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# World energy balances



International  
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Together

# 2017

# World energy balances

2017

## INTERNATIONAL ENERGY AGENCY

The International Energy Agency (IEA), an autonomous agency, was established in November 1974. Its primary mandate was – and is – two-fold: to promote energy security amongst its member countries through collective response to physical disruptions in oil supply, and provide authoritative research and analysis on ways to ensure reliable, affordable and clean energy for its 29 member countries and beyond. The IEA carries out a comprehensive programme of energy co-operation among its member countries, each of which is obliged to hold oil stocks equivalent to 90 days of its net imports. The Agency's aims include the following objectives:

- Secure member countries' access to reliable and ample supplies of all forms of energy; in particular, through maintaining effective emergency response capabilities in case of oil supply disruptions.
- Promote sustainable energy policies that spur economic growth and environmental protection in a global context – particularly in terms of reducing greenhouse-gas emissions that contribute to climate change.
- Improve transparency of international markets through collection and analysis of energy data.
- Support global collaboration on energy technology to secure future energy supplies and mitigate their environmental impact, including through improved energy efficiency and development and deployment of low-carbon technologies.
- Find solutions to global energy challenges through engagement and dialogue with non-member countries, industry, international organisations and other stakeholders.

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The European Commission also participates in the work of the IEA.

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# INTRODUCTION

*World Energy Balances* presents comprehensive energy balances for all the world's largest energy producing and consuming countries. It contains statistics on production, trade and consumption in a common unit for each source of energy for all 35 OECD countries, the six IEA Association countries, and over 100 other key energy producing and consuming countries, and main geographical regions, including the World. Non-OECD countries cover developing countries in Africa, Latin America and Asia, Central and Eastern European countries, and Eurasia. The consistency and complementarity of OECD and non-OECD countries' data ensure an accurate picture of the global energy situation.

Complementing the data in physical units of the sister publication *World Energy Statistics*, this book includes graphs and detailed data by country for all energy sources – coal, gas, oil, electricity, renewables and waste - expressed in balance format, for the year 2015. Alongside this, there are summary time series on production, trade, final consumption by sector, as well as key energy and economic indicators. It also presents provisional 2016 supply data for OECD countries, and initial 2016 estimates for non-OECD countries production and trade of natural gas, primary coal and oil.

The energy balance is a presentation of the basic supply and demand data for all fuels in a manner which shows them together but separately and expressed in a common energy unit. This allows for the easy comparison of the contribution each fuel makes to the economy and their interrelationships through the conversion of one fuel into another.

This volume has been prepared in close collaboration with other international organisations, including Eurostat, the Economic Commission for Europe of the United Nations (UNECE), the Organización Latinoamericana de Energía (OLADE), the Asia Pacific

Energy Research Centre (APEREC), the United Nations Statistics Division (UNSD), and the Forestry Department of the Food and Agriculture Organisation of the United Nations (FAO). It draws upon and complements the extensive work of the United Nations in the field of world energy statistics.

While every effort is made to ensure the accuracy of the data, quality is not homogeneous throughout the publication. In some countries data are based on secondary sources, and where incomplete or unavailable, on estimates. In general, data are likely to be more accurate for production, trade and total consumption than for individual sectors in transformation or final consumption.

General issues of data quality, as well as country notes and sources, should always be consulted when using data. In addition, very little official data are available for 2016 from non-OECD countries, therefore estimations have been used in most cases.

Data were collected by the team in the Energy Data Centre (EDC) of the IEA Secretariat, headed by Duncan Millard.

Within the IEA, for OECD members: electricity, coal and renewable data were prepared, respectively, by Mark Mateo, Beatriz Martinez and Dae Yong Kwon, under the responsibility of Vladimir Kubecek; oil and natural gas data were prepared, respectively, by Laura Thomson and Aitor Soler Garcia, under the responsibility of Erica Robin; energy balances data were prepared by Rémi Gigoux, under the responsibility of Roberta Quadrelli. Non-OECD countries statistics were prepared by Emmanouil Christinakis, Laila El-Ashmawy, Musa Erdogan, Markus Fager-Pintilä, Nikolaos Kordevas, Agnieszka Koscielniak, Claire Morel, Klaus Pedersen and Arnaud Pincet, under the responsibility of Céline Rouquette.

Roberta Quadrelli and Céline Rouquette have the overall responsibility for this report. The publication and its statistics were produced by Emmanouil Christinakis, Laila El-Ashmawy and Rémi Gigoux. Desktop publishing was carried out by Sharon Burghraeve.

We would like to thank our numerous contacts worldwide in national administrations and in public and private companies for their helpful co-operation.

Complete supply and consumption data from 1971 to 2015 and selected estimates for 2016 are available on our online data service and on CD-ROM. Moreover, data can also be obtained on a pay-per-view basis. Details are available at [www.iea.org/statistics](http://www.iea.org/statistics).

Enquiries about data, methodology, or comments and suggestions should be addressed to: [stats@iea.org](mailto:stats@iea.org)

## What's new?

### New focus on Association countries and on geographic regions

In the 2017 edition, six new regional aggregates are added as a response to user requests. Firstly, the *IEA and Accession/Association countries* aggregate is added to show the wider connections the IEA has beyond members as part of the continuous development of the IEA's work; this shows member countries, Accession countries and Association countries as a whole. The five regional geographic aggregates are also included: Africa, Americas, Asia, Europe and Oceania, which are based on country aggregations in line with the UN's geographic regions. Note that these aggregates – apart from Africa - have different coverage from those historically presented in this publication (e.g. Armenia is included in Non-OECD Europe and Eurasia and in Asia at the same time). For the list of countries in each aggregation, please refer to the section "Geographical coverage".

In this release, energy balances and energy indicators are displayed for the world and the main geographic regions, then for OECD countries, Association countries, and finally for the other non-OECD countries.

Additionally, data for Gabon, that re-joined OPEC in July 2016, are included in the OPEC aggregate starting with the 2017 edition. Data for Equatorial Guinea, that joined OPEC in January 2017, are not included in the OPEC aggregate in this edition.

### New OECD member: Latvia

Latvia became an OECD member in July 2016. Accordingly, Latvia appears in the list of OECD members and is included in the zone aggregates for data starting in 1990, starting with the 2017 edition. Prior to 1990, data for Latvia are included in Former Soviet Union.

### New non-OECD balances

The IEA continues to expand the coverage of its statistics reports and encourages more countries to collaborate on data exchange. This year detailed data have become available for Greenland from 2004 to 2015, and for Mali from 2000 to 2015. These data are presented in the Annex of this publication. Mali data are nonetheless included in the Africa region. Prior to 1990, data on oil for Greenland were included with the Danish statistics, within the OECD region. They are not included in any region after 1990.

# WORLD ENERGY BALANCES: AN OVERVIEW

## Global trends

This overview provides a detailed look at energy developments based on complete supply and demand data for 2015 for 150 countries and regions and provisional partial supply or production data for 2016.

In 2015, global energy demand as measured by TPES was stable compared to 2014 (+0.3%) at slightly more than 13 600 Mtoe. Such stability resulted from contrasting trends: In non-OECD countries, energy demand rose by 0.5%, whereas in OECD countries it decreased by 0.3% and remained stable in 2016, as discussed in more detail in the OECD section.

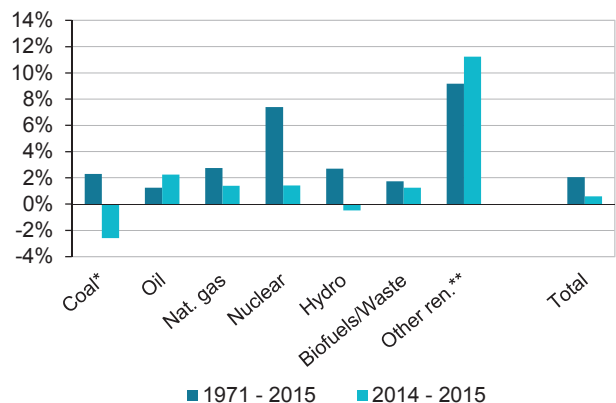
## Production

World energy production was 13 790 Mtoe in 2015 – 0.6% more than in 2014. Oil production increased the most for the second year in a row (+2.3%), followed by renewables (+1.9%), natural gas and nuclear (+1.4% for each).

Fossil fuels accounted for 81.7% of production – a 0.2 percentage point decrease compared to 81.9% in 2014, with growth in oil and natural gas almost entirely offset by the coal production's sharp decline (-2.6%) – the first since 1999. Together the production of these three fossil fuels increased by +0.3% in 2015 (Figure 1).

Among non-fossil sources, biofuels and waste maintained their share of the world energy production in 2015 (9.6% compared to 9.5% in 2014), though with slower development (+1.2% compared to +1.5% in 2014, +1.9% in 2013 and +3.0% in 2012). Hydro decreased slightly, by 0.5% in 2015, the first decline in global production since 1989. Nevertheless hydro

Figure 1. Global annual average change in energy production by fuel



\* In this graph peat and oil shale are aggregated with coal.

\*\* Includes geothermal, solar thermal, solar photovoltaic and wind.

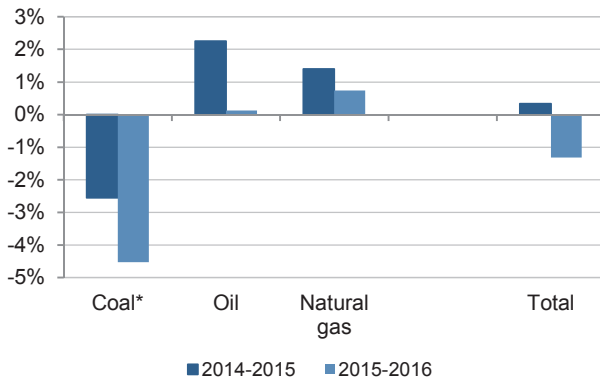
provided 2.4% of global production, just as in 2014. Other renewable sources such as wind, solar thermal, solar PV, geothermal, kept on expanding at a fast pace (+16.8%, +6.8%, +29.7%, +4.1% respectively) but still accounted for less than 2% of global energy production. Finally, nuclear slightly increased its share of energy production (4.9%), producing 1.4% more energy in 2015 than in 2014.

For 2016, global country level production data is preliminary and restricted to fossil fuels. Based on these data, production growth of fossil fuels significantly decreased (-1.3% compared to 2015 – Figure 2). This was entirely driven by a fall in coal production for the second year in a row (-4.5% in 2016, -2.6% in 2015). On the contrary crude oil and natural gas production continued to grow though at a much slower rate: +0.7% in 2016 for natural gas, half the 2015 growth rate, +0.1% for crude oil, as opposed to +2.3% in 2014. The decrease in coal production was particularly strong in OECD countries (-95 Mtoe, more than 10% fall) and China (-110 Mtoe,



almost -6%). Natural gas production increased in all regions in 2016, except in OECD where it was stable at 1 080 Mtoe. As for crude oil, growth in Middle East and non-OECD Europe and Eurasia countries (+6.3% and +1.2% respectively in 2016) was offset by a decline in OECD and Africa (-2.7% and -6.9% respectively).

**Figure 2. Annual average change in fossil fuels production by fuel**

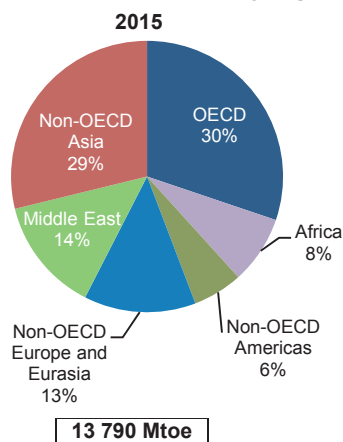


\* In this graph peat and oil shale are aggregated with coal.

The remainder of the article looks at the detail of 2015 world production and use, and 2016 OECD supply.

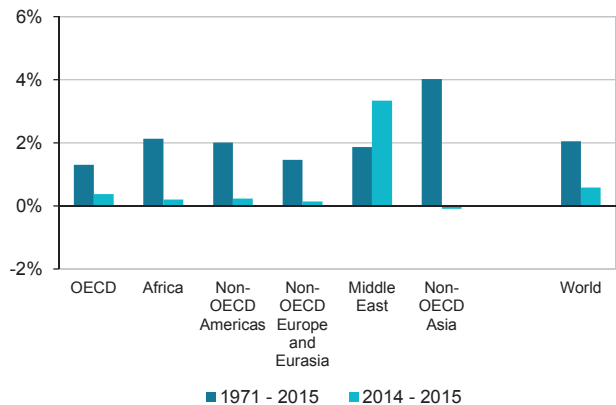
At a regional level, the OECD was the largest energy producing area ahead of non-OECD Asia<sup>1</sup> in 2015 (Figure 3), and the gap is slightly increasing: OECD economies produced 30.2% of global energy, whereas non-OECD Asia accounted for 28.8% (respectively 30.2% and 29.0% in 2014). Indeed in 2015 the OECD increased its production by 0.4% (Figure 4), in the wake of production slightly growing in the United States of America and Canada (+0.3% each), but production in non-OECD Asia stalled at -0.1%.

**Figure 3. Total production by region**



1. In this chapter, Asia includes China region unless otherwise specified and excludes Asian countries of the OECD.

**Figure 4. Annual average change in energy production by region**



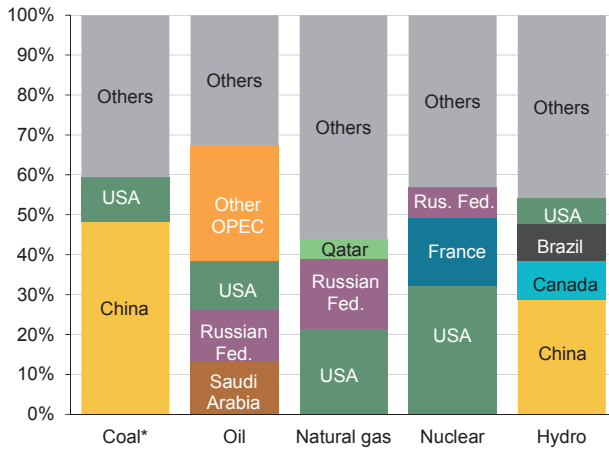
The share of the United States and Canada is very stable: they accounted for almost 2 500 of the 4 160 Mtoe of energy produced by the OECD, so almost 60%, in 2015 as well as in 2014. Australia and Norway, OECD's third and fourth biggest producer, significantly increased their production (+4.3% and +6.2% respectively). Energy production grew in 13 of the 34 member countries of the OECD, but fell in 22 member countries, the most significant in volumes being the fifth biggest OECD energy producer, Mexico (-16.5 Mtoe) and the Netherlands (-10.9 Mtoe).

In non-OECD Asia, energy production slightly decreased (-0.1%), stabilising around 3 980 Mtoe in 2015, and decreased by 1.8% excluding China and India. Indeed, production significantly declined in the two other biggest energy producers in the region, Indonesia and Thailand (-4.9% and -4.1% respectively), driven by coal in the former (-7.5%) and natural gas in the latter (-11%). In China, energy production in 2015 amounted to almost 2 500 Mtoe (+0.1%), the decline in coal production (-1.4%) being compensated by growths in crude oil, natural gas, hydro, nuclear and power renewables productions (+1.5%, +3.4%, +6.0%, +28.9% and +14.8% respectively). In India, energy production increased by 2.1% in 2015, in the wake of increases in coal (+4.0%) and biofuels and waste (+1.5%).

In 2015, the Middle East ranked third, with 1 880 Mtoe of energy produced. Production of energy in the Middle East grew by 3.3%, in the wake of an increase of crude oil production in the top producing economies. With 1 830 Mtoe, non-OECD Europe and Eurasia produced around the same amount of energy in 2015 than in 2014.

Africa produced 1 120 Mtoe in 2015, non-OECD Americas 816 Mtoe, both very similar levels of energy production than in 2014.

**Figure 5. Largest producers by fuel in 2015**



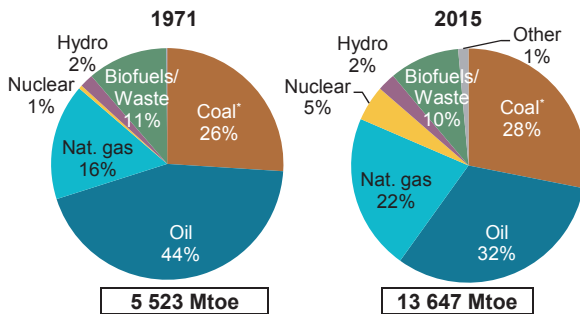
\* In this graph peat and oil shale are aggregated with coal.

Energy production is not evenly distributed across countries: for each fuel, less than four countries generally account for more than half of global production (Figure 5). China was not far from producing half of the world coal in 2015, and 29% of hydro. The United States and France combined produced 50% of all nuclear. Saudi Arabia, The Russian Federation and the United States contributed slightly less than 40% of the world crude oil – these last two also accounting for 40% of the world natural gas.

## Total Primary Energy Supply (TPES)

Between 1971 and 2015, world total primary energy supply (TPES) multiplied by almost 2.5 times and also changed structure somewhat (Figure 6). While remaining the dominant fuel in 2015, oil fell from 44% to 32% of TPES. The share of coal has increased constantly since 1999, influenced primarily by increased consumption in China, and reached its highest level since 1971 in 2011 (29.1%). That year coal peaked at 71.3% of TPES in China. It has started declining since then and represented 28% in 2015. Meanwhile natural gas grew from 16% to 22% and nuclear from 1% to 5%.

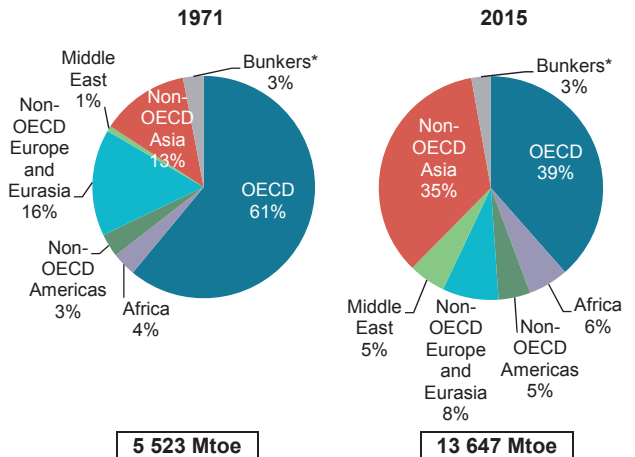
**Figure 6. Total primary energy supply by fuel**



\* In this graph peat and oil shale are aggregated with coal.

Energy demand evolved differently in the regions between 1971 and 2015. The OECD's share of global TPES fell from 61% in 1971 to 39% in 2015 (Figure 7). It is now almost on par with non-OECD Asia, where energy demand grew seven-fold, and whose share of TPES almost tripled over the period. Though its share of global energy demand was divided by two between 1971 and 2015, non-OECD Europe and Eurasia remained the third biggest energy consuming region, with more than 1 100 Mtoe TPES. It was followed by Africa, where energy demand over the period has multiplied by four.

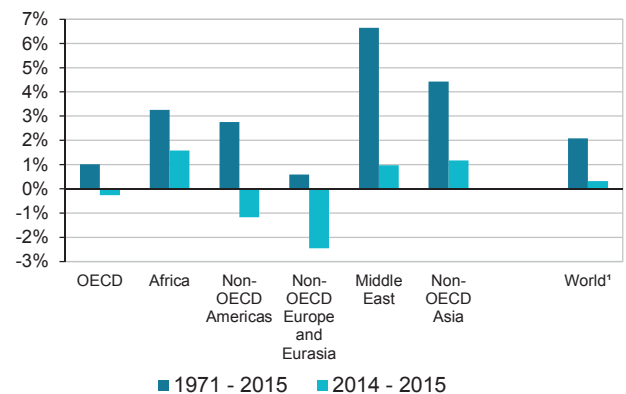
**Figure 7. Total primary energy supply by region**



\* Including international marine and aviation bunkers.

Between 2014 and 2015, global TPES growth slowed down quite significantly: it increased by 43 Mtoe (+0.3%), reaching 13 647 Mtoe in 2015. This is the slowest growth seen outside of an economic crisis time. During 2015 TPES increased mostly in Africa, non-OECD Asia and the Middle East (+1.6%, +1.2% and +1.0% respectively). It decreased by 2.6% in non-OECD Europe and Eurasia, by 1.2% in non-OECD Americas, and by 0.3% in OECD (Figure 8).

**Figure 8. Annual average change in TPES by region**



\* World also includes international marine and aviation bunkers.

Non-OECD countries account for a continuously growing share of the world energy consumption. In 2015, China accounted for 22% of global TPES while the United States accounted for 16% (Table 1). India and the Russian Federation ranked third and fourth, respectively. Japan, the second largest OECD consuming country, was in fifth position. Together, these five countries accounted for more than half the global TPES in 2015.

**Table 1. TPES – top ten countries in 2015 and 1971**

Country	TPES (Mtoe)	Share in world TPES	
		2015	1971
People’s Rep. of China	2 973	22%	7%
United States	2 188	16%	29%
India	851	6%	3%
Russian Federation	710	5%	N/A
Japan	430	3%	5%
Germany	308	2%	6%
Brazil	298	2%	1%
Canada	273	2%	0.3%
Korea	270	2%	3%
France	247	2%	3%
Rest of the world	5 099	37%	44%
<b>World</b>	<b>13 647</b>	<b>100%</b>	<b>100%</b>

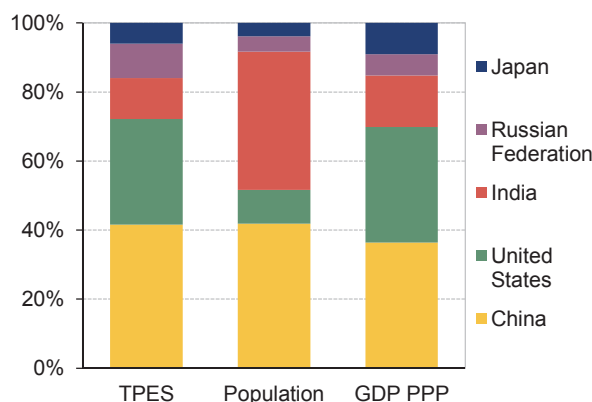
Global energy demand was even more concentrated in 2015 compared to 1971, as the top ten countries represented 63% of global energy demand, as opposed to 56% in 1971.

In 2015, the top five countries in terms of TPES accounted for less than half of the world GDP<sup>2</sup>, and world population (47% and 45% respectively) but consumed 52% of total world energy. However, the relative shares of GDP, population and TPES of these five countries significantly varied from one to another (Figure 9).

The United States consumed 16% of world energy, with 4% of the world’s population. Conversely, China and India consumed 22% and 6% of global energy respectively, but accounted for 19% and 18% of the global population. The Russian Federation and Japan also consumed significant amounts of energy in 2015 (5.2% and 3.1% of global TPES respectively). However, energy intensities differed significantly. To produce the same amount of wealth, as measured by GDP in PPP, the Russian Federation consumed 2.4 times as much energy as Japan (the country with the lowest

energy intensity of the five top energy consumers), and twice as much than India, in 2015; naturally such comparisons reflect the importance of specific industries in each country.

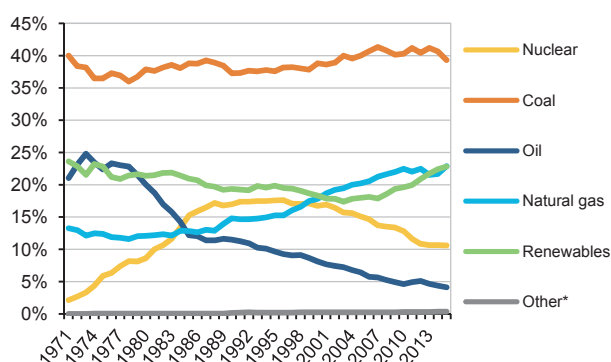
**Figure 9. Top five energy consumers: 2015 relative shares\***



\* Relative shares within the top five, which differ from shares in the world total.

Though still dominant, power generation from coal has been decreasing for the three last years, reaching 39.3% of the electricity produced globally in 2015, its lowest share since 2002 (Figure 10). Generation from gas grew slowly to reach 15% in 1990; since then steady increases have seen it grow to 22.9% in 2015. This is around the same share as renewables (22.8%) which initially was dominated by hydro, but recent growth has come from the development of wind and solar PV. Nuclear production had steadily increased in the 1970s and 1980s, before plateauing at around 17% of electricity and then declining since the 2000s. Power production from oil has peaked at almost 25% of power production in 1973, just before the oil crisis, and has been declining since then. From being the second fuel used for electricity production after coal, it has become the fifth.

**Figure 10. World electricity generation mix 1971-2015**



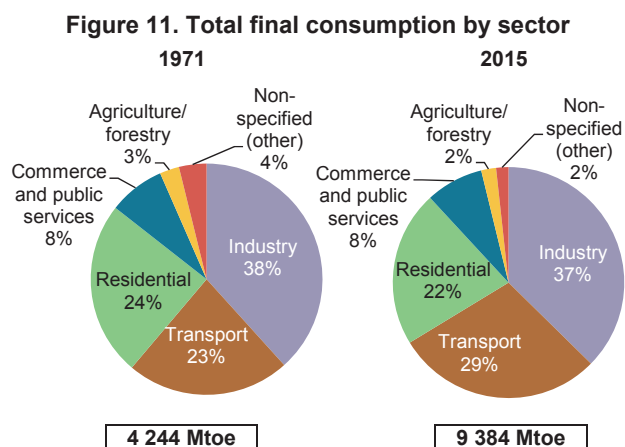
\* Other includes non renewable waste and non renewable heat.

2. In this chapter, GDP refers to GDP using purchasing power parities.

## Total Final Consumption (TFC)

Between 1971 and 2015, total final consumption (TFC) more than doubled (Figure 11). However, the energy use by most economy sectors<sup>3</sup> did not change. Energy use in transport significantly increased, from 23% of TFC in 1971 to 29% in 2015. Nevertheless, in 2015 industry remained the largest consuming sector, only one percentage point lower than in 1971 (37%). The residential sector ranked third in 2015 (22%).

The following sections briefly describe OECD trends up to 2016 and 1971-2015 energy trends in six different regions of the world: OECD, Africa, non-OECD Americas, non-OECD Asia, non-OECD Europe and Eurasia, and the Middle East.



3. In this chapter, each sector of final consumption includes its respective non-energy use quantity.



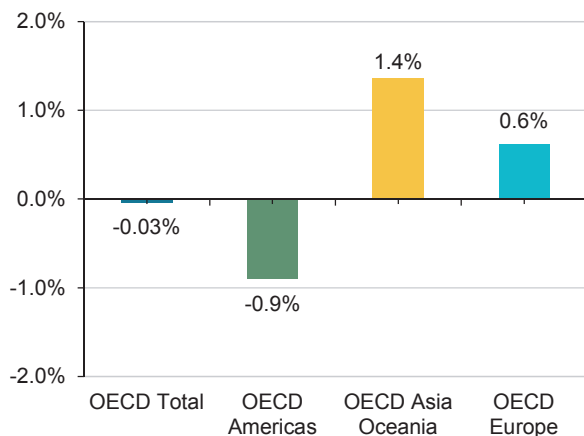
## OECD

### Key supply trends in 2016

OECD TPES remained approximately stable in 2016<sup>4</sup> (5 258 Mtoe, 2 Mtoe less than in 2015), with regional trends similar to those observed in the previous year.

In OECD Europe, TPES rose by 0.6% following last year's 1.8% increase. In OECD Asia-Oceania, TPES increased by 1.4%, more than in the previous year. On the other hand, in OECD Americas TPES decreased by almost 1% (Figure 12), led by the 1% (30 Mtoe) reduction in the United States.

**Figure 12. OECD total primary energy supply 2015-2016 change**

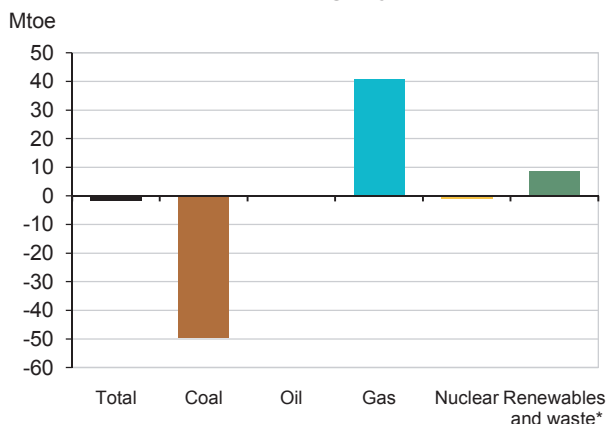


The United States reduction was mainly due to a decreased use of coal (8% less than in 2015), linked to a switch in the power sector from coal to natural gas. This change in the United States also drove the 5% decrease in coal demand across the OECD (Figure 13). Compared to 2015, the OECD mainly increased its use of natural gas (27% of TPES, +3%). Oil (36% of TPES) and nuclear (10% of TPES) remained stable, while renewables and waste (10% of TPES) increased by 1.6%, mainly due to renewables, as discussed in the section on electricity generation.

In 2016, the United States still represented 41% of all OECD TPES, a weight comparable to that of the following largest nine countries when taken all together (Figure 14). Therefore, changes seen in the United States, such as the switch from coal to gas in power generation, are strongly reflected in OECD totals.

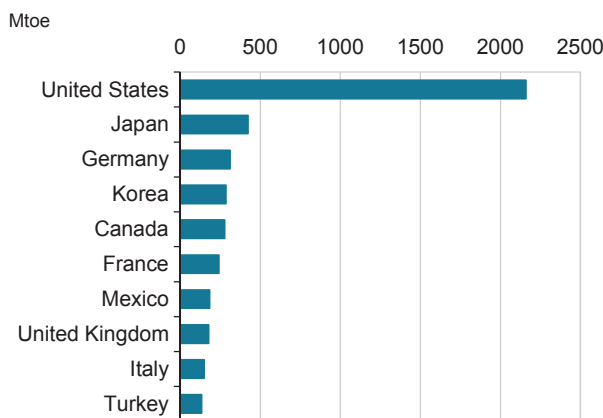
4. All the energy supply data for 2016 described in this chapter are provisional.

**Figure 13. OECD total primary energy supply 2015-2016 change by source**



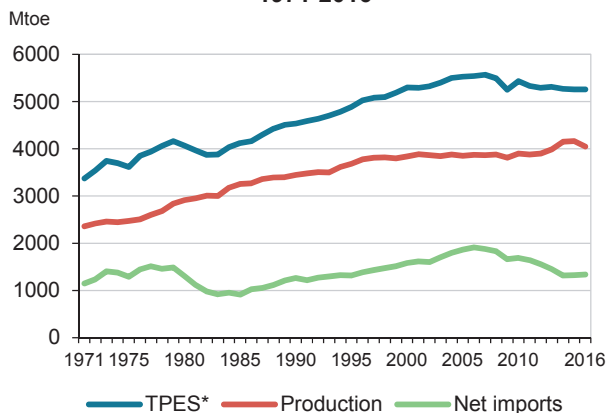
\*Includes hydro, geothermal, solar, wind, biofuels, waste as well as electricity and heat trade.

**Figure 14. Top ten OECD countries by TPES\* in 2016**



\*Total primary energy supply

**Figure 15. OECD energy supply 1971-2016**



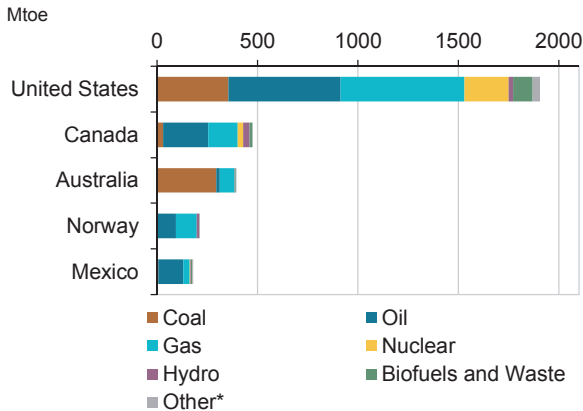
\*Total primary energy supply

Energy production in 2016 decreased for the first time since 2011, by 2.8%, to 4 046 Mtoe (Figure 15). On the other hand, OECD net imports started increasing

again, by 1.2%, after significant reductions (ranging from -5% to -9%) between 2011 and 2014.

About half of the energy production in OECD occurs in the United States (47%), with levels in 2016 over four times larger than those of the second largest producer, Canada (12%) (Figure 16).

**Figure 16. Top five OECD producing countries 2016**



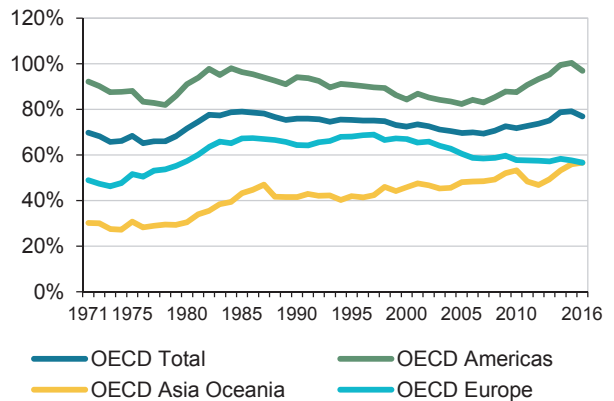
\*Other includes geothermal, solar, wind, and heat.

Trends in energy production differed across OECD countries. In the United States, total energy production scaled down in 2016 (-5.6%, -113 Mtoe) after having increased almost every single year for the last decade. The 2016 decrease in production was driven mostly by coal (-18%, equivalent to -76 Mtoe), while production of other fossil fuels decreased to a lesser extent (oil: -4%, -23 Mtoe; and natural gas: -3%, -20 Mtoe). The slight increase of nuclear, hydro, and renewable energy production was not enough to compensate the decrease in fossil fuels, which led the overall decrease. The production trend for the United States, note matched by that of energy use, resulted in a loss of five percentage-points in self-sufficiency (defined as production/TPES), which decreased to 88%.

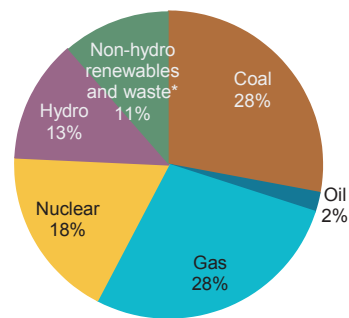
Driven by the trend in the United States, the level of self-sufficiency reduced in 2016 to 97% in the OECD Americas and to 77% in the OECD as a whole. Levels observed in OECD Europe and OECD Asia Oceania were both lower than 60%, and for the first time comparable, reflecting the increase in OECD Oceania driven mainly by Australia (Figure 17).

About a quarter of OECD's TPES is used for electricity generation, where important structural changes have been occurring over the last few years. Overall, the OECD electricity generation mix was still dominated by fossil fuels, representing in 2016 58% of the mix (Figure 18), a similar level to that of 2015.

**Figure 17. OECD energy self-sufficiency 1971-2016**



**Figure 18. OECD electricity generation mix 2016**

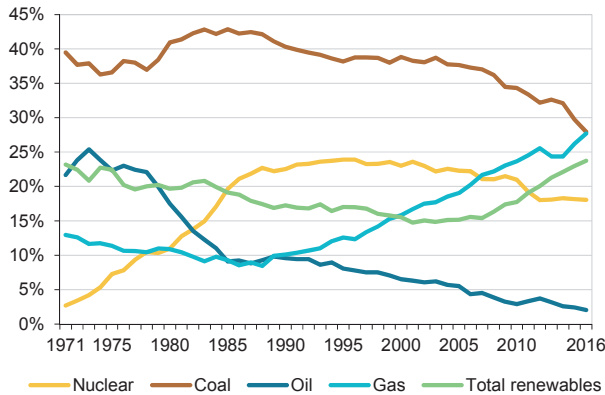


\*Non-hydro renewables and waste includes geothermal, solar, wind, tide, biofuels, waste and heat.

Within the fossil sources, the phenomenon of fuel-switching from coal to natural gas already observed last year and driven by the United States also occurred in 2016 to a similar extent, but also in other countries such as the United Kingdom. Coal went from 30% in 2015 to 28% in 2016, compensated by the increase of natural gas (from 26% to 28%).

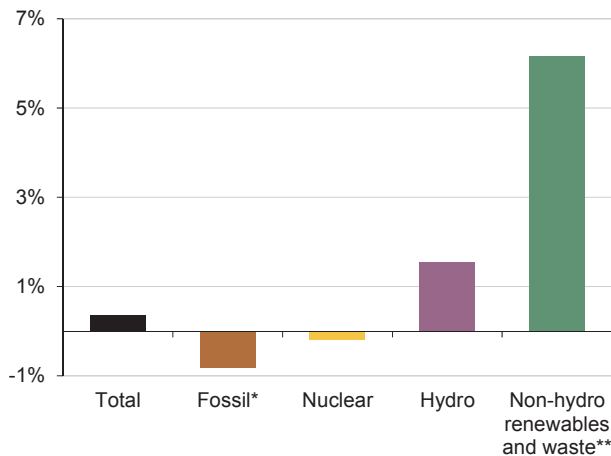
For the first time in OECD history, coal was no longer the single largest electricity source in 2016, as natural gas equalled its share in the mix after several years of fuel-switch in major countries. In the United States only, coal electricity generation decreased by 8% in 2016, reducing from 40% of the mix in 2014 to 31% in 2016, whilst gas electricity generation grew from 27% to 33%. Similar trends were observed in OECD Europe, while coal electricity generation remained more stable in OECD Asia Oceania (Figure 19).

**Figure 19. OECD electricity generation mix 1971-2016**



In the OECD, fossil fuel use in electricity generation continued its decline in 2016 with a 51 TWh decrease (-1%). Non-hydro renewables and waste more than compensated this decrease by generating 72 TWh more than in 2015, a 6% increase to reach 1 243 TWh. In terms of relative growth, solar photovoltaics (+19%) and wind (+8%) again led the way in 2016 at the OECD level, although the wind growth was much smaller than the 16% observed in 2015 (Figure 20).

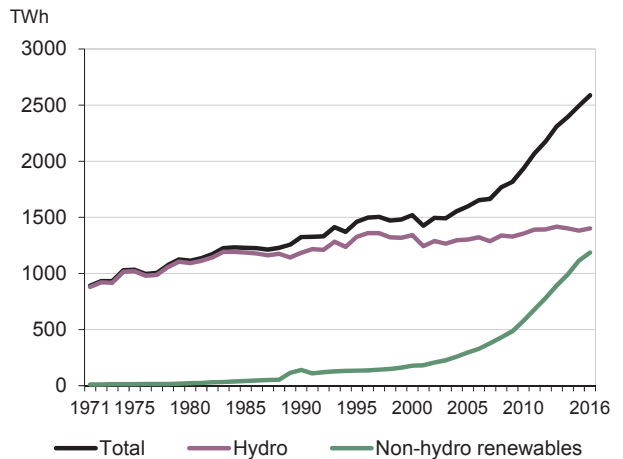
**Figure 20. OECD electricity generation 2015-2016 change**



\*Fossil includes coal, peat, oil shale, oil and gas.  
\*\*Includes geothermal, solar, wind, biofuels, waste and heat.

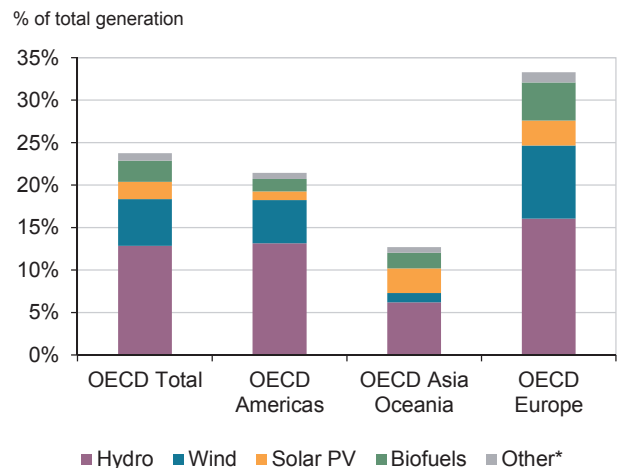
Similarly to 2015, non-hydro renewables still contributed in 2016 to nearly 11% of total generation, comparable with the 13% of conventional hydro. Total renewable sources (hydro and non-hydro) accounted for 2 588 TWh (24% of the total electricity), which represented again another all-time high (Figure 21).

**Figure 21. OECD renewable electricity generation 1971-2016**



More specifically, in OECD Europe alone, non-hydro renewables provided 17% of total generation in 2016, more than hydro (16%) for the second consecutive year, with all renewables accounting for 33% of total generation (Figure 22).

**Figure 22. OECD electricity generation in 2016 shares of renewable sources, by region**

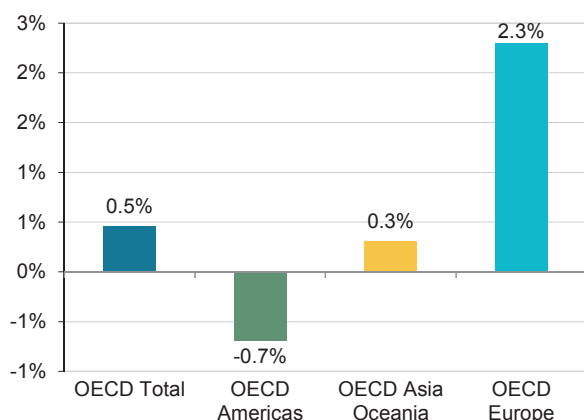


\*Other includes geothermal, solar thermal, tide and renewable municipal waste.

### Key demand trends in 2015

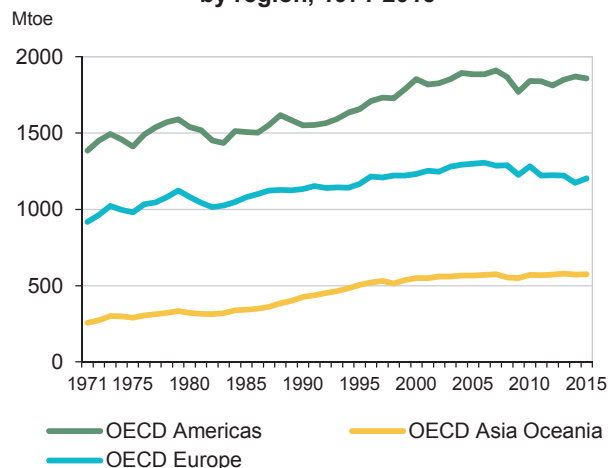
Alongside trends towards less-carbon intensive electricity generation, 2015 saw total final consumption (TFC) in the OECD slightly increasing (0.5%), following last year's slight decrease (0.7%), but with differences across the three OECD regions (Figure 23).

**Figure 23. OECD Total final consumption 2014-2015 change by region**



In 2015, final consumption increased in OECD Europe compared to 2014 levels due to 2015 being a colder winter, whilst it fell slightly in OECD Americas, which is the opposite of the observed trends last year. Overall, the OECD final consumption has been generally flat over the last five years, around levels comparable to those of the early 2000's (Figure 24).

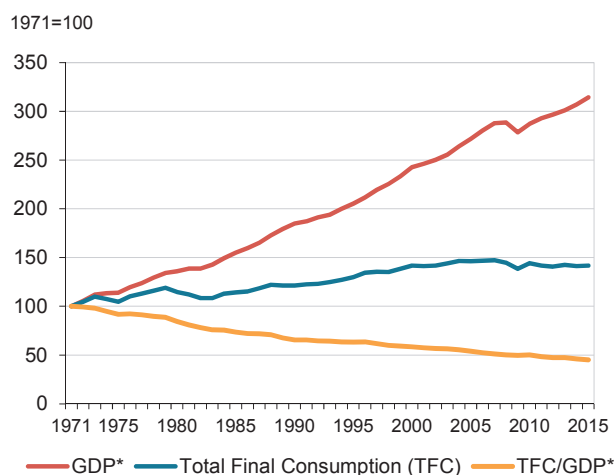
**Figure 24. OECD Total final consumption by region, 1971-2015**



At the sectoral level, industry and residential consumption decreased in 2015 by 1%, whilst transport consumption increased by nearly 2%, notably through an increase in road consumption, half of which happened in the United States. In OECD Europe, the over 2% increase in TFC was driven by increases in residential energy consumption (+12 Mtoe), road transport (+8.3 Mtoe) and commerce and public services (+7 Mtoe). The increase in buildings consumption should be put in perspective with a relatively low 2014 consumption figure due to warmer winter conditions.

With slight variations in TFC and a growing GDP, the general decoupling of economic growth from energy consumption observed over the years continued across the OECD (Figure 25).

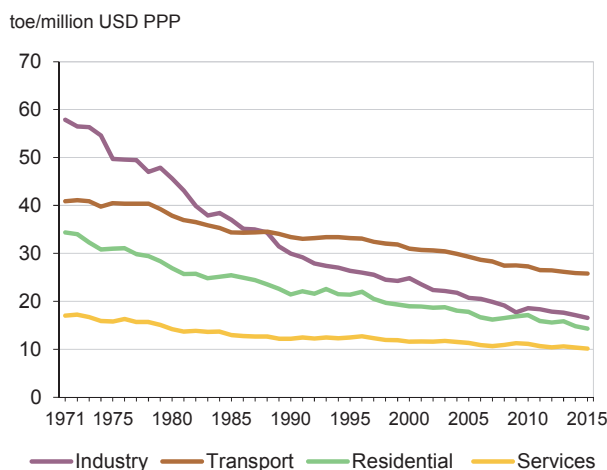
**Figure 25. Final energy intensity in OECD 1971-2015**



\*GDP based on 2010 USD PPP.

Changes in final energy intensities are very different across countries, depending on changes in economic structures and on efficiency improvements. However, sectoral energy intensities (defined based on the national GDP) also show decreasing trends and levels, with the downward trend continuing in 2015 for all sectors of consumption (Figure 26).

**Figure 26. Sectoral energy intensities\* in OECD 1971-2015**



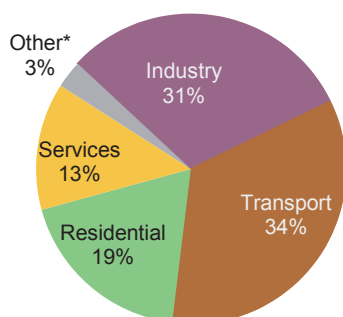
\*Defined as sectoral final consumption/GDP PPP.

The structure of OECD TFC shows that transport was again the largest energy consuming sector in 2015, accounting for roughly a third of final energy consumption, followed by industry with 31% (Figure 27).



Such shares are exactly the same as in 2014, but have reversed since 1971, when industry accounted for 41% of TFC and transport for 24%.

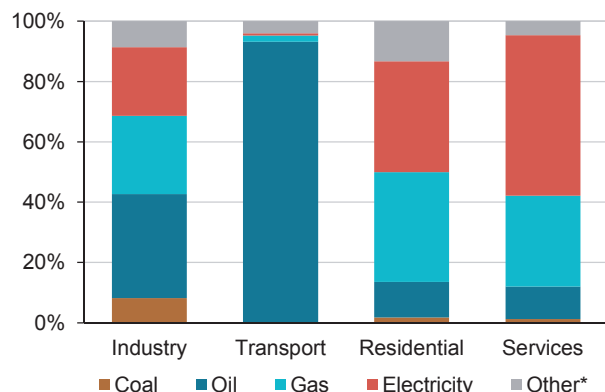
**Figure 27. OECD Total final consumption by sector 2015**



\*Other includes agriculture, forestry, fishing and non-specified.

Differences in economic structure affect the energy mix at national level, as sectors use fuels differently. In particular, transport almost completely relies on oil, while residential and services in the OECD use a lot of electricity and gas. Coal, mainly used for electricity generation, is used very little by final consumers (Figure 28).

**Figure 28. Total final consumption by sector: shares by energy source, 2015**



\*Other includes biofuels and waste, direct use of geothermal/solar thermal and heat.

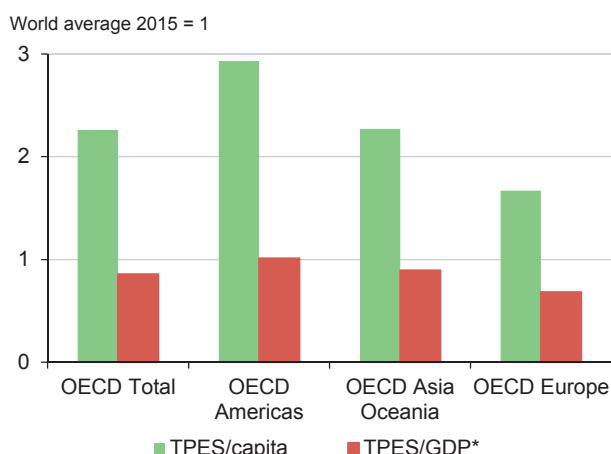
## The OECD in the world

With 4.1 toe per capita (compared to a world average of 1.8 toe per capita), the OECD is the most energy-intensive region, in terms of TPES/population (Figure 29). Several factors explain these high levels: an electrification rate of almost 100%, a high rate of cars per household, large industry and service sectors, high heating degree-days and a high GDP per capita.

However, this indicator decreased for the OECD from its 2014 level of 4.2 toe per capita.

While OECD levels of energy per capita are generally larger than the world average by a factor of two, with some regional variations, OECD levels of energy intensity of the economy (TPES/GDP, based on PPP) tend to be slightly lower than the world average, possibly reflecting a less energy-intensive economic structure and a generally more advanced development in efficient use of energy, with high efficiency in transformation and some final consumption sectors.

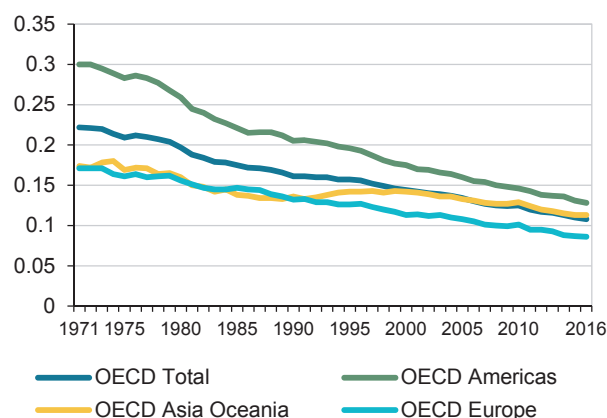
**Figure 29. OECD energy indicators by region 2016**



\*GDP based on 2010 USD PPP.

While energy intensity is on a declining trend across the whole OECD (25% lower in 2016 compared to 2000), levels have been historically lower in OECD Europe than in OECD Americas, with OECD average comparable with the levels of Asia Oceania since around the year 2000 (Figure 30).

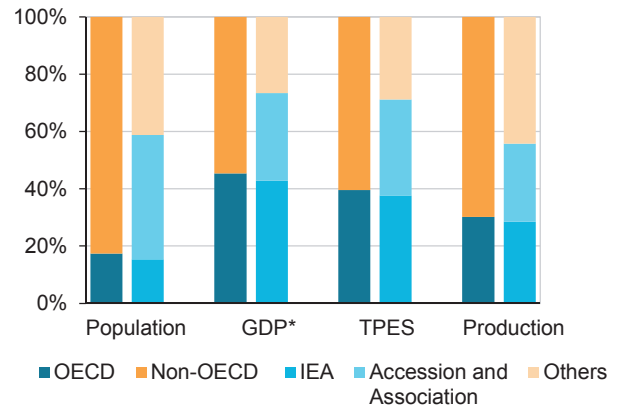
**Figure 30. TPES per GDP of OECD by region 1971-2016**



In 2015, the OECD still accounted for 17% of global population, 45% of GDP, 40% of TPES and 30% of energy production (Figure 31). These shares have significantly changed since 1971, when the region accounted for 61% of the global energy supply, and 65% of GDP.

These shares are significantly larger when considering the group of countries tightly connected with the IEA: IEA, its Accession (Mexico, Chile) and Association countries (China, India, Indonesia, Morocco, Singapore and Thailand) altogether accounted for around three quarters of the world GDP and TPES in 2015.

**Figure 31. OECD and IEA in the world, 2015**

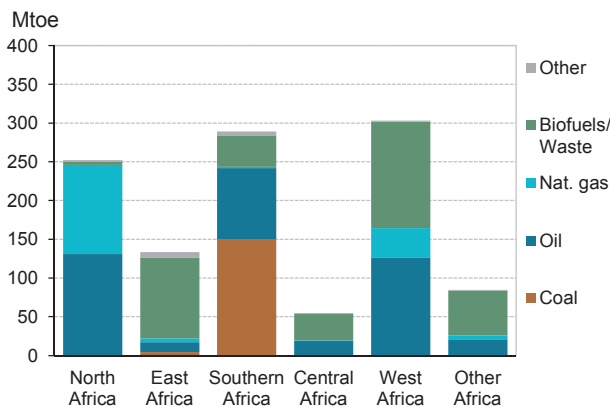


## Africa

In 2015, Africa produced 8.1% of the world’s energy, a similar share than in 1971 (7.8%). African production is dominated by oil (36%), and traditional biomass (34%), followed by natural gas (15%) and coal (14%). Africa’s share of global TPES increased from 3.5% in 1971 to 5.8% in 2015; and despite many African countries being dependent on imports of fossil fuels, as a region it is energy self-sufficient and a net exporter of coal, natural gas and crude oil.

Fossil fuels production is unevenly distributed across Africa (Figure 32). West Africa was the main producer of crude oil in 2015, due to Nigeria (almost 27% of the African crude oil). North Africa produces mainly crude oil and natural gas: in 2015 Algeria accounted for more than 43% of the natural gas and 18% of the crude oil in Africa, and Egypt for 9% of crude oil and 19% of natural gas. Southern Africa is characterized by the high share of coal and of crude oil; South Africa, the fifth largest coal exporter in the world, produced 94% of African coal in 2015 whereas Angola is the second biggest producer of crude oil in Africa, with 23% of the region production. Energy production in East and Central Africa remains dominated by bio-fuels, mainly biomass.

**Figure 32. Energy production by sub-region in 2015**  
Africa



\* In this graph peat and oil shale are aggregated with coal.

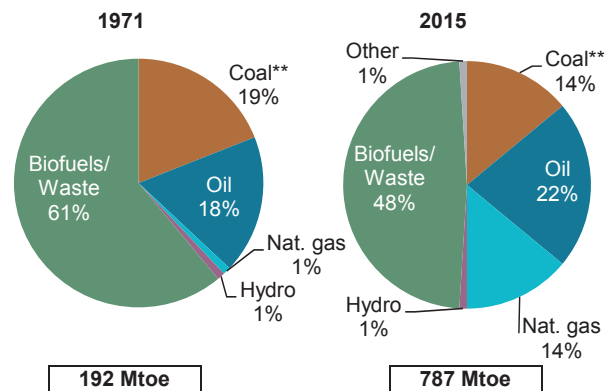
**North Africa** includes Algeria, Egypt, Libya, Morocco and Tunisia;  
**East Africa** includes Eritrea, Ethiopia, Kenya, Mauritius, Mozambique, South Sudan, Sudan and United Republic of Tanzania;  
**Southern Africa** includes Angola, Botswana, Namibia, South Africa, Zambia and Zimbabwe;  
**Central Africa** includes Cameroon, Congo and Democratic Republic of Congo;  
**West Africa** includes Benin, Côte d'Ivoire, Gabon, Ghana, Niger, Nigeria, Senegal and Togo.

In 2015, Africa’s crude oil production slightly decreased compared to 2014 (-1.0%), as it continued declining in

Libya though at a slower pace (-15%), in Algeria and Egypt (-2.3% and -1.7% respectively) but recovered in Angola (+6.4%) and increased in Gabon (+4.9%). Africa represented 9% of world crude oil output and it exported 80% of this production in 2015.

The production and consumption of biofuels (mainly fuelwood) is significantly higher across Africa (48% of total TPES in 2015) than the world average (10% of total TPES). The presence of large forests, agro-industry, agriculture, a large rural population, and a low GDP per capita have resulted in a large use of solid biofuels for cooking. Because of the extensive use of wood and charcoal with its low efficiency, energy intensity<sup>5</sup> is higher than the world average.

**Figure 33: Total primary energy supply\* by fuel**  
Africa



\* Excluding electricity trade.

\*\* In this graph peat and oil shale are aggregated with coal.

However, the share of traditional biomass in TPES has decreased significantly between 1971 and 2015 (Figure 33), due to increased electrification, and particularly the recent development of power generation from natural gas. Natural gas share in TPES increased steeply from 1% in 1971 to 14% in 2015. Coal continued to represent an important share of African TPES (14% in 2015) even if it has declined since 1971. Its share is largely due to South Africa, where coal represented in 2015 85% of primary production, 68% of TPES, 93% of electricity generation and 24% of total final consumption.

In 2015, power generation in Africa was almost nine times the level in 1971 (Figure 34), whilst also seeing a significant change in the fuel mix. Natural gas was barely nil in 1971 but in 2015 provided almost 300 TWh of electricity, a 37% share of electricity generation in Africa (compared to 26% in OECD, 41%

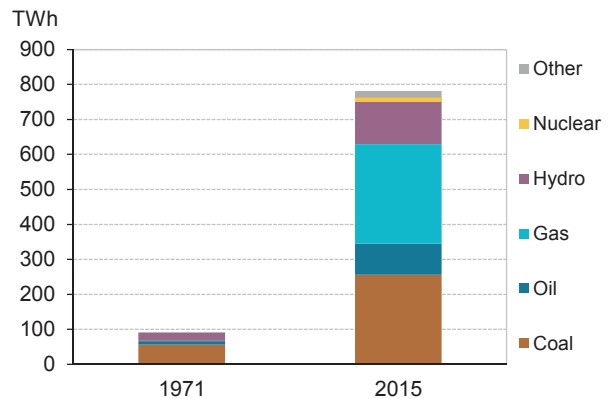
5. Measured by the ratio TPES/GDP.

in non-OECD Europe and Eurasia, and 67% in the Middle East). Its share in the power mix reached even higher level in gas-producing countries such as Algeria (98%), Nigeria (82%), and neighbouring importing countries like Tunisia (91%). In 1971, coal was the first fuel used for power generation in Africa (62%); in 2015 it ranked second after natural gas and accounted for 33% of power generation, providing 257 TWh. Hydro was the second provider of electricity in Africa in 1971 (23 TWh, 26% of the power produced in the continent) and ranked third in 2015 with 121 TWh.

Electricity production reflects the disparity in fossil fuel resources between sub-regions of Africa. In 2015, North African countries plus South Africa, represented only 20% of the population but generated 75% of the electricity in Africa. Electricity remains a grave scarcity for most Sub-Saharan African countries, with national electrification rates in 2014 averaging 35%, compared to 45% for the whole continent, but only 19%

in rural Sub-Saharan areas, but even much less in some countries (less than 1% in Burkina Faso, the Democratic Republic of Congo, Chad, Central African Republic, Djibouti, Sierra Leone or South Sudan)<sup>6</sup>.

**Figure 34. Electricity generation by fuel, Africa**



\* In this graph peat and oil shale are aggregated with coal.

6. Electrification rate extracted from the World Energy Outlook 2016 electricity database: [www.worldenergyoutlook.org/resources/](http://www.worldenergyoutlook.org/resources/)

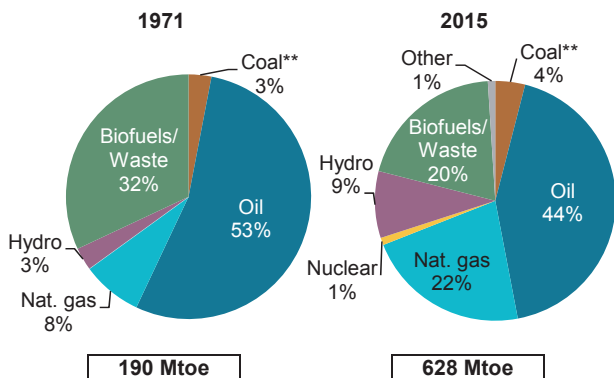


## Non-OECD Americas

In 2015, energy production in non-OECD Americas reached 816 Mtoe, 2 Mtoe more than in 2014. Increased energy production in Brazil (+4.5%) and Argentina (+1.1%) – first and fourth biggest energy producers in the region – was offset by a decline in Venezuela (-1.6%) and Colombia (-2.0%), respectively second and third major producers. In Colombia, which accounted for 93% of the region’s coal, coal production decreased by 3.4%, reaching a level of 55.6 Mtoe. In Venezuela, crude oil production declined for the fourth year in a row (-0.9%). On the contrary in Brazil, non-OECD Americas second oil producer, crude oil production rose by 8% in 2015. Natural gas production decreased by 2.6% in 2015, in the wake of lower productions in some of the region main providers, Trinidad and Tobago (-5.3%), Venezuela (-1.4%) and Bolivia (-11.1%).

Overall the energy mix in non-OECD Americas in 2015 was similar to 2014: oil provided the biggest share of TPES in the region (44% - Figure 35), followed by natural gas (22%) and biofuels and waste (20%).

**Figure 35. Total primary energy supply\* by fuel, Non-OECD Americas**



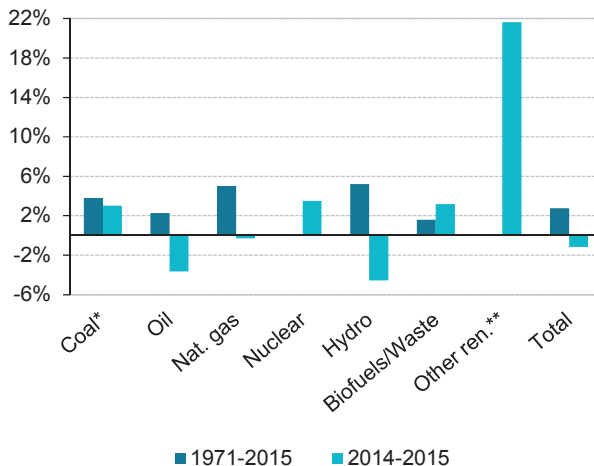
\* Excluding electricity trade.

\*\* In this graph peat and oil shale are aggregated with coal.

In 2015, other renewables (solar thermal, solar photovoltaic, wind, geothermal), saw a 22% increase in production compared to 2014 (Figure 36). Hydro production declined for the fourth year in a row, at a level not seen since 2001 (-4.6%), mainly due to the lower production in Brazil, Venezuela, Argentina and Colombia. Though declining, hydro still accounted for 56% of total non-OECD Americas power generation, a much higher share than globally (16%). Biofuels have been increasing at a steady annual rate of 3% since 2013: liquid biofuels (and in particular transport

biofuels in Brazil) in addition to traditional solid biofuels, are important in non-OECD Americas (20% of TPES, twice more than globally).

**Figure 36. Annual change in TPES by fuel, Non-OECD Americas**



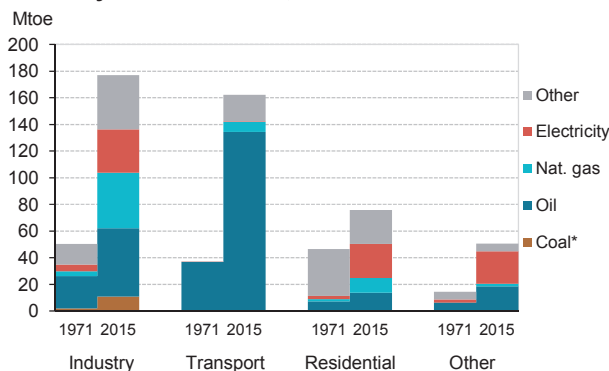
\* In this graph peat and oil shale are aggregated with coal.

\*\* Includes geothermal, solar thermal, solar photovoltaic and wind.

In 2015, industry remained the biggest energy consuming sector (38%), followed by transport (35%) and residential (16%). Industry increased from 50 Mtoe in 1971 to 177 Mtoe in 2015. However, transport saw the largest increase in growing energy final consumption by more than four times since 1971 (Figure 37). Residential nearly doubled over the period, and ranked third in 2015.

In 1971, oil accounted for half of total final consumption and it peaked at 55% in 1979 before the second oil crisis. However the development of electricity, particularly in the residential and the industry sectors, shows why oil’s share in TFC is slowly diminishing and reached 47% in 2015. The share of electricity has almost tripled during that period, reaching 18% in 2015. Natural gas increased from less than 4% to more than 13%, mainly driven by industry use (from 7% to 24%) and residential (from 4% to 15%).

**Figure 37. Total final consumption by sector and fuel, Non-OECD Americas**

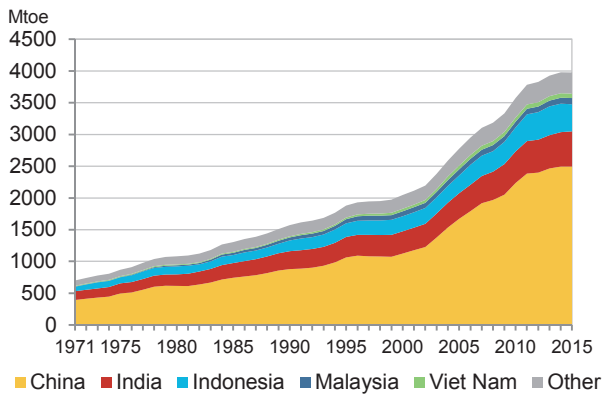


\* In this graph peat and oil shale are aggregated with coal.

## Non-OECD Asia

Since the early 1990s non-OECD Asia has been the second largest energy producing region in the world behind OECD accounting for almost 28.8% of global production in 2015. China alone provided 62.8% of energy production in the region in 2015 (Figure 38). India and Indonesia together accounted for a quarter of the region production (13.9% and 10.7% respectively).

**Figure 38. Energy production by country, Non-OECD Asia**

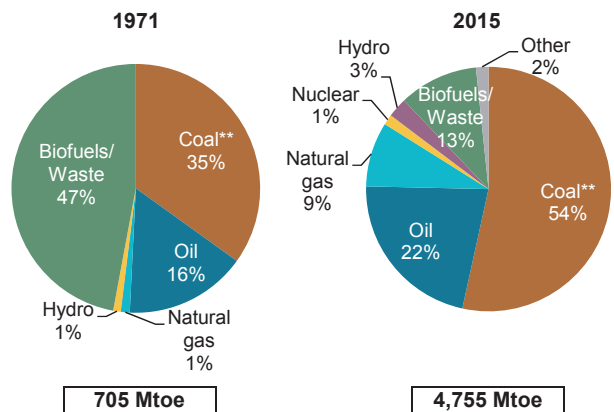


In 2015, non-OECD Asia's total primary energy supply (TPES) increased again, but at a much slower rate compared to previous years (+1.2% growth rate in 2015 compared to +2.7% in 2014 and +3.1% in 2013). It thus seemed decoupled from the economic growth, GDP increasing by 6.3% in Asia in 2015. This is particularly true in China, where GDP increased by 6.8% in 2015, while TPES increased by 0.67%. In India, GDP increased by 7.9% in 2015 whilst TPES increased by 3%. TPES in India has been growing at a rate of 5.1% per annum since 2005, compared to 3.4% between 1995 and 2005.

In 2015, non-OECD Asia accounted for 34.9% of global TPES. However since its production does not cover its needs the region is a net importer. China and India's self-sufficiency continued to decline in 2015 (83.9% and 65.1% respectively) since they peaked - at 108% in 1985 for China and 96% in 1984 for India; Indonesia covered 189% of its energy needs in 2015, but still is a net importer of crude oil.

In 2015, the share of biofuels in TPES decreased to 10% from 47% in 1971; natural gas has reached 9% of TPES, from negligible in 1971. Coal has been by far the main energy source in non-OECD Asia since 2012, supplying more than half of its energy demand (Figure 39), compared to 29% globally. This is also the case in the main energy consuming countries (Figure 40).

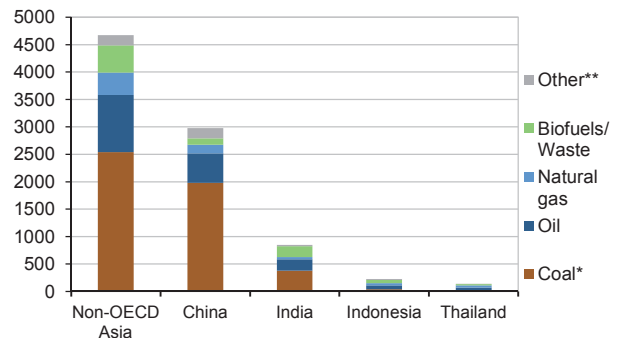
**Figure 39. Total primary energy supply\* by fuel, Non-OECD Asia**



\* Excluding electricity trade.

\*\* In this graph peat and oil shale are aggregated with coal.

**Figure 40. TPES by country in 2015, Non-OECD Asia**

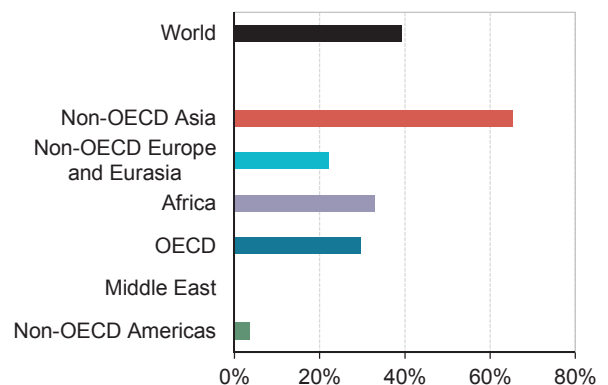


\* In this graph peat and oil shale are aggregated with coal.

\*\* Includes geothermal, solar thermal, solar photovoltaic and wind.

Coal's significance is partly explained by its use in power generation: in 2015, coal represented 65% of the regional electricity mix, versus 39% globally (Figure 41). Coal provided 70% of electricity in China, 75% in India and 56% in Indonesia. In China, the power mix is gradually shifting to less coal and more other sources of energy (natural gas, nuclear, hydro and other renewables).

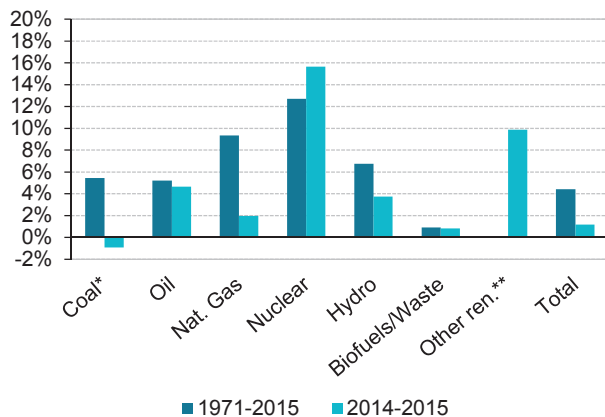
**Figure 41. Share of coal in electricity generation in 2015**



In 2015, total electricity generation in non-OECD Asia increased by 3.6%, mainly driven by India (+6.9%). Electricity production grew in the region at an average annual rate of 8.1% since 1971.

The use of coal in TPES decreased in 2015 whilst the use of oil, gas, biofuels and hydro increased. However, the most significant growth came from other renewables (geothermal, solar photovoltaic, solar thermal and wind) and nuclear (Figure 42). Nuclear, hydro, and other renewables accounted for 5.6% of non-OECD Asia TPES in 2015.

**Figure 42. Annual growth in TPES by fuel, Non-OECD Asia**

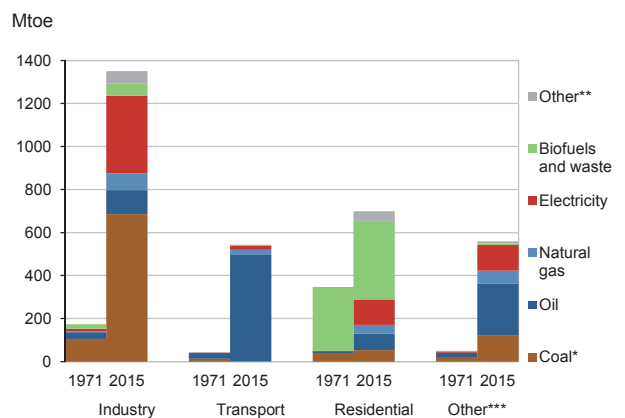


\* In this graph peat and oil shale are aggregated with coal.  
 \*\* Includes geothermal, solar thermal, solar photovoltaic and wind.

Total final consumption in non-OECD Asia has increased by five times over four decades (Figure 43) and has changed considerably. The share of traditional biofuels (biomass, waste) has fallen to a third of its 1971 level (53% of total energy consumption in 1971 compared to 14% in 2015), resulting in coal, with

approximately the same share in 1971 and 2015 (29% and 27% respectively) now being the biggest fuel consumed. The share of oil in total final consumption has almost doubled (from 15% to 29%), and that of electricity rose from 3% to 20%. With a seven-fold increase industry is by far the biggest energy consuming sector in non-OECD Asia, representing in 2015 43% of the region total final consumption. Though coal is still the main fuel consumed in industry (51% in 2015) it is now followed by electricity (27%). The residential sector is now second behind industry, and has increased by 200% between 1971 and 2015; though traditional biomass is still the main fuel consumed by residential, electricity and natural gas have significantly increased. Energy consumption has been multiplied by 13 times in the transport sector and relies mainly on oil.

**Figure 43. Total final consumption by sector and fuel, Non-OECD Asia**



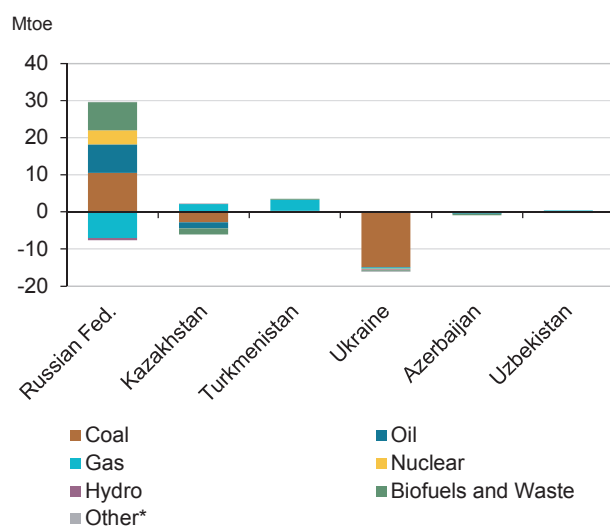
\* In this graph peat and oil shale are aggregated with coal.  
 \*\* Includes direct use of geothermal, solar thermal and heat.  
 \*\*\* Includes non-energy use.

## Non-OECD Europe and Eurasia

In 2015, total energy production in non-OECD Europe and Eurasia was lower than energy production in the Middle East for the first time since 1998. Energy production in non-OECD Europe and Eurasia remained largely stable at 2014 levels (+2 Mtoe, +0.1%), whereas the Middle East added 61 Mtoe of production (+3.3%), mainly crude oil from Saudi Arabia, Iraq and UAE.

Energy production in the Russian Federation, which represented 73% of the regional total, grew by 1.1% (15 Mtoe) from 2014 to 2015 (Figure 44). This growth was offset by a fall in reported Ukrainian production (-16 Mtoe, -20.3%). Please refer to the country notes included in this publication for details of territorial coverage.

**Figure 44. Top producers**  
Annual change in production in 2015,  
Non-OECD Europe and Eurasia



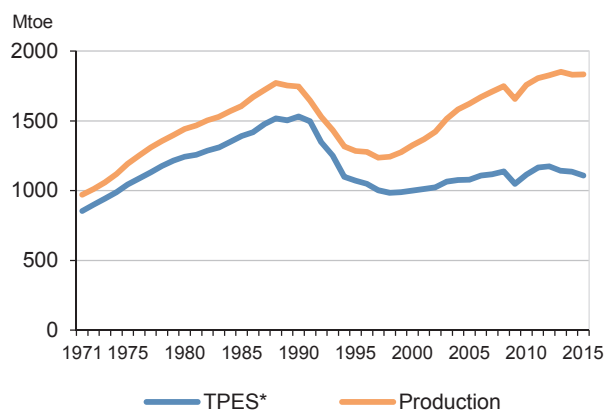
\*Other includes hydro, geothermal, solar, wind, and heat

Preliminary data on the trade of coal, crude oil and natural gas for 2016 shows that the Russian Federation remains world's largest exporter of natural gas (205 bcm) and second largest exporter of crude oil (243 Mt). Turkmenistan stays the 6<sup>th</sup> largest exporter of natural gas and Kazakhstan the 8<sup>th</sup> largest exporter of coal.

Energy production is very unevenly distributed across non-OECD Europe and Eurasia. Although the region

as a whole is energy self-sufficient (Figure 45), it includes some of the most energy import-dependent countries in the world: In 2015, only 2% of Malta's energy consumption was covered by domestic production. The self-sufficiency ratio was 6% for Cyprus and 14% for Belarus. In contrast, Azerbaijan produced four times more energy than it consumed.

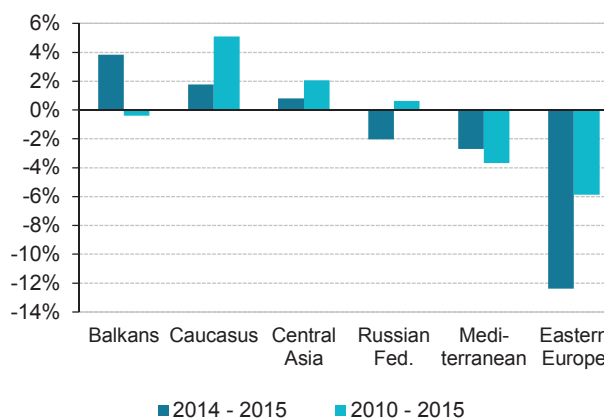
**Figure 45. Energy production and demand,**  
1971-2015,  
Non-OECD Europe and Eurasia



\*excluding electricity trade.

In 2015, non-OECD Europe and Eurasia saw the sharpest regional decrease in energy demand compared to 2014, both in percentage (-2.4%) and in absolute value (-28 Mtoe).

**Figure 46. Annual average change in total primary energy supply by sub-region,**  
Non-OECD Europe and Eurasia



**Balkans** is Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Kosovo, Montenegro, Romania and Serbia;

**Caucasus** is Armenia, Azerbaijan and Georgia

**Central Asia** is Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan;

**Mediterranean** is Cyprus, Gibraltar and Malta

**Eastern Europe** is Belarus, Moldova, Ukraine and Lithuania

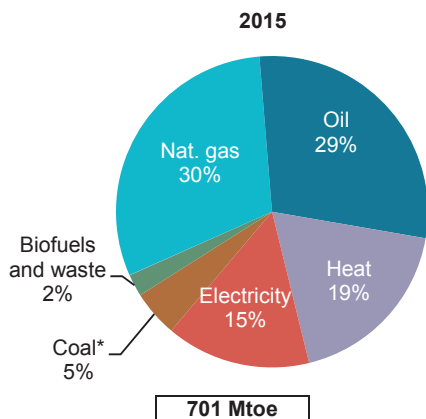
Note: Estonia, Latvia and Slovenia are OECD members.

The Russian Federation’s energy demand decreased by 2.0% (-15 Mtoe) between 2014 and 2015 (Figure 46) where reported consumption of natural gas for power and heat fell by 21 Mtoe in 2015, compared to 2014. The other main contributor to the regional energy demand drop was Ukraine (-14.8%, 16 Mtoe between 2014 and 2015) where increase in end-use consumer prices and ongoing economic turmoil impacted energy consumption.

Energy demand also dropped in Belarus (-9%, 2 Mtoe), partly due to warmer weather. However, energy demand continued to grow in the Caucasus (+1.8%) and in Central Asia (+0.8%), in line with the trends observed in the previous years. The growth observed in the Balkan region (+3.8%) was driven by Serbia (+11.3%).

In 2015, natural gas had the largest share in the regional total final consumption (30%), followed by oil (29%), heat (18%) and electricity (15%). Biofuels and waste represented only 2% of total final consumption in Non-OECD Europe and Eurasia in 2015, but this share is likely underestimated (Figure 47): For instance, the Republic of Moldova was recently able to carry out a detailed survey on household consumption which revealed that biofuels and waste are the first source of energy used in households.

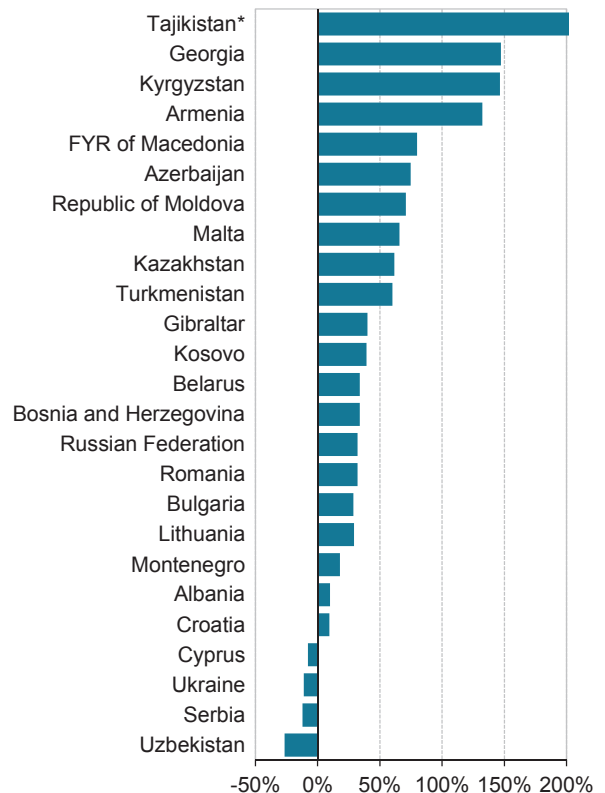
**Figure 47. Total final consumption by fuel, Non-OECD Europe and Eurasia**



\* In this graph peat and oil shale are aggregated with coal

Over the past decade (2005-2015), road transport consumption in Non-OECD Europe in Eurasia has increased by 30%, increasing demand for oil products. Road transport consumption more than doubled in the Caucasus (Azerbaijan, Armenia, Georgia -Figure 48).

**Figure 48. Road transport, change in energy consumption 2005-2015, Non-OECD Europe and Eurasia**



\* Tajikistan's reported road consumption growth exceeds 500%

In 2015, natural gas was also the dominant fuel in the regional electricity mix (41%), followed by coal at 22%, and nuclear (18%). Non-OECD Europe and Eurasia was the second largest nuclear-producing region in the world, with the Russian Federation, Ukraine, Bulgaria, Romania, and Armenia producing a total of 313 TWh (12.2% of world). However, at end 2015 the People’s Republic of China overtook the Russian Federation in terms of installed nuclear capacity (27 GW against 25 GW). Renewables, largely hydropower, accounted for 17% of regional electricity mix in 2015, with a record high share in Tajikistan and Kyrgyzstan (over 90% of power generation). Solar, geothermal and wind electricity generation though increasing, accounted only for 1.0% of regional electricity output.

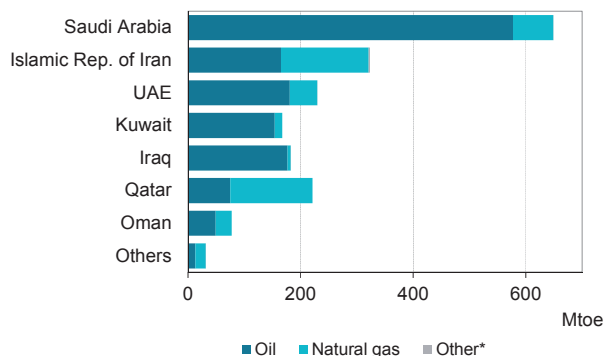
Natural gas was even more dominant in the heat mix (64%), followed by coal (23%).



## Middle East

With energy production more than 2.5 times as large as its demand, the Middle East has the highest energy self-sufficiency ratio in the world. In 2015, for the fifth consecutive year since 2011, the region produced just over 13% of global energy, including 31% of global oil. The Middle East's global share of natural gas production has increased every year since 1997, levelling at 16% of global natural gas production since 2013.

**Figure 49. Energy production in 2015, Middle East**

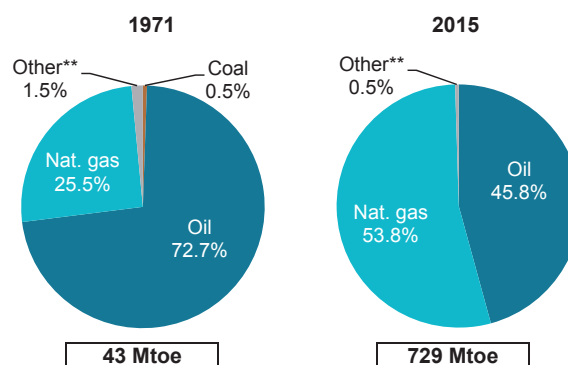


\* Includes coal, nuclear, hydro, other renewables, biofuels and waste

Saudi Arabia was still by far the largest oil producer in the region with 41%, followed by Iraq and the UAE each with 12% (Figure 49). With 32% of the Middle East's natural gas production, Iran maintained its position as the region's largest producer of natural gas in 2015, closely followed by Qatar at 30% of the regional production. Iran's natural gas production increased by 5% in 2015, which is slower growth compared to the 11% increase seen in 2014. The 2% decline in gas production in Qatar in 2014 was more than offset by a 3% growth in 2015. In 2015, the major growth in oil production was again seen in Iraq (+12% to be compared to 4% in 2014). Other notable growth in oil production was seen in the UAE (+6%). Oil production continued to decline in Syria (-18%) in 2015, though not as drastically as in 2014 – with a nearly 48% decline. Similarly, Yemen also saw a dramatic deterioration of oil production, with an 80% drop due to political unrest and the halting of oil and gas activities in 2015.

Alongside increasing its production, the Middle East is also the fastest growing region in terms of TPES. Over the period from 1971 to 2015, TPES grew on average by 7% per year. In 2015 this supply is almost exclusively based on oil and natural gas (Figure 50). Natural gas has partially displaced oil, doubling its share between 1971 and 2015.

**Figure 50. Total primary energy supply\* by fuel, Middle East**



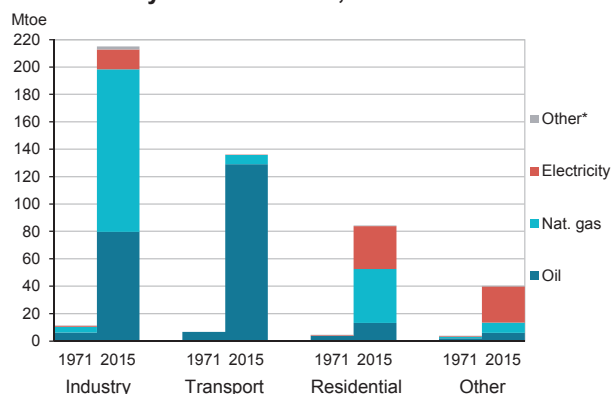
\* Excluding electricity trade.

\*\* Includes coal, nuclear, hydro, other renewables, biofuels and waste

Key factors driving the rapid development of natural gas in the Middle East are power generation and the petrochemical sector. This is illustrated by the share of oil in electricity production continuing to shrink, starting with 54% in 1971 and reaching the 2015 level of 31%. In contrast, the share of natural gas in electricity production continually increases, from 27% to 67% in the same period. In 2015, natural gas continued to provide almost all the electricity generated in Bahrain, Qatar, the United Arab Emirates, and in Oman.

Over the last four decades, total final consumption expanded in all sectors, particularly industry and transport, which increased twenty fold. In 2015 oil accounted for 95%, 37% and 16% of final consumption in transport, industry and residential, respectively (Figure 51). Oil is responsible for 47% of total energy consumption in the Middle East. Also in 2015, natural gas met 55% and 47% of final consumption in industry and residential, respectively. Electricity tripled its share in final energy consumption from 5.6% in 1971 to 15.1% in 2015.

**Figure 51. Total final consumption by sector and fuel, Middle East**



\* Includes coal, other renewables, biofuels and waste



# PART I

## EXPLANATORY NOTES

## ABBREVIATIONS

Btu:	British thermal unit
GWh:	gigawatt hour
kcal:	kilocalorie
kg:	kilogramme
kJ:	kilojoule
Mt:	million tonnes
m <sup>3</sup> :	cubic metre
t:	metric ton = tonne = 1 000 kg
TJ:	terajoule
toe:	tonne of oil equivalent = 10 <sup>7</sup> kcal
CHP:	combined heat and power
GCV:	gross calorific value
GDP:	gross domestic product
HHV:	higher heating value = GCV
LHV:	lower heating value = NCV
NCV:	net calorific value
PPP:	purchasing power parity
TPES:	total primary energy supply
AfDB:	African Development Bank
EU-28:	European Union - 28
FAO:	Food and Agriculture Organisation of the United Nations
IEA:	International Energy Agency
IPCC:	Intergovernmental Panel on Climate Change
ISIC:	International Standard Industrial Classification
OECD:	Organisation for Economic Co-Operation and Development
OLADE:	Organización Latinoamericana de Energía
UN:	United Nations
UNIPED:	International Union of Producers and Distributors of Electrical Energy
c	confidential
e	estimated
..	not available
-	nil
x	not applicable

# 1. METHODOLOGICAL NOTES

In this publication, Part I presents key explanations on the IEA energy balances methodologies and on the data presented in the book. Part II presents the 2015 energy balance table and graphs on key data and indicators by country and regional aggregate, with additional information on the provisional 2016 supply for OECD countries and, to the extent available, for Association countries<sup>1</sup>; as well as country notes. Part III presents summary tables with time series, for selected data and indicators for all countries and regional aggregates at a glance.

This publication is based on the data in physical units published in the IEA *World Energy Statistics*. It follows the definitions of the *United Nations International Recommendations for Energy Statistics (IRES)*<sup>2</sup> which form the basis of the IEA energy balance methodology, briefly summarised below.

## Energy balance: key concepts

Energy data are generally collected independently across different commodities. Energy statistics are the simplest format to present all the data together, assembling the individual balances of all products, each expressed in its own physical unit (e.g. TJ for natural gas, kt for coal, etc). These are called commodity balances.

However, energy products can be converted into one another through a number of transformation processes. Therefore, it is very useful to also develop one comprehensive national energy balance, to understand how products are transformed into one another, and to highlight the various relationships among them.

By presenting all the data in a common energy unit, the energy balance allows users to see the total

amount of energy used and the relative contribution of each different source, for the whole economy and for each individual consumption sector; to compute the different fuel transformation efficiencies; to develop various aggregated indicators (for example consumption per capita or per unit of GDP) and to estimate CO<sub>2</sub> emissions from fuel combustion.

The energy balance is a natural starting point to study the evolution of the domestic energy market, forecast energy demand, monitor impacts of energy policies and assess potential areas for action. The statistician also uses the energy balance to check data accuracy, as large statistical differences in energy units, apparent energy gains or large losses in transformation processes, or large unexplained variations in shares or in high-level indicators may all indicate underlying data problems.

The energy balance takes the form of a matrix where columns present all the different energy sources (“products”) categories and rows represent all the different “flows”, grouped in three main blocks: energy supply, transformation/energy use and final consumption.

To develop an energy balance from the set of commodity balances, the two main steps are: i) all the data are converted to a common energy unit – also allowing to compute a “total” product; and ii) some re-formatting is performed to avoid double counting when summing all products together. For example, for secondary products (e.g. motor gasoline) the production appears in the production row in commodity balances, but is reported as an output of the relevant transformation (e.g. oil refineries) in an energy balance, where the production row only refers to production of primary products (e.g. crude oil).

The methodological assumptions underlying energy balances, discussed in the next section, are particularly important to understand differences across balances derived by different national and international organisations starting from the same energy commodity data.

1. China, India, Indonesia, Morocco, Singapore and Thailand.  
2. [http://unstats.un.org/unsd/energy/ires/IRES\\_Whitecover.pdf](http://unstats.un.org/unsd/energy/ires/IRES_Whitecover.pdf).

## IEA energy balances methodology

The unit adopted by the IEA is the tonne of oil equivalent (toe), defined as  $10^7$  kilocalories (41.868 gigajoules). This quantity of energy is, within a few per cent, equal to the net heat content of 1 tonne of crude oil. Conversion of the IEA energy balances to other energy units would be straightforward.

The main methodological choices underlying energy balances that can differentiate the final balances layout across organisations are: i) “net” versus “gross” energy content; ii) calorific values; and iii) primary energy conventions.

### Net versus gross energy content

The IEA energy balances are based on a “net” energy content, which excludes the energy lost to produce water vapour during combustion. All the elements of the energy balance are expressed on the same net basis to ensure comparability. Even elements (e.g. natural gas) that in commodity balances may be already in energy units but on a different basis (e.g. “gross”) are converted (e.g. from “gross” to “net”).

The difference between the “net” and the “gross” calorific value for each fuel is the latent heat of vaporisation of the water produced during combustion of the fuel. For coal and oil, the net calorific value is about 5% less than gross, for most forms of natural and manufactured gas the difference is 9-10%, while for electricity and heat there is no difference as they are not combusted.

### Calorific values

Generally, the IEA adopts country-specific, time-varying, and for some products flow-dependent, net calorific values supplied by national administrations for most products; and regional default values (in conjunction with Eurostat for the European countries) for the oil products. More detailed explanations on the IEA conversion to energy units for the different energy sources are given in Section 2, Units and conversions.

### Primary energy conventions

A very important methodological choice is the definition of the “**primary energy equivalent**” for the electricity and heat produced from non-combustible sources, such as nuclear, geothermal, solar, hydro, wind. The information collected is generally the amount of electricity and heat produced, represented

in the balance as an output of transformation. Conventions are needed to compute the most appropriate corresponding primary energy, input to the transformation, both in form and in amount.

The principle adopted by the IEA is that the **primary energy form** is *the first energy form downstream in the production process for which multiple energy uses are practical*. For example, the first energy form that can be used as energy in the case of nuclear is the nuclear heat of the reactor, most of which is then transformed into electricity. The application of this principle leads to the choice of the following primary energy forms:

- **Electricity** for primary electricity (hydro, wind, tide/wave/ocean and solar photovoltaic).
- **Heat** for heat and secondary electricity (nuclear, geothermal and solar thermal).

Once the primary energy form is identified for all electricity and heat generated from non-combustible sources, the IEA adopts the **physical energy content method** to compute the corresponding primary energy equivalent amounts: the primary energy equivalent is simply the physical energy content of the corresponding primary energy form.

For primary electricity, such as hydro and solar PV, as electricity is identified as the primary energy form, the primary energy equivalent is simply the gross electricity generated in the plant.

For nuclear electricity, the primary energy equivalent is the quantity of heat generated in the reactors. In the absence of country-specific information, the IEA estimates the primary energy equivalent from the electricity generated by assuming an efficiency of 33%, derived as the average efficiency of nuclear power plants across Europe. Note that the principle of using the heat from nuclear reactors as the primary energy form for the energy statistics has an important effect on any indicators of energy supply dependence. Under the present convention, the primary nuclear heat appears as an indigenous resource. However, the majority of countries using nuclear power import their nuclear fuel, and if this fact could be taken into account, it would lead to an increase in the supply dependence on other countries.

For geothermal electricity, the primary energy equivalent is the quantity of heat and a similar back-calculation is used where the quantities of steam supplied to the plant are not measured, assuming a thermal efficiency of 10%. This figure is only approximate and reflects the fact that the steam from



geothermal sources is generally of low quality. If data for the steam input to geothermal power plants are available, they are used directly as primary energy equivalent.

Similarly, for solar thermal plants the heat supply is back-calculated assuming a 33% efficiency of conversion of heat into electricity, reflecting relatively low working temperatures, although central receiver systems can reach higher temperatures and therefore higher efficiencies.

In summary, for geothermal and solar thermal, if no country-specific information is reported, the primary energy equivalent is calculated using the following efficiencies:

- 10% for geothermal electricity;
- 50% for geothermal heat;
- 33% for solar thermal electricity;
- 100% for solar thermal heat.

An alternative to the physical energy content method is the **partial substitution method**, used in the past by the IEA. In this case, the primary energy equivalent of the electricity generated from non-combustible sources is computed as the hypothetical amount of energy necessary to generate the same amount of electricity in thermal power plants, assuming an average generation efficiency. The method was abandoned by the IEA and other organisations because it had little meaning for countries with significant hydro electricity generation, and because the actual substitution values were hard to establish, as they depended on the efficiency of the marginal electricity production. It also had unreal effects on the energy balance, as transformation losses appeared without a physical basis.

Since the two methods differ significantly in the treatment of solar, hydro, etc., the share of renewables in total energy supply varies depending on the method. To interpret shares of various energy sources in total supply, it is important to understand the conventions used to calculate the primary energy supply.

## Balances tables description

The energy balances shown in Part II are presented in tabular format: columns for the various sources of energy and rows for the different origins and uses.

Note that the tables for World, regional aggregates and OECD countries are in million tonnes of oil equivalent (Mtoe), while those for non-OECD countries are

in thousand tonnes of oil equivalent (ktoe) with a few exceptions for the Association countries.

## Columns

Across the top of the table from left to right, there are eleven columns with the following headings:

**Column 1:** *Coal* includes all coal, both primary (including hard coal and lignite) and derived fuels (including patent fuel, coke oven coke, gas coke, BKB, gas works gas, coke oven gas, blast furnace gas and other recovered gases).

*For presentational purposes, peat (including peat products) and oil shale are also included in this column, where applicable. Note: starting with the 2011 edition, gas works gas is included here with coal. In prior years, gas works gas was included with natural gas.*

**Column 2:** *Crude oil* comprises crude oil, natural gas liquids, refinery feedstocks, and additives as well as other hydrocarbons (including emulsified oils, synthetic crude oil, mineral oils extracted from bituminous minerals such as oil shale, bituminous sand, etc., and oils from coal liquefaction).

**Column 3:** *Oil products* comprise refinery gas, ethane, LPG, aviation gasoline, motor gasoline, jet fuels, kerosene, gas/diesel oil, fuel oil, naphtha, white spirit, lubricants, bitumen, paraffin waxes, petroleum coke and other oil products.

**Column 4:** *Natural gas* includes natural gas (excluding natural gas liquids). *Note: starting with the 2011 edition, gas works gas is included with coal. In prior years, gas works gas was included with natural gas.*

**Column 5:** *Nuclear* shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33%.

**Column 6:** *Hydro* shows the energy content of the electricity produced in hydro power plants. Hydro output excludes output from pumped storage plants.

**Column 7:** *Geothermal/Solar/etc.* shows production of geothermal, solar, wind and tide/wave/ocean energy and the use of these energy forms for electricity and heat generation. Unless the actual efficiency of the geothermal process is known, the quantity of geothermal energy entering electricity generation is inferred from the electricity production at geothermal plants assuming an average thermal efficiency of 10%. Similarly, for solar thermal electricity, a default of 33% is used if the actual efficiency is not known. For solar PV, wind and tide/wave/ocean energy, the quantities

entering electricity generation are equal to the electrical energy generated. Other uses shown in this column relate to geothermal and solar thermal heat. If the heat is distributed in the transformation sector, then the default efficiencies are 50% for geothermal heat and 100% for solar thermal heat. The production is included in the transformation sector as an input and the consumption of the heat is included in the heat column. If the heat is used directly, then the consumption is shown in the geothermal/solar column directly in the sector where the heat was consumed.

**Column 8: Biofuels/Waste** comprises solid biofuels, liquid biofuels, biogases, industrial waste and municipal waste. Biofuels are defined as any plant matter used directly as fuel or converted into fuels (e.g. charcoal) or electricity and/or heat. Included here are wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes (also known as "black liquor") which is an alkaline spent liquor from the digesters in the production of sulphate or soda pulp during the manufacture of paper where the energy content is derived from the lignin removed from the wood pulp and which is usually 65-70% solid in its concentrated form.

Municipal waste comprises wastes produced by residential and commercial/public services that are collected by local authorities for disposal in a central location for the production of heat and/or power. Hospital waste is included in this category.

Note that for biofuels, only the amounts of biomass specifically used for energy purposes (a small part of the total) are included in the energy statistics. Therefore, the non-energy use of biomass is not taken into consideration and the quantities are null by definition.

Data under this heading are often based on incomplete information. Thus the data give only a broad impression of developments, and are not strictly comparable between countries. In some cases complete categories of vegetal fuel are omitted due to lack of information. Please refer to individual country data when consulting regional aggregates.

**Column 9: Electricity** shows final consumption and trade in electricity, which is accounted at the same heat value as electricity in final consumption (i.e. 1 GWh = 0.000086 Mtoe).

**Column 10: Heat** shows the disposition of heat produced for sale. The large majority of the heat included in this column results from the combustion of fuels although some small amounts are produced from

electrically powered heat pumps and boilers. Any heat extracted from ambient air by heat pumps is shown as production.

**Column 11: Total** equals the total of Columns 1 to 10.

## Rows

The categories on the left hand side of the table have the following functions:

**Row 1: Production** is the production of primary energy, i.e. hard coal, brown coal, peat, oil shale, crude oil, NGL, natural gas, biofuels and waste, nuclear, hydro, geothermal, solar, wind and the heat from heat pumps that is extracted from the ambient environment. Production is calculated after removal of impurities (e.g. sulphur from natural gas). Calculation of production of hydro, geothermal, etc. and nuclear electricity is explained in the section on Units and conversions.

**Row 2/3: Imports and exports** comprise amounts having crossed the national territorial boundaries of the country, whether or not customs clearance has taken place.

**For coal:** Imports and exports comprise the amount of fuels obtained from or supplied to other countries, whether or not there is an economic or customs union between the relevant countries. Coal in transit should not be included.

**For oil and natural gas:** Quantities of crude oil and oil products imported or exported under processing agreements (i.e. refining on account) are included. Quantities of oil in transit are excluded. Crude oil, NGL and natural gas are reported as coming from the country of origin; refinery feedstocks and oil products are reported as coming from the country of last consignment. Re-exports of oil imported for processing within bonded areas are shown as exports of product from the processing country to the final destination. Imported LNG which is exported to another country after regasification is considered both as an import and as an export of gas.

**For electricity:** Amounts are considered as imported or exported when they have crossed the national territorial boundaries of the country. If electricity is "wheeled" or transited through a country, the amount is shown as both an import and an export.

**Row 4: International marine bunkers** covers those quantities delivered to ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and

waterways, and in coastal waters. Consumption by ships engaged in domestic navigation is excluded. The domestic/international split is determined on the basis of port of departure and port of arrival, and not by the flag or nationality of the ship. Consumption by fishing vessels and by military forces is also excluded. See *domestic navigation* (Row 40), *fishing* (Row 46) and *non-specified "other"* (Row 47).

**Row 5:** *International aviation bunkers* includes deliveries of aviation fuels to aircraft for international aviation. Fuels used by airlines for their road vehicles are excluded. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. For many countries this incorrectly excludes fuel used by domestically owned carriers for their international departures.

*Note that international aviation bunkers and international marine bunkers are subtracted out of supply, based on the IRES. This differs from the treatment of international aviation bunkers in the annual oil statistics published in the Oil Information publication.*

**Row 6:** *Stock changes* reflects the difference between opening stock levels on the first day of the year and closing levels on the last day of the year of stocks on national territory held by producers, importers, energy transformation industries and large consumers. A stock build is shown as a negative number, and a stock draw as a positive number.

**Row 7:** *Total primary energy supply (TPES)* is made up of *production* (Row 1) + *imports* (Row 2) - *exports* (Row 3) - *international marine bunkers* (Row 4) - *international aviation bunkers* (Row 5) ± *stock changes* (Row 6). Note, exports, bunkers and stock changes incorporate the algebraic sign directly in the number.

**Row 8:** *Transfers* include interproduct transfers, products transferred and recycled products (e.g. used lubricants which are reprocessed).

**Row 9:** *Statistical differences* are essentially the difference between supply and demand. They include the sum of the unexplained statistical differences for individual fuels, as they appear in the basic energy statistics. They also include the statistical differences that arise because of the variety of conversion factors in the coal and oil columns. See introduction to the *World Energy Statistics* for further details.

**Row 10:** *Electricity plants* refers to plants which are designed to produce electricity only. If one or more

units of the plant is a CHP unit (and the inputs and outputs cannot be distinguished on a unit basis) then the whole plant is designated as a CHP plant. Both main activity producer<sup>3</sup> and autoproducer<sup>4</sup> plants are included here. Columns 1 through 8 show the use of primary and secondary fuels for the production of electricity as negative entries. Heat from chemical processes used for electricity generation will appear in Column 10. Gross electricity produced (including power stations' own consumption) appears as a positive quantity in the electricity column. Transformation losses appear in the total column as a negative number.

**Row 11:** *Combined heat and power plants (CHP)*, refers to plants which are designed to produce both heat and electricity, sometimes referred as co-generation power stations. If possible, fuel inputs and electricity/heat outputs are on a unit basis rather than on a plant basis. However, if data are not available on a unit basis, the convention for defining a CHP plant noted above is adopted. Both main activity producer and autoproducer plants are included here. *Note that for autoproducer CHP plants, all fuel inputs to electricity production are taken into account, while only the part of fuel inputs to heat sold is shown. Fuel inputs for the production of heat consumed within the autoproducer's establishment are not included here but are included with figures for the final consumption of fuels in the appropriate consuming sector.*

Columns 1 through 8 show the use of primary and secondary fuels for the production of electricity and heat as negative entries. Total gross electricity produced appears as a positive quantity in the electricity column and heat produced appears as a positive number in the heat column. Transformation losses appear in the total column as a negative number.

**Row 12:** *Heat plants* refers to plants (including heat pumps and electric boilers) designed to produce heat only, which is sold to a third party under the provisions of a contract. Both main activity producer and autoproducer plants are included here. Heat pumps that are operated within the residential sector where the heat is not sold are not considered a transformation process and are not included here – the electricity consumption appears as residential use.

3. Main activity producers generate electricity and/or heat for sale to third parties, as their primary activity. They may be privately or publicly owned. Note that the sale need not take place through the public grid.

4. Autoproducer undertakings generate electricity and/or heat, wholly or partly for their own use as an activity which supports their primary activity. They may be privately or publicly owned.

Columns 1 through 8 show the use of primary and secondary fuels in a heating system that transmits and distributes heat from one or more energy sources to, among others, residential, industrial, and commercial consumers, for space heating, cooking, hot water and industrial processes.

**Row 13:** *Blast furnaces* contains inputs to and outputs of fuels from blast furnaces. It is often difficult to correctly account for all inputs and outputs in energy transformation industries, and to separate energy that is transformed from energy that is combusted. As a result, in certain cases the data in the total column are positive numbers, indicating a problem in the underlying energy data.

**Row 14:** *Gas works* contains the inputs to and outputs from plants manufacturing gases for distribution to the public, either directly or after blending with natural gas. The coal column will contain the output of gas works gas minus any inputs of coal and coal products into the gas works. Inputs of oil products or natural gas into the gas works will figure as negative numbers with conversion losses appearing in the total column.

**Row 15:** *Coke/patent fuel/BKB/PB plants* contains losses in transformation of coal from primary to secondary fuels and from secondary to tertiary fuels (hard coal to coke and patent fuel, lignite to BKB, peat to peat briquettes (PB), etc.).

**Row 16:** *Oil refineries* shows the use of primary energy for the manufacture of finished oil products and the corresponding output. Thus, the total reflects transformation losses. In certain cases the data in the total column are positive numbers. This can be due either to problems in the primary refinery balance, or to the fact that the IEA uses regional net calorific values for oil products.

**Row 17:** *Petrochemical plants* covers backflows returned from the petrochemical industry. Note that backflows from oil products that are used for non-energy purposes (i.e. white spirit and lubricants) are not included here, but in non-energy use.

**Row 18:** *Liquefaction plants* includes diverse liquefaction processes, such as coal liquefaction plants and gas-to-liquid plants.

**Row 19:** *Other transformation* covers non-specified transformation not shown elsewhere, such as the transformation of primary solid biofuels into charcoal.

**Row 20:** *Energy industry own use* contains the primary and secondary energy consumed by transformation industries for heating, pumping, traction and lighting

purposes [ISIC<sup>5</sup> 05, 06, 19 and 35, Group 091 and Classes 0892 and 0721]. These quantities are shown as negative figures. Included here are, for example, own use of energy in coal mines, own consumption in power plants (which includes net electricity consumed for pumped storage) and energy used for oil and gas extraction.

**Row 21:** *Losses* includes losses in energy distribution, transmission and transport.

**Row 22:** *Total final consumption* (TFC) is the sum of consumption by the different end-use sectors and also includes *non-energy use*. Backflows from the petrochemical industry are not included in final consumption (see Row 17, *petrochemical plants* and Row 52, *of which petrochemical feedstocks*).

**Rows 23-36:** *Industry* consumption is specified by sub-sector as listed below. Energy used for transport by industry is not included here but is reported under transport. *Non-energy use* in industry is excluded from *industry* and reported separately (see Rows 50-52).

*Iron and steel industry* [ISIC Group 241 and Class 2431];

*Chemical and petrochemical industry* [ISIC Divisions 20 and 21] excluding petrochemical feedstocks;

*Non-ferrous metals basic industries* [ISIC Group 242 and Class 2432];

*Non-metallic minerals* such as glass, ceramic, cement, etc. [ISIC Division 23];

*Transport equipment* [ISIC Divisions 29 and 30];

*Machinery* comprises fabricated metal products, machinery and equipment other than transport equipment [ISIC Divisions 25 to 28];

*Mining (excluding fuels) and quarrying* [ISIC Divisions 07 and 08 and Group 099];

*Food and tobacco* [ISIC Divisions 10 to 12];

*Paper, pulp and printing* [ISIC Divisions 17 and 18];

*Wood and wood products* (other than pulp and paper) [ISIC Division 16];

*Construction* [ISIC Divisions 41 to 43];

*Textile and leather* [ISIC Divisions 13 to 15];

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5. International Standard Industrial Classification of All Economic Activities, Series M, No. 4 / Rev. 4, United Nations, New York, 2008.



*Non-specified* (any manufacturing industry not included above) [ISIC Divisions 22, 31 and 32].

Note: Most countries have difficulties supplying an industrial breakdown for all fuels. In these cases, the *non-specified* industry row has been used. Regional aggregates of industrial consumption should therefore be used with caution.

**Rows 37-43:** *Transport* includes all fuels used for transport [ISIC Divisions 49 to 51] except international marine bunkers and international aviation bunkers. It includes transport in industry and covers *domestic aviation, road, rail, pipeline transport, domestic navigation* and *non-specified transport*. Domestic aviation includes deliveries of aviation fuels to aircraft for domestic aviation – commercial, private, agriculture, etc. It includes use for purposes other than flying, e.g. bench testing of engines, but not airline use of fuel for road transport. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. Note that this may include journeys of considerable length between two airports in a country (e.g. San Francisco to Honolulu). For many countries, the split between international aviation and domestic aviation incorrectly allocates fuel use for both domestic and international departures of domestically owned carriers to domestic air. Fuel used for ocean, coastal and inland fishing (included under *fishing*) and military consumption (included in *other non-specified*) are excluded from transport. *Non-energy use* in transport is excluded from *transport* and reported separately (see Row 53).

**Rows 44-49:** *Other* covers *residential* [ISIC Divisions 97 and 98, although this is only a small part of residential], *commercial and public services* [ISIC Divisions 33, 36-39, 45-47, 52, 53, 55, 56, 58-66, 68-75, 77-82, 84 (excluding Class 8422), 85-88, 90-96 and 99], *agriculture/forestry* [ISIC Divisions 01 and 02], *fishing* [ISIC Division 03] and *non-specified consumption*. *Non-specified* includes military fuel use for all mobile and stationary consumption (e.g. ships, aircraft, road and energy used in living quarters) regardless of whether the fuel delivered is for the military of that country or for the military of another country. In many cases administrations find it impossible to distinguish energy consumption in *commercial and public services* from *residential* consumption. Some cannot distinguish consumption in *agriculture* from that in *residential*. In these cases, residential will also include consumption in *agriculture* and/or *commercial/public services*. The *other* total is, therefore, more accurate than its components.

**Rows 50-54:** *Non-energy use* covers those fuels that are used as raw materials in the different sectors and are not consumed as a fuel or transformed into another fuel. Non-energy use is shown separately in final consumption under the heading *non-energy use*.

Note that for biofuels, only the amounts of biomass specifically used for energy purposes (a small part of the total) are included in the energy statistics. Therefore, the non-energy use of biomass is not taken into consideration and the quantities are null by definition.

*of which: chemical/petrochemical.* Fuels used for chemical feedstocks and non-energy products in the petrochemical industry, which includes cracking and reforming processes for the purpose of producing ethylene, propylene, butylene, synthesis gas, aromatics, butadene and other hydrocarbon-based raw materials in processes *such* as steam cracking, aromatics plants and steam reforming [part of ISIC Group 201].

**Rows 55-57:** *Electricity generated* shows the total electricity generated by installations separated into electricity plants and CHP plants. Production includes electricity from combustible fuels, nuclear, hydro (excluding pumped storage production), geothermal, etc. (see, however, the notes on Rows 10 and 11). Electricity produced by *heat* from chemical processes is shown in the *heat* column.

**Rows 58-60:** *Heat generated* shows the total heat generated by installations separated into CHP plants and heat plants. Heat produced by electric boilers is shown in the *electricity* column. Heat produced by heat pumps, heat from chemical processes and heat from non-specified combustible fuels is shown in *the heat* column.

## Graphs description

The graphs in Part II show for each country and regional aggregate the data and indicators described below.

### *Figure 1: Energy production*

Presents total primary energy production, *expressed* in Mtoe. The product *Hydro/other* includes hydro, geothermal, solar, wind, tide/wave/ocean and primary electricity and heat from other sources.

### *Figure 2: Total primary energy supply*

This graph excludes electricity trade. The product *Hydro/other* includes hydro, geothermal, solar, wind, tide/wave/ocean and primary electricity and heat from other sources.

**Figure 3: Energy self-sufficiency**

Presents total energy production divided by TPES as a percentage.

**Figure 4 (OECD and Association countries): Breakdown of sectoral total final consumption by source in 1973 and 2015**

This graph includes non-energy use.

The sector *Other* includes commercial and public services, agriculture/forestry, fishing and non-specified.

The product *Other* includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

**Figure 4 (non-OECD, except Association countries): Oil product demand**

This graph presents the demand for oil products, expressed in millions of tons, including international marine and aviation bunkers.

**FO** is residual fuel oil.

**Middle distillates** include a range of refined petroleum products situated between the lighter fractions and heavier products: other kerosene, diesel.

**Aviation fuels** include kerosene-type jet fuel, gasoline-type jet fuel and aviation gasoline.

**Mogas** is motor gasoline, including additives and excluding biofuels.

**LPG** includes LPG, NGL, ethane and naphtha.

**Other** includes direct use of crude oil, refinery gas and other products, such as bitumen, white spirit, and lubricants.

**Figure 5: Electricity generation by source**

The product *Other renewables/Waste* includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste and primary electricity and heat from other sources.

**Figure 6: Selected indicators**

Presents indices where 1971=100 of four aggregated indicators: TPES/GDP, TPES per capita, TFC/GDP and Electricity per capita.

Notes on the graphs: peat and oil shale are aggregated with the product *coal*, when applicable; the GDP data used to calculate the indicators are at 2010 constant US dollars, converted from national currencies using purchasing power parities.

**Key OECD indicators tables and global summary tables**

The key indicators tables of Part II for OECD countries as well as the six Association countries, and the summary tables of Part III for all countries show indicators derived from the following data.

**Energy production:** The key indicators tables for OECD countries of Part II present total primary energy production. The summary tables of Part III present primary energy production by different sources separately (coal, crude oil and NGL, natural gas, nuclear energy, hydro energy, geothermal energy, energy from solar, wind tide, etc., of biofuels and waste, ) and also include a table on the secondary production of oil products, expressed in Mtoe.

**Net imports:** imports minus exports of total energy (Part II) and of coal, oil, natural gas, electricity, and total energy (Part III), expressed in Mtoe.

**Primary energy supply:** Total primary energy supply (Part II), and separate primary supply of coal, oil, natural gas, biofuels and waste, renewables, total (Part III), expressed in Mtoe.

**Net oil imports:** imports minus exports of oil, expressed in Mtoe (Part II).

**Oil supply:** primary supply of oil, expressed in Mtoe (Part II).

**Electricity generation:** share of coal, oil, natural gas, nuclear, hydro, renewables, other, expressed in % of total generation, as well as total electricity generation in Gwh (Part III).

**Electricity consumption:** domestic consumption, i.e. gross production + imports - exports - losses, expressed in TWh (Part II).

**Final consumption:** expressed in Mtoe, and detailed for coal, oil, natural gas, electricity, and total, including non-energy use (Part III).

**Consumption in industry:** consumption of coal, oil, natural gas, electricity, and total consumption of energy in the industry sector, including non-energy use, expressed in Mtoe (Part III).

**Consumption in transport:** consumption of oil, electricity, and total consumption of energy in the transport sector, including non-energy use, expressed in Mtoe (Part III).



**Self-sufficiency:** expressed as a ratio between production and primary energy supply, for total (Part III), and for total, coal, oil and natural gas (Part II).

**GDP using exchanges rates:** expressed in billion 2010 USD.

**For OECD countries,** the main source of these series for 1970 to 2016 is the OECD *National Accounts Statistics* database [ISSN: 2074-3947 (online)], last published in book format as *National Accounts of OECD Countries, Volume 2016 Issue 2: Main Aggregates*, OECD 2017. GDP data for **Australia, France, Greece, Korea, Sweden** and the **United Kingdom** for 1960 to 1969 and **Denmark** for 1966 to 1969 as well as for **Netherlands** for 1969 were taken from the same source. GDP data for 1960 to 1969 for the other countries have been estimated using the growth rates from the series in the *OECD Economic Outlook* No 98 and other data previously published by the OECD. Growth rates from these sources were also used to estimate data for the **Czech Republic** (prior to 1990), **Hungary** (prior to 1991) and **Poland** (prior to 1990) and the **Slovak Republic** (prior to 1992). Data for **Chile** (prior to 1986) and **Estonia** (prior to 1992) are IEA Secretariat estimates based on GDP growth rates from the World Bank.

The GDP data have been compiled for individual countries at market prices in local currency and annual rates. These data have been scaled up/down to the price levels of 2010 and then converted to US dollars using the yearly average 2010 exchange rates.

**For non-OECD countries,** the main source of the GDP data is *World Development Indicators*, The World Bank, Washington D.C., 2017. GDP figures for **Eritrea, Gibraltar, Myanmar, Democratic People's Republic of Korea, Former Soviet Union** (before 1990), **Syrian Arab Republic, Chinese Taipei, Former Yugoslavia** (before 1990) and a few countries within the regions<sup>6</sup> **Other Africa, Other non-OECD Americas** and **Other non-OECD Asia** are based on the CHELEM-CEPII online databases, Bureau van Dijk, 2017. For **Curaçao**, GDP figures are based on historical CHELEM-CEPII GDP data for Netherlands Antilles before the country's dissolution, and on Curaçao/Sint Maarten nominal GDP ratios calculated based on information received from Curaçao Central bank. For **South Sudan**, GDP figures are based on data from the International Monetary Fund.

The GDP data have been compiled for all individual countries at market prices in 2010 US dollars.

**GDP using purchasing power parities:** expressed in billion 2010 USD. Purchasing power parities are the

rates of currency conversion that equalise the purchasing power of different currencies. A given sum of money, when converted into different currencies at the PPP rates, buys the same basket of goods and services in all countries. In other words, PPPs are the rates of currency conversion which eliminate the differences in price levels between different countries. The PPPs selected to convert the GDP from national currencies to US dollars were aggregated using the Éltető, Köves and Szulc (EKS) Eurostat-OECD method and rebased on the United States. For a more detailed description of the methodology please see *Eurostat-OECD Methodological Manual on Purchasing Power Parities*, 2012 edition, European Union / OECD 2012.

**For OECD countries,** the GDP PPP data have been compiled for individual countries at market prices in local currency and annual rates. These data have been scaled up/down to the price levels of 2010 and then converted to US dollars using the yearly average 2010 purchasing power parities (PPPs). See *GDP using exchange rates* for sources.

**For non-OECD countries,** the main source of the GDP PPP data is *World Development Indicators*, The World Bank, Washington, D.C., 2017. However, this source is available for GDP PPP (constant 2011 US dollars scaled to the levels of 2010 using current PPP US dollars) only from 1990. Therefore, prior to 1990 GDP PPP data have been calculated based on the PPP conversion factor (GDP) to market exchange rate ratio.

GDP PPP figures for **Argentina, Cuba, Eritrea, Gibraltar, Libya, Myanmar, Democratic People's Republic of Korea, Serbia, Former Soviet Union** (before 1990), **Syrian Arab Republic, Chinese Taipei** (before 1990), **Former Yugoslavia** (before 1990), and a few countries within the regions<sup>6</sup> **Other Africa, Other non-OECD Americas** and **Other non-OECD Asia** are based on the PPP conversion factor (GDP) to market exchange rate ratio.

For **Gibraltar**, GDP PPP figures are based on historical CHELEM-CEPII GDP PPP data and government of Gibraltar national accounts.

For **Curaçao**, GDP PPP figures are based on historical CHELEM-CEPII GDP data for Netherlands Antilles before its dissolving, and for 2012-2015 GDP PPP is calculated based on historical GDP PPP / GDP ratio.

6. Due to lack of complete time series for Other non-OECD Americas, figures for population do not include British Virgin Islands, Falkland Islands (Malvinas), Martinique, and Saint Pierre and Miquelon. Figures for population and GDP of Other Asia do not include Cook Islands.

For **South Sudan**, GDP PPP figures are based on International Monetary Fund data.

GDP PPP figures for **Bosnia and Herzegovina** (up to 1993) and **Croatia** (up to 1994) have been estimated based on the growth rates of the CHELEM-CEPII online database, Bureau van Dijk, 2017. The GDP PPP data have been converted from GDP using purchasing power parity rates. These data have been scaled to the price levels of 2010.

The GDP PPP reflect the changes to power purchasing parity rates based on the 2011 International Comparison Program (ICP), published in 2014. The ICP has worked for 6 years to better estimate the value of the PPP 'basket of goods' for all countries for which the World Bank calculates GDP PPP. For many countries, this value has significantly changed in comparison to previous ICP exercises. This leads to significant revisions to GDP PPP for many countries compared to previous publications.

Please note that the regional totals shown for OECD and other regions were calculated by summing individual countries' GDP data. This calculation yields slightly different results to the GDP totals published by OECD in its national accounts which are derived from chained-linked indices. GDP data from the World Bank have also been summed rather than using chain-linked indices.

**Population: For OECD countries**, the main source of these series for 1970 to 2016 when available is the OECD *National Accounts Statistics* database [ISSN: 2074-3947 (online)], last published in book format as *National Accounts of OECD Countries, Volume 2016 Issue 2: Main Aggregates*, OECD 2017. Data for 2016 for **Australia, Canada, Chile, Greece, Iceland, Israel, Japan, Korea, Mexico, New Zealand, the Slovak Republic, Switzerland, Turkey and the United States** were estimated using the growth rates from the population series in *OECD Economic Outlook*

*No. 95*, long-term baseline projections. Data for 1960 to 1969 have been estimated using the growth rates from the population series published in the *OECD Factbook 2015* (online database version). Growth rates from the *OECD Factbook 2015* were also used to estimate data for **Chile** (prior to 1986), **Estonia** (prior to 1993), **Israel** (prior to 1995), the **Slovak Republic** (prior to 1990) and **Slovenia** (prior to 1995).

**For non-OECD countries**, the main source of the population data is *World Development Indicators*, The World Bank, Washington D.C., 2016.

Population data for **Former Soviet Union** (before 1990), **Chinese Taipei**, **Former Yugoslavia** (before 1990) and for a few countries within the regions<sup>6</sup> **Other Africa**, **Other non-OECD Americas** and **Other non-OECD Asia** are based on the CHELEM-CEPII online database, Bureau van Dijk, Paris, 2017. Population data for **Cyprus**<sup>7</sup> are taken from the Eurostat online database. Population data for **Gibraltar** are taken from the government of Gibraltar *Key Indicators* publication available online.

**Industrial Production Index (OECD):** The main source of these series is the OECD database Main Economic Indicators, May 2017. Industrial production refers to the goods produced by establishments engaged in mining (including oil extraction), manufacturing, and production of electricity, gas and water. These are Sections B, C, D and E of ISIC Rev. 4 or NACE Rev. 2 classifications. From 1991, the industrial production index for Germany refers to unified Germany and has been linked to the series for western Germany. Data for Mexico include construction (Section F). For OECD Total and OECD Europe, the IPI has been chain linked and data refer to all OECD countries from 1990 onwards; prior to 1990 **Chile**, the **Czech Republic**, **Estonia**, **Hungary**, **Israel**, **Poland**, the **Slovak Republic**, **Slovenia** and **Switzerland** are not included.

7. Please refer to the section on Geographical coverage.

## 2. UNITS AND CONVERSIONS

### General conversion factors for energy

To:	TJ	Gcal	Mtoe	MBtu	GWh
From:	multiply by:				
terajoule (TJ)	1	2.388x10 <sup>2</sup>	2.388x10 <sup>-5</sup>	9.478x10 <sup>2</sup>	2.778x10 <sup>-1</sup>
gigacalorie (Gcal)	4.187x10 <sup>-3</sup>	1	1.000x10 <sup>-7</sup>	3.968	1.163x10 <sup>-3</sup>
million tonnes of oil equivalent (Mtoe)	4.187x10 <sup>4</sup>	1.000x10 <sup>7</sup>	1	3.968x10 <sup>7</sup>	1.163x10 <sup>4</sup>
million British thermal units (MBtu)	1.055x10 <sup>-3</sup>	2.520x10 <sup>-1</sup>	2.520x10 <sup>-8</sup>	1	2.931x10 <sup>-4</sup>
gigawatt hour (GWh)	3.600	8.598x10 <sup>2</sup>	8.598x10 <sup>-5</sup>	3.412x10 <sup>3</sup>	1

### Conversion factors for mass

To:	kg	t	lt	st	lb
From:	multiply by:				
kilogramme (kg)	1	1.000x10 <sup>-3</sup>	9.842x10 <sup>-4</sup>	1.102x10 <sup>-3</sup>	2.205
tonne (t)	1.000x10 <sup>3</sup>	1	9.842x10 <sup>-1</sup>	1.102	2.205x10 <sup>3</sup>
long ton (lt)	1.016x10 <sup>3</sup>	1.016	1	1.120	2.240x10 <sup>3</sup>
short ton (st)	9.072x10 <sup>2</sup>	9.072x10 <sup>-1</sup>	8.929x10 <sup>-1</sup>	1	2.000x10 <sup>3</sup>
pound (lb)	4.536x10 <sup>-1</sup>	4.536x10 <sup>-4</sup>	4.464x10 <sup>-4</sup>	5.000x10 <sup>-4</sup>	1

### Conversion factors for volume

To:	gal US	gal UK	bbl	ft <sup>3</sup>	l	m <sup>3</sup>
From:	multiply by:					
US gallon (gal US)	1	8.327x10 <sup>-1</sup>	2.381x10 <sup>-2</sup>	1.337x10 <sup>-1</sup>	3.785	3.785x10 <sup>-3</sup>
UK gallon (gal UK)	1.201	1	2.859x10 <sup>-2</sup>	1.605x10 <sup>-1</sup>	4.546	4.546x10 <sup>-3</sup>
barrel (bbl)	4.200x10 <sup>1</sup>	3.497x10 <sup>1</sup>	1	5.615	1.590x10 <sup>2</sup>	1.590x10 <sup>-1</sup>
cubic foot (ft <sup>3</sup> )	7.481	6.229	1.781x10 <sup>-1</sup>	1	2.832x10 <sup>1</sup>	2.832x10 <sup>-2</sup>
litre (l)	2.642x10 <sup>-1</sup>	2.200x10 <sup>-1</sup>	6.290x10 <sup>-3</sup>	3.531x10 <sup>-2</sup>	1	1.000x10 <sup>-3</sup>
cubic metre (m <sup>3</sup> )	2.642x10 <sup>2</sup>	2.200x10 <sup>2</sup>	6.290	3.531x10 <sup>1</sup>	1.000x10 <sup>3</sup>	1

## Decimal prefixes

10 <sup>1</sup>	deca (da)	10 <sup>-1</sup>	deci (d)
10 <sup>2</sup>	hecto (h)	10 <sup>-2</sup>	centi (c)
10 <sup>3</sup>	kilo (k)	10 <sup>-3</sup>	milli (m)
10 <sup>6</sup>	mega (M)	10 <sup>-6</sup>	micro (μ)
10 <sup>9</sup>	giga (G)	10 <sup>-9</sup>	nano (n)
10 <sup>12</sup>	tera (T)	10 <sup>-12</sup>	pico (p)
10 <sup>15</sup>	peta (P)	10 <sup>-15</sup>	femto (f)
10 <sup>18</sup>	exa (E)	10 <sup>-18</sup>	atto (a)

## Energy content

### Coal

Coal has separate net calorific values for production, imports, exports, inputs to electricity/heat generation and coal used in coke ovens, blast furnaces and industry. For electricity/heat generation, coal inputs to each type of plant (i.e. main activity electricity plant, auto-producer electricity plant, main activity CHP plant, autoproducer CHP plant, main activity heat plant, autoproducer heat plant) are converted to energy units using average factors calculated from the annual *Electricity Questionnaire*. All other flows are converted using an average net calorific value. Country-specific net calorific values for 2015 are given in the section on Net calorific values.

### Crude oil

Country-specific net calorific values (NCV) for production, imports and exports by country are used to calculate the balances. The average value is used to convert all the other flows to heat values. Country-specific net calorific values for 2015 are given in the section on Net calorific values.

### Gases

*World Energy Statistics* expresses the following gases in terajoules, using their gross calorific value.

$$1 \text{ terajoule} = 0.00002388 \text{ Mtoe.}$$

To calculate the net heat content of a gas from its gross heat content, multiply the gross heat content by the appropriate following factor.

Gas	Ratio from GCV to NCV
Natural gas	0.9
Gas works gas	0.9
Coke oven gas	0.9
Blast furnace gas	1.0
Other recovered gases	1.0

### Biofuels and Waste

The heat content of primary solid biofuels, biogases, municipal waste and industrial waste, expressed in terajoules on a net calorific value basis, is presented in *World Energy Statistics*. The IEA Secretariat does not receive information on volumes and other characteristics of these fuels.

$$1 \text{ terajoule} = 0.00002388 \text{ Mtoe.}$$

Data for charcoal are converted from tonnes using the average net calorific values given in the section on Net calorific values.

Unless country-specific information has been provided, data for biogasoline are converted from tonnes using 26 800 kJ/kg. Biodiesels and other liquid biofuels are assumed to have a net calorific value of 36 700 kJ/kg unless otherwise specified.

### Oil products

The IEA applies regional default conversion factors (in conjunction with Eurostat for the European countries) for the oil products, allowing country-specific values for some non-OECD countries. Regional and country-specific net calorific values are given in the section on Net calorific values.

### Electricity

Figures for electricity production, trade, and final consumption are calculated using the energy content of the electricity (i.e. at a rate of 1 TWh = 0.086 Mtoe).

Hydro-electricity production (excluding pumped storage) and electricity produced by other non-thermal means (wind, tide/wave/ocean, solar PV, etc.) are accounted for similarly using 1 TWh = 0.086 Mtoe.

The primary energy equivalent of nuclear electricity is calculated from the gross generation by assuming a 33% conversion efficiency, i.e. 1 TWh = (0.086 ÷ 0.33) Mtoe.

In the case of electricity produced from geothermal heat, if the actual geothermal efficiency is not known, then the primary equivalent is calculated assuming an efficiency of 10%, so 1 TWh = (0.086 ÷ 0.1) Mtoe.

For electricity produced from solar thermal heat, the primary equivalent is calculated assuming an efficiency of 33%, so 1 TWh = (0.086 ÷ 0.33) Mtoe, unless the actual efficiency is known.

## Heat

Information on heat is supplied in terajoules and 1 terajoule = 0.00002388 Mtoe.

In the case of heat produced in a geothermal plant, if the actual geothermal efficiency is not known, then the primary equivalent is calculated assuming an efficiency of 50%, so 1 TJ =  $(0.00002388 \div 0.5)$  Mtoe.

For heat produced in a solar thermal plant, the primary equivalent is equal to the heat consumed, i.e. 1 TJ = 0.00002388 Mtoe.

For direct use of geothermal and solar thermal heat, all the heat consumed is accounted for in production and consumption.

## Examples

The following examples indicate how to calculate the net calorific content (in Mtoe) of the quantities expressed in original units.

From original units	To Mtoe (on a NCV basis)
Coking coal production (Poland) for 2015 in thousand tonnes	divide by 41 868 and then multiply by 29.518
Natural gas in terajoules (gross)	multiply by 0.00002388 and then multiply by 0.9
Motor gasoline (Poland) in thousand tonnes	divide by 41 868 and then multiply by 44.000
Heat in terajoules (net)	multiply by 0.00002388





## 3. NOTES ON DATA QUALITY

### Methodology

For OECD member countries, the data shown in this publication are derived from information provided in the five annual OECD questionnaires<sup>1</sup>: “Oil”, “Natural Gas”, “Solid Fossil Fuels and Manufactured Gases”, “Renewables” and “Electricity and Heat” completed by the national administrations. For the member countries of the European Union and the Economic Commission for Europe of the United Nations (UNECE) and a few others, the data shown in this publication are mostly based on information provided by the national administrations through the same annual questionnaires. The commodity balances for all other countries are based on national energy data of heterogeneous nature, converted and adapted to fit the IEA format and methodology.

Considerable effort has been made to ensure that the data presented in this publication adhere to the IEA definitions reported in the section on Methodological notes. These definitions, based on the *United Nations International Recommendations on Energy Statistics*<sup>2</sup>, are used by most of the international organisations that collect energy statistics.

Nevertheless, energy statistics at the national level are often collected using criteria and definitions which differ, sometimes considerably, from those of international organisations. This is especially true for non-OECD countries, which are submitting data to the IEA on a voluntary basis. The IEA Secretariat has identified most of these differences and, where possible, adjusted the data to meet international definitions.

Recognised anomalies occurring in specific countries are presented in the section on Country notes and

sources. Country notes present the most important deviations from the IEA methodology, and are by no means a comprehensive list of anomalies by country.

### Estimation

In addition to adjustments addressing differences in definitions, estimations<sup>3</sup> are sometimes required to complete major aggregates, when key statistics are missing.

The IEA Secretariat has attempted to provide all the elements of energy balances down to the level of final consumption, for all countries and years. Providing all the elements of supply, as well as all inputs and outputs of the main transformation activities (such as oil refining and electricity generation), has often required estimations. Estimations have been generally made after consultation with national statistical offices, oil companies, electricity utilities and national energy experts.

### Time series and political changes

The IEA Secretariat reviews its databases each year. In the light of new assessments, important revisions may be made to time series of individual countries during the course of this review. Therefore, some data in this publication have been substantially revised with respect to previous editions. Please always consult the section on Country notes and sources.

It is also the case that energy statistics for some countries undergo continuous changes in their coverage or

1. See link to the annual questionnaires:

[www.iea.org/statistics/resources/questionnaires/annual/](http://www.iea.org/statistics/resources/questionnaires/annual/)

2. [http://unstats.un.org/unsd/energy/ires/IRES\\_Whitecover.pdf](http://unstats.un.org/unsd/energy/ires/IRES_Whitecover.pdf).

3. Data may not include all informal and/or illegal trade, production or consumption of energy products, although the IEA Secretariat makes efforts to estimate these where reliable information is available.

methodology. Consequently, breaks in time series are considered to be unavoidable.

For example, energy balances for the individual countries of the Former Soviet Union and the Former Yugoslavia have been constructed since 1990 and are not available for previous years. These balances are generally based on official submissions, but estimations also have been made by the IEA Secretariat. The section on Country notes and sources describes in detail these elements country by country.

## Classification of fuel uses

National statistical sources often lack adequate information on the consumption of fuels in different categories of end use. Many countries do not conduct annual surveys of consumption in the main sectors of economic activity, and published data may be based on out-of-date surveys. Therefore, sectoral disaggregation of consumption should generally be interpreted with caution.

In many countries of non-OECD Europe and Eurasia and in China, the sectoral classification of fuel consumption before the reforms of the 1990's significantly differed from that of market economies. Sectoral consumption was defined according to the economic branch of the user, rather than according to the purpose or use of the fuel. For example, consumption of gasoline in the vehicle fleet of an enterprise attached to the economic branch 'Iron and steel' was classified as consumption in the 'Iron and steel' industry itself.

Where possible, data have been adjusted to fit international classifications, for example by assuming that most gasoline is consumed in transport. However, it has not been possible to reclassify products other than gasoline and jet fuel as easily, and few other adjustments have been made to other products.

## Imports and exports

For a given product, imports and exports may not sum up to zero at the world level for a number of reasons. Fuels may be classified differently (i.e. fuel oil exports may be reported as refinery feedstocks by the importing country; NGL exports may be reported as LPG by the importing country, etc.). Other possible reasons include discrepancies in conversion factors, inclusion of international bunkers in exports, timing differences, data reported on a fiscal year basis instead of calendar year for certain countries, and under-reporting of imports and exports for fiscal reasons.

## Specific issues by fuel

### Coal

Data on sectoral coal consumption are usually reported in metric tonnes. Net calorific values of different coal types used in different end use sectors are not always available. In the absence of specific information, the IEA Secretariat estimates end use net calorific values based on the available net calorific values for production, imports and exports.

### Oil

The IEA Secretariat collects comprehensive statistics for oil supply and use, including oil for own use of refineries, oil delivered to international bunkers, and oil used as petrochemical feedstock. National statistics often do not report all these amounts.

Reported production of refined products may refer to net rather than gross refinery output; consumption of oil products may be limited to sales to domestic markets and may not include deliveries to international shipping or aircraft. Oil consumed as petrochemical feedstock in integrated refinery/petrochemical complexes is often not included in available official statistics.

Where possible, the IEA Secretariat has estimated those unreported data, in consultation with the oil industry. In the absence of any other indication, refinery fuel use is estimated to be a percentage (e.g. 5%) of refinery throughput, and where possible, split between refinery gas and fuel oil. For a description of some adjustments made to the sectoral consumption of oil products, see the above section 'Classification of fuel uses'.

### Natural gas

Natural gas should be comprised mainly of methane; other gases, such as ethane and heavier hydrocarbons, should be reported under the heading of 'oil'. The IEA defines natural gas production as the marketable production, i.e. net of field losses, flaring, venting and re-injection.

However, the lack of adequate definitions makes it difficult or impossible to identify all quantities of gas at all different stages of its separation into dry gas (methane) and heavier fractions. National data for natural gas do not always explicitly show separate quantities for field losses, flaring, venting and re-injection.

Natural gas supply and demand statistics are normally reported in volumetric units and it is difficult to obtain accurate data on the calorific value. In the absence of

specific information, the IEA generally applies an average gross calorific value of 38 TJ/million m<sup>3</sup>.

Reliable consumption data for natural gas at a disaggregated level are often difficult to find. This is especially true for some of the largest natural gas consuming countries in the Middle East. Therefore, industrial use of natural gas for these countries is frequently missing from the data published here.

## Electricity

The IEA classification shows ‘main activity producers’ separately from ‘autoproducers’ of electricity and heat. For non-OECD countries, data on autoproducers are not always reported. In such cases, the quantities of fuels used as input to electricity are included under the appropriate end-use sector.

When statistics of production of electricity from biofuels and waste are available, they are included in total electricity production. However, these data are not comprehensive; e.g. some generation from waste biomass in sugar refining may be unreported.

When unreported, inputs of fuels for electricity generation are estimated using information on electricity output, fuel efficiency and type of generation capacity.

Off-grid electricity generation may be still underreported due to measurement difficulties, especially for developing countries.

## Heat

For heat, transition economies (countries of non-OECD Europe and Eurasia) and China used to adopt a different methodology from that adopted in market economies. They allocated the transformation of primary fuels (coal, oil and gas) by industry into heat *for consumption on site* to the transformation activity “*heat production*”, **not** to industrial consumption, as in the IEA methodology<sup>4</sup>. The transformation output of *Heat* was then allocated to the various end use sectors. The losses occurring in the transformation of fuels into heat in industry were not included in final consumption of industry.

Although a number of countries have recently switched to the practice of international organisations, this important issue reduces the possibility of cross-country comparisons for sectoral end use consumption between transition economies and market economies.

4. For autoproducer plants, the international methodology restricts the inclusion of heat in transformation processes to that sold to third parties.

## Biofuels and waste

The IEA publishes data on production, domestic supply and consumption of biofuels and waste for all countries and all regions.

Data for non-OECD countries are often based on secondary sources and may be of variable quality, which makes comparisons between countries difficult. For many countries, historical data are derived from surveys which were often irregular, irreconcilable and conducted at a local rather than national level.

Where historical series were incomplete or unavailable, they were estimated using a methodology consistent with the projection framework of the IEA’s 1998 edition of *World Energy Outlook* (September 1998). First, nation-wide domestic supply per capita of biofuels and wastes was compiled or estimated for 1995. Then, per capita supply for the years 1971 to 1994 was estimated using a log/log equation with either GDP per capita or percentage of urban population as exogenous variables, depending on the region. Finally, supply of total biofuels and waste after 1996 was estimated assuming a growth rate either constant, equal to the population growth rate, or based on the 1971-1994 trend.

Those estimated time series should be treated very cautiously. The chart below provides a broad indication of the estimation methodology and of the data quality by region.

Region	Main source of data	Data quality	Exogenous variables
Africa	FAO database and AfDB	low	population growth rate
Non-OECD Americas	national and OLADE	high	none
Asia	surveys	high to low	population growth rate
Non-OECD Europe and Eurasia	questionnaires and FAO	high to medium	none
Middle East	FAO	medium to low	none

Given the importance of vegetal fuels in the energy picture of many developing countries, balances down to final consumption by end-use for individual products or product categories have been compiled for all countries.

The IEA hopes that the inclusion of these data will encourage national administrations and other agencies active in the field to enhance the level and quality of data collection and coverage for biofuels and waste. More details on the methodology used by each country may be provided on request and comments are welcome.





## 4. GEOGRAPHICAL COVERAGE

### In this publication:

**World** includes OECD Total; Africa; Non-OECD Americas; Non-OECD Asia (excluding China); China (People's Republic of China and Hong Kong, China); Non-OECD Europe and Eurasia; Middle East; World aviation bunkers and World marine bunkers.

**Africa** includes Algeria; Angola; Benin; Botswana; Burkina Faso; Burundi; Cabo Verde; Cameroon; Central African Republic; Chad; Comoros; the Republic of the Congo (Congo); Côte d'Ivoire; the Democratic Republic of the Congo; Djibouti; Egypt; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Libya; Madagascar; Malawi; Mali; Mauritania; Mauritius; Morocco; Mozambique; Namibia; Niger; Nigeria; Réunion; Rwanda; Sao Tome and Principe; Senegal; the Seychelles; Sierra Leone; Somalia; South Africa; South Sudan (from 2012); Sudan; Swaziland; the United Republic of Tanzania (Tanzania); Togo; Tunisia; Uganda; Zambia; Zimbabwe.

**Americas** includes Antigua and Barbuda; Argentina; Aruba; the Bahamas; Barbados; Belize; Bermuda; the Plurinational State of Bolivia (Bolivia); Bonaire (from 2012); the British Virgin Islands; Brazil; Canada; the Cayman Islands; Chile; Colombia; Costa Rica; Cuba; Curaçao<sup>1</sup>; Dominica; the Dominican Republic; Ecuador; El Salvador; the Falkland Islands (Malvinas); Guatemala; French Guiana; Grenada; Guadeloupe; Guyana; Haiti; Honduras; Jamaica; Martinique; Mexico;

1. The Netherlands Antilles was dissolved on 10 October 2010 resulting in two new 'constituent countries' (Curaçao and Sint Maarten) with the other islands joining The Netherlands as "special municipalities". However, due to lack of detailed data the IEA Secretariat's data and estimates under the "Netherlands Antilles" still refer to the whole territory of the Netherlands Antilles as it was known prior to 10 October 2010 up to the end of 2011. Data refer only to the island of Curaçao from 2012. The other islands of the former Netherlands Antilles are added to Other non-OECD Americas from 2012.

Montserrat; Nicaragua; Panama; Paraguay; Peru; Puerto Rico (for natural gas and electricity)<sup>2</sup>; Saba (from 2012); Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Eustatius (from 2012); Sint Maarten (from 2012); Suriname; Trinidad and Tobago; the Turks and Caicos Islands; the United States; Uruguay; the Bolivarian Republic of Venezuela (Venezuela).

**Asia** (from 1990) includes Afghanistan; Armenia; Azerbaijan; Bahrain; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; the People's Republic of China; Cyprus<sup>3</sup>; Georgia; Hong Kong, China; India; Indonesia; the Islamic Republic of Iran; Iraq; Israel<sup>4</sup>; Japan; Jordan; the Democratic People's Republic of Korea; Korea; Kazakhstan; Kuwait; Kyrgyzstan; Lao People's Democratic Republic; Lebanon; Macau, China; Malaysia; the Maldives; Mongolia; Myanmar; Nepal; Oman; Pakistan; the Philippines; Qatar; Saudi Arabia; Singapore; Sri Lanka; the Syrian Arab Republic; Tajikistan; Chinese Taipei; Thailand; Timor-Leste; Turkey; Turkmenistan; the United Arab Emirates; Uzbekistan; Viet Nam; and Yemen.

2. Oil statistics as well as coal trade statistics for Puerto Rico are included under the United States.

#### 3. Note by Turkey:

*The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".*

#### Note by all the European Union member states of the OECD and the European Union:

*The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.*

4. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

**Europe** (from 1990) includes Albania; Austria; Belarus; Belgium; Bosnia and Herzegovina; Bulgaria; Croatia; the Czech Republic; Denmark; Estonia; Finland; the Former Yugoslav Republic of Macedonia; France; Germany; Gibraltar; Greece; Hungary; Iceland; Ireland; Italy; Kosovo<sup>5</sup>; Latvia; Lithuania; Luxembourg; Malta; the Republic of Moldova (Moldova); Montenegro; the Netherlands; Norway; Poland; Portugal; Romania; the Russian Federation; Serbia<sup>6</sup>; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Ukraine; the United Kingdom.

**Oceania** includes Australia; New Zealand; Cook Islands; Fiji; French Polynesia; Kiribati; New Caledonia; Palau; Papua New Guinea; Samoa; the Solomon Islands; Tonga; Vanuatu.

The **International Energy Agency (IEA)** includes Australia; Austria; Belgium; Canada; the Czech Republic; Denmark; Estonia<sup>7</sup>; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Japan; Korea; Luxembourg; the Netherlands; New Zealand; Norway; Poland; Portugal; the Slovak Republic; Spain; Sweden; Switzerland; Turkey; the United Kingdom; the United States.

The **IEA and Accession/Association countries** includes: IEA member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Estonia<sup>7</sup>, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States; Accession countries: Chile and Mexico; Association countries: the People's Republic of China; India; Indonesia; Morocco; Singapore; Thailand.

The **Organisation for Economic Co-Operation and Development (OECD)** includes Australia; Austria; Belgium; Canada; Chile; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Israel; Italy;

Japan; Korea; Latvia<sup>8</sup>; Luxembourg; Mexico; the Netherlands; New Zealand; Norway; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Turkey; the United Kingdom; the United States.

**OECD Americas** includes Canada; Chile; Mexico; the United States.

**OECD Asia Oceania** includes Australia; Israel; Japan; Korea; New Zealand.

**OECD Europe** includes Austria; Belgium; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Italy; Latvia<sup>8</sup>; Luxembourg; the Netherlands; Norway; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Turkey; the United Kingdom.

Estonia, Latvia and Slovenia are included starting in 1990. Prior to 1990, Estonia and Latvia are included in Former Soviet Union and Slovenia is included in Former Yugoslavia.

Within the **OECD**:

- **Australia** excludes the overseas territories;
- **Denmark** excludes Greenland and the Faroe Islands, except prior to 1990, where data on oil for Greenland were included with the Danish statistics. The administration is planning to revise the series back to 1974 to exclude these amounts;
- **France** includes Monaco and excludes the following overseas departments: Guadeloupe; French Guiana; Martinique; Mayotte; and Réunion; and collectivities: New Caledonia; French Polynesia; Saint Barthélemy; Saint Martin; Saint Pierre and Miquelon; and Wallis and Futuna;
- **Germany** includes the new federal states of Germany from 1970 onwards;
- The statistical data for **Israel** are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law;

5. This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.

6. Serbia includes Montenegro until 2004 and Kosovo until 1999.

7. Estonia is included starting in 1990. Prior to 1990, data for Estonia are included in Former Soviet Union.

8. Latvia became an OECD member in July 2016. Accordingly, Latvia appears in the list of OECD members and is included in the zone aggregates for data from 1990, starting with the 2017 edition. Prior to 1990, data for Latvia are included in Former Soviet Union.

- **Italy** includes San Marino and the Holy See;
- **Japan** includes Okinawa;
- **Netherlands** excludes Suriname, Aruba and the other former Netherlands Antilles (Bonaire, Curaçao, Saba, Saint Eustatius and Sint Maarten);
- **Portugal** includes the Azores and Madeira;
- **Spain** includes the Canary Islands;
- **Switzerland** includes Liechtenstein for oil data; data for other fuels do not include Liechtenstein;
- Shipments of coal and oil to the Channel Islands and the Isle of Man from the **United Kingdom** are not classed as exports. Supplies of coal and oil to these islands are, therefore, included as part of UK supply. Exports of natural gas to the Isle of Man are included with the exports to Ireland;
- **United States** includes the 50 states and the District of Columbia but generally excludes all territories, and all trade between the U.S. and its territories. Oil statistics include Guam, Puerto Rico<sup>9</sup> and the United States Virgin Islands; trade statistics for coal include international trade to and from Puerto Rico and the United States Virgin Islands.

**Non-OECD Europe and Eurasia** includes Albania; Armenia; Azerbaijan; Belarus; Bosnia and Herzegovina; Bulgaria; Croatia; Cyprus<sup>3</sup>; the Former Yugoslav Republic of Macedonia; Georgia; Gibraltar; Kazakhstan; Kosovo<sup>5</sup>; Kyrgyzstan; Lithuania; Malta; the Republic of Moldova (Moldova); Montenegro; Romania; the Russian Federation; Serbia<sup>6</sup>; Tajikistan; Turkmenistan; Ukraine; Uzbekistan; the Former Soviet Union; the Former Yugoslavia.<sup>10</sup>

**Non-OECD Asia excluding China** includes Bangladesh; Brunei Darussalam; Cambodia (from 1995); India; Indonesia; the Democratic People's Republic of Korea; Malaysia; Mongolia (from 1985); Myanmar; Nepal; Pakistan; the Philippines; Singapore; Sri Lanka; Chinese Taipei; Thailand; Viet Nam;  
**Other non-OECD Asia.**

**China** includes the (People's Republic of) China; Hong Kong, China.

**Non-OECD Americas** includes Argentina; the Plurinational State of Bolivia (Bolivia); Brazil; Colombia; Costa Rica; Cuba; Curaçao<sup>1</sup>; the Dominican Republic; Ecuador; El Salvador; Guatemala; Haiti; Honduras; Jamaica; Nicaragua; Panama; Paraguay; Peru; Suriname (from 2000), Trinidad and Tobago; Uruguay; the Bolivarian Republic of Venezuela (Venezuela); **Other non-OECD Americas.**

**Middle East** includes Bahrain; the Islamic Republic of Iran; Iraq; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; the Syrian Arab Republic; the United Arab Emirates; Yemen.

**Other Africa** includes Botswana (until 1980); Burkina Faso; Burundi; Cabo Verde; Central African Republic; Chad; Comoros; Djibouti; Equatorial Guinea; Gambia; Guinea; Guinea-Bissau; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Namibia (until 1990); Niger (until 1999); Réunion; Rwanda; Sao Tome and Principe; the Seychelles; Sierra Leone; Somalia; Swaziland; Uganda.

**Other non-OECD Americas** includes Antigua and Barbuda; Aruba; the Bahamas; Barbados; Belize; Bermuda; Bonaire (from 2012); the British Virgin Islands; the Cayman Islands; Dominica; the Falkland Islands (Malvinas); the French Guiana; Grenada; Guadeloupe; Guyana; Martinique; Montserrat; Puerto Rico (for natural gas and electricity)<sup>9</sup>; Saba (from 2012); Saint Eustatius (from 2012); Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Maarten (from 2012); Suriname (until 1999); the Turks and Caicos Islands.

**Other non-OECD Asia** includes Afghanistan; Bhutan; Cambodia (until 1994); Cook Islands; Fiji; French Polynesia; Kiribati; Lao People's Democratic Republic; Macau, China; the Maldives; Mongolia (until 1984); New Caledonia; Palau (from 1994); Papua New Guinea; Samoa; the Solomon Islands; Timor-Leste; Tonga; Vanuatu.

The **European Union - 28 (EU-28)** (from 1990) includes Austria; Belgium; Bulgaria; Croatia; Cyprus<sup>3</sup>; the Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Malta; the Netherlands; Poland; Portugal; Romania; the Slovak Republic; Slovenia; Spain; Sweden; the United Kingdom.

Please note that in the interest of having comparable data, all these countries are included since 1990 despite different entry dates into the European Union.

9. Natural gas and electricity data for Puerto Rico are included under Other non-OECD Americas.

10. Latvia became an OECD member in July 2016. Accordingly, Latvia appears in the list of OECD members and is not included in the non-OECD aggregates for data from 1990, starting with the 2017 edition. Prior to 1990, data for Latvia are included in Former Soviet Union.

**G7** includes Canada; France; Germany; Italy; Japan; United Kingdom; the United States.

**G8** includes Canada; France; Germany; Italy; Japan; the Russian Federation; the United Kingdom; the United States.

**G20** includes Argentina; Australia; Brazil; Canada; China (including Hong Kong, China); India; Indonesia; Japan; Korea; Mexico; the Russian Federation; Saudi Arabia; South Africa; Turkey; the United States; the European Union – 28.

The **Organisation of the Petroleum Exporting Countries (OPEC)** includes Algeria; Angola; Ecuador; Gabon; the Islamic Republic of Iran; Iraq; Kuwait; Libya; Nigeria; Qatar; Saudi Arabia; the United Arab Emirates; the Bolivarian Republic of Venezuela (Venezuela).<sup>11</sup>

Please note that the following countries have not been considered:

- **Non-OECD Europe and Eurasia:** Andorra; Faroe Islands (after 1990); Liechtenstein<sup>12</sup> (except for oil data); the Palestinian Authority; Svalbard; Jan Mayen Islands;
- **Africa:** British Indian Ocean Territory; French Southern and Antarctic Lands; Mayotte; Saint Helena; Western Sahara;
- **Non-OECD Americas:** Anguilla; Bouvet Island; Saint Barthélemy; Greenland (after 1990); Saint Martin (French Part); South Georgia and the South Sandwich Islands;
- Antarctica;
- **Non-OECD Asia excluding China:** American Samoa; Cocos (Keeling) Islands; Christmas Island; Heard Island and McDonald Islands; Marshall Islands; Micronesia (Federated States of); Nauru; Niue; Norfolk Island; Northern Mariana Islands; Pitcairn; Tokelau; Tuvalu; United States Minor Outlying Islands; Wallis and Futuna Islands.

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11. Data for Gabon, that re-joined OPEC in July 2016, are included in the OPEC aggregate starting with the 2017 edition. Data for Equatorial Guinea, that joined OPEC in January 2017, are not included in the OPEC aggregate in this edition.

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12. Oil data for Liechtenstein are included under Switzerland.

# PART II

## ENERGY BALANCES AND INDICATORS BY REGION AND COUNTRY





# WORLD AND REGIONAL TOTALS

World

Figure 1. Energy production

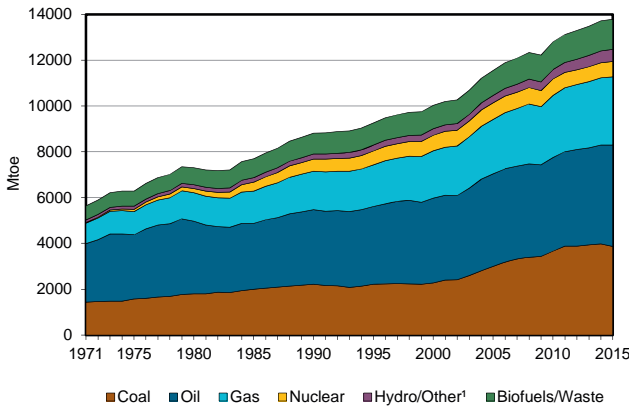


Figure 2. Total primary energy supply²

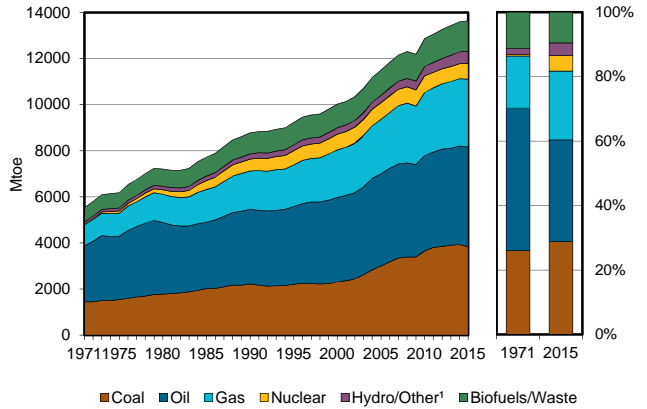


Figure 3. Energy self-sufficiency³

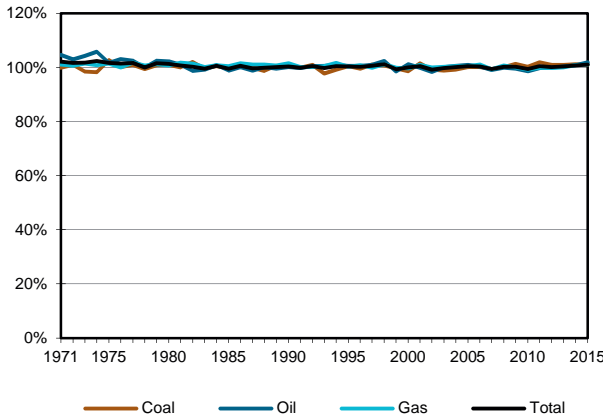


Figure 4. Oil products demand⁴

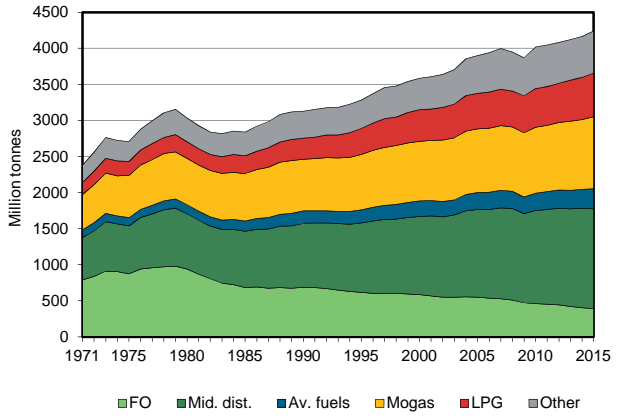


Figure 5. Electricity generation by source

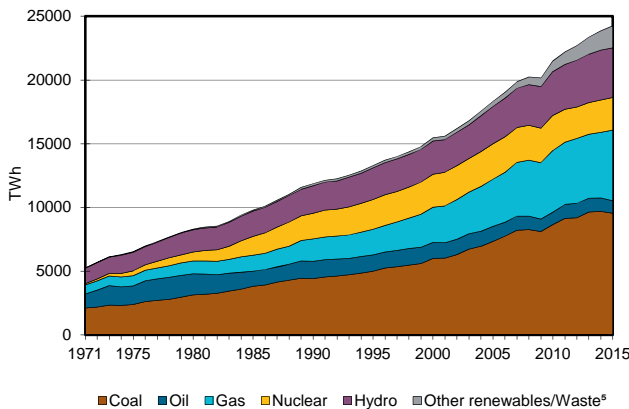
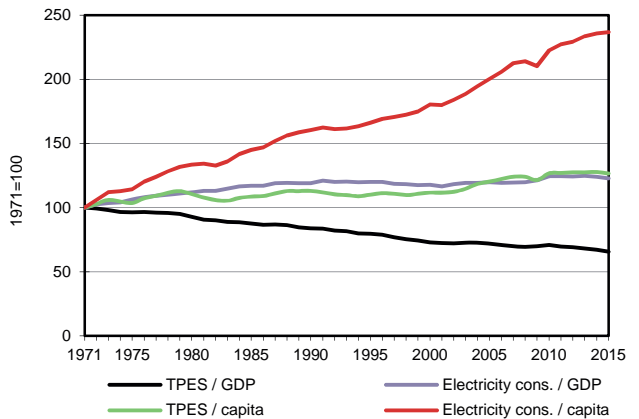


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## World

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	3871.53	4416.26	-	2975.71	670.73	334.40	200.56	1319.00	-	1.83	13790.02
Imports	791.76	2303.19	1258.87	868.66	-	-	-	20.75	64.66	0.01	5307.89
Exports	-820.39	-2262.47	-1350.24	-883.43	-	-	-	-16.58	-62.37	-0.01	-5395.47
Stock changes	-6.83	-14.88	-16.46	-17.22	-	-	-	0.31	-	-	-55.08
<b>TPES</b>	<b>3836.09</b>	<b>4442.11</b>	<b>-107.83</b>	<b>2943.72</b>	<b>670.73</b>	<b>334.40</b>	<b>200.56</b>	<b>1323.47</b>	<b>2.28</b>	<b>1.83</b>	<b>13647.37</b>
Transfers	-0.97	-230.46	259.77	-	-	-	-	-0.42	-	-	27.92
Statistical differences	-14.63	-0.75	11.34	2.20	-	-	-0.02	0.50	-1.24	-0.07	-2.68
Electricity plants	-2060.04	-42.30	-192.28	-835.51	-663.14	-334.40	-158.36	-100.35	1903.83	-0.95	-2483.50
CHP plants	-171.02	-0.01	-19.16	-303.06	-7.58	-	-2.73	-58.50	182.09	145.47	-234.52
Heat plants	-136.72	-0.65	-11.51	-67.52	-	-	-1.16	-11.27	-0.43	180.13	-49.13
Blast furnaces	-205.36	-	-0.21	-0.07	-	-	-	-0.05	-	-	-205.70
Gas works	-11.18	-0.00	-2.51	4.61	-	-	-	-0.11	-	-	-9.20
Coke/pat.fuel/BKB/PB plants	-85.69	-	-2.56	-0.03	-	-	-	-0.12	-	-	-88.40
Oil refineries	-	-4188.73	4128.69	-	-	-	-	-	-	-	-60.04
Petrochemical plants	-	34.97	-34.75	-	-	-	-	-	-	-	0.22
Liquefaction plants	-10.10	14.34	-	-17.41	-	-	-	-	-	-	-13.18
Other transformation	-0.37	10.70	-0.58	-12.78	-	-	-	-86.53	-	-0.85	-90.40
Energy industry own use	-91.78	-11.51	-207.51	-293.73	-	-	-0.00	-14.28	-178.57	-36.74	-834.11
Losses	-4.13	-8.61	-0.42	-19.28	-	-	-0.01	-0.13	-170.73	-17.75	-221.06
<b>TFC</b>	<b>1044.09</b>	<b>19.10</b>	<b>3820.49</b>	<b>1401.13</b>	<b>-</b>	<b>-</b>	<b>38.27</b>	<b>1052.21</b>	<b>1737.23</b>	<b>271.08</b>	<b>9383.60</b>
<b>INDUSTRY</b>	<b>826.39</b>	<b>9.07</b>	<b>298.93</b>	<b>529.81</b>	<b>-</b>	<b>-</b>	<b>0.70</b>	<b>192.71</b>	<b>730.66</b>	<b>124.09</b>	<b>2712.37</b>
Iron and steel	305.47	-	6.71	53.35	-	-	-	3.69	94.71	15.15	479.07
Chemical and petrochemical	109.25	0.05	55.16	118.37	-	-	0.00	1.88	102.46	51.96	439.15
Non-ferrous metals	24.54	-	5.07	16.62	-	-	0.00	0.10	89.88	4.00	140.21
Non-metallic minerals	231.71	0.00	44.84	53.53	-	-	0.00	8.85	50.79	3.02	392.73
Transport equipment	3.13	-	2.09	11.78	-	-	0.00	0.03	24.06	3.77	44.86
Machinery	13.22	-	6.39	24.27	-	-	0.00	0.16	75.52	5.03	124.59
Mining and quarrying	8.76	-	22.53	8.12	-	-	0.00	0.16	28.33	1.99	69.89
Food and tobacco	30.94	0.01	10.11	44.99	-	-	0.00	29.42	41.83	10.56	167.86
Paper pulp and printing	17.70	-	4.14	23.80	-	-	0.10	59.27	36.89	12.09	153.99
Wood and wood products	2.88	-	2.14	3.10	-	-	0.00	7.94	8.75	1.75	26.56
Construction	4.65	-	30.26	6.47	-	-	0.00	0.31	15.66	0.98	58.34
Textile and leather	13.13	0.01	3.30	6.56	-	-	0.00	0.23	29.14	7.99	60.38
Non-specified	61.02	9.00	106.20	158.84	-	-	0.60	80.66	132.62	5.81	554.75
<b>TRANSPORT</b>	<b>2.53</b>	<b>0.01</b>	<b>2490.99</b>	<b>97.59</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>75.99</b>	<b>35.90</b>	<b>-</b>	<b>2703.00</b>
World aviation bunkers	-	-	176.95	-	-	-	-	-	-	-	176.95
Domestic aviation	-	-	112.71	-	-	-	-	-	-	-	112.71
Road	-	-	1907.05	40.99	-	-	-	75.55	10.63	-	2034.22
Rail	2.49	-	29.40	-	-	-	-	0.20	20.37	-	52.45
Pipeline transport	-	0.01	0.33	56.34	-	-	-	-	2.54	-	59.22
World marine bunkers	-	-	204.68	-	-	-	-	0.17	-	-	204.84
Domestic navigation	-	-	50.72	0.10	-	-	-	0.07	-	-	50.89
Non-specified	0.04	-	9.16	0.15	-	-	0.00	0.00	2.36	-	11.72
<b>OTHER</b>	<b>154.20</b>	<b>0.07</b>	<b>425.88</b>	<b>613.33</b>	<b>-</b>	<b>-</b>	<b>37.57</b>	<b>783.51</b>	<b>970.67</b>	<b>146.99</b>	<b>3132.22</b>
Residential	74.14	-	210.56	419.82	-	-	28.30	745.27	470.05	102.43	2050.57
Comm. and public services	35.85	-	85.85	181.48	-	-	6.74	25.47	386.33	34.60	756.31
Agriculture/forestry	15.30	0.01	104.98	8.93	-	-	1.48	10.08	50.64	3.08	194.49
Fishing	0.00	-	5.60	0.10	-	-	0.04	0.01	0.55	0.03	6.33
Non-specified	28.91	0.06	18.90	3.01	-	-	1.00	2.68	63.10	6.85	124.51
<b>NON-ENERGY USE</b>	<b>60.96</b>	<b>9.95</b>	<b>604.69</b>	<b>160.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>836.01</b>
in industry/transf./energy	60.62	9.95	563.73	160.41	-	-	-	-	-	-	794.70
of which: chem./petrochem.	3.01	9.89	419.14	158.87	-	-	-	-	-	-	590.93
in transport	-	-	9.85	-	-	-	-	-	-	-	9.85
in other	0.35	-	31.11	-	-	-	-	-	-	-	31.46
<b>Electricity and Heat Output</b>											
<b>Electr. Generated - TWh</b>	<b>9538.30</b>	<b>147.03</b>	<b>842.84</b>	<b>5543.36</b>	<b>2571.37</b>	<b>3888.32</b>	<b>1191.62</b>	<b>528.05</b>	<b>-</b>	<b>3.96</b>	<b>24254.84</b>
Electricity plants	8935.27	147.02	780.68	4346.00	2544.63	3888.32	1182.15	309.53	-	2.65	22136.24
CHP plants	603.03	0.01	62.16	1197.36	26.74	-	9.46	218.53	-	1.31	2118.60
<b>Heat Generated - PJ</b>	<b>5941.04</b>	<b>18.00</b>	<b>584.07</b>	<b>5703.41</b>	<b>25.82</b>	<b>-</b>	<b>401.32</b>	<b>940.49</b>	<b>9.08</b>	<b>87.97</b>	<b>13711.20</b>
CHP plants	1835.32	0.14	189.67	3449.38	25.82	-	14.04	577.19	0.32	44.65	6136.52
Heat plants	4105.73	17.86	394.40	2254.02	-	-	387.28	363.30	8.76	43.32	7574.68

1. Includes peat and oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

Africa

Figure 1. Energy production

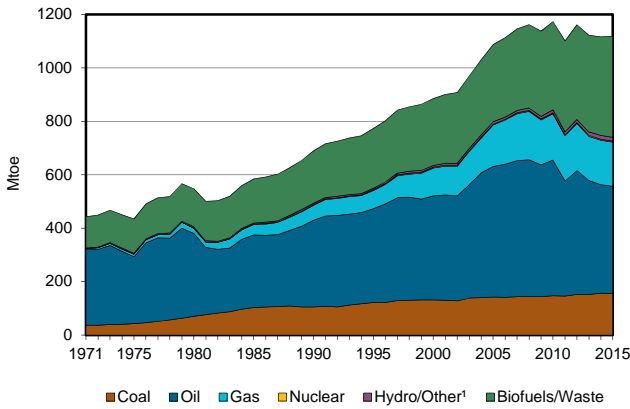


Figure 2. Total primary energy supply²

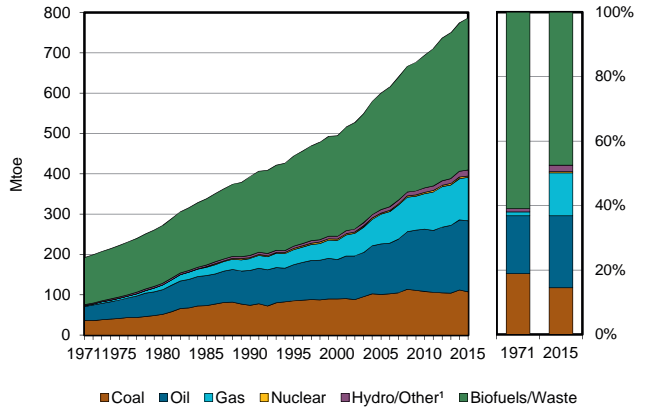


Figure 3. Energy self-sufficiency³

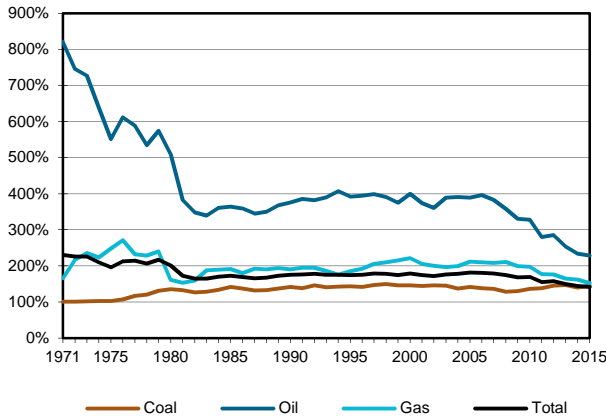


Figure 4. Oil products demand⁴

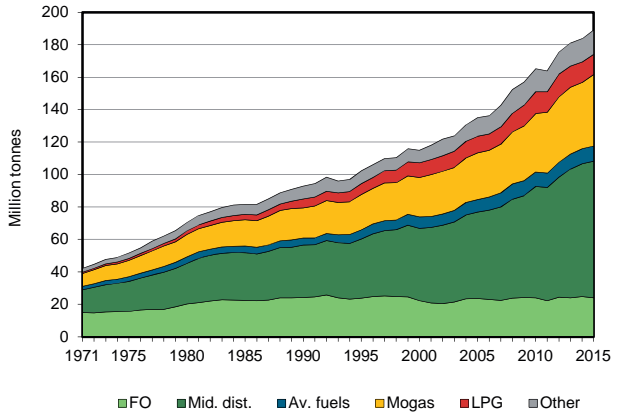


Figure 5. Electricity generation by source

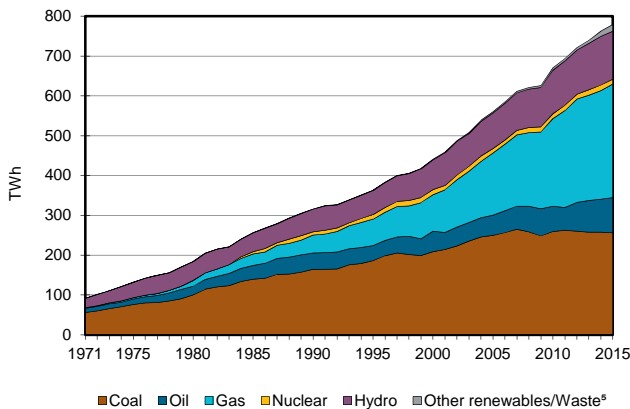
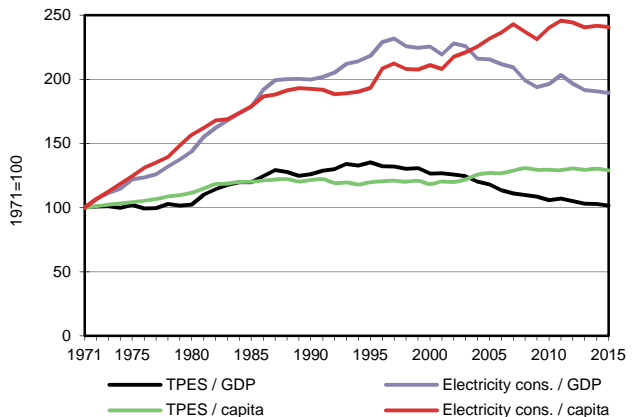


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.



## Africa

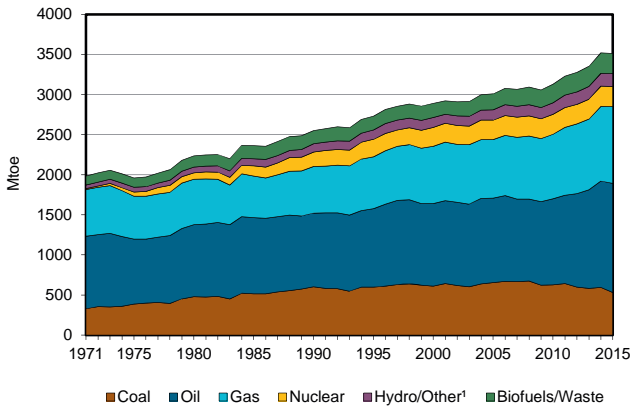
2015

Million tonnes of oil equivalent

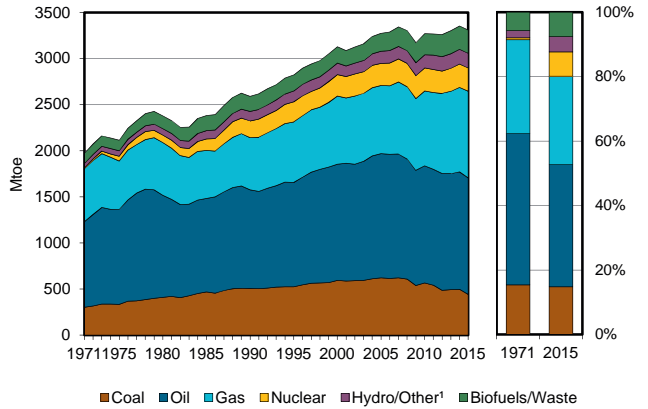
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	155.05	401.57	-	164.95	3.19	10.36	4.88	377.44	-	0.09	1117.54
Imports	7.43	35.33	110.16	13.01	-	-	-	0.00	3.71	-	169.65
Exports	-54.29	-320.77	-39.17	-69.69	-	-	-	-0.43	-2.98	-	-487.33
Intl. marine bunkers	-	-	-6.25	-	-	-	-	-	-	-	-6.25
Intl. aviation bunkers	-	-	-7.27	-	-	-	-	-	-	-	-7.27
Stock changes	-1.06	1.77	0.59	-0.00	-	-	-	-	-	-	1.29
<b>TPES</b>	<b>107.12</b>	<b>117.90</b>	<b>58.06</b>	<b>108.26</b>	<b>3.19</b>	<b>10.36</b>	<b>4.88</b>	<b>377.01</b>	<b>0.73</b>	<b>0.09</b>	<b>787.62</b>
Transfers	-	-16.97	18.22	-	-	-	-	-	-	-	1.25
Statistical differences	4.30	2.34	-0.31	-1.25	-	-	0.00	0.01	-0.00	-	5.09
Electricity plants	-69.73	-0.73	-22.53	-57.02	-3.19	-10.36	-4.72	-0.59	67.08	-0.09	-101.90
CHP plants	-	-	-	-0.02	-	-	-	-0.43	0.07	-	-0.39
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.99	-	-	-	-	-	-	-	-	-	-0.99
Gas works	-4.12	-	-	-	-	-	-	-	-	-	-4.12
Coke/pat.fuel/BKB/PB plants	-0.82	-	-	-	-	-	-	-	-	-	-0.82
Oil refineries	-	-105.75	103.96	-	-	-	-	-	-	-	-1.79
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-5.17	5.10	-	-2.51	-	-	-	-	-	-	-2.59
Other transformation	-	-	-	-	-	-	-	-64.40	-	-	-64.40
Energy industry own use	-10.44	-0.66	-3.27	-13.27	-	-	-	-0.00	-4.15	-	-31.79
Losses	-0.03	-1.08	-0.09	-0.55	-	-	-	-0.03	-10.44	-	-12.23
<b>TFC</b>	<b>20.12</b>	<b>0.15</b>	<b>154.03</b>	<b>33.64</b>	<b>-</b>	<b>-</b>	<b>0.16</b>	<b>311.56</b>	<b>53.28</b>	<b>-</b>	<b>572.95</b>
<b>INDUSTRY</b>	<b>13.10</b>	<b>0.14</b>	<b>17.53</b>	<b>14.06</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20.26</b>	<b>22.08</b>	<b>-</b>	<b>87.19</b>
Iron and steel	3.10	-	0.00	0.70	-	-	-	-	0.49	-	4.28
Chemical and petrochemical	0.84	-	0.07	1.57	-	-	-	0.01	1.23	-	3.72
Non-ferrous metals	1.49	-	0.11	0.06	-	-	-	-	2.91	-	4.57
Non-metallic minerals	2.02	-	2.05	2.50	-	-	-	0.12	0.84	-	7.52
Transport equipment	0.00	-	0.00	0.01	-	-	-	-	0.02	-	0.04
Machinery	0.03	-	0.00	0.02	-	-	-	-	0.05	-	0.12
Mining and quarrying	0.19	-	2.50	0.03	-	-	-	0.02	3.21	-	5.94
Food and tobacco	0.09	-	0.38	0.84	-	-	-	0.03	0.54	-	1.88
Paper pulp and printing	0.06	-	0.03	0.11	-	-	-	-	0.18	-	0.37
Wood and wood products	0.02	-	0.00	0.00	-	-	-	0.00	0.08	-	0.10
Construction	-	-	0.92	1.00	-	-	-	0.00	0.18	-	2.11
Textile and leather	0.00	-	0.05	0.09	-	-	-	0.06	0.16	-	0.37
Non-specified	5.28	0.14	11.40	7.13	-	-	-	20.03	12.19	-	56.17
<b>TRANSPORT</b>	<b>0.01</b>	<b>0.01</b>	<b>103.44</b>	<b>1.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.47</b>	<b>-</b>	<b>104.98</b>
Domestic aviation	-	-	2.51	-	-	-	-	-	-	-	2.51
Road	-	-	99.54	0.32	-	-	-	0.03	0.00	-	99.89
Rail	0.01	-	0.61	-	-	-	-	-	0.40	-	1.03
Pipeline transport	-	0.01	-	0.69	-	-	-	-	0.03	-	0.72
Domestic navigation	-	-	0.77	-	-	-	-	-	-	-	0.77
Non-specified	-	-	0.01	-	-	-	-	-	0.04	-	0.05
<b>OTHER</b>	<b>5.71</b>	<b>-</b>	<b>25.02</b>	<b>9.53</b>	<b>-</b>	<b>-</b>	<b>0.16</b>	<b>291.26</b>	<b>30.73</b>	<b>-</b>	<b>362.41</b>
Residential	3.47	-	14.32	8.48	-	-	0.05	280.09	17.57	-	323.97
Comm. and public services	1.75	-	2.00	0.17	-	-	0.00	6.89	9.31	-	20.13
Agriculture/forestry	0.35	-	4.51	0.06	-	-	-	2.79	1.94	-	9.65
Fishing	-	-	0.11	-	-	-	-	-	-	-	0.11
Non-specified	0.13	-	4.08	0.82	-	-	0.12	1.49	1.90	-	8.55
<b>NON-ENERGY USE</b>	<b>1.29</b>	<b>-</b>	<b>8.04</b>	<b>9.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18.37</b>
in industry/transf./energy	1.29	-	7.82	9.04	-	-	-	-	-	-	18.15
of which: chem./petrochem.	1.29	-	0.53	9.04	-	-	-	-	-	-	10.86
in transport	-	-	0.12	-	-	-	-	-	-	-	0.12
in other	-	-	0.10	-	-	-	-	-	-	-	0.10
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>256.52</b>	<b>2.86</b>	<b>85.24</b>	<b>285.30</b>	<b>12.24</b>	<b>120.52</b>	<b>14.60</b>	<b>1.91</b>	<b>-</b>	<b>1.59</b>	<b>780.78</b>
Electricity plants	256.52	2.86	85.24	285.01	12.24	120.52	14.60	1.41	-	1.59	779.99
CHP plants	-	-	-	0.29	-	-	-	0.50	-	-	0.79
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.86</b>	<b>3.86</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	3.86	3.86

## Americas

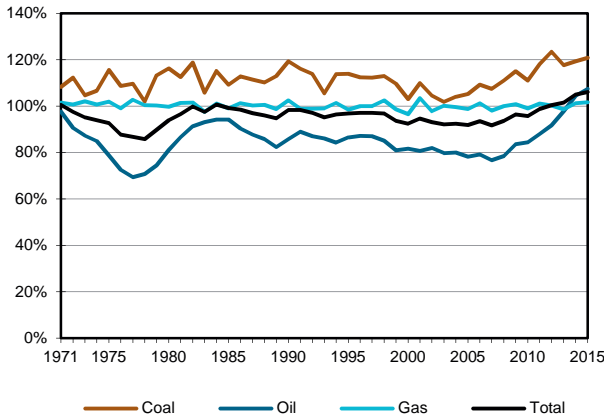
**Figure 1. Energy production**



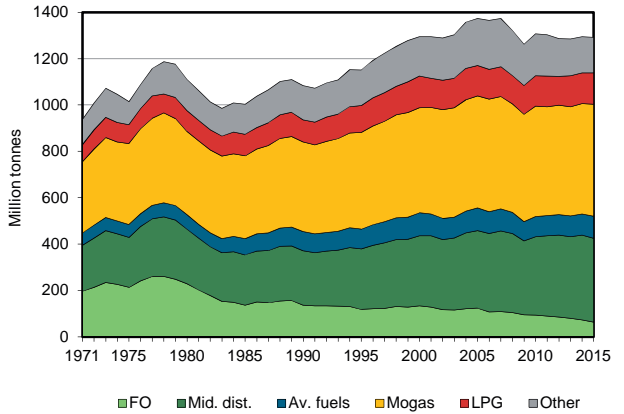
**Figure 2. Total primary energy supply<sup>2</sup>**



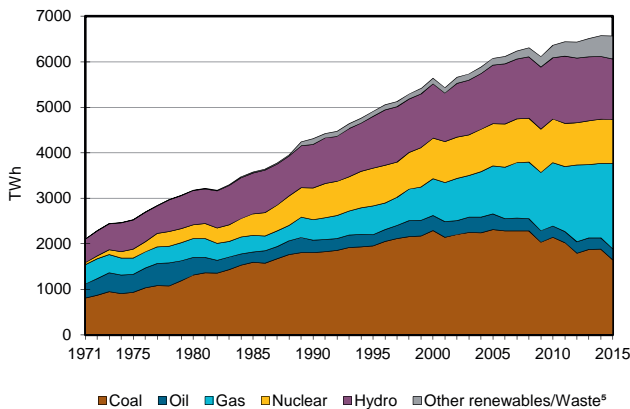
**Figure 3. Energy self-sufficiency<sup>3</sup>**



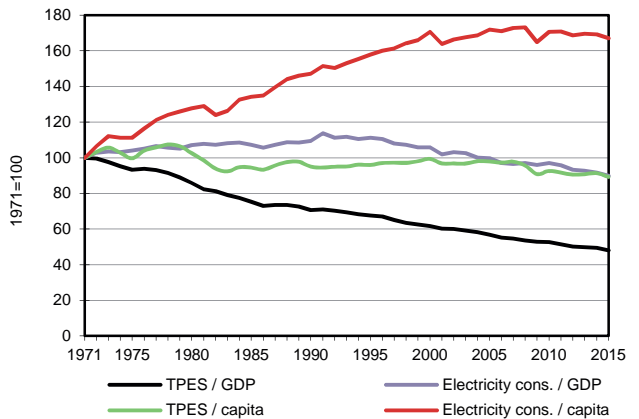
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Americas

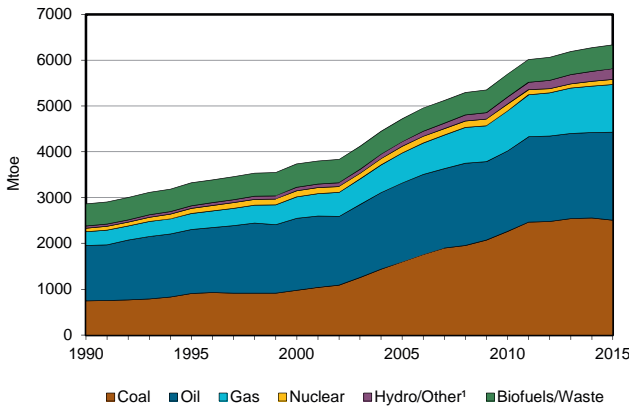
2015

Million tonnes of oil equivalent

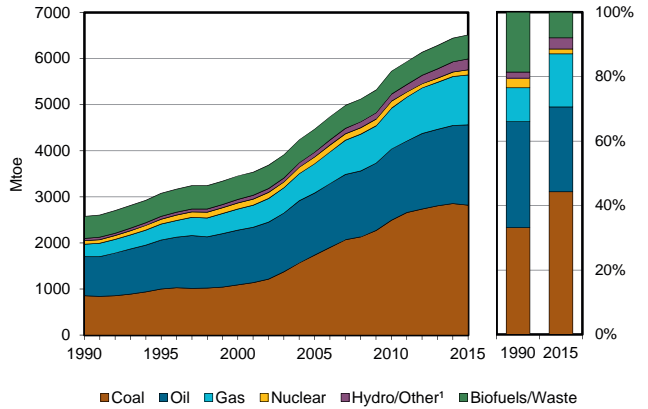
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	531.42	1360.00	-	955.64	251.53	114.64	45.07	252.45	-	0.08	3510.83
Imports	41.55	512.73	212.48	139.15	-	-	-	4.04	11.47	-	921.43
Exports	-114.95	-482.95	-254.05	-139.36	-	-	-	-4.89	-10.87	-	-1007.07
Intl. marine bunkers	-	-	-28.14	-	-	-	-	-0.17	-	-	-28.31
Intl. aviation bunkers	-	-	-37.60	-	-	-	-	-	-	-	-37.60
Stock changes	-18.03	-13.26	-3.91	-14.81	-	-	-	0.37	-	-	-49.64
<b>TPES</b>	<b>440.00</b>	<b>1376.52</b>	<b>-111.22</b>	<b>940.62</b>	<b>251.53</b>	<b>114.64</b>	<b>45.07</b>	<b>251.80</b>	<b>0.60</b>	<b>0.08</b>	<b>3309.63</b>
Transfers	-	-114.25	123.52	-	-	-	-	-	-	-	9.27
Statistical differences	-2.09	-2.07	16.15	-5.71	-	-	-	0.09	0.50	-	6.87
Electricity plants	-372.24	-2.73	-46.83	-289.93	-251.53	-114.64	-41.49	-24.35	527.39	-0.08	-616.42
CHP plants	-10.17	-	-4.54	-52.77	-	-	-	-20.22	37.26	10.52	-39.92
Heat plants	-0.00	-	-	-	-	-	-	-0.19	-	0.10	-0.09
Blast furnaces	-9.43	-	-	-	-	-	-	-0.05	-	-	-9.48
Gas works	-1.99	-	-0.79	1.58	-	-	-	-0.00	-	-	-1.19
Coke/pat.fuel/BKB/PB plants	-4.01	-	-1.46	-	-	-	-	-	-	-	-5.47
Oil refineries	-	-1263.65	1243.13	-	-	-	-	-	-	-	-20.52
Petrochemical plants	-	3.67	-3.14	-	-	-	-	-	-	-	0.54
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	8.08	-	-8.43	-	-	-	-5.36	-	-	-5.71
Energy industry own use	-2.26	-0.43	-68.82	-126.03	-	-	-	-13.25	-38.35	-3.33	-252.48
Losses	-0.36	-0.08	-0.24	-1.19	-	-	-	-0.06	-48.12	-1.20	-51.24
<b>TFC</b>	<b>37.45</b>	<b>5.07</b>	<b>1145.76</b>	<b>458.14</b>	<b>-</b>	<b>-</b>	<b>3.58</b>	<b>188.40</b>	<b>479.28</b>	<b>6.09</b>	<b>2323.77</b>
<b>INDUSTRY</b>	<b>36.25</b>	<b>0.87</b>	<b>66.47</b>	<b>175.01</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>79.03</b>	<b>132.05</b>	<b>4.92</b>	<b>494.61</b>
Iron and steel	11.98	-	0.97	19.11	-	-	-	3.20	8.95	0.16	44.37
Chemical and petrochemical	3.41	-	8.01	51.80	-	-	-	0.34	14.61	2.92	81.08
Non-ferrous metals	1.12	-	1.87	5.65	-	-	0.00	0.01	13.70	0.08	22.44
Non-metallic minerals	7.52	-	9.01	14.01	-	-	-	3.28	5.89	0.00	39.70
Transport equipment	0.01	-	0.34	4.72	-	-	-	0.00	4.73	0.10	9.91
Machinery	0.08	-	1.13	9.54	-	-	-	0.01	8.92	0.08	19.76
Mining and quarrying	0.57	-	8.40	4.10	-	-	-	0.04	8.58	-	21.68
Food and tobacco	3.42	-	1.74	20.99	-	-	-	20.53	10.06	0.48	57.22
Paper pulp and printing	2.53	-	1.78	13.17	-	-	-	43.45	12.07	0.47	73.46
Wood and wood products	0.01	-	1.05	1.84	-	-	-	1.41	1.84	0.22	6.37
Construction	-	-	10.42	0.74	-	-	-	0.10	5.32	0.00	16.58
Textile and leather	0.18	-	0.10	1.47	-	-	-	0.07	2.30	0.13	4.25
Non-specified	5.42	0.87	21.67	27.87	-	-	0.01	6.57	35.08	0.27	97.76
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>827.72</b>	<b>27.75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>54.78</b>	<b>1.74</b>	<b>-</b>	<b>911.98</b>
Domestic aviation	-	-	62.87	-	-	-	-	-	-	-	62.87
Road	-	-	734.93	6.74	-	-	-	54.55	0.28	-	796.50
Rail	0.00	-	15.78	-	-	-	-	0.18	1.03	-	16.99
Pipeline transport	-	-	0.01	20.94	-	-	-	-	0.41	-	21.36
Domestic navigation	-	-	13.36	-	-	-	-	0.05	-	-	13.42
Non-specified	-	-	0.77	0.07	-	-	-	-	0.01	-	0.85
<b>OTHER</b>	<b>0.89</b>	<b>-</b>	<b>104.14</b>	<b>224.56</b>	<b>-</b>	<b>-</b>	<b>3.57</b>	<b>54.60</b>	<b>345.50</b>	<b>1.18</b>	<b>734.44</b>
Residential	0.09	-	43.54	135.38	-	-	0.64	46.54	166.53	-	392.72
Comm. and public services	0.68	-	20.98	86.85	-	-	2.16	2.94	150.99	1.16	265.76
Agriculture/forestry	0.00	-	36.84	2.29	-	-	0.00	5.01	7.79	-	51.93
Fishing	-	-	0.34	0.05	-	-	-	0.00	0.04	-	0.43
Non-specified	0.13	-	2.43	0.00	-	-	0.77	0.10	20.15	0.02	23.59
<b>NON-ENERGY USE</b>	<b>0.30</b>	<b>4.21</b>	<b>147.43</b>	<b>30.81</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>182.75</b>
in industry/transf./energy	0.06	4.21	135.81	30.81	-	-	-	-	-	-	170.88
of which: chem./petrochem.	-	4.21	87.58	30.81	-	-	-	-	-	-	122.60
in transport	-	-	4.77	-	-	-	-	-	-	-	4.77
in other	0.24	-	6.86	-	-	-	-	-	-	-	7.10
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1643.32</b>	<b>7.21</b>	<b>238.08</b>	<b>1875.78</b>	<b>965.16</b>	<b>1333.03</b>	<b>340.36</b>	<b>162.40</b>	<b>-</b>	<b>0.39</b>	<b>6565.74</b>
Electricity plants	1597.35	7.21	217.37	1607.05	965.16	1333.03	336.49	68.44	-	0.39	6132.48
CHP plants	45.97	-	20.71	268.73	-	-	3.87	93.97	-	-	433.25
<b>Heat generated - PJ</b>	<b>40.19</b>	<b>-</b>	<b>25.83</b>	<b>329.79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>48.99</b>	<b>-</b>	<b>3.33</b>	<b>448.12</b>
CHP plants	40.17	-	25.83	329.79	-	-	-	44.69	-	-	440.49
Heat plants	0.01	-	-	-	-	-	-	4.30	-	3.33	7.64

## Asia

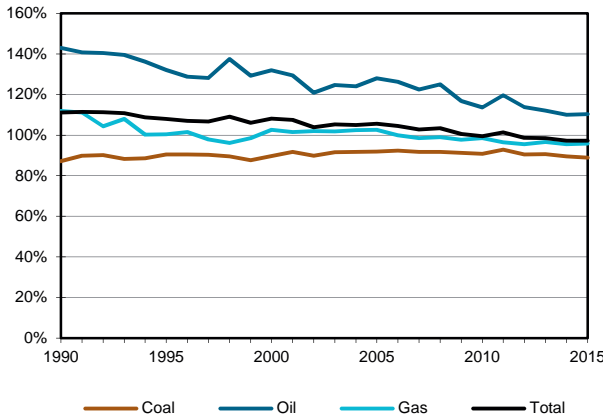
**Figure 1. Energy production**



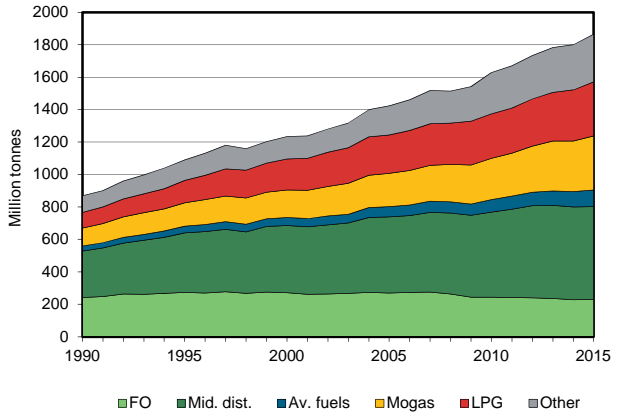
**Figure 2. Total primary energy supply<sup>2</sup>**



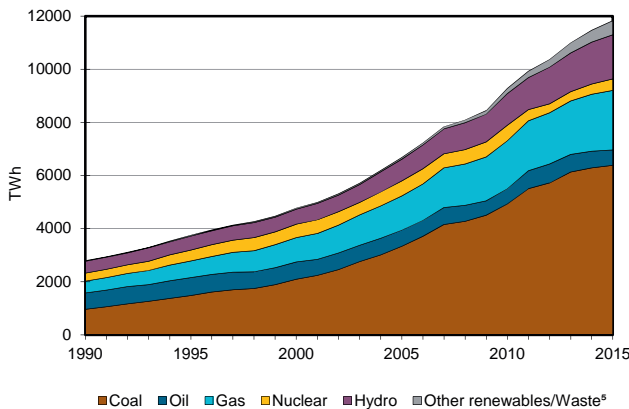
**Figure 3. Energy self-sufficiency<sup>3</sup>**



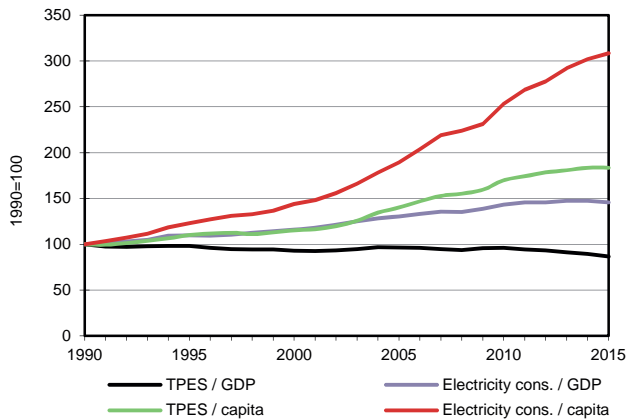
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Asia

2015

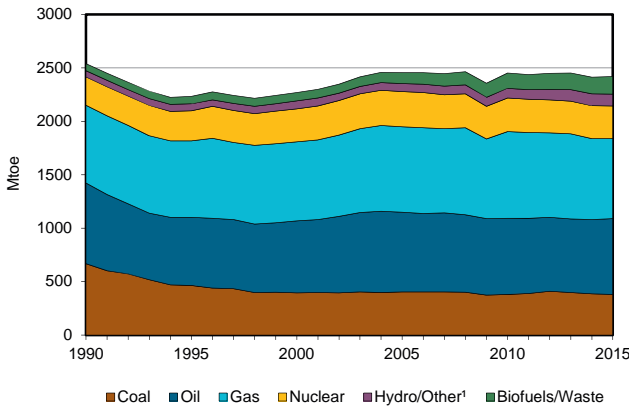
Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	2506.43	1919.64	-	1037.97	112.23	143.16	93.37	518.26	-	0.06	6331.12
Imports	562.97	1093.76	537.45	327.41	-	-	-	0.59	7.88	-	2530.07
Exports	-255.54	-1072.50	-551.39	-282.16	-	-	-	-0.78	-6.05	-	-2168.43
Intl. marine bunkers	-	-	-107.70	-	-	-	-	-	-	-	-107.70
Intl. aviation bunkers	-	-	-74.19	-	-	-	-	-	-	-	-74.19
Stock changes	6.72	2.31	-6.51	-0.82	-	-	-	-0.08	-	-	1.62
<b>TPES</b>	<b>2820.57</b>	<b>1943.21</b>	<b>-202.34</b>	<b>1082.40</b>	<b>112.23</b>	<b>143.16</b>	<b>93.37</b>	<b>517.99</b>	<b>1.83</b>	<b>0.06</b>	<b>6512.48</b>
Transfers	-0.97	-100.56	111.40	-	-	-	-	-0.42	-	-	9.45
Statistical differences	-13.10	-1.16	-9.34	5.87	-	-	0.00	0.44	-1.08	0.02	-18.34
Electricity plants	-1424.79	-38.83	-111.70	-430.41	-112.23	-143.16	-62.22	-52.73	996.15	-0.03	-1379.95
CHP plants	-37.58	-	-3.46	-29.78	-	-	-	-0.45	21.43	19.46	-30.39
Heat plants	-121.51	-0.07	-4.77	-7.66	-	-	-0.12	-1.94	-0.09	98.27	-37.87
Blast furnaces	-148.95	-	-	-	-	-	-	-	-	-	-148.95
Gas works	-4.81	-	-1.51	2.75	-	-	-	-0.01	-	-	-3.57
Coke/pat.fuel/BKB/PB plants	-67.77	-	-0.58	-	-	-	-	-0.11	-	-	-68.47
Oil refineries	-	-1804.40	1771.95	-	-	-	-	-	-	-	-32.45
Petrochemical plants	-	15.80	-15.67	-	-	-	-	-	-	-	0.13
Liquefaction plants	-3.64	8.44	-	-14.90	-	-	-	-	-	-	-10.10
Other transformation	-	0.87	-0.57	-0.39	-	-	-	-16.24	-	-0.12	-16.45
Energy industry own use	-69.00	-10.28	-81.87	-112.93	-	-	-	-0.00	-88.09	-14.78	-376.96
Losses	-2.09	-1.65	-0.03	-9.72	-	-	-0.00	-0.00	-79.72	-1.99	-95.20
<b>TFC</b>	<b>926.36</b>	<b>11.37</b>	<b>1451.51</b>	<b>485.24</b>	<b>-</b>	<b>-</b>	<b>31.03</b>	<b>446.52</b>	<b>850.43</b>	<b>100.90</b>	<b>4303.36</b>
<b>INDUSTRY</b>	<b>735.38</b>	<b>8.02</b>	<b>164.43</b>	<b>212.30</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>62.98</b>	<b>440.70</b>	<b>62.75</b>	<b>1687.09</b>
Iron and steel	266.56	-	4.68	11.27	-	-	-	0.06	68.13	6.87	357.57
Chemical and petrochemical	100.97	0.03	30.20	38.60	-	-	-	0.43	65.13	28.68	264.02
Non-ferrous metals	20.31	-	1.80	4.51	-	-	-	0.03	52.90	3.52	83.07
Non-metallic minerals	214.76	-	26.46	11.88	-	-	-	1.39	35.69	0.26	290.44
Transport equipment	2.98	-	1.17	4.25	-	-	-	0.00	13.49	1.12	23.02
Machinery	12.91	-	3.83	6.85	-	-	-	0.00	53.86	1.09	78.55
Mining and quarrying	7.67	-	6.48	1.79	-	-	-	0.00	10.27	1.04	27.26
Food and tobacco	25.35	-	5.14	6.02	-	-	-	5.55	17.93	3.86	63.85
Paper pulp and printing	13.97	-	1.38	2.71	-	-	-	3.30	11.97	5.12	38.46
Wood and wood products	2.79	-	0.70	0.44	-	-	-	0.17	4.10	0.17	8.37
Construction	4.55	-	13.40	0.63	-	-	-	0.03	7.13	0.25	25.99
Textile and leather	12.86	-	2.84	2.63	-	-	-	0.07	24.41	7.26	50.06
Non-specified	49.71	8.00	66.35	120.71	-	-	0.54	51.95	75.68	3.51	376.44
<b>TRANSPORT</b>	<b>2.50</b>	<b>-</b>	<b>766.47</b>	<b>35.94</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.29</b>	<b>19.70</b>	<b>-</b>	<b>830.90</b>
Domestic aviation	-	-	32.84	-	-	-	-	-	-	-	32.84
Road	-	-	689.05	31.95	-	-	-	6.28	10.11	-	737.40
Rail	2.45	-	7.90	-	-	-	-	0.00	9.16	-	19.51
Pipeline transport	-	-	0.07	3.99	-	-	-	-	0.15	-	4.22
Domestic navigation	-	-	29.95	-	-	-	-	0.01	-	-	29.96
Non-specified	0.04	-	6.66	0.00	-	-	-	-	0.27	-	6.97
<b>OTHER</b>	<b>131.55</b>	<b>-</b>	<b>205.77</b>	<b>168.77</b>	<b>-</b>	<b>-</b>	<b>30.49</b>	<b>377.26</b>	<b>390.03</b>	<b>38.15</b>	<b>1342.02</b>
Residential	58.56	-	107.13	120.54	-	-	25.20	366.94	187.46	26.70	892.53
Comm. and public services	30.73	-	43.00	45.27	-	-	3.91	9.28	127.38	4.73	264.30
Agriculture/forestry	13.78	-	42.76	1.90	-	-	1.32	0.08	34.17	0.11	94.11
Fishing	-	-	2.84	0.05	-	-	-	0.00	0.42	0.00	3.31
Non-specified	28.48	-	10.05	1.01	-	-	0.07	0.95	40.59	6.61	87.76
<b>NON-ENERGY USE</b>	<b>56.93</b>	<b>3.35</b>	<b>314.83</b>	<b>68.23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>443.35</b>
in industry/transf./energy	56.93	3.35	288.25	68.23	-	-	-	-	-	-	416.76
of which: chem./petrochem.	0.88	3.30	231.68	66.79	-	-	-	-	-	-	302.66
in transport	-	-	3.05	-	-	-	-	-	-	-	3.05
in other	-	-	23.53	-	-	-	-	-	-	-	23.53
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>6388.36</b>	<b>136.95</b>	<b>438.76</b>	<b>2243.14</b>	<b>430.65</b>	<b>1664.68</b>	<b>377.53</b>	<b>152.07</b>	<b>-</b>	<b>0.13</b>	<b>11832.26</b>
Electricity plants	6248.84	136.95	431.97	2141.37	430.65	1664.68	377.53	150.98	-	0.13	11583.11
CHP plants	139.52	-	6.78	101.76	-	-	-	1.09	-	-	249.15
<b>Heat generated - PJ</b>	<b>4169.30</b>	<b>-</b>	<b>219.57</b>	<b>457.31</b>	<b>-</b>	<b>-</b>	<b>8.86</b>	<b>71.25</b>	<b>3.62</b>	<b>2.67</b>	<b>4932.57</b>
CHP plants	562.05	-	48.49	195.07	-	-	-	9.11	-	2.67	817.38
Heat plants	3607.25	-	171.09	262.25	-	-	8.86	62.14	3.62	-	4115.19

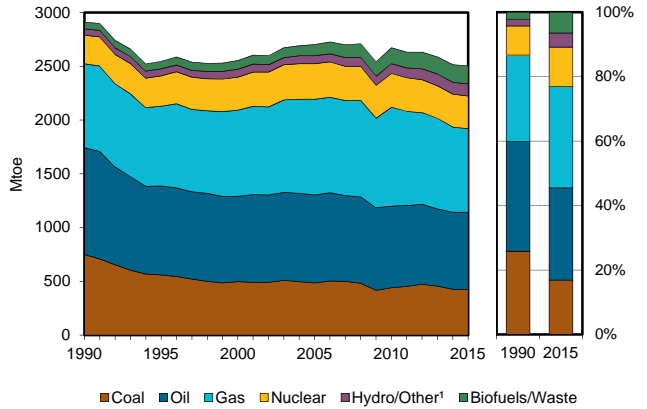
1. Includes peat.

## Europe

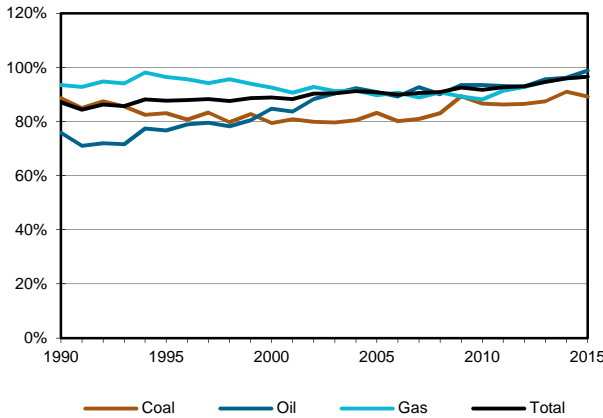
**Figure 1. Energy production**



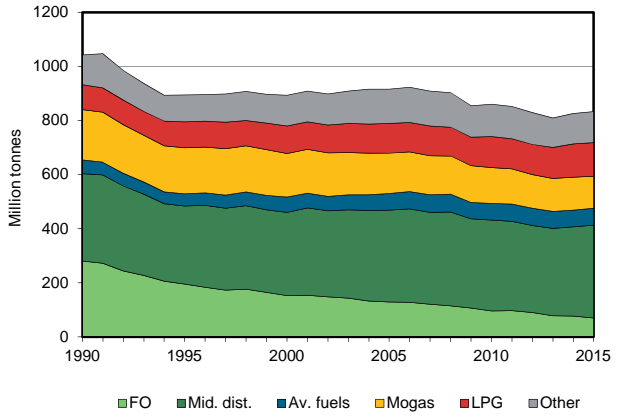
**Figure 2. Total primary energy supply<sup>2</sup>**



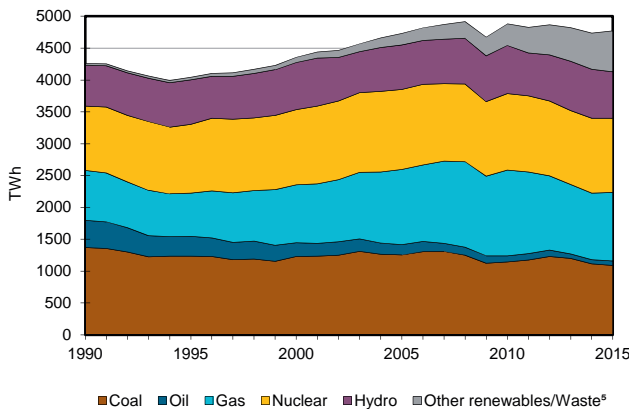
**Figure 3. Energy self-sufficiency<sup>3</sup>**



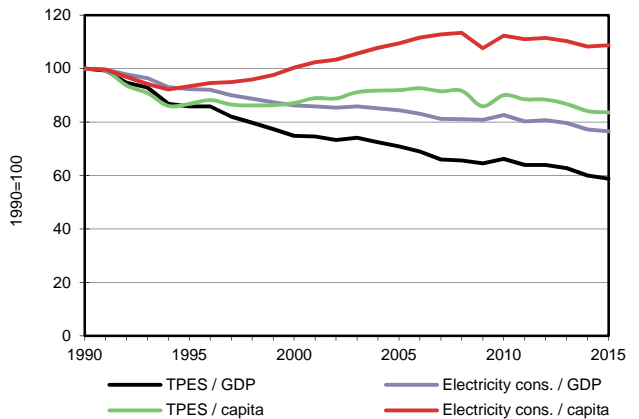
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.



## Europe

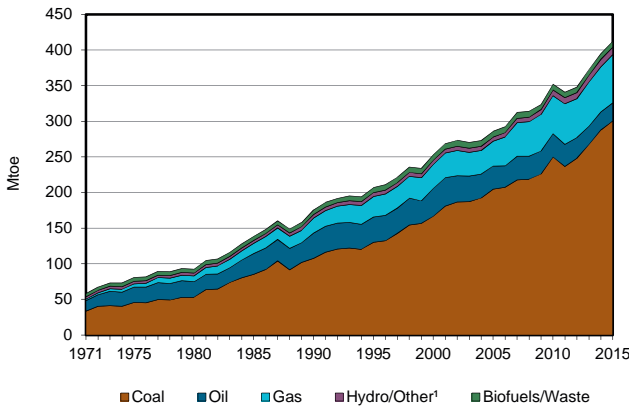
2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	378.12	709.78	-	749.32	303.78	62.77	50.27	162.72	-	1.59	2418.34
Imports	179.07	634.88	370.20	383.96	-	-	-	16.11	41.59	0.01	1625.82
Exports	-140.63	-369.18	-500.58	-355.63	-	-	-	-10.48	-42.47	-0.01	-1418.97
Intl. marine bunkers	-	-	-61.39	-	-	-	-	-	-	-	-61.39
Intl. aviation bunkers	-	-	-53.00	-	-	-	-	-	-	-	-53.00
Stock changes	7.20	-6.04	-6.40	-1.63	-	-	-	0.02	-	-	-6.85
<b>TPES</b>	<b>423.76</b>	<b>969.45</b>	<b>-251.18</b>	<b>776.02</b>	<b>303.78</b>	<b>62.77</b>	<b>50.27</b>	<b>168.37</b>	<b>-0.88</b>	<b>1.60</b>	<b>2503.94</b>
Transfers	-	3.44	-0.25	-	-	-	-	0.00	-	-	3.19
Statistical differences	-3.62	0.46	3.97	2.80	-	-	-0.02	0.00	-0.64	-0.10	2.85
Electricity plants	-154.54	-	-8.05	-47.35	-296.20	-62.77	-43.57	-22.28	288.31	-0.71	-347.14
CHP plants	-122.59	-0.01	-11.13	-218.09	-7.58	-	-2.65	-36.75	121.96	115.46	-161.39
Heat plants	-15.22	-0.59	-6.75	-59.86	-	-	-1.04	-9.13	-0.34	81.75	-11.17
Blast furnaces	-45.22	-	-0.21	-0.07	-	-	-	-	-	-	-45.50
Gas works	-0.27	-0.00	-0.22	0.28	-	-	-	-0.10	-	-	-0.31
Coke/pat.fuel/BKB/PB plants	-12.78	-	-0.51	-0.03	-	-	-	-0.00	-	-	-13.32
Oil refineries	-	-982.35	977.03	-	-	-	-	-	-	-	-5.32
Petrochemical plants	-	15.50	-15.94	-	-	-	-	-	-	-	-0.44
Liquefaction plants	-1.29	0.80	-	-	-	-	-	-	-	-	-0.49
Other transformation	-0.37	1.67	-0.00	-3.89	-	-	-	-0.51	-	-0.73	-3.83
Energy industry own use	-9.16	-0.09	-49.84	-34.10	-	-	-0.00	-1.02	-45.48	-18.62	-158.32
Losses	-1.64	-5.79	-0.06	-7.80	-	-	-0.01	-0.04	-30.95	-14.56	-60.86
<b>TFC</b>	<b>57.08</b>	<b>2.49</b>	<b>636.87</b>	<b>407.90</b>	<b>-</b>	<b>-</b>	<b>2.96</b>	<b>98.53</b>	<b>331.97</b>	<b>164.09</b>	<b>1701.88</b>
<b>INDUSTRY</b>	<b>38.65</b>	<b>0.03</b>	<b>45.20</b>	<b>119.49</b>	<b>-</b>	<b>-</b>	<b>0.06</b>	<b>26.42</b>	<b>127.57</b>	<b>56.42</b>	<b>413.84</b>
Iron and steel	23.48	-	1.03	21.92	-	-	-	0.43	16.73	8.11	71.70
Chemical and petrochemical	3.87	0.03	16.75	24.14	-	-	0.00	1.00	21.10	20.36	87.24
Non-ferrous metals	0.52	-	0.36	3.32	-	-	0.00	0.01	17.00	0.40	21.62
Non-metallic minerals	6.94	0.00	7.12	23.93	-	-	0.00	4.02	7.96	2.75	52.72
Transport equipment	0.13	-	0.57	2.80	-	-	0.00	0.02	5.82	2.54	11.89
Machinery	0.18	-	1.40	7.79	-	-	0.00	0.16	12.52	3.85	25.90
Mining and quarrying	0.28	-	2.62	2.07	-	-	0.00	0.09	4.80	0.95	10.81
Food and tobacco	1.51	0.00	2.73	15.98	-	-	0.00	1.11	12.56	6.22	40.11
Paper pulp and printing	1.08	-	0.90	7.43	-	-	0.00	12.35	12.22	6.49	40.47
Wood and wood products	0.04	-	0.38	0.73	-	-	0.00	5.20	2.54	1.37	10.25
Construction	0.10	-	4.94	4.01	-	-	0.00	0.18	2.96	0.73	12.92
Textile and leather	0.07	-	0.30	2.26	-	-	0.00	0.03	2.21	0.61	5.48
Non-specified	0.45	-	6.10	3.12	-	-	0.05	1.82	9.16	2.04	22.73
<b>TRANSPORT</b>	<b>0.02</b>	<b>-</b>	<b>374.17</b>	<b>32.61</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>14.48</b>	<b>13.51</b>	<b>-</b>	<b>434.79</b>
Domestic aviation	-	-	11.10	-	-	-	-	-	-	-	11.10
Road	-	-	351.49	1.90	-	-	-	14.44	0.23	-	368.06
Rail	0.02	-	4.01	-	-	-	-	0.03	9.54	-	13.59
Pipeline transport	-	-	0.23	30.55	-	-	-	-	1.93	-	32.71
Domestic navigation	-	-	5.82	0.10	-	-	-	0.00	-	-	5.93
Non-specified	0.00	-	1.52	0.06	-	-	0.00	0.00	1.81	-	3.40
<b>OTHER</b>	<b>15.97</b>	<b>0.07</b>	<b>86.74</b>	<b>205.36</b>	<b>-</b>	<b>-</b>	<b>2.90</b>	<b>57.64</b>	<b>190.88</b>	<b>107.66</b>	<b>667.23</b>
Residential	12.02	-	45.01	151.79	-	-	2.06	48.99	92.15	75.73	427.76
Comm. and public services	2.66	-	18.93	47.78	-	-	0.60	6.31	91.94	28.72	196.93
Agriculture/forestry	1.11	0.01	18.25	4.61	-	-	0.15	2.20	6.28	2.96	35.58
Fishing	0.00	-	2.24	0.00	-	-	0.04	0.01	0.09	0.03	2.40
Non-specified	0.17	0.06	2.32	1.17	-	-	0.05	0.13	0.43	0.22	4.56
<b>NON-ENERGY USE</b>	<b>2.44</b>	<b>2.39</b>	<b>130.76</b>	<b>50.43</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>186.02</b>
in industry/transf./energy	2.34	2.39	128.24	50.43	-	-	-	-	-	-	183.40
of which: chem./petrochem.	0.84	2.38	97.80	50.34	-	-	-	-	-	-	151.36
in transport	-	-	1.90	-	-	-	-	-	-	-	1.90
in other	0.10	-	0.62	-	-	-	-	-	-	-	0.72
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1088.79</b>	<b>0.01</b>	<b>68.68</b>	<b>1079.29</b>	<b>1163.32</b>	<b>729.85</b>	<b>431.31</b>	<b>207.44</b>	<b>-</b>	<b>1.86</b>	<b>4770.54</b>
Electricity plants	673.82	-	34.15	263.21	1136.58	729.85	425.84	87.15	-	0.55	3351.14
CHP plants	414.97	0.01	34.53	816.08	26.74	-	5.46	120.29	-	1.31	1419.40
<b>Heat generated - PJ</b>	<b>1731.56</b>	<b>18.00</b>	<b>338.67</b>	<b>4916.30</b>	<b>25.82</b>	<b>-</b>	<b>391.10</b>	<b>820.26</b>	<b>5.46</b>	<b>78.12</b>	<b>8325.28</b>
CHP plants	1233.09	0.14	115.36	2924.52	25.82	-	12.68	523.39	0.32	41.99	4877.30
Heat plants	498.47	17.86	223.31	1991.78	-	-	378.42	296.87	5.14	36.13	3447.99

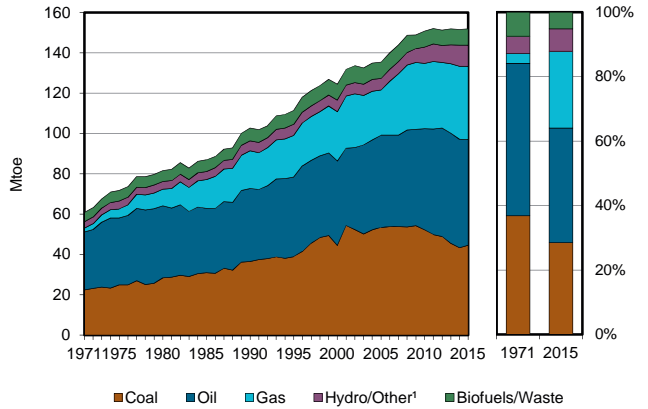
1. Includes peat.

## Oceania

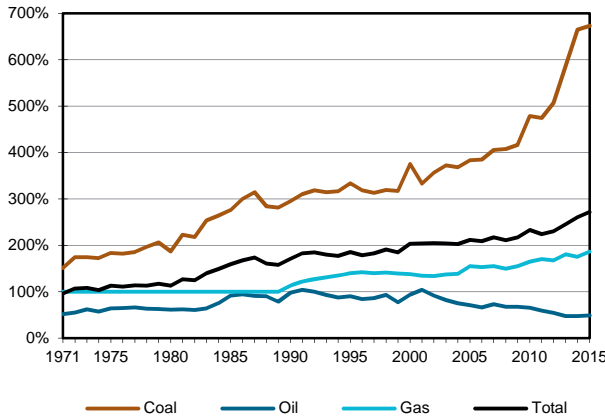
**Figure 1. Energy production**



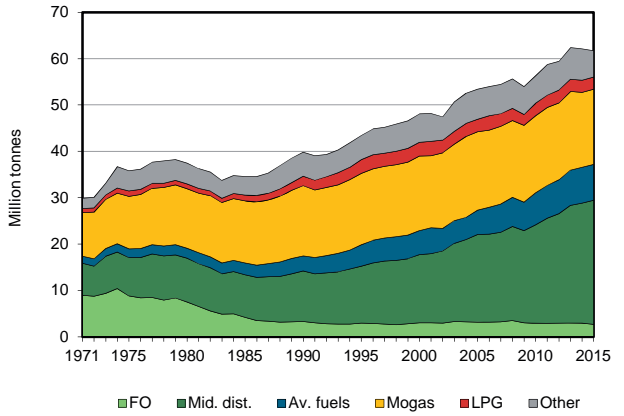
**Figure 2. Total primary energy supply<sup>2</sup>**



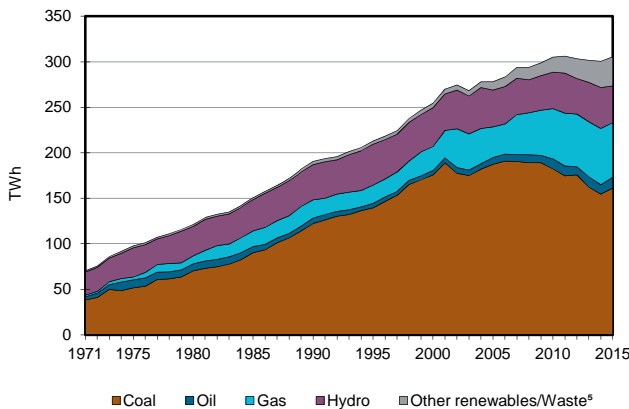
**Figure 3. Energy self-sufficiency<sup>3</sup>**



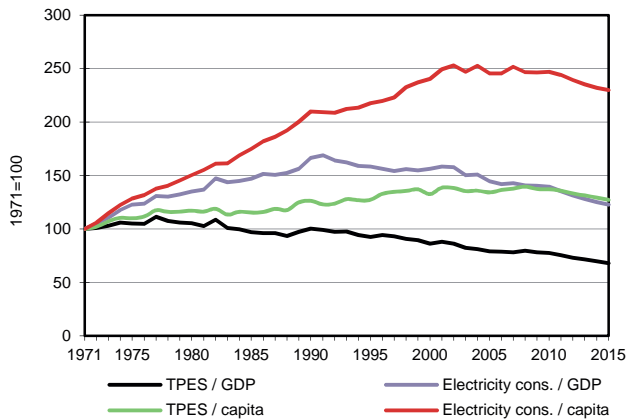
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Oceania

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	300.52	25.26	-	67.83	-	3.46	6.98	8.14	-	-	412.19
Imports	0.74	26.49	28.57	5.14	-	-	-	-	-	-	60.93
Exports	-254.98	-17.06	-5.04	-36.59	-	-	-	-	-	-	-313.66
Intl. marine bunkers	-	-	-1.19	-	-	-	-	-	-	-	-1.19
Intl. aviation bunkers	-	-	-4.88	-	-	-	-	-	-	-	-4.88
Stock changes	-1.65	0.35	-0.23	0.05	-	-	-	-	-	-	-1.49
<b>TPES</b>	<b>44.63</b>	<b>35.03</b>	<b>17.23</b>	<b>36.43</b>	-	<b>3.46</b>	<b>6.98</b>	<b>8.14</b>	-	-	<b>151.90</b>
Transfers	-	-2.13	6.89	-	-	-	-	-	-	-	4.76
Statistical differences	-0.12	-0.33	0.87	0.49	-	-	-0.00	-0.04	-0.02	-	0.86
Electricity plants	-38.74	-	-3.18	-10.81	-	-3.46	-6.36	-0.40	24.90	-0.03	-38.09
CHP plants	-0.68	-	-0.03	-2.40	-	-	-0.08	-0.65	1.38	0.03	-2.42
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.78	-	-	-	-	-	-	-	-	-	-0.78
Gas works	0.00	-	-	-0.00	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-0.31	-	-	-	-	-	-	-	-	-	-0.31
Oil refineries	-	-32.58	32.62	-	-	-	-	-	-	-	0.04
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.08	-	-0.07	-	-	-	-0.02	-	-	-0.01
Energy industry own use	-0.92	-0.05	-3.71	-7.41	-	-	-	-	-2.48	-	-14.57
Losses	-0.01	-	-	-0.02	-	-	-	-	-1.51	-	-1.53
<b>TFC</b>	<b>3.09</b>	<b>0.02</b>	<b>50.70</b>	<b>16.21</b>	-	-	<b>0.54</b>	<b>7.03</b>	<b>22.27</b>	-	<b>99.84</b>
<b>INDUSTRY</b>	<b>3.00</b>	<b>0.02</b>	<b>5.30</b>	<b>8.95</b>	-	-	<b>0.10</b>	<b>4.02</b>	<b>8.27</b>	-	<b>29.65</b>
Iron and steel	0.35	-	0.02	0.35	-	-	-	-	0.42	-	1.15
Chemical and petrochemical	0.17	-	0.15	2.27	-	-	-	0.10	0.40	-	3.08
Non-ferrous metals	1.11	-	0.93	3.07	-	-	-	0.05	3.37	-	8.52
Non-metallic minerals	0.48	-	0.20	1.21	-	-	-	0.05	0.42	-	2.34
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	-	-	0.03	0.07	-	-	-	-	0.16	-	0.26
Mining and quarrying	0.05	-	2.53	0.14	-	-	-	0.00	1.48	-	4.20
Food and tobacco	0.59	0.00	0.12	1.15	-	-	-	2.20	0.74	-	4.80
Paper pulp and printing	0.07	-	0.05	0.39	-	-	0.10	0.17	0.46	-	1.23
Wood and wood products	0.02	-	0.01	0.09	-	-	-	1.17	0.18	-	1.46
Construction	0.00	-	0.58	0.08	-	-	-	-	0.07	-	0.73
Textile and leather	0.01	0.01	0.01	0.12	-	-	-	-	0.06	-	0.21
Non-specified	0.16	-	0.68	0.01	-	-	-	0.29	0.51	-	1.65
<b>TRANSPORT</b>	<b>0.00</b>	-	<b>37.57</b>	<b>0.27</b>	-	-	-	<b>0.25</b>	<b>0.48</b>	-	<b>38.56</b>
Domestic aviation	-	-	3.39	-	-	-	-	-	-	-	3.39
Road	-	-	32.03	0.09	-	-	-	0.25	-	-	32.37
Rail	0.00	-	1.10	-	-	-	-	-	0.24	-	1.34
Pipeline transport	-	-	0.03	0.17	-	-	-	-	0.02	-	0.21
Domestic navigation	-	-	0.81	-	-	-	-	-	-	-	0.81
Non-specified	-	-	0.21	0.01	-	-	-	-	0.22	-	0.44
<b>OTHER</b>	<b>0.09</b>	-	<b>4.21</b>	<b>5.11</b>	-	-	<b>0.44</b>	<b>2.75</b>	<b>13.52</b>	-	<b>26.12</b>
Residential	0.01	-	0.56	3.63	-	-	0.36	2.70	6.33	-	13.59
Comm. and public services	0.03	-	0.94	1.40	-	-	0.06	0.05	6.70	-	9.19
Agriculture/forestry	0.05	-	2.62	0.06	-	-	0.02	-	0.46	-	3.21
Fishing	-	-	0.07	-	-	-	-	-	0.00	-	0.07
Non-specified	-	-	0.02	0.01	-	-	-	0.00	0.03	-	0.05
<b>NON-ENERGY USE</b>	-	-	<b>3.63</b>	<b>1.89</b>	-	-	-	-	-	-	<b>5.51</b>
in industry/transf./energy	-	-	3.63	1.89	-	-	-	-	-	-	5.51
of which: chem./petrochem.	-	-	1.56	1.89	-	-	-	-	-	-	3.45
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>161.31</b>	-	<b>12.08</b>	<b>59.85</b>	-	<b>40.25</b>	<b>27.82</b>	<b>4.23</b>	-	-	<b>305.53</b>
Electricity plants	158.74	-	11.95	49.36	-	40.25	27.69	1.54	-	-	289.52
CHP plants	2.57	-	0.13	10.50	-	-	0.13	2.69	-	-	16.01
<b>Heat generated - PJ</b>	-	-	-	-	-	-	<b>1.36</b>	-	-	-	<b>1.37</b>
CHP plants	-	-	-	-	-	-	1.36	-	-	-	1.37
Heat plants	-	-	-	-	-	-	-	-	-	-	-



# OTHER REGIONAL TOTALS

IEA

Figure 1. Energy production

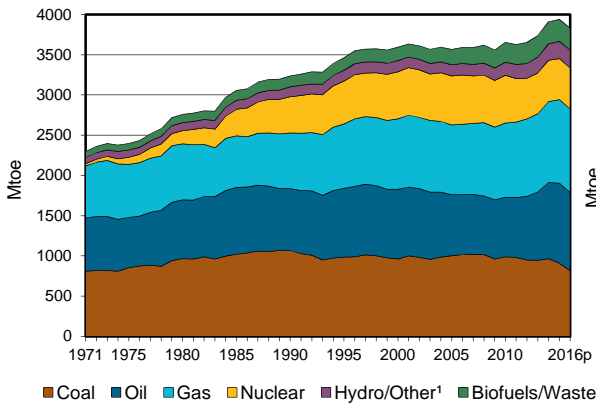


Figure 2. Total primary energy supply<sup>2</sup>

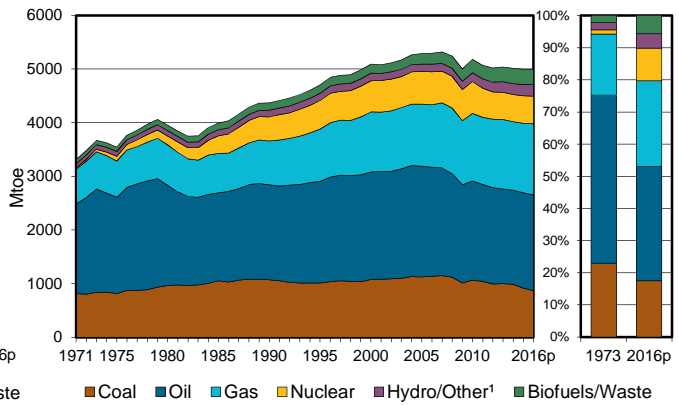


Figure 3. Energy self-sufficiency

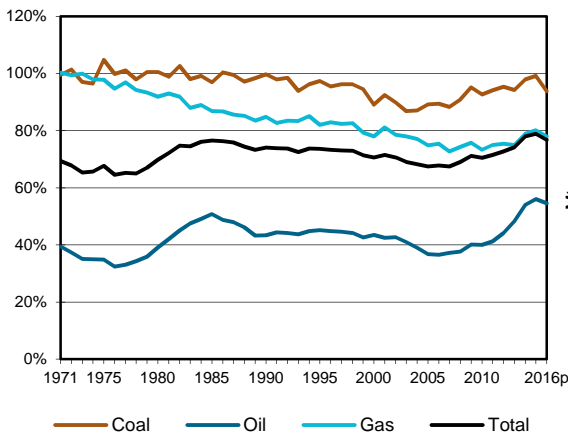


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

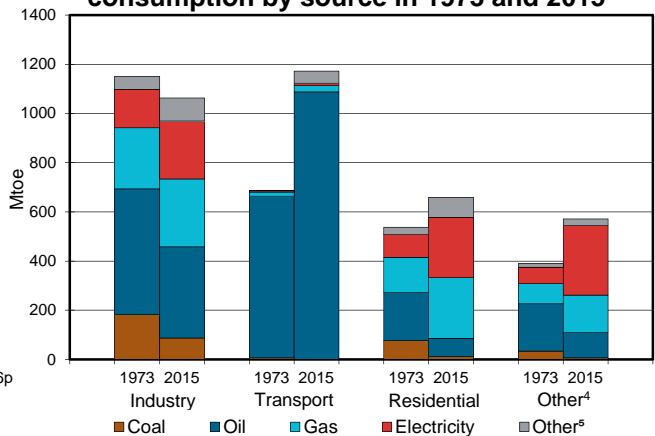


Figure 5. Electricity generation by source

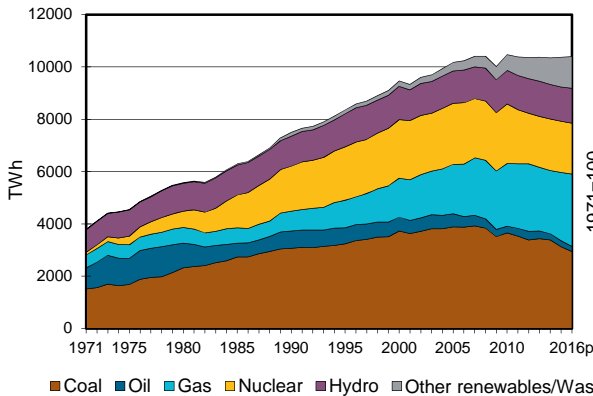
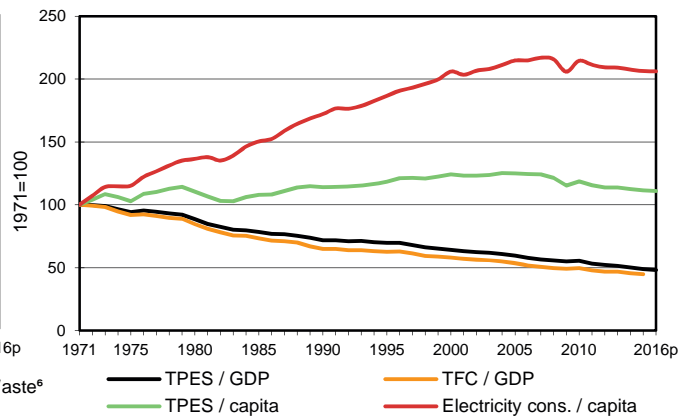


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## IEA

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	910.68	994.45	-	1038.18	509.20	112.36	99.57	276.14	-	0.82	3941.40
Imports	382.25	1398.04	548.59	597.37	-	-	-	18.50	42.84	0.01	2987.61
Exports	-357.74	-348.87	-627.60	-326.52	-	-	-	-10.80	-41.97	-0.01	-1713.50
Intl. marine bunkers	-	-	-68.77	-	-	-	-	-0.17	-	-	-68.94
Intl. aviation bunkers	-	-	-90.12	-	-	-	-	-	-	-	-90.12
Stock changes	-16.22	-16.84	-14.10	-12.25	-	-	-	-0.45	-	-	-59.87
<b>TPES</b>	<b>918.98</b>	<b>2026.78</b>	<b>-252.00</b>	<b>1296.77</b>	<b>509.20</b>	<b>112.36</b>	<b>99.57</b>	<b>283.23</b>	<b>0.87</b>	<b>0.82</b>	<b>4996.58</b>
Transfers	-	-98.52	113.00	-	-	-	-	-0.42	-	-	14.07
Statistical differences	-4.83	-6.00	10.77	5.03	-	-	-0.00	0.42	0.76	-0.71	5.43
Electricity plants	-644.41	-4.94	-33.92	-359.28	-502.11	-112.36	-89.74	-49.10	800.75	-0.52	-995.66
CHP plants	-76.52	-	-12.41	-102.80	-7.08	-	-0.08	-41.80	90.94	53.84	-95.90
Heat plants	-3.77	-	-1.02	-8.09	-	-	-0.52	-6.30	-0.41	16.49	-3.62
Blast furnaces	-52.50	-	-0.21	-0.07	-	-	-	-	-	-	-52.79
Gas works	-2.23	-	-1.43	2.75	-	-	-	-0.10	-	-	-1.00
Coke/pat. fuel/BKB/PB plants	-7.46	-	-1.09	-0.03	-	-	-	-0.11	-	-	-8.70
Oil refineries	-	-1950.95	1938.96	-	-	-	-	-	-	-	-11.99
Petrochemical plants	-	30.78	-31.10	-	-	-	-	-	-	-	-0.32
Liquefaction plants	-1.29	0.80	-	-	-	-	-	-	-	-	-0.49
Other transformation	-0.19	9.02	-0.00	-9.37	-	-	-	-0.14	-	-0.85	-1.52
Energy industry own use	-18.03	-0.06	-101.65	-121.89	-	-	-0.00	-0.85	-65.19	-7.69	-315.35
Losses	-1.15	-	-0.05	-1.81	-	-	-0.00	-0.04	-55.27	-5.13	-63.44
<b>TFC</b>	<b>106.60</b>	<b>6.90</b>	<b>1627.84</b>	<b>701.22</b>	<b>-</b>	<b>-</b>	<b>9.22</b>	<b>184.80</b>	<b>772.45</b>	<b>56.25</b>	<b>3465.28</b>
<b>INDUSTRY</b>	<b>85.19</b>	<b>0.04</b>	<b>81.55</b>	<b>243.24</b>	<b>-</b>	<b>-</b>	<b>0.43</b>	<b>69.02</b>	<b>236.37</b>	<b>24.18</b>	<b>740.02</b>
Iron and steel	36.68	-	2.47	22.43	-	-	-	0.09	26.01	0.67	88.35
Chemical and petrochemical	11.03	0.03	19.45	67.43	-	-	0.00	1.63	36.79	11.06	147.41
Non-ferrous metals	1.85	-	1.60	11.58	-	-	0.00	0.09	22.90	0.22	38.24
Non-metallic minerals	20.42	-	10.60	25.08	-	-	0.00	5.74	13.74	0.27	75.84
Transport equipment	0.20	-	1.03	7.91	-	-	0.00	0.02	13.09	0.67	22.93
Machinery	0.31	-	2.81	18.64	-	-	0.00	0.14	29.89	0.62	52.42
Mining and quarrying	0.33	-	8.23	3.97	-	-	0.00	0.11	7.36	0.12	20.12
Food and tobacco	5.61	0.00	4.28	35.79	-	-	0.00	3.82	21.57	1.80	72.87
Paper, pulp and printing	5.15	-	2.31	19.43	-	-	0.10	47.88	23.70	3.13	101.70
Wood and wood products	0.09	-	1.35	2.55	-	-	-	6.83	4.58	0.63	16.02
Construction	0.03	-	16.42	2.76	-	-	0.00	0.30	7.85	0.04	27.40
Textile and leather	0.87	0.01	1.02	5.14	-	-	0.00	0.08	6.06	0.65	13.84
Non-specified	2.61	-	9.99	20.54	-	-	0.33	2.30	22.81	4.30	62.88
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>1080.15</b>	<b>25.12</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>49.56</b>	<b>9.05</b>	<b>-</b>	<b>1163.89</b>
Domestic aviation	-	-	72.84	-	-	-	-	-	-	-	72.84
Road	-	-	969.75	4.03	-	-	-	49.30	0.46	-	1023.54
Rail	0.01	-	17.36	-	-	-	-	0.20	7.15	-	24.73
Pipeline transport	-	-	0.04	20.86	-	-	-	-	0.48	-	21.38
Domestic navigation	-	-	19.61	0.10	-	-	-	0.06	-	-	19.77
Non-specified	-	-	0.56	0.12	-	-	0.00	0.00	0.95	-	1.64
<b>OTHER</b>	<b>18.62</b>	<b>-</b>	<b>168.68</b>	<b>400.33</b>	<b>-</b>	<b>-</b>	<b>8.80</b>	<b>66.22</b>	<b>527.04</b>	<b>32.07</b>	<b>1221.75</b>
Residential	11.62	-	73.90	248.08	-	-	5.03	54.79	243.77	20.99	658.18
Comm. and public services	5.93	-	49.45	145.49	-	-	2.83	8.29	252.57	10.66	475.21
Agriculture/forestry	1.04	-	38.81	5.56	-	-	0.82	3.11	10.43	0.21	59.98
Fishing	-	-	3.05	0.05	-	-	0.03	0.01	0.38	-	3.51
Non-specified	0.04	-	3.47	1.14	-	-	0.09	0.02	19.90	0.21	24.87
<b>NON-ENERGY USE</b>	<b>2.77</b>	<b>6.86</b>	<b>297.46</b>	<b>32.53</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>339.62</b>
in industry/transf./energy	2.67	6.86	281.31	32.53	-	-	-	-	-	-	323.38
of which: chem./petrochem.	1.54	6.86	214.18	32.53	-	-	-	-	-	-	255.10
in transport	-	-	8.17	-	-	-	-	-	-	-	8.17
in other	0.10	-	7.97	-	-	-	-	-	-	-	8.07
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>3132.14</b>	<b>24.68</b>	<b>201.03</b>	<b>2613.30</b>	<b>1953.46</b>	<b>1306.55</b>	<b>791.06</b>	<b>345.04</b>	<b>-</b>	<b>1.23</b>	<b>10368.47</b>
Electricity plants	2841.59	24.68	159.90	2075.85	1926.72	1306.55	786.11	188.39	-	0.65	9310.43
CHP plants	290.55	-	41.14	537.45	26.74	-	4.95	156.64	-	0.58	1058.04
<b>Heat generated - PJ</b>	<b>754.79</b>	<b>-</b>	<b>163.01</b>	<b>1248.01</b>	<b>4.77</b>	<b>-</b>	<b>35.78</b>	<b>719.52</b>	<b>7.83</b>	<b>45.64</b>	<b>2979.36</b>
CHP plants	627.29	-	129.48	970.55	4.77	-	7.17	515.37	0.32	20.05	2275.00
Heat plants	127.51	-	33.53	277.47	-	-	28.60	204.15	7.51	25.59	704.36

1. Includes peat and oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## IEA

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	817.94	970.95	-	1040.37	508.46	114.61	107.43	272.47	-	0.75	3832.97
Imports	365.01	1416.46	567.86	621.88	-	-	-	21.04	40.63	0.01	3032.89
Exports	-350.03	-352.81	-650.54	-345.77	-	-	-	-12.04	-39.40	-0.01	-1750.59
Intl. marine bunkers	-	-	-77.08	-	-	-	-	-	-	-	-77.08
Intl. aviation bunkers	-	-	-94.19	-	-	-	-	-	-	-	-94.19
Stock changes	38.86	-2.48	0.42	17.19	-	-	-	-0.44	-	-	53.54
<b>TPES</b>	<b>871.77</b>	<b>2032.12</b>	<b>-253.53</b>	<b>1333.66</b>	<b>508.46</b>	<b>114.61</b>	<b>107.43</b>	<b>281.03</b>	<b>1.23</b>	<b>0.75</b>	<b>4997.53</b>
Electricity and Heat Output											
Elec. generated - TWh	2947.68	11.00	179.90	2766.10	1950.50	1332.70	868.44	335.86	-	0.95	10393.13
Heat generated - PJ	717.90	-	137.56	1244.41	6.02	-	41.30	734.25	8.06	37.30	2926.80

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat and oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	2398.4	2759.3	3236.9	3594.9	3653.8	3908.7	3941.4	3833.0
Net imports (Mtoe)	1388.2	1340.6	1299.8	1606.6	1677.9	1288.6	1274.1	1282.3
Total primary energy supply (Mtoe)	3670.5	3953.8	4370.2	5092.1	5183.8	5012.0	4996.6	4997.5
Net oil imports (Mtoe)	1365.1	1263.6	1139.1	1295.2	1279.9	969.2	970.2	981.0
Oil supply (Mtoe)	1921.7	1867.8	1773.7	2001.3	1847.9	1753.6	1774.8	1778.6
Electricity consumption (TWh) <sup>1</sup>	4089.6	5174.8	6992.3	8939.6	9921.7	9791.1	9796.8	9831.7
GDP (billion 2010 USD)	17376.8	20895.9	28515.7	37028.7	43150.8	45876.5	46909.5	47705.4
GDP PPP (billion 2010 USD)	16344.2	19662.0	26792.7	34994.7	41235.7	43964.9	44987.8	45756.7
Population (millions)	849.10	899.22	963.01	1029.12	1096.71	1118.96	1124.94	1131.20
Industrial production index (2010=100)	..	..	..	..	..	..	..	-
Total self-sufficiency <sup>2</sup>	0.65	0.70	0.74	0.71	0.70	0.78	0.79	0.77
Coal self-sufficiency <sup>2</sup>	0.97	1.00	1.00	0.89	0.93	0.98	0.99	0.94
Oil self-sufficiency <sup>2</sup>	0.35	0.39	0.43	0.43	0.40	0.54	0.56	0.55
Natural gas self-sufficiency <sup>2</sup>	1.00	0.92	0.85	0.78	0.73	0.79	0.80	0.78
TPES/GDP (toe per thousand 2010 USD)	0.21	0.19	0.15	0.14	0.12	0.11	0.11	0.10
TPES/GDP PPP (toe per thousand 2010 USD)	0.22	0.20	0.16	0.15	0.13	0.11	0.11	0.11
TPES/population (toe per capita)	4.32	4.40	4.54	4.95	4.73	4.48	4.44	4.42
Net oil imports/GDP (toe per thousand 2010 USD)	0.08	0.06	0.04	0.04	0.03	0.02	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.09	0.06	0.05	0.04	0.04	0.04	0.04
Oil supply/population (toe per capita)	2.26	2.08	1.84	1.94	1.68	1.57	1.58	1.57
Share of renewables in TPES	0.04	0.05	0.06	0.06	0.08	0.09	0.09	0.10
Share of renewables in electricity generation	0.21	0.20	0.17	0.15	0.18	0.22	0.23	0.24
TFC/GDP (toe per thousand 2010 USD)	0.16	0.14	0.11	0.09	0.08	0.08	0.07	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.17	0.15	0.11	0.10	0.09	0.08	0.08	..
TFC/population (toe per capita)	3.26	3.18	3.11	3.40	3.22	3.08	3.08	..
Elect. cons./GDP (kWh per 2010 USD)	0.24	0.25	0.25	0.24	0.23	0.21	0.21	0.21
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.25	0.26	0.26	0.26	0.24	0.22	0.22	0.22
Elect. cons./population (kWh per capita)	4816	5755	7261	8687	9047	8750	8709	8691
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

IEA excludes Estonia prior to 1990.

1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## IEA and Accession/Association countries

Figure 1. Energy production

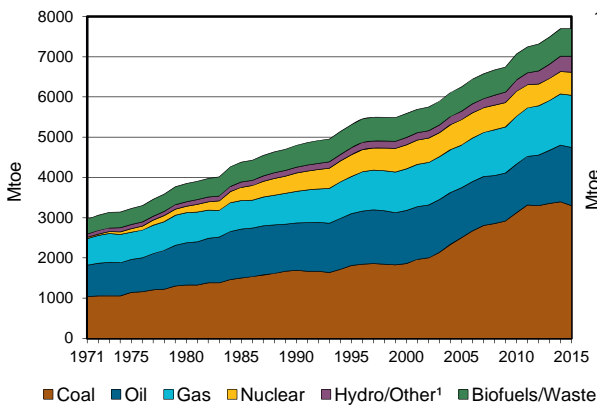


Figure 2. Total primary energy supply<sup>2</sup>

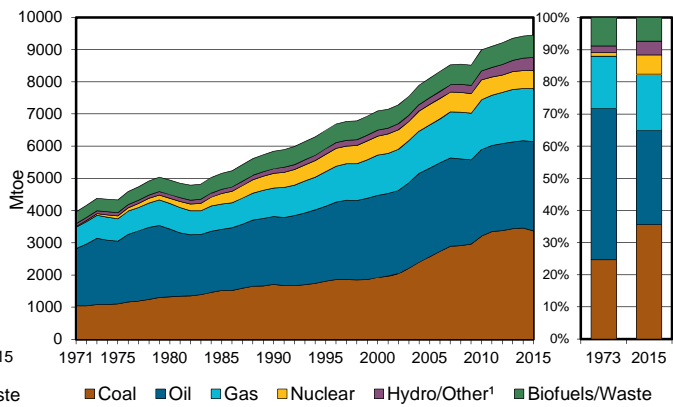


Figure 3. Energy self-sufficiency

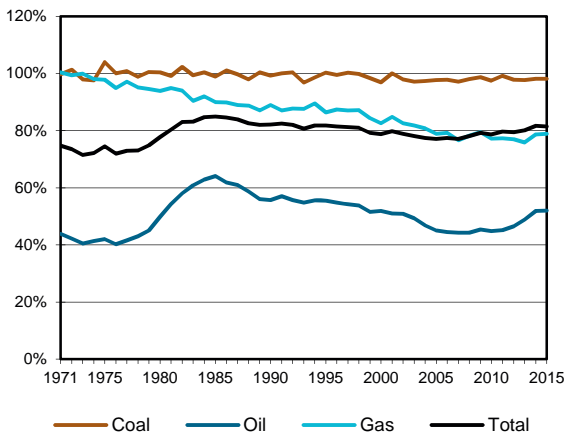


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

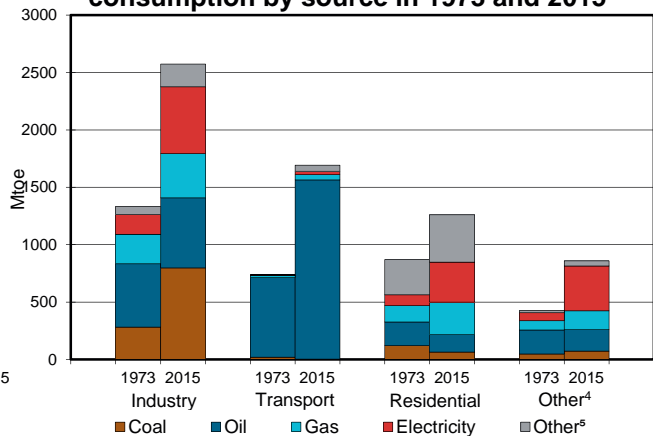


Figure 5. Electricity generation by source

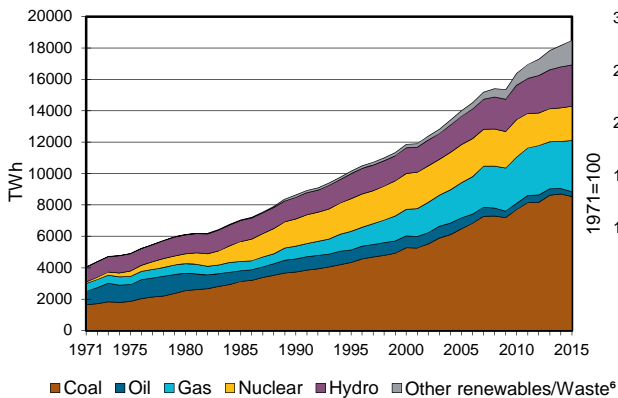
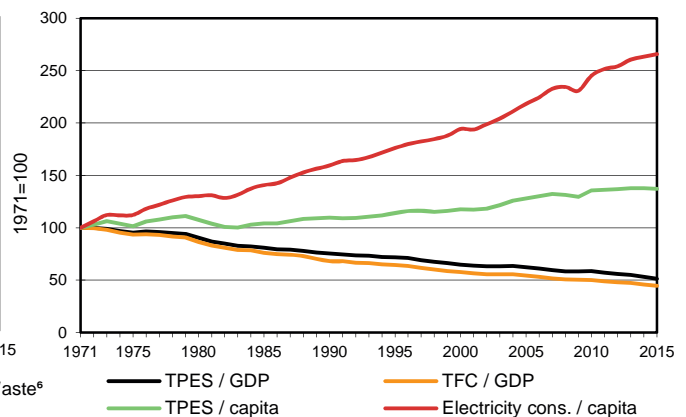


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## IEA and Accession/Association countries

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	3300.55	1442.46	-	1303.50	566.47	226.54	172.89	686.37	-	0.82	7699.61
Imports	643.02	2063.05	833.16	718.56	-	-	-	18.66	45.65	0.01	4322.11
Exports	-573.89	-430.42	-851.41	-356.88	-	-	-	-11.27	-44.43	-0.01	-2268.31
Intl. marine bunkers	-	-	-125.35	-	-	-	-	-0.17	-	-	-125.52
Intl. aviation bunkers	-	-	-119.57	-	-	-	-	-	-	-	-119.57
Stock changes	-6.24	-18.96	-20.45	-12.19	-	-	-	-0.45	-	-	-58.30
<b>TPES</b>	<b>3363.44</b>	<b>3056.13</b>	<b>-283.63</b>	<b>1653.00</b>	<b>566.47</b>	<b>226.54</b>	<b>172.89</b>	<b>693.15</b>	<b>1.23</b>	<b>0.82</b>	<b>9450.03</b>
Transfers	-0.97	-101.67	119.12	-	-	-	-	-0.42	-	-	16.07
Statistical differences	-13.74	-8.98	9.29	1.97	-	-	-	0.51	1.15	-0.71	-10.50
Electricity plants	-1878.78	-5.07	-57.66	-476.34	-559.39	-226.54	-135.90	-92.32	1496.08	-0.52	-1936.42
CHP plants	-76.52	-	-12.95	-106.99	-7.08	-	-0.08	-45.64	92.78	53.84	-102.65
Heat plants	-125.23	-0.07	-5.64	-13.35	-	-	-0.52	-7.77	-0.41	112.39	-40.59
Blast furnaces	-169.21	-	-0.21	-0.07	-	-	-	-	-	-	-169.50
Gas works	-7.03	-	-2.20	4.32	-	-	-	-0.10	-	-	-5.01
Coke/pat. fuel/BKB/PB plants	-71.89	-	-1.09	-0.03	-	-	-	-0.11	-	-	-73.13
Oil refineries	-	-2965.81	2924.73	-	-	-	-	-	-	-	-41.08
Petrochemical plants	-	30.93	-31.26	-	-	-	-	-	-	-	-0.33
Liquefaction plants	-4.93	2.99	-	-	-	-	-	-	-	-	-1.95
Other transformation	-0.19	9.08	-0.00	-9.37	-	-	-	-10.93	-	-0.85	-12.26
Energy industry own use	-76.05	-4.46	-156.83	-172.70	-	-	-0.00	-0.85	-133.32	-19.17	-563.38
Losses	-1.16	-1.07	-0.05	-3.90	-	-	-0.00	-0.04	-110.30	-6.28	-122.81
<b>TFC</b>	<b>937.74</b>	<b>12.00</b>	<b>2501.62</b>	<b>876.52</b>	<b>-</b>	<b>-</b>	<b>36.39</b>	<b>535.49</b>	<b>1347.20</b>	<b>139.53</b>	<b>6386.49</b>
<b>INDUSTRY</b>	<b>740.04</b>	<b>2.11</b>	<b>189.49</b>	<b>316.44</b>	<b>-</b>	<b>-</b>	<b>0.69</b>	<b>117.79</b>	<b>581.75</b>	<b>79.90</b>	<b>2028.21</b>
Iron and steel	278.12	-	4.88	29.33	-	-	-	0.09	79.02	6.33	397.77
Chemical and petrochemical	103.07	0.03	40.10	85.20	-	-	0.00	1.63	88.54	37.95	356.53
Non-ferrous metals	20.94	-	2.79	14.91	-	-	0.00	0.09	72.01	3.72	114.47
Non-metallic minerals	209.37	-	37.17	33.88	-	-	0.00	5.84	44.09	0.52	330.88
Transport equipment	3.10	-	1.81	10.57	-	-	0.00	0.02	22.47	1.77	39.73
Machinery	13.09	-	5.73	22.57	-	-	0.00	0.14	67.73	1.67	110.94
Mining and quarrying	7.56	-	16.08	5.24	-	-	0.00	0.11	19.56	1.01	49.57
Food and tobacco	29.57	0.00	7.09	38.14	-	-	0.00	8.28	34.38	5.42	122.89
Paper, pulp and printing	16.57	-	3.17	21.92	-	-	0.10	49.35	31.65	8.01	130.77
Wood and wood products	2.86	-	1.78	2.74	-	-	-	6.83	7.82	0.79	22.81
Construction	4.54	-	24.63	2.95	-	-	0.00	0.30	13.97	0.25	46.65
Textile and leather	11.30	0.01	2.84	5.83	-	-	0.00	0.08	26.57	7.54	54.17
Non-specified	39.94	2.07	41.41	43.18	-	-	0.59	45.02	73.92	4.90	251.03
<b>TRANSPORT</b>	<b>2.45</b>	<b>-</b>	<b>1553.64</b>	<b>46.58</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>54.52</b>	<b>26.37</b>	<b>-</b>	<b>1683.56</b>
Domestic aviation	-	-	96.97	-	-	-	-	-	-	-	96.97
Road	-	-	1385.13	24.82	-	-	-	54.26	10.58	-	1474.79
Rail	2.45	-	24.20	-	-	-	-	0.20	14.37	-	41.22
Pipeline transport	-	-	0.04	21.53	-	-	-	-	0.48	-	22.04
Domestic navigation	-	-	44.84	0.10	-	-	-	0.06	-	-	45.00
Non-specified	0.00	-	2.46	0.12	-	-	0.00	0.00	0.95	-	3.54
<b>OTHER</b>	<b>136.77</b>	<b>-</b>	<b>309.83</b>	<b>444.22</b>	<b>-</b>	<b>-</b>	<b>35.70</b>	<b>363.18</b>	<b>739.08</b>	<b>59.63</b>	<b>2088.41</b>
Residential	64.02	-	154.42	280.16	-	-	27.49	344.01	348.26	43.40	1261.75
Comm. and public services	31.33	-	70.65	157.06	-	-	6.53	16.04	300.68	12.82	595.11
Agriculture/forestry	14.68	-	75.65	5.80	-	-	1.46	3.11	36.93	0.23	137.86
Fishing	-	-	3.26	0.05	-	-	0.03	0.01	0.38	-	3.73
Non-specified	26.74	-	5.86	1.15	-	-	0.19	0.02	52.83	3.17	89.96
<b>NON-ENERGY USE</b>	<b>58.47</b>	<b>9.89</b>	<b>448.66</b>	<b>69.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>586.30</b>
in industry/transf./energy	58.26	9.89	408.45	69.28	-	-	-	-	-	-	545.89
of which: chem./petrochem.	1.54	9.89	309.85	69.28	-	-	-	-	-	-	390.55
in transport	-	-	9.40	-	-	-	-	-	-	-	9.40
in other	0.21	-	30.80	-	-	-	-	-	-	-	31.01
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>8527.28</b>	<b>24.68</b>	<b>291.62</b>	<b>3263.92</b>	<b>2173.24</b>	<b>2634.13</b>	<b>1104.69</b>	<b>453.06</b>	<b>-</b>	<b>2.53</b>	<b>18475.14</b>
Electricity plants	8236.73	24.68	249.31	2712.24	2146.50	2634.13	1099.74	290.43	-	1.95	17395.71
CHP plants	290.55	-	42.31	551.68	26.74	-	4.95	162.63	-	0.58	1079.43
<b>Heat generated - PJ</b>	<b>4360.08</b>	<b>-</b>	<b>330.00</b>	<b>1446.39</b>	<b>4.77</b>	<b>-</b>	<b>35.78</b>	<b>764.92</b>	<b>7.83</b>	<b>45.64</b>	<b>6995.40</b>
CHP plants	627.29	-	129.48	970.55	4.77	-	7.17	515.37	0.32	20.05	2275.00
Heat plants	3732.80	-	200.52	475.84	-	-	28.60	249.55	7.51	25.59	4720.40

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## IEA and Accession/Association countries

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	3102.74	1399.99	..	1305.56	..	..	..	..	..	..	..
Imports	643.23	..	..	766.06	..	..	..	..	..	..	..
Exports	-562.71	..	..	-378.80	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	100.50	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>3283.76</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	3130.4	3846.3	4798.3	5590.1	7069.2	7696.2	7699.6	..
Net imports (Mtoe)	1383.3	1254.3	1213.3	1672.8	2180.2	2026.5	2053.8	..
Total primary energy supply (Mtoe)	4379.0	4944.6	5844.0	7096.4	8993.7	9419.7	9450.0	..
Net oil imports (Mtoe)	1362.1	1191.4	1085.3	1442.5	1745.6	1559.0	1614.4	..
Oil supply (Mtoe)	2059.6	2099.2	2109.0	2547.8	2692.7	2712.2	2772.5	..
Electricity consumption (TWh) <sup>1</sup>	4359.7	5652.5	8019.2	11044.0	15314.6	16988.1	17283.8	..
GDP (billion 2010 USD)	18377.3	22388.5	31073.1	41954.5	53601.1	59485.5	61367.0	..
GDP PPP (billion 2010 USD)	18558.9	22925.0	32502.3	45870.3	64404.9	74139.1	77097.8	..
Population (millions)	2575.35	2876.62	3335.06	3768.75	4142.24	4277.64	4311.70	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	0.71	0.78	0.82	0.79	0.79	0.82	0.81	..
Coal self-sufficiency <sup>2</sup>	0.98	1.00	0.99	0.97	0.97	0.98	0.98	0.94
Oil self-sufficiency <sup>2</sup>	0.40	0.50	0.56	0.52	0.45	0.52	0.52	..
Natural gas self-sufficiency <sup>2</sup>	1.00	0.94	0.89	0.83	0.77	0.79	0.79	..
TPES/GDP (toe per thousand 2010 USD)	0.24	0.22	0.19	0.17	0.17	0.16	0.15	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.24	0.22	0.18	0.15	0.14	0.13	0.12	..
TPES/population (toe per capita)	1.70	1.72	1.75	1.88	2.17	2.20	2.19	..
Net oil imports/GDP (toe per thousand 2010 USD)	0.07	0.05	0.03	0.03	0.03	0.03	0.03	..
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.09	0.07	0.06	0.05	0.05	0.05	..
Oil supply/population (toe per capita)	0.80	0.73	0.63	0.68	0.65	0.63	0.64	..
Share of renewables in TPES	0.11	0.11	0.12	0.11	0.10	0.11	0.11	..
Share of renewables in electricity generation	0.21	0.20	0.18	0.15	0.18	0.22	0.22	..
TFC/GDP (toe per thousand 2010 USD)	0.18	0.16	0.13	0.12	0.11	0.11	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.18	0.16	0.13	0.11	0.09	0.09	0.08	..
TFC/population (toe per capita)	1.31	1.28	1.23	1.30	1.45	1.48	1.48	..
Elect. cons./GDP (kWh per 2010 USD)	0.24	0.25	0.26	0.26	0.29	0.29	0.28	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.24	0.25	0.25	0.24	0.24	0.23	0.22	..
Elect. cons./population (kWh per capita)	1693	1965	2405	2930	3697	3971	4009	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

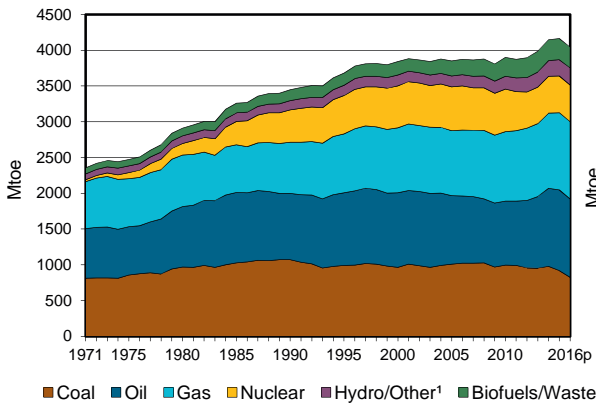
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

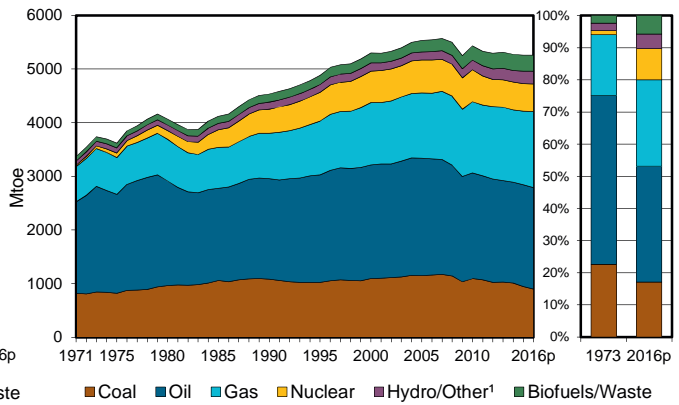
3. Includes non-energy use.

### OECD Total

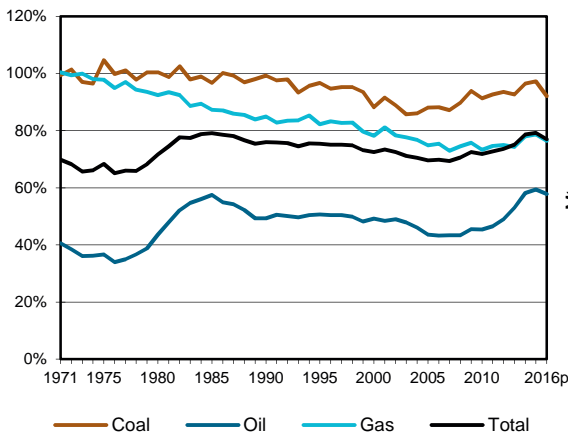
**Figure 1. Energy production**



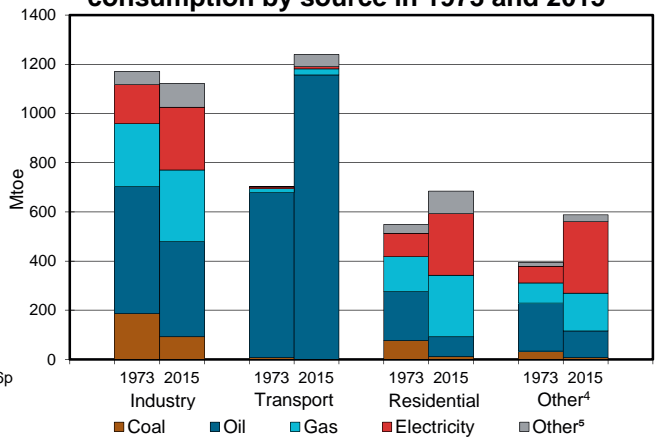
**Figure 2. Total primary energy supply<sup>2</sup>**



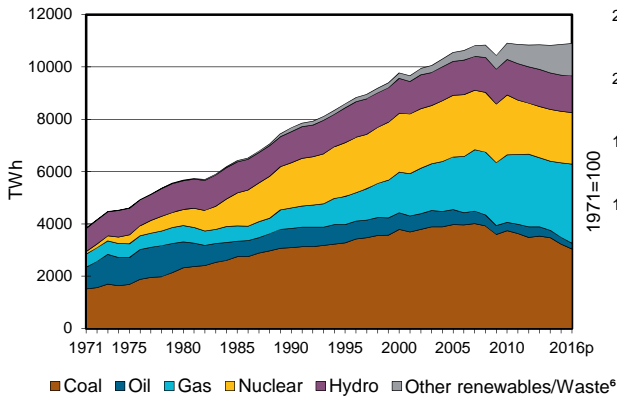
**Figure 3. Energy self-sufficiency**



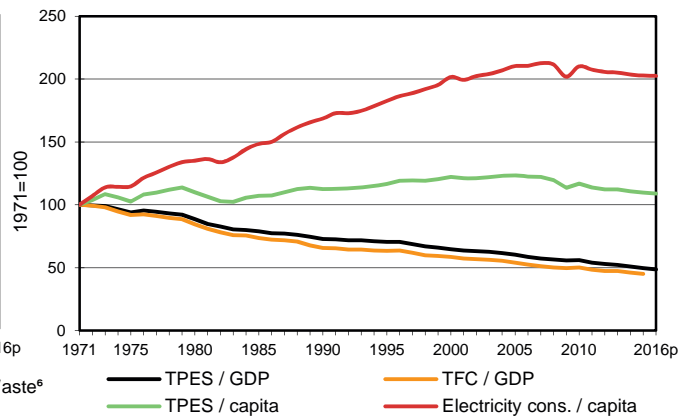
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## OECD Total

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	921.66	1125.77	-	1080.13	513.69	118.74	108.37	294.91	-	0.82	4164.09
Imports	400.14	1422.20	600.29	632.55	-	-	-	18.72	44.22	0.01	3118.12
Exports	-358.33	-411.15	-646.77	-326.55	-	-	-	-11.66	-43.70	-0.01	-1798.17
Intl. marine bunkers	-	-	-70.36	-	-	-	-	-0.17	-	-	-70.53
Intl. aviation bunkers	-	-	-95.41	-	-	-	-	-	-	-	-95.41
Stock changes	-15.84	-16.75	-13.47	-12.09	-	-	-	-0.49	-	-	-58.65
<b>TPES</b>	<b>947.63</b>	<b>2120.07</b>	<b>-225.74</b>	<b>1374.05</b>	<b>513.69</b>	<b>118.74</b>	<b>108.37</b>	<b>301.31</b>	<b>0.52</b>	<b>0.82</b>	<b>5259.45</b>
Transfers	-	-103.43	119.04	-	-	-	-	-0.42	-	-	15.20
Statistical differences	-4.75	-3.53	10.85	1.75	-	-	-0.02	0.49	1.22	-0.68	5.34
Electricity plants	-666.26	-4.94	-41.86	-397.25	-506.60	-118.74	-94.50	-50.61	839.91	-0.52	-1041.38
CHP plants	-77.54	-	-12.95	-107.76	-7.08	-	-2.73	-46.00	93.91	54.63	-105.53
Heat plants	-3.78	-	-1.02	-8.18	-	-	-1.14	-6.44	-0.43	17.15	-3.84
Blast furnaces	-53.34	-	-0.21	-0.07	-	-	-	-	-	-	-53.63
Gas works	-2.22	-	-2.20	3.24	-	-	-	-0.10	-	-	-1.28
Coke/pat. fuel/BKB/PB plants	-7.55	-	-1.09	-0.03	-	-	-	-0.11	-	-	-8.79
Oil refineries	-	-2042.01	2021.04	-	-	-	-	-	-	-	-20.97
Petrochemical plants	-	30.93	-31.26	-	-	-	-	-	-	-	-0.33
Liquefaction plants	-1.29	0.80	-	-	-	-	-	-	-	-	-0.49
Other transformation	-0.19	9.08	-0.00	-9.37	-	-	-	-0.22	-	-0.85	-1.54
Energy industry own use	-18.56	-0.06	-107.71	-136.43	-	-	-0.00	-0.85	-67.50	-7.73	-338.84
Losses	-1.16	-	-0.05	-1.85	-	-	-0.01	-0.04	-59.46	-5.30	-67.87
<b>TFC</b>	<b>110.99</b>	<b>6.90</b>	<b>1726.83</b>	<b>718.10</b>	<b>-</b>	<b>-</b>	<b>9.96</b>	<b>197.01</b>	<b>808.17</b>	<b>57.53</b>	<b>3635.50</b>
<b>INDUSTRY</b>	<b>89.44</b>	<b>0.04</b>	<b>92.39</b>	<b>257.42</b>	<b>-</b>	<b>-</b>	<b>0.45</b>	<b>72.38</b>	<b>255.18</b>	<b>24.27</b>	<b>791.57</b>
Iron and steel	37.60	-	2.58	25.41	-	-	-	0.09	26.73	0.67	93.08
Chemical and petrochemical	11.03	0.03	19.75	70.51	-	-	0.00	1.65	37.38	11.09	151.43
Non-ferrous metals	1.86	-	1.61	11.61	-	-	0.00	0.09	24.23	0.22	39.61
Non-metallic minerals	20.61	-	13.84	26.46	-	-	0.00	5.84	14.78	0.27	81.81
Transport equipment	0.20	-	1.06	8.04	-	-	0.00	0.02	13.38	0.67	23.37
Machinery	0.31	-	2.87	18.68	-	-	0.00	0.14	30.21	0.63	52.85
Mining and quarrying	0.39	-	10.85	4.36	-	-	0.00	0.11	10.64	0.12	26.47
Food and tobacco	5.68	0.00	4.50	36.19	-	-	0.00	4.61	22.00	1.81	74.80
Paper, pulp and printing	5.17	-	2.65	20.25	-	-	0.10	49.36	24.44	3.13	105.11
Wood and wood products	0.09	-	1.36	2.56	-	-	-	7.20	4.71	0.66	16.58
Construction	0.03	-	16.74	2.77	-	-	0.00	0.30	7.91	0.04	27.79
Textile and leather	0.87	0.01	1.03	5.15	-	-	0.00	0.08	6.09	0.66	13.89
Non-specified	5.59	-	13.55	25.44	-	-	0.35	2.87	32.67	4.32	84.79
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>1148.14</b>	<b>25.17</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>49.63</b>	<b>9.25</b>	<b>-</b>	<b>1232.20</b>
Domestic aviation	-	-	73.41	-	-	-	-	-	-	-	73.41
Road	-	-	1035.30	4.07	-	-	-	49.37	0.48	-	1089.22
Rail	0.01	-	18.14	-	-	-	-	0.20	7.33	-	25.69
Pipeline transport	-	-	0.04	20.86	-	-	-	-	0.48	-	21.38
Domestic navigation	-	-	20.70	0.10	-	-	-	0.06	-	-	20.86
Non-specified	-	-	0.56	0.12	-	-	0.00	0.00	0.95	-	1.64
<b>OTHER</b>	<b>18.65</b>	<b>-</b>	<b>182.19</b>	<b>402.36</b>	<b>-</b>	<b>-</b>	<b>9.51</b>	<b>75.01</b>	<b>543.75</b>	<b>33.25</b>	<b>1264.72</b>
Residential	11.63	-	81.02	249.50	-	-	5.56	63.45	251.61	21.71	684.48
Comm. and public services	5.94	-	51.83	146.02	-	-	2.96	8.40	257.74	11.08	483.97
Agriculture/forestry	1.04	-	42.14	5.57	-	-	0.83	3.12	11.54	0.22	64.47
Fishing	-	-	3.47	0.05	-	-	0.04	0.01	0.39	0.02	3.98
Non-specified	0.04	-	3.73	1.21	-	-	0.12	0.02	22.47	0.21	27.81
<b>NON-ENERGY USE</b>	<b>2.89</b>	<b>6.86</b>	<b>304.11</b>	<b>33.15</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>347.01</b>
in industry/transf./energy	2.68	6.86	287.94	33.15	-	-	-	-	-	-	330.63
of which: chem./petrochem.	1.54	6.86	218.76	33.15	-	-	-	-	-	-	260.30
in transport	-	-	8.19	-	-	-	-	-	-	-	8.19
in other	0.21	-	7.98	-	-	-	-	-	-	-	8.19
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>3227.78</b>	<b>24.68</b>	<b>236.21</b>	<b>2847.22</b>	<b>1970.68</b>	<b>1380.71</b>	<b>816.32</b>	<b>353.55</b>	<b>-</b>	<b>1.23</b>	<b>10858.37</b>
Electricity plants	2932.84	24.68	193.88	2292.39	1943.94	1380.71	806.86	189.88	-	0.65	9765.83
CHP plants	294.93	-	42.33	554.83	26.74	-	9.46	163.67	-	0.58	1092.54
<b>Heat generated - PJ</b>	<b>759.84</b>	<b>-</b>	<b>163.21</b>	<b>1266.05</b>	<b>4.77</b>	<b>-</b>	<b>61.67</b>	<b>730.38</b>	<b>8.53</b>	<b>45.64</b>	<b>3040.11</b>
CHP plants	632.06	-	129.49	985.28	4.77	-	14.04	521.92	0.32	20.05	2307.93
Heat plants	127.79	-	33.73	280.77	-	-	47.63	208.46	8.21	25.59	732.18

1. Includes peat and oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Total

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	826.96	1095.94	-	1080.46	512.70	120.56	117.22	291.09	-	0.75	4045.68
Imports	382.73	1439.59	624.49	662.78	-	-	-	21.25	41.96	0.01	3172.81
Exports	-350.64	-416.62	-668.84	-346.10	-	-	-	-13.00	-41.19	-0.01	-1836.41
Intl. marine bunkers	-	-	-78.73	-	-	-	-	-	-	-	-78.73
Intl. aviation bunkers	-	-	-99.92	-	-	-	-	-	-	-	-99.92
Stock changes	38.95	-2.55	0.60	17.67	-	-	-	-0.43	-	-	54.24
<b>TPES</b>	<b>898.00</b>	<b>2116.35</b>	<b>-222.40</b>	<b>1414.81</b>	<b>512.70</b>	<b>120.56</b>	<b>117.22</b>	<b>298.91</b>	<b>0.77</b>	<b>0.75</b>	<b>5257.68</b>
Electricity and Heat Output											
Elec. generated - TWh	3044.60	11.00	209.55	3019.69	1966.78	1401.92	897.29	344.87	-	0.95	10896.65
Heat generated - PJ	723.24	-	137.77	1263.87	6.02	-	74.29	747.33	9.22	37.30	2999.03

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat and oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

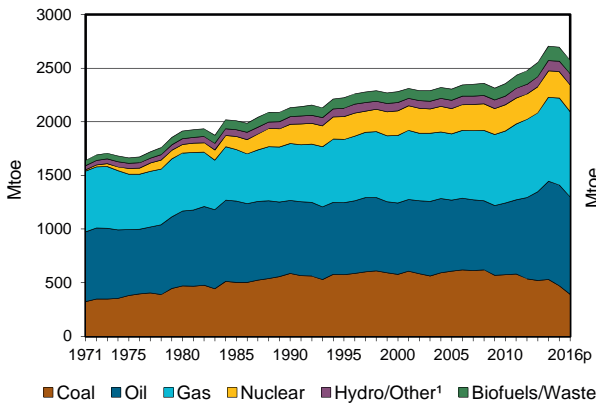
	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	2457.4	2913.2	3446.6	3840.4	3900.0	4148.5	4164.1	4045.7
Net imports (Mtoe)	1401.0	1304.3	1259.1	1576.8	1686.8	1318.1	1320.0	1336.4
Total primary energy supply (Mtoe)	3740.5	4067.7	4535.3	5299.6	5433.7	5273.7	5259.5	5257.7
Net oil imports (Mtoe)	1377.4	1228.5	1090.1	1246.4	1254.7	955.7	964.6	978.6
Oil supply (Mtoe)	1967.5	1945.5	1875.6	2116.6	1972.4	1878.3	1894.3	1894.0
Electricity consumption (TWh) <sup>1</sup>	4140.5	5259.9	7151.5	9219.5	10297.9	10210.7	10234.2	10281.5
GDP (billion 2010 USD)	17807.7	21537.0	29343.8	38277.1	44737.1	47671.5	48750.4	49591.6
GDP PPP (billion 2010 USD)	17005.5	20656.0	28088.4	36873.3	43602.5	46639.6	47731.0	48560.5
Population (millions)	919.75	984.90	1072.84	1156.35	1240.14	1269.10	1276.74	1284.61
Industrial production index (2010=100)	..	57.2	73.3	94.8	100.0	106.3	107.2	107.5
Total self-sufficiency <sup>2</sup>	0.66	0.72	0.76	0.72	0.72	0.79	0.79	0.77
Coal self-sufficiency <sup>2</sup>	0.97	1.00	0.99	0.88	0.91	0.96	0.97	0.92
Oil self-sufficiency <sup>2</sup>	0.36	0.44	0.49	0.49	0.45	0.58	0.59	0.58
Natural gas self-sufficiency <sup>2</sup>	1.00	0.92	0.85	0.78	0.73	0.78	0.79	0.76
TPES/GDP (toe per thousand 2010 USD)	0.21	0.19	0.15	0.14	0.12	0.11	0.11	0.11
TPES/GDP PPP (toe per thousand 2010 USD)	0.22	0.20	0.16	0.14	0.12	0.11	0.11	0.11
TPES/population (toe per capita)	4.07	4.13	4.23	4.58	4.38	4.16	4.12	4.09
Net oil imports/GDP (toe per thousand 2010 USD)	0.08	0.06	0.04	0.03	0.03	0.02	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.09	0.06	0.06	0.04	0.04	0.04	0.04
Oil supply/population (toe per capita)	2.14	1.98	1.75	1.83	1.59	1.48	1.48	1.47
Share of renewables in TPES	0.05	0.05	0.06	0.06	0.08	0.09	0.10	0.10
Share of renewables in electricity generation	0.21	0.20	0.17	0.16	0.18	0.22	0.23	0.24
TFC/GDP (toe per thousand 2010 USD)	0.16	0.14	0.11	0.10	0.08	0.08	0.08	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.17	0.14	0.11	0.10	0.09	0.08	0.08	..
TFC/population (toe per capita)	3.06	2.99	2.90	3.14	2.98	2.85	2.85	..
Elect. cons./GDP (kWh per 2010 USD)	0.23	0.24	0.24	0.24	0.23	0.21	0.21	0.21
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.24	0.26	0.26	0.25	0.24	0.22	0.21	0.21
Elect. cons./population (kWh per capita)	4502	5341	6666	7973	8304	8046	8016	8004
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	176.6	131.2	115.2	100.0	91.4	89.8	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	197.8	129.3	110.6	100.0	83.8	82.5	..

OECD Total excludes Estonia, Latvia and Slovenia prior to 1990. Please refer to section 'Geographical coverage'.

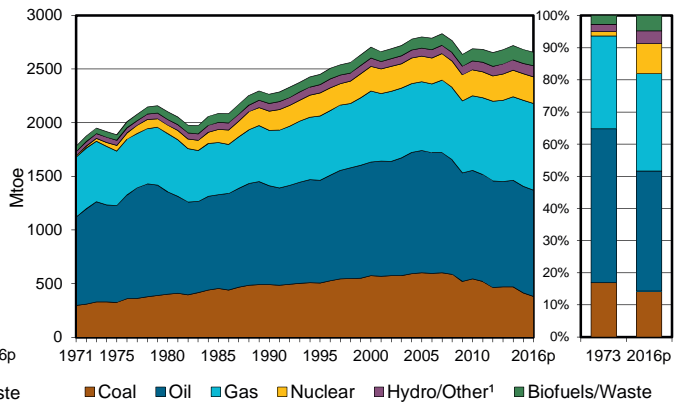
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## OECD Americas

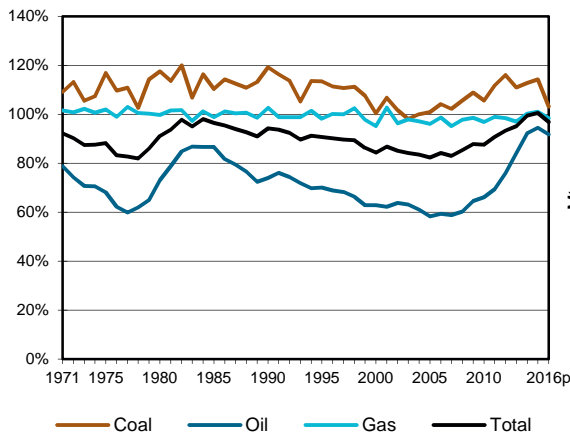
**Figure 1. Energy production**



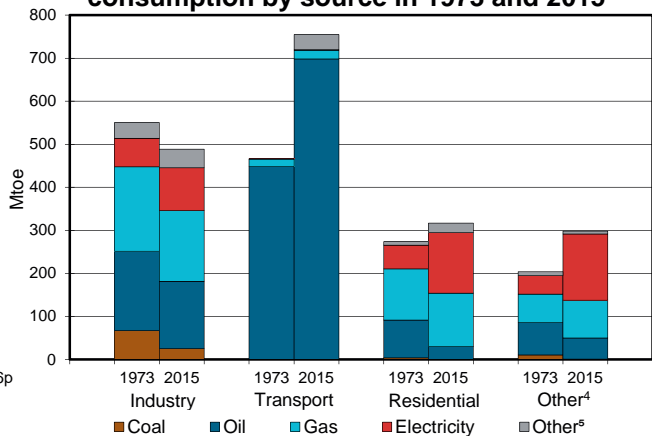
**Figure 2. Total primary energy supply<sup>2</sup>**



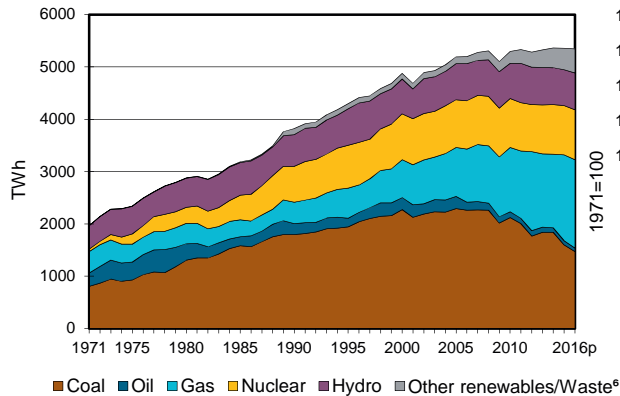
**Figure 3. Energy self-sufficiency**



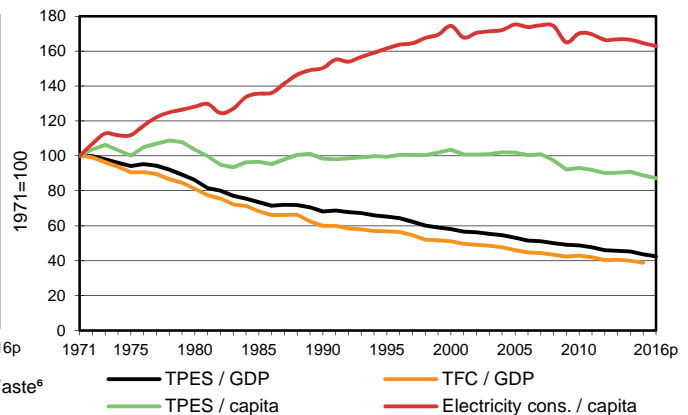
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## OECD Americas

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	471.97	939.56	-	810.80	245.83	59.02	38.45	128.93	-	-	2694.55
Imports	22.12	466.90	129.44	112.47	-	-	-	3.26	7.41	-	741.60
Exports	-62.76	-276.99	-204.56	-106.44	-	-	-	-3.01	-6.85	-	-660.61
Intl. marine bunkers	-	-	-14.09	-	-	-	-	-0.17	-	-	-14.26
Intl. aviation bunkers	-	-	-28.46	-	-	-	-	-	-	-	-28.46
Stock changes	-17.96	-11.97	-5.61	-14.80	-	-	-	-0.52	-	-	-50.87
<b>TPES</b>	<b>413.36</b>	<b>1117.50</b>	<b>-123.29</b>	<b>802.04</b>	<b>245.83</b>	<b>59.02</b>	<b>38.45</b>	<b>128.49</b>	<b>0.56</b>	-	<b>2681.95</b>
Transfers	-	-104.36	111.91	-	-	-	-	-	-	-	7.55
Statistical differences	-2.13	-2.62	16.63	-4.70	-	-	-	0.05	1.07	-	8.31
Electricity plants	-363.34	-	-15.91	-242.64	-245.83	-59.02	-35.60	-19.17	429.84	-	-551.68
CHP plants	-8.20	-	-3.27	-50.20	-	-	-	-11.35	30.63	10.52	-31.87
Heat plants	-0.00	-	-	-	-	-	-	-0.19	-	0.10	-0.09
Blast furnaces	-5.69	-	-	-	-	-	-	-	-	-	-5.69
Gas works	-1.99	-	-0.77	1.56	-	-	-	-0.00	-	-	-1.19
Coke/pat. fuel/BKB/PB plants	-3.90	-	-	-	-	-	-	-	-	-	-3.90
Oil refineries	-	-1013.77	1000.29	-	-	-	-	-	-	-	-13.48
Petrochemical plants	-	0.15	-0.16	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	7.30	-	-7.46	-	-	-	-0.07	-	-	-0.23
Energy industry own use	-1.86	-	-56.13	-102.68	-	-	-	-0.10	-34.28	-3.33	-198.39
Losses	-0.02	-	-	-0.03	-	-	-	-	-31.52	-1.20	-32.76
<b>TFC</b>	<b>26.24</b>	<b>4.21</b>	<b>929.30</b>	<b>395.88</b>	-	-	<b>2.85</b>	<b>97.65</b>	<b>396.30</b>	<b>6.09</b>	<b>1858.52</b>
<b>INDUSTRY</b>	<b>25.38</b>	-	<b>36.63</b>	<b>145.26</b>	-	-	<b>0.01</b>	<b>38.35</b>	<b>99.50</b>	<b>4.92</b>	<b>350.05</b>
Iron and steel	5.23	-	0.36	13.11	-	-	-	0.00	5.40	0.16	24.25
Chemical and petrochemical	3.20	-	3.43	46.56	-	-	-	0.22	12.07	2.92	68.40
Non-ferrous metals	0.19	-	0.04	4.52	-	-	-	-	10.75	0.08	15.58
Non-metallic minerals	6.31	-	4.86	10.00	-	-	-	0.59	4.66	0.00	26.43
Transport equipment	0.01	-	0.27	4.68	-	-	-	0.00	4.73	0.10	9.79
Machinery	0.08	-	1.08	9.53	-	-	-	0.01	8.89	0.08	19.67
Mining and quarrying	0.10	-	6.62	3.47	-	-	-	0.04	7.07	-	17.30
Food and tobacco	3.28	-	0.75	18.27	-	-	-	1.39	7.34	0.48	31.52
Paper, pulp and printing	2.29	-	1.08	11.99	-	-	-	33.90	9.96	0.47	59.69
Wood and wood products	0.01	-	1.04	1.79	-	-	-	1.32	1.82	0.22	6.20
Construction	-	-	9.95	0.74	-	-	-	0.10	5.28	0.00	16.07
Textile and leather	0.06	-	-	1.13	-	-	-	-	1.64	0.13	2.96
Non-specified	4.60	-	7.16	19.47	-	-	0.01	0.77	19.91	0.27	52.18
<b>TRANSPORT</b>	-	-	<b>693.43</b>	<b>20.21</b>	-	-	-	<b>34.89</b>	<b>1.38</b>	-	<b>749.91</b>
Domestic aviation	-	-	58.35	-	-	-	-	-	-	-	58.35
Road	-	-	608.97	1.01	-	-	-	34.66	0.28	-	644.91
Rail	-	-	14.75	-	-	-	-	0.18	0.75	-	15.68
Pipeline transport	-	-	0.01	19.16	-	-	-	-	0.35	-	19.52
Domestic navigation	-	-	11.25	-	-	-	-	0.05	-	-	11.30
Non-specified	-	-	0.11	0.05	-	-	-	-	-	-	0.16
<b>OTHER</b>	<b>0.69</b>	-	<b>72.34</b>	<b>211.52</b>	-	-	<b>2.84</b>	<b>24.42</b>	<b>295.42</b>	<b>1.18</b>	<b>608.40</b>
Residential	0.01	-	29.86	124.37	-	-	0.62	21.29	140.90	-	317.04
Comm. and public services	0.68	-	18.13	84.86	-	-	2.15	2.02	130.13	1.16	239.12
Agriculture/forestry	-	-	24.14	2.29	-	-	-	1.11	4.98	-	32.52
Fishing	-	-	0.21	0.00	-	-	-	-	0.01	-	0.22
Non-specified	-	-	-	-	-	-	0.07	-	19.40	0.02	19.50
<b>NON-ENERGY USE</b>	<b>0.17</b>	<b>4.21</b>	<b>126.89</b>	<b>18.90</b>	-	-	-	-	-	-	<b>150.16</b>
in industry/transf./energy	0.05	4.21	115.33	18.90	-	-	-	-	-	-	138.49
of which: chem./petrochem.	-	4.21	78.04	18.90	-	-	-	-	-	-	101.15
in transport	-	-	4.73	-	-	-	-	-	-	-	4.73
in other	0.11	-	6.83	-	-	-	-	-	-	-	6.94
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1598.78</b>	-	<b>81.72</b>	<b>1637.36</b>	<b>943.29</b>	<b>686.32</b>	<b>306.20</b>	<b>100.65</b>	-	-	<b>5354.31</b>
Electricity plants	1562.46	-	67.24	1380.13	943.29	686.32	302.33	56.36	-	-	4998.13
CHP plants	36.32	-	14.48	257.23	-	-	3.87	44.29	-	-	356.19
<b>Heat generated - PJ</b>	<b>40.19</b>	-	<b>25.83</b>	<b>329.79</b>	-	-	-	<b>48.99</b>	-	-	<b>444.80</b>
CHP plants	40.17	-	25.83	329.79	-	-	-	44.69	-	-	440.49
Heat plants	0.01	-	-	-	-	-	-	4.30	-	-	4.31

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Americas

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	393.12	908.51	-	794.36	248.46	60.59	44.00	125.68	-	-	2574.72
Imports	21.98	495.17	135.56	125.46	-	-	-	4.35	7.95	-	790.47
Exports	-54.97	-277.81	-218.67	-122.07	-	-	-	-3.86	-7.38	-	-684.77
Intl. marine bunkers	-	-	-19.84	-	-	-	-	-	-	-	-19.84
Intl. aviation bunkers	-	-	-29.50	-	-	-	-	-	-	-	-29.50
Stock changes	21.03	-4.61	1.34	9.43	-	-	-	-0.48	-	-	26.71
<b>TPES</b>	<b>381.16</b>	<b>1121.26</b>	<b>-131.11</b>	<b>807.17</b>	<b>248.46</b>	<b>60.59</b>	<b>44.00</b>	<b>125.69</b>	<b>0.57</b>	<b>-</b>	<b>2657.78</b>
Electricity and Heat Output											
Elec. generated - TWh	1471.14	-	69.92	1684.99	953.39	704.59	367.36	95.16	-	-	5346.55
Heat generated - PJ	33.38	-	22.65	331.02	-	-	-	50.09	-	-	437.14

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	1706.8	1913.3	2132.4	2280.0	2356.3	2704.6	2694.6	2574.7
Net imports (Mtoe)	270.4	249.4	219.7	424.1	373.8	80.4	81.0	105.7
Total primary energy supply (Mtoe)	1950.3	2101.2	2264.0	2702.9	2689.8	2719.0	2682.0	2657.8
Net oil imports (Mtoe)	298.1	304.3	295.0	445.0	398.8	130.5	114.8	134.2
Oil supply (Mtoe)	934.3	955.0	920.6	1058.1	1012.8	991.5	994.2	990.2
Electricity consumption (TWh) <sup>1</sup>	2087.7	2625.3	3487.5	4596.7	4960.5	5029.5	5014.5	5009.2
GDP (billion 2010 USD)	6481.9	7879.7	10772.6	15069.9	17845.3	19391.3	19864.7	20191.2
GDP PPP (billion 2010 USD)	6619.3	8114.7	11046.9	15485.0	18366.2	19985.5	20478.7	20803.8
Population (millions)	301.59	333.81	378.12	429.38	475.16	492.33	496.61	500.99
Industrial production index (2010=100)	..	..	..	..	..	..	..	-
Total self-sufficiency <sup>2</sup>	0.88	0.91	0.94	0.84	0.88	0.99	1.00	0.97
Coal self-sufficiency <sup>2</sup>	1.06	1.18	1.19	1.00	1.06	1.13	1.14	1.03
Oil self-sufficiency <sup>2</sup>	0.71	0.73	0.74	0.63	0.66	0.92	0.95	0.92
Natural gas self-sufficiency <sup>2</sup>	1.02	1.00	1.03	0.95	0.97	1.00	1.01	0.98
TPES/GDP (toe per thousand 2010 USD)	0.30	0.27	0.21	0.18	0.15	0.14	0.14	0.13
TPES/GDP PPP (toe per thousand 2010 USD)	0.29	0.26	0.20	0.17	0.15	0.14	0.13	0.13
TPES/population (toe per capita)	6.47	6.29	5.99	6.30	5.66	5.52	5.40	5.31
Net oil imports/GDP (toe per thousand 2010 USD)	0.05	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Oil supply/GDP (toe per thousand 2010 USD)	0.14	0.12	0.09	0.07	0.06	0.05	0.05	0.05
Oil supply/population (toe per capita)	3.10	2.86	2.43	2.46	2.13	2.01	2.00	1.98
Share of renewables in TPES	0.05	0.06	0.07	0.06	0.07	0.08	0.08	0.09
Share of renewables in electricity generation	0.21	0.20	0.19	0.16	0.17	0.20	0.20	0.21
TFC/GDP (toe per thousand 2010 USD)	0.23	0.20	0.14	0.12	0.10	0.10	0.09	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.23	0.19	0.14	0.12	0.10	0.09	0.09	..
TFC/population (toe per capita)	4.95	4.61	4.10	4.32	3.88	3.80	3.74	..
Elect. cons./GDP (kWh per 2010 USD)	0.32	0.33	0.32	0.31	0.28	0.26	0.25	0.25
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.32	0.32	0.32	0.30	0.27	0.25	0.25	0.24
Elect. cons./population (kWh per capita)	6922	7865	9223	10705	10440	10216	10098	9999
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

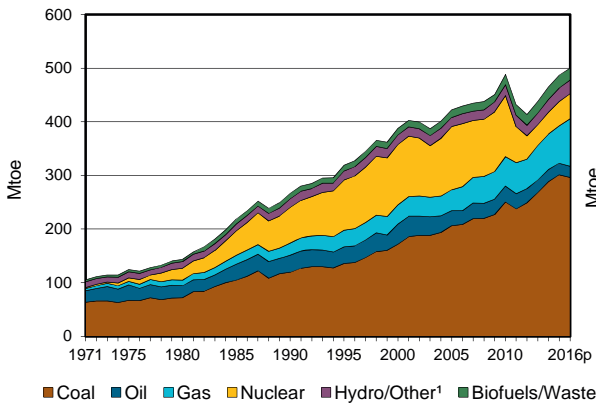
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.

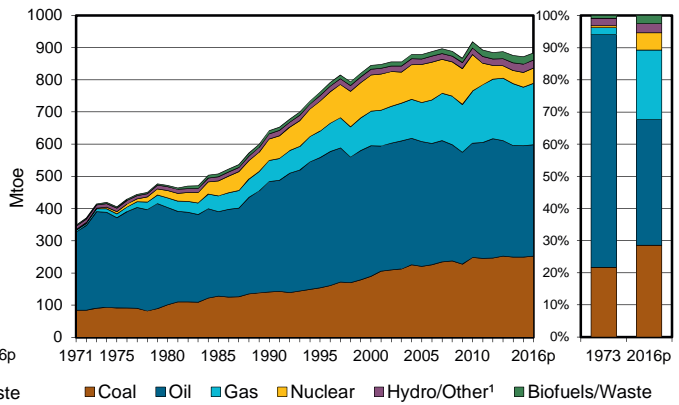
3. Includes non-energy use.

## OECD Asia Oceania

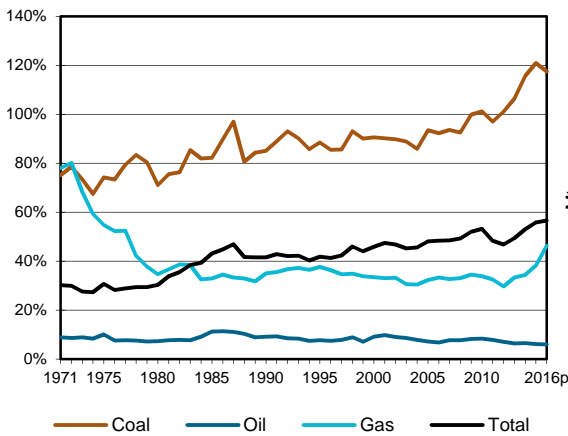
**Figure 1. Energy production**



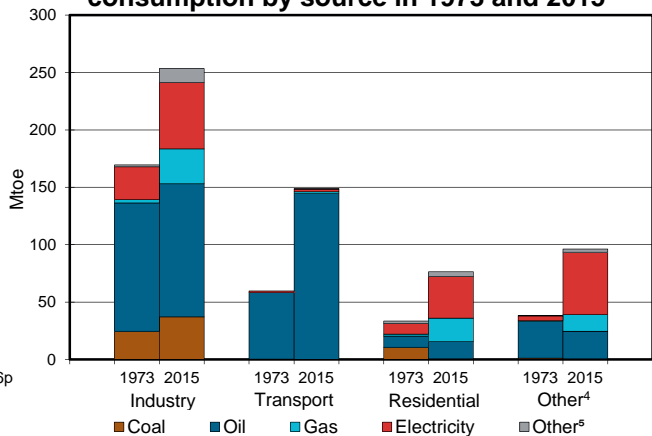
**Figure 2. Total primary energy supply<sup>2</sup>**



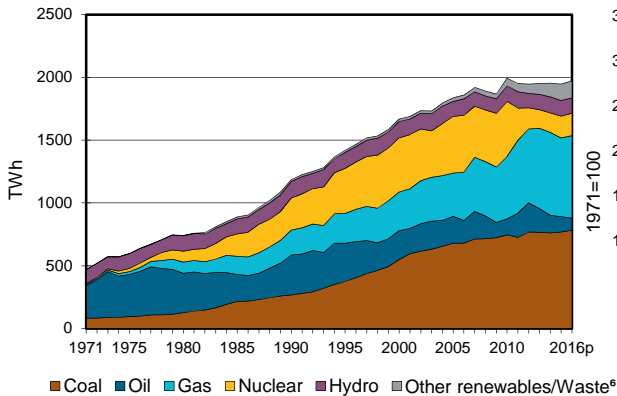
**Figure 3. Energy self-sufficiency**



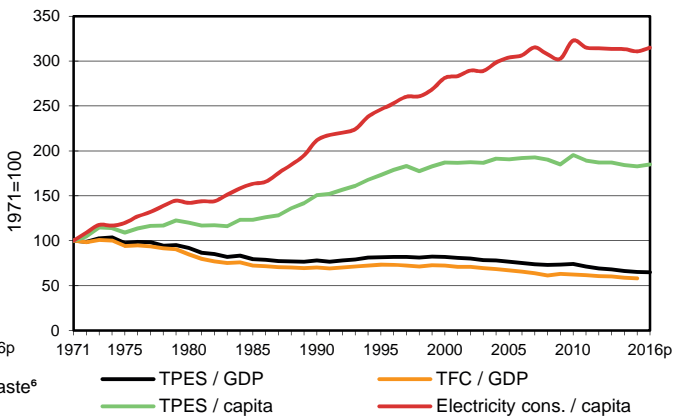
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## OECD Asia Oceania

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	301.34	21.46	-	69.70	45.40	10.77	14.45	23.73	-	0.06	486.91
Imports	206.10	350.37	109.02	141.85	-	-	-	0.01	-	-	807.36
Exports	-255.53	-14.88	-88.96	-29.28	-	-	-	-	-0.45	-	-389.09
Intl. marine bunkers	-	-	-15.07	-	-	-	-	-	-	-	-15.07
Intl. aviation bunkers	-	-	-16.52	-	-	-	-	-	-	-	-16.52
Stock changes	-2.72	-0.02	0.24	0.28	-	-	-	0.02	-	-	-2.21
<b>TPES</b>	<b>249.20</b>	<b>356.93</b>	<b>-11.29</b>	<b>182.55</b>	<b>45.40</b>	<b>10.77</b>	<b>14.45</b>	<b>23.76</b>	<b>-0.45</b>	<b>0.06</b>	<b>871.38</b>
Transfers	-	-3.83	8.70	-	-	-	-	-0.42	-	-	4.45
Statistical differences	-1.10	-0.84	-2.22	5.26	-	-	0.00	0.39	0.27	-0.35	1.42
Electricity plants	-163.92	-4.94	-18.90	-101.90	-45.40	-10.77	-12.81	-9.03	161.68	-0.07	-206.05
CHP plants	-7.62	-	-2.01	-7.73	-	-	-0.08	-0.89	5.60	4.34	-8.38
Heat plants	-	-	-0.13	-0.36	-	-	-	-0.47	-0.09	1.05	0.00
Blast furnaces	-27.89	-	-	-	-	-	-	-	-	-	-27.89
Gas works	0.00	-	-1.21	1.40	-	-	-	-	-	-	0.19
Coke/pat. fuel/BKB/PB plants	-0.61	-	-0.58	-	-	-	-	-0.11	-	-	-1.30
Oil refineries	-	-361.22	359.57	-	-	-	-	-	-	-	-1.65
Petrochemical plants	-	14.19	-14.00	-	-	-	-	-	-	-	0.19
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.08	-	-0.07	-	-	-	-0.01	-	-	-0.00
Energy industry own use	-9.68	-0.06	-18.60	-12.42	-	-	-	-	-9.63	-0.11	-50.51
Losses	-0.01	-	-	-0.02	-	-	-	-	-6.94	-0.06	-7.03
<b>TFC</b>	<b>38.36</b>	<b>0.31</b>	<b>299.33</b>	<b>66.72</b>	<b>-</b>	<b>-</b>	<b>1.56</b>	<b>13.21</b>	<b>150.45</b>	<b>4.87</b>	<b>574.82</b>
<b>INDUSTRY</b>	<b>36.30</b>	<b>0.04</b>	<b>27.36</b>	<b>27.99</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>9.57</b>	<b>57.77</b>	<b>2.57</b>	<b>161.69</b>
Iron and steel	20.55	-	1.50	4.10	-	-	-	0.06	10.64	0.00	36.84
Chemical and petrochemical	4.21	0.03	8.26	5.31	-	-	-	0.52	8.90	1.65	28.87
Non-ferrous metals	1.33	-	1.25	3.57	-	-	-	0.08	4.86	0.00	11.09
Non-metallic minerals	7.05	-	2.81	2.61	-	-	-	1.41	3.41	0.00	17.29
Transport equipment	0.08	-	0.36	0.95	-	-	-	0.00	4.14	0.01	5.53
Machinery	0.07	-	0.67	2.64	-	-	-	0.00	10.50	0.00	13.88
Mining and quarrying	0.05	-	2.95	0.24	-	-	-	0.00	1.96	-	5.21
Food and tobacco	0.63	0.00	1.82	3.61	-	-	-	2.31	3.94	0.11	12.41
Paper, pulp and printing	1.70	-	0.84	1.15	-	-	0.10	3.37	3.80	0.22	11.17
Wood and wood products	0.02	-	0.12	0.16	-	-	-	1.33	0.70	0.01	2.34
Construction	0.00	-	3.54	0.14	-	-	-	0.03	0.68	-	4.39
Textile and leather	0.07	0.01	0.75	1.00	-	-	-	0.07	1.41	0.37	3.68
Non-specified	0.55	-	2.50	2.50	-	-	0.00	0.39	2.84	0.20	8.99
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>143.36</b>	<b>1.51</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.67</b>	<b>2.21</b>	<b>-</b>	<b>147.74</b>
Domestic aviation	-	-	7.90	-	-	-	-	-	-	-	7.90
Road	-	-	129.74	1.32	-	-	-	0.67	-	-	131.73
Rail	0.00	-	1.39	-	-	-	-	-	1.97	-	3.36
Pipeline transport	-	-	0.03	0.17	-	-	-	-	0.02	-	0.22
Domestic navigation	-	-	4.13	-	-	-	-	-	-	-	4.13
Non-specified	-	-	0.17	0.01	-	-	-	-	0.22	-	0.41
<b>OTHER</b>	<b>1.13</b>	<b>-</b>	<b>38.40</b>	<b>35.04</b>	<b>-</b>	<b>-</b>	<b>1.46</b>	<b>2.98</b>	<b>90.47</b>	<b>2.30</b>	<b>171.79</b>
Residential	0.66	-	14.87	20.45	-	-	1.06	1.47	36.19	1.58	76.28
Comm. and public services	0.42	-	17.18	14.46	-	-	0.29	1.44	49.28	0.73	83.80
Agriculture/forestry	0.05	-	3.20	0.07	-	-	0.11	0.07	1.87	-	5.36
Fishing	-	-	1.52	0.00	-	-	-	-	0.31	-	1.83
Non-specified	-	-	1.63	0.07	-	-	-	0.00	2.82	-	4.52
<b>NON-ENERGY USE</b>	<b>0.93</b>	<b>0.27</b>	<b>90.21</b>	<b>2.18</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>93.60</b>
in industry/transf./energy	0.93	0.27	88.31	2.18	-	-	-	-	-	-	91.69
of which: chem./petrochem.	0.88	0.27	80.58	2.18	-	-	-	-	-	-	83.92
in transport	-	-	1.28	-	-	-	-	-	-	-	1.28
in other	-	-	0.62	-	-	-	-	-	-	-	0.62
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>769.74</b>	<b>24.68</b>	<b>97.58</b>	<b>625.17</b>	<b>174.20</b>	<b>125.26</b>	<b>79.54</b>	<b>48.91</b>	<b>-</b>	<b>0.13</b>	<b>1945.20</b>
Electricity plants	746.56	24.68	95.00	589.01	174.20	125.26	79.42	45.79	-	0.13	1880.04
CHP plants	23.18	-	2.59	36.16	-	-	0.13	3.12	-	-	65.16
<b>Heat generated - PJ</b>	<b>74.32</b>	<b>-</b>	<b>33.33</b>	<b>87.08</b>	<b>-</b>	<b>-</b>	<b>5.38</b>	<b>22.20</b>	<b>3.62</b>	<b>2.67</b>	<b>228.59</b>
CHP plants	74.32	-	29.74	71.01	-	-	1.36	5.46	-	2.67	184.57
Heat plants	-	-	3.59	16.07	-	-	4.01	16.74	3.62	-	44.02

1. Includes oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Asia Oceania

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	296.08	20.87	-	88.41	46.92	10.54	14.91	21.97	-	0.06	499.77
Imports	204.50	350.52	111.81	144.89	-	-	-	0.00	-	-	811.73
Exports	-253.54	-13.87	-89.82	-41.32	-	-	-	-	-0.45	-	-399.01
Intl. marine bunkers	-	-	-16.30	-	-	-	-	-	-	-	-16.30
Intl. aviation bunkers	-	-	-17.31	-	-	-	-	-	-	-	-17.31
Stock changes	4.87	0.79	-0.21	-1.09	-	-	-	-0.00	-	-	4.36
<b>TPES</b>	<b>251.91</b>	<b>358.32</b>	<b>-11.84</b>	<b>190.89</b>	<b>46.92</b>	<b>10.54</b>	<b>14.91</b>	<b>21.97</b>	<b>-0.45</b>	<b>0.06</b>	<b>883.24</b>
Electricity and Heat Output											
Elec. generated - TWh	782.27	11.00	85.41	656.28	180.06	122.52	90.99	43.43	-	0.13	1972.08
Heat generated - PJ	72.42	-	33.48	96.25	-	-	5.38	23.93	3.62	2.62	237.70

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

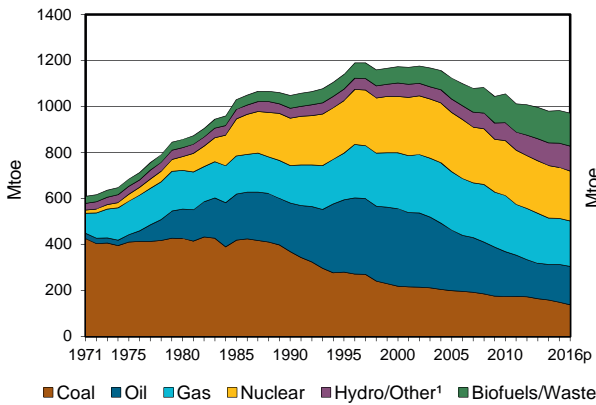
## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	114.3	143.6	266.7	387.5	488.4	464.8	486.9	499.8
Net imports (Mtoe)	328.9	345.7	396.8	489.3	468.1	438.4	418.3	412.7
Total primary energy supply (Mtoe)	414.6	472.2	642.2	844.5	917.8	874.9	871.4	883.2
Net oil imports (Mtoe)	302.5	303.0	331.4	399.7	357.2	350.8	355.6	358.6
Oil supply (Mtoe)	300.7	302.1	343.6	405.3	355.8	346.0	345.6	346.5
Electricity consumption (TWh) <sup>1</sup>	536.9	704.2	1137.3	1601.6	1914.0	1877.9	1869.1	1897.7
GDP (billion 2010 USD)	2972.4	3753.9	5897.2	7296.1	8468.7	9026.5	9183.0	9331.9
GDP PPP (billion 2010 USD)	2324.9	2959.6	4734.2	5938.3	7123.5	7588.3	7698.4	7823.1
Population (millions)	162.87	177.01	191.68	203.19	211.66	213.95	214.66	215.13
Industrial production index (2010=100)	..	..	..	..	..	..	..	-
Total self-sufficiency <sup>2</sup>	0.28	0.30	0.42	0.46	0.53	0.53	0.56	0.57
Coal self-sufficiency <sup>2</sup>	0.74	0.71	0.85	0.91	1.01	1.16	1.21	1.18
Oil self-sufficiency <sup>2</sup>	0.09	0.07	0.09	0.09	0.08	0.07	0.06	0.06
Natural gas self-sufficiency <sup>2</sup>	0.68	0.35	0.35	0.34	0.34	0.34	0.38	0.46
TPES/GDP (toe per thousand 2010 USD)	0.14	0.13	0.11	0.12	0.11	0.10	0.09	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.18	0.16	0.14	0.14	0.13	0.12	0.11	0.11
TPES/population (toe per capita)	2.55	2.67	3.35	4.16	4.34	4.09	4.06	4.11
Net oil imports/GDP (toe per thousand 2010 USD)	0.10	0.08	0.06	0.05	0.04	0.04	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.08	0.06	0.06	0.04	0.04	0.04	0.04
Oil supply/population (toe per capita)	1.85	1.71	1.79	1.99	1.68	1.62	1.61	1.61
Share of renewables in TPES	0.03	0.04	0.04	0.03	0.04	0.05	0.05	0.05
Share of renewables in electricity generation	0.17	0.17	0.12	0.09	0.09	0.12	0.13	0.13
TFC/GDP (toe per thousand 2010 USD)	0.10	0.09	0.07	0.08	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.13	0.11	0.09	0.09	0.08	0.08	0.08	..
TFC/population (toe per capita)	1.85	1.82	2.22	2.71	2.70	2.68	2.68	..
Elect. cons./GDP (kWh per 2010 USD)	0.18	0.19	0.19	0.22	0.23	0.21	0.20	0.20
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.23	0.24	0.24	0.27	0.27	0.25	0.24	0.24
Elect. cons./population (kWh per capita)	3296	3978	5933	7882	9043	8777	8707	8821
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

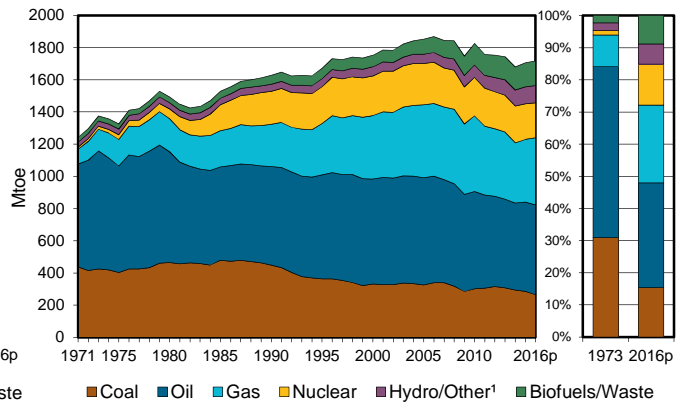
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## OECD Europe

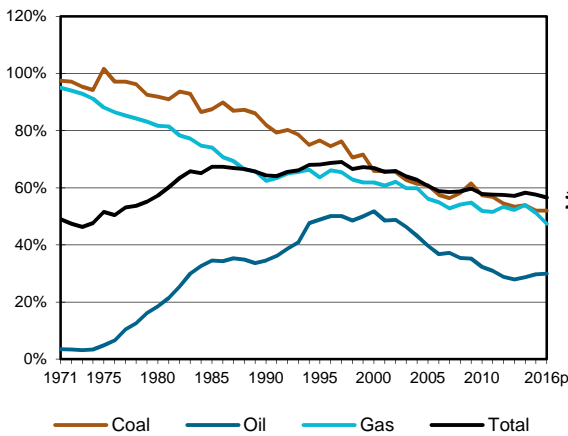
**Figure 1. Energy production**



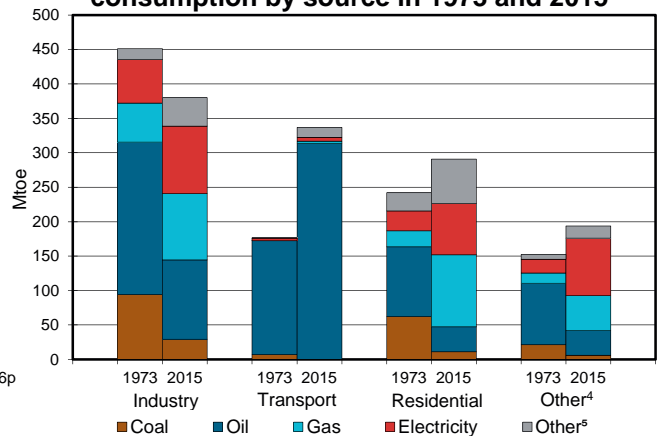
**Figure 2. Total primary energy supply<sup>2</sup>**



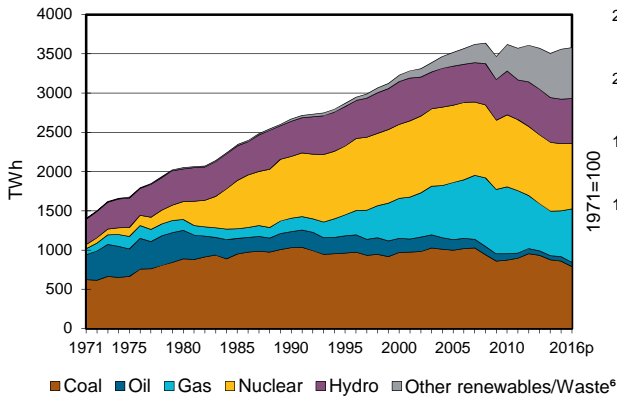
**Figure 3. Energy self-sufficiency**



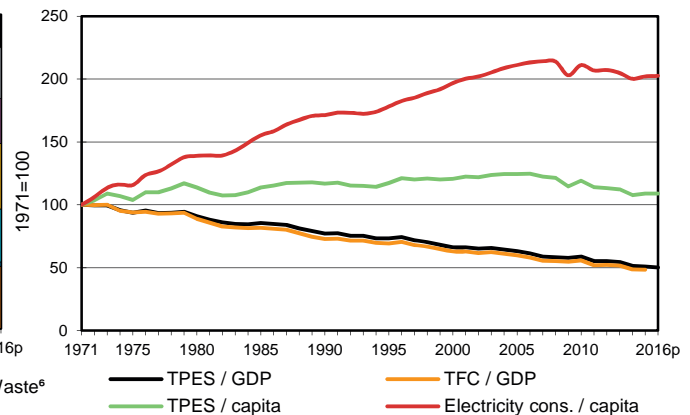
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## OECD Europe

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	148.35	164.75	-	199.63	222.46	48.95	55.47	142.26	-	0.76	982.63
Imports	171.92	604.93	361.83	378.22	-	-	-	15.45	36.81	0.01	1569.16
Exports	-40.04	-119.29	-353.26	-190.83	-	-	-	-8.65	-36.40	-0.01	-748.47
Intl. marine bunkers	-	-	-41.20	-	-	-	-	-	-	-	-41.20
Intl. aviation bunkers	-	-	-50.43	-	-	-	-	-	-	-	-50.43
Stock changes	4.84	-4.75	-8.10	2.43	-	-	-	0.01	-	-	-5.57
<b>TPES</b>	<b>285.07</b>	<b>645.64</b>	<b>-91.16</b>	<b>389.45</b>	<b>222.46</b>	<b>48.95</b>	<b>55.47</b>	<b>149.06</b>	<b>0.41</b>	<b>0.76</b>	<b>1706.12</b>
Transfers	-	4.76	-1.56	-	-	-	-	0.00	-	-	3.20
Statistical differences	-1.52	-0.08	-3.56	1.19	-	-	-0.02	0.05	-0.12	-0.32	-4.39
Electricity plants	-138.99	-	-7.06	-52.71	-215.38	-48.95	-46.09	-22.41	248.39	-0.45	-283.65
CHP plants	-61.72	-	-7.67	-49.83	-7.08	-	-2.65	-33.75	57.67	39.76	-65.27
Heat plants	-3.78	-	-0.90	-7.81	-	-	-1.14	-5.78	-0.34	16.00	-3.75
Blast furnaces	-19.76	-	-0.21	-0.07	-	-	-	-	-	-	-20.05
Gas works	-0.24	-	-0.22	0.28	-	-	-	-0.10	-	-	-0.28
Coke/pat. fuel/BKB/PB plants	-3.04	-	-0.51	-0.03	-	-	-	-	-	-	-3.58
Oil refineries	-	-667.02	661.18	-	-	-	-	-	-	-	-5.84
Petrochemical plants	-	16.59	-17.10	-	-	-	-	-	-	-	-0.51
Liquefaction plants	-1.29	0.80	-	-	-	-	-	-	-	-	-0.49
Other transformation	-0.19	1.69	-0.00	-1.84	-	-	-	-0.13	-	-0.85	-1.31
Energy industry own use	-7.02	-	-32.97	-21.33	-	-	-0.00	-0.75	-23.59	-4.29	-89.95
Losses	-1.14	-	-0.05	-1.80	-	-	-0.01	-0.04	-21.00	-4.04	-28.08
<b>TFC</b>	<b>46.39</b>	<b>2.38</b>	<b>498.20</b>	<b>255.50</b>	<b>-</b>	<b>-</b>	<b>5.55</b>	<b>86.15</b>	<b>261.42</b>	<b>46.56</b>	<b>1202.16</b>
<b>INDUSTRY</b>	<b>27.76</b>	<b>-</b>	<b>28.40</b>	<b>84.18</b>	<b>-</b>	<b>-</b>	<b>0.34</b>	<b>24.46</b>	<b>97.91</b>	<b>16.79</b>	<b>279.84</b>
Iron and steel	11.83	-	0.73	8.20	-	-	-	0.03	10.70	0.51	31.99
Chemical and petrochemical	3.62	-	8.06	18.64	-	-	0.00	0.91	16.41	6.52	54.17
Non-ferrous metals	0.34	-	0.31	3.53	-	-	0.00	0.01	8.62	0.13	12.95
Non-metallic minerals	7.25	-	6.17	13.85	-	-	0.00	3.84	6.72	0.26	38.09
Transport equipment	0.11	-	0.43	2.41	-	-	0.00	0.02	4.51	0.56	8.04
Machinery	0.16	-	1.12	6.51	-	-	0.00	0.13	10.83	0.55	19.30
Mining and quarrying	0.24	-	1.28	0.64	-	-	0.00	0.07	1.60	0.12	3.95
Food and tobacco	1.77	-	1.93	14.31	-	-	0.00	0.91	10.72	1.22	30.87
Paper, pulp and printing	1.18	-	0.74	7.12	-	-	0.00	12.09	10.69	2.43	34.25
Wood and wood products	0.06	-	0.21	0.61	-	-	-	4.55	2.18	0.43	8.04
Construction	0.03	-	3.25	1.89	-	-	0.00	0.17	1.95	0.04	7.33
Textile and leather	0.74	-	0.28	3.01	-	-	0.00	0.01	3.04	0.16	7.25
Non-specified	0.44	-	3.89	3.46	-	-	0.34	1.71	9.93	3.85	23.61
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>311.35</b>	<b>3.45</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>14.08</b>	<b>5.65</b>	<b>-</b>	<b>334.54</b>
Domestic aviation	-	-	7.16	-	-	-	-	-	-	-	7.16
Road	-	-	296.59	1.74	-	-	-	14.04	0.20	-	312.58
Rail	0.01	-	2.00	-	-	-	-	0.03	4.61	-	6.65
Pipeline transport	-	-	0.00	1.54	-	-	-	-	0.11	-	1.65
Domestic navigation	-	-	5.32	0.10	-	-	-	0.00	-	-	5.43
Non-specified	-	-	0.28	0.06	-	-	0.00	0.00	0.73	-	1.07
<b>OTHER</b>	<b>16.83</b>	<b>-</b>	<b>71.45</b>	<b>155.80</b>	<b>-</b>	<b>-</b>	<b>5.21</b>	<b>47.61</b>	<b>157.86</b>	<b>29.77</b>	<b>484.53</b>
Residential	10.96	-	36.29	104.69	-	-	3.88	40.69	74.51	20.14	291.16
Comm. and public services	4.84	-	16.53	46.70	-	-	0.52	4.95	78.32	9.20	161.06
Agriculture/forestry	0.99	-	14.79	3.22	-	-	0.72	1.95	4.70	0.22	26.59
Fishing	-	-	1.73	0.05	-	-	0.04	0.01	0.07	0.02	1.93
Non-specified	0.04	-	2.10	1.14	-	-	0.05	0.02	0.25	0.19	3.80
<b>NON-ENERGY USE</b>	<b>1.80</b>	<b>2.38</b>	<b>87.01</b>	<b>12.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>103.25</b>
in industry/transf./energy	1.70	2.38	84.31	12.07	-	-	-	-	-	-	100.45
of which: chem./petrochem.	0.65	2.38	60.14	12.06	-	-	-	-	-	-	75.24
in transport	-	-	2.18	-	-	-	-	-	-	-	2.18
in other	0.10	-	0.52	-	-	-	-	-	-	-	0.62
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>859.25</b>	<b>-</b>	<b>56.90</b>	<b>584.69</b>	<b>853.20</b>	<b>569.14</b>	<b>430.58</b>	<b>204.00</b>	<b>-</b>	<b>1.10</b>	<b>3558.86</b>
Electricity plants	623.82	-	31.64	323.24	826.46	569.14	425.12	87.73	-	0.52	2887.67
CHP plants	235.43	-	25.26	261.45	26.74	-	5.46	116.27	-	0.58	671.19
<b>Heat generated - PJ</b>	<b>645.34</b>	<b>-</b>	<b>104.05</b>	<b>849.19</b>	<b>4.77</b>	<b>-</b>	<b>56.29</b>	<b>659.19</b>	<b>4.92</b>	<b>42.98</b>	<b>2366.72</b>
CHP plants	517.56	-	73.92	584.48	4.77	-	12.68	471.77	0.32	17.39	1682.88
Heat plants	127.77	-	30.13	264.71	-	-	43.61	187.43	4.60	25.59	683.84

1. Includes peat and oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Europe

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	137.75	166.55	-	197.70	217.32	49.43	58.31	143.45	-	0.69	971.19
Imports	156.26	593.90	377.12	392.42	-	-	-	16.89	34.02	0.01	1570.61
Exports	-42.13	-124.94	-360.35	-182.71	-	-	-	-9.14	-33.36	-0.01	-752.63
Intl. marine bunkers	-	-	-42.58	-	-	-	-	-	-	-	-42.58
Intl. aviation bunkers	-	-	-53.11	-	-	-	-	-	-	-	-53.11
Stock changes	13.05	1.26	-0.53	9.33	-	-	-	0.05	-	-	23.17
<b>TPES</b>	<b>264.93</b>	<b>636.77</b>	<b>-79.45</b>	<b>416.75</b>	<b>217.32</b>	<b>49.43</b>	<b>58.31</b>	<b>151.25</b>	<b>0.65</b>	<b>0.69</b>	<b>1716.66</b>
Electricity and Heat Output											
Elec. generated - TWh	791.18	-	54.23	678.43	833.33	574.81	438.95	206.28	-	0.83	3578.03
Heat generated - PJ	617.44	-	81.64	836.59	6.02	-	68.91	673.30	5.61	34.68	2324.19

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat and oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

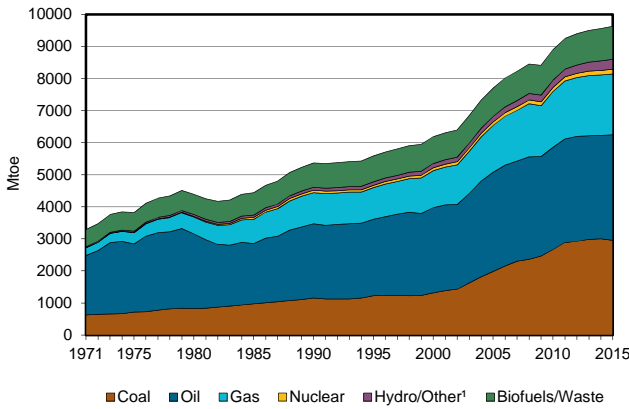
	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	636.3	856.3	1047.5	1172.8	1055.2	979.1	982.6	971.2
Net imports (Mtoe)	801.7	709.3	642.7	663.5	844.9	799.3	820.7	818.0
Total primary energy supply (Mtoe)	1375.5	1494.3	1629.0	1752.2	1826.0	1679.9	1706.1	1716.7
Net oil imports (Mtoe)	776.8	621.2	463.7	401.7	498.8	474.4	494.2	485.7
Oil supply (Mtoe)	732.4	688.5	611.4	653.3	603.8	540.8	554.5	557.3
Electricity consumption (TWh) <sup>1</sup>	1515.9	1930.4	2526.7	3021.3	3423.5	3303.3	3350.6	3374.6
GDP (billion 2010 USD)	8353.4	9903.4	12674.0	15911.1	18423.1	19253.8	19702.8	20068.5
GDP PPP (billion 2010 USD)	8061.3	9581.6	12307.3	15450.0	18112.7	19065.8	19553.9	19933.6
Population (millions)	455.29	474.07	503.04	523.79	553.32	562.82	565.47	568.49
Industrial production index (2010=100)	56.2	63.4	79.1	94.5	100.0	103.6	105.7	107.3
Total self-sufficiency <sup>2</sup>	0.46	0.57	0.64	0.67	0.58	0.58	0.58	0.57
Coal self-sufficiency <sup>2</sup>	0.95	0.92	0.82	0.66	0.57	0.54	0.52	0.52
Oil self-sufficiency <sup>2</sup>	0.03	0.18	0.35	0.52	0.32	0.29	0.30	0.30
Natural gas self-sufficiency <sup>2</sup>	0.93	0.82	0.62	0.62	0.52	0.54	0.51	0.47
TPES/GDP (toe per thousand 2010 USD)	0.16	0.15	0.13	0.11	0.10	0.09	0.09	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.17	0.16	0.13	0.11	0.10	0.09	0.09	0.09
TPES/population (toe per capita)	3.02	3.15	3.24	3.35	3.30	2.98	3.02	3.02
Net oil imports/GDP (toe per thousand 2010 USD)	0.09	0.06	0.04	0.03	0.03	0.02	0.03	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.09	0.07	0.05	0.04	0.03	0.03	0.03	0.03
Oil supply/population (toe per capita)	1.61	1.45	1.22	1.25	1.09	0.96	0.98	0.98
Share of renewables in TPES	0.05	0.05	0.06	0.07	0.11	0.14	0.14	0.14
Share of renewables in electricity generation	0.22	0.21	0.18	0.19	0.24	0.32	0.33	0.33
TFC/GDP (toe per thousand 2010 USD)	0.12	0.11	0.09	0.08	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.13	0.11	0.09	0.08	0.07	0.06	0.06	..
TFC/population (toe per capita)	2.25	2.28	2.25	2.35	2.32	2.09	2.13	..
Elect. cons./GDP (kWh per 2010 USD)	0.18	0.19	0.20	0.19	0.19	0.17	0.17	0.17
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.19	0.20	0.21	0.20	0.19	0.17	0.17	0.17
Elect. cons./population (kWh per capita)	3330	4072	5023	5768	6187	5869	5925	5936
Industry cons. <sup>3</sup> /industrial production (2010=100)	200.1	174.6	134.2	115.0	100.0	91.2	89.7	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	294.4	224.3	134.8	118.5	100.0	82.8	81.5	..

OECD Europe excludes Estonia, Latvia, Slovenia prior to 1990. Please refer to section 'Geographical coverage'.

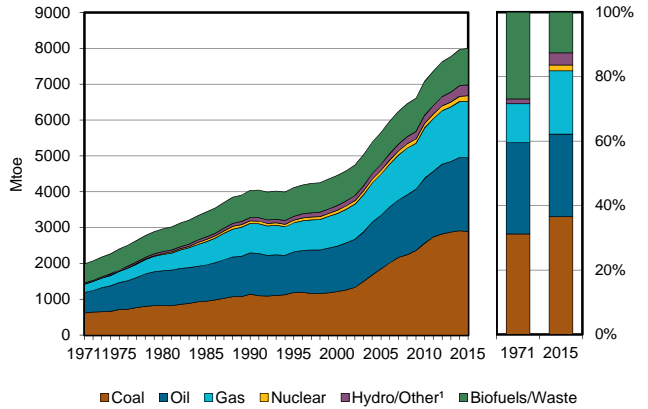
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

### Non-OECD Total

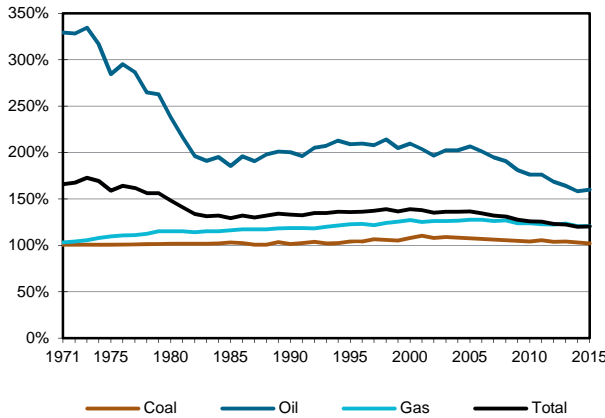
**Figure 1. Energy production**



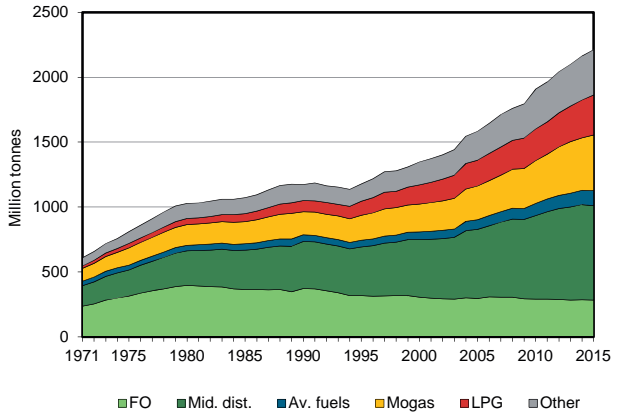
**Figure 2. Total primary energy supply²**



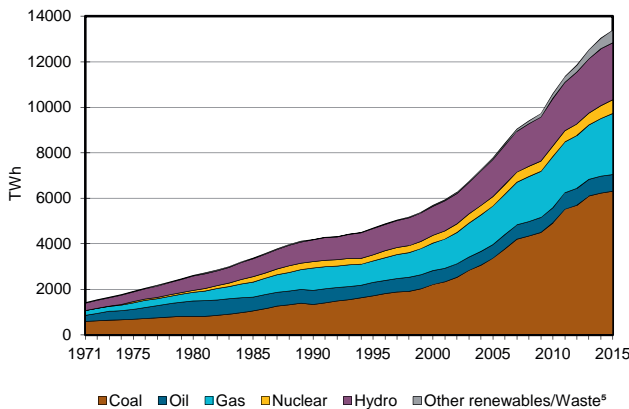
**Figure 3. Energy self-sufficiency³**



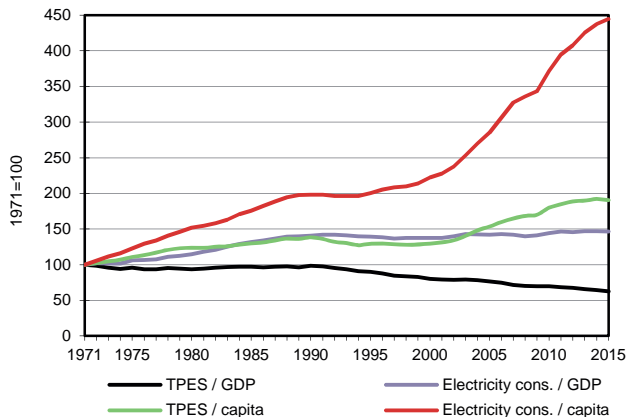
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.



## Non-OECD Total

2015

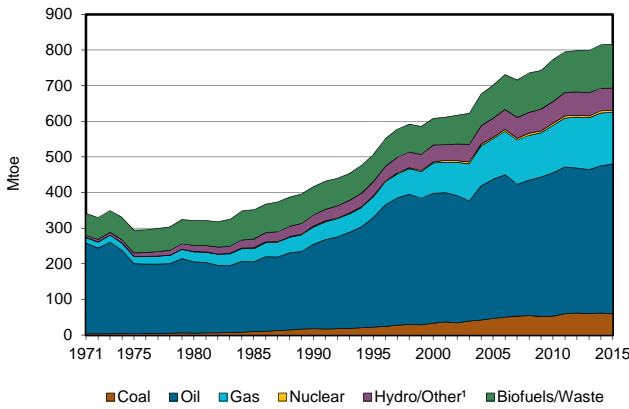
Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	2949.87	3290.49	-	1895.57	157.04	215.65	92.20	1024.09	-	1.01	9625.93
Imports	391.63	880.99	658.58	236.11	-	-	-	2.03	20.44	-	2189.78
Exports	-462.05	-1851.32	-703.46	-556.88	-	-	-	-4.92	-18.68	-	-3597.31
Intl. marine bunkers	-	-	-134.31	-	-	-	-	-	-	-	-134.31
Intl. aviation bunkers	-	-	-81.53	-	-	-	-	-	-	-	-81.53
Stock changes	9.01	1.87	-2.98	-5.13	-	-	-	0.80	-	-	3.58
<b>TPES</b>	<b>2888.46</b>	<b>2322.04</b>	<b>-263.71</b>	<b>1569.68</b>	<b>157.04</b>	<b>215.65</b>	<b>92.20</b>	<b>1021.99</b>	<b>1.76</b>	<b>1.01</b>	<b>8006.13</b>
Transfers	-0.97	-127.03	140.73	-	-	-	-	-	-	-	12.72
Statistical differences	-9.87	2.78	0.49	0.45	-	-	0.00	0.01	-2.46	0.60	-8.01
Electricity plants	-1393.78	-37.35	-150.42	-438.26	-156.54	-215.65	-63.86	-49.74	1063.92	-0.43	-1442.12
CHP plants	-93.48	-0.01	-6.21	-195.30	-0.50	-	-	-12.50	88.18	90.84	-128.99
Heat plants	-132.94	-0.65	-10.49	-59.34	-	-	-0.02	-4.82	-0.00	162.98	-45.30
Blast furnaces	-152.02	-	-	-	-	-	-	-0.05	-	-	-152.07
Gas works	-8.96	-0.00	-0.31	1.37	-	-	-	-0.01	-	-	-7.92
Coke/pat.fuel/BKB/PB plants	-78.14	-	-1.46	-	-	-	-	-0.00	-	-	-79.61
Oil refineries	-	-2146.72	2107.65	-	-	-	-	-	-	-	-39.06
Petrochemical plants	-	4.04	-3.49	-	-	-	-	-	-	-	0.56
Liquefaction plants	-8.81	13.53	-	-17.41	-	-	-	-	-	-	-12.69
Other transformation	-0.18	1.62	-0.57	-3.41	-	-	-	-86.31	-	-	-88.86
Energy industry own use	-73.22	-11.45	-99.80	-157.30	-	-	-	-13.43	-111.06	-29.00	-495.27
Losses	-2.97	-8.61	-0.37	-17.43	-	-	-0.00	-0.10	-111.28	-12.45	-153.20
<b>TFC</b>	<b>933.10</b>	<b>12.19</b>	<b>1712.04</b>	<b>683.03</b>	<b>-</b>	<b>-</b>	<b>28.31</b>	<b>855.03</b>	<b>929.06</b>	<b>213.55</b>	<b>5366.31</b>
<b>INDUSTRY</b>	<b>736.96</b>	<b>9.03</b>	<b>206.54</b>	<b>272.39</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>120.33</b>	<b>475.48</b>	<b>99.81</b>	<b>1920.80</b>
Iron and steel	267.86	-	4.13	27.94	-	-	-	3.60	67.98	14.47	385.99
Chemical and petrochemical	98.23	0.03	35.42	47.87	-	-	-	0.23	65.09	40.87	287.72
Non-ferrous metals	22.69	-	3.46	5.01	-	-	0.00	0.01	65.65	3.78	100.60
Non-metallic minerals	211.09	0.00	30.99	27.07	-	-	-	3.01	36.01	2.75	310.91
Transport equipment	2.93	-	1.03	3.75	-	-	-	0.01	10.68	3.10	21.49
Machinery	12.91	-	3.51	5.60	-	-	0.00	0.02	45.31	4.40	71.74
Mining and quarrying	8.37	-	11.68	3.77	-	-	-	0.05	17.69	1.87	43.42
Food and tobacco	25.26	0.00	5.61	8.80	-	-	0.00	24.80	19.83	8.75	93.06
Paper pulp and printing	12.53	-	1.48	3.55	-	-	-	9.91	12.45	8.96	48.88
Wood and wood products	2.79	-	0.77	0.54	-	-	0.00	0.74	4.05	1.10	9.98
Construction	4.62	-	13.52	3.70	-	-	-	0.02	7.75	0.94	30.55
Textile and leather	12.26	-	2.28	1.41	-	-	0.00	0.15	23.05	7.34	46.49
Non-specified	55.43	9.00	92.65	133.40	-	-	0.25	77.79	99.95	1.50	469.97
<b>TRANSPORT</b>	<b>2.52</b>	<b>0.01</b>	<b>961.23</b>	<b>72.42</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26.19</b>	<b>26.65</b>	<b>-</b>	<b>1089.02</b>
Domestic aviation	-	-	39.31	-	-	-	-	-	-	-	39.31
Road	-	-	871.75	36.92	-	-	-	26.18	10.14	-	945.00
Rail	2.48	-	11.25	-	-	-	-	0.00	13.04	-	26.77
Pipeline transport	-	0.01	0.29	35.47	-	-	-	-	2.07	-	37.84
Domestic navigation	-	-	30.02	-	-	-	-	0.01	-	-	30.03
Non-specified	0.04	-	8.60	0.03	-	-	-	-	1.41	-	10.08
<b>OTHER</b>	<b>135.55</b>	<b>0.07</b>	<b>243.69</b>	<b>210.97</b>	<b>-</b>	<b>-</b>	<b>28.06</b>	<b>708.51</b>	<b>426.92</b>	<b>113.74</b>	<b>1867.50</b>
Residential	62.51	-	129.53	170.32	-	-	22.75	681.82	218.44	80.72	1366.09
Comm. and public services	29.91	-	34.02	35.45	-	-	3.78	17.07	128.59	23.52	272.34
Agriculture/forestry	14.26	0.01	62.84	3.35	-	-	0.65	6.95	39.10	2.85	130.02
Fishing	0.00	-	2.13	0.04	-	-	-	0.01	0.16	0.01	2.35
Non-specified	28.88	0.06	15.16	1.80	-	-	0.88	2.66	40.63	6.64	96.70
<b>NON-ENERGY USE</b>	<b>58.07</b>	<b>3.09</b>	<b>300.58</b>	<b>127.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>488.99</b>
in industry/transf./energy	57.94	3.09	275.79	127.26	-	-	-	-	-	-	464.07
of which: chem./petrochem.	1.48	3.03	200.39	125.73	-	-	-	-	-	-	330.63
in transport	-	-	1.65	-	-	-	-	-	-	-	1.65
in other	0.13	-	23.13	-	-	-	-	-	-	-	23.27
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>6310.53</b>	<b>122.35</b>	<b>606.63</b>	<b>2696.15</b>	<b>600.68</b>	<b>2507.61</b>	<b>375.29</b>	<b>174.50</b>	<b>-</b>	<b>2.73</b>	<b>13396.47</b>
Electricity plants	6002.43	122.34	586.80	2053.61	600.68	2507.61	375.29	119.65	-	2.00	12370.41
CHP plants	308.10	0.01	19.83	642.54	-	-	-	54.86	-	0.73	1026.06
<b>Heat generated - PJ</b>	<b>5181.20</b>	<b>18.00</b>	<b>420.86</b>	<b>4437.35</b>	<b>21.05</b>	<b>-</b>	<b>339.65</b>	<b>210.11</b>	<b>0.54</b>	<b>42.33</b>	<b>10671.09</b>
CHP plants	1203.26	0.14	60.18	2464.10	21.05	-	-	55.27	-	24.60	3828.60
Heat plants	3977.94	17.86	360.68	1973.25	-	-	339.65	154.84	0.54	17.73	6842.50

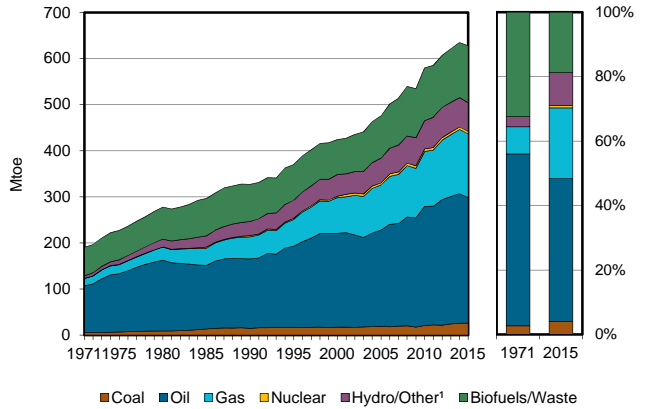
1. Includes peat.

## Non-OECD Americas

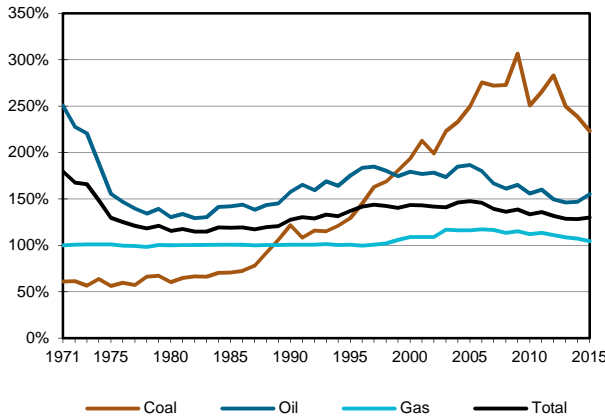
**Figure 1. Energy production**



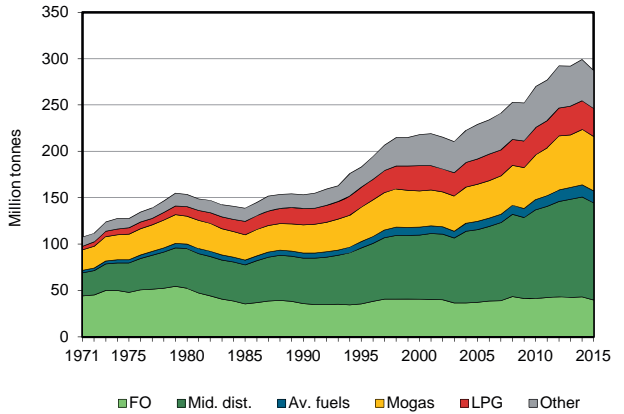
**Figure 2. Total primary energy supply<sup>2</sup>**



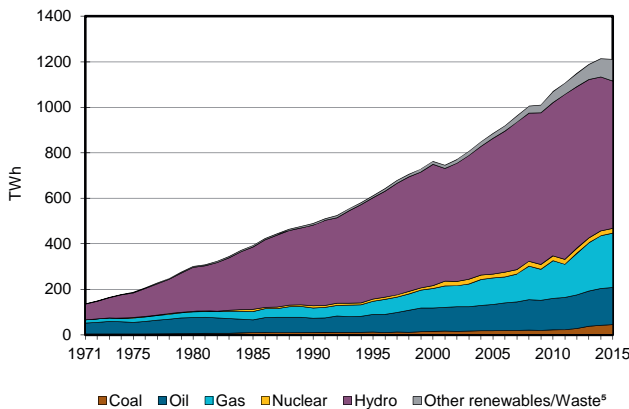
**Figure 3. Energy self-sufficiency<sup>3</sup>**



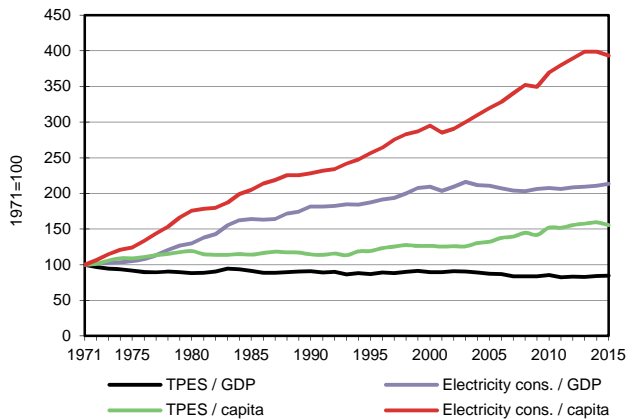
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Non-OECD Americas

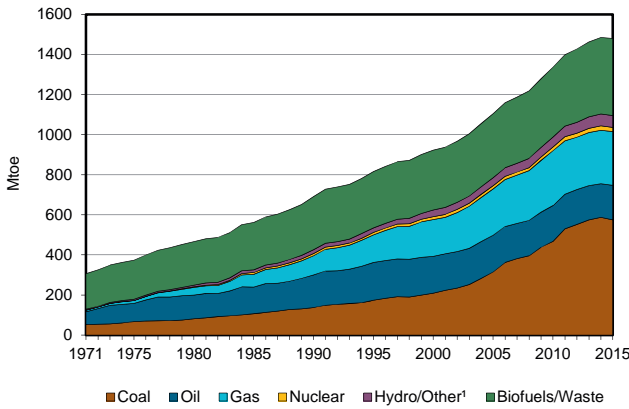
2015

Million tonnes of oil equivalent

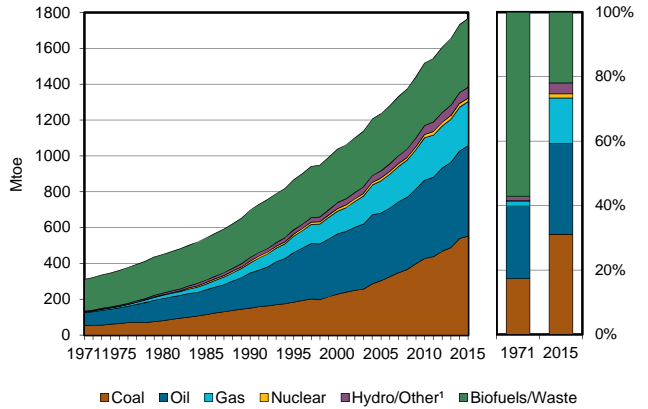
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	59.46	420.45	-	144.84	5.70	55.62	6.62	123.52	-	0.08	816.28
Imports	19.43	45.83	83.05	26.67	-	-	-	0.78	4.07	-	179.83
Exports	-52.19	-205.96	-49.49	-32.92	-	-	-	-1.88	-4.02	-	-346.46
Intl. marine bunkers	-	-	-14.05	-	-	-	-	-	-	-	-14.05
Intl. aviation bunkers	-	-	-9.14	-	-	-	-	-	-	-	-9.14
Stock changes	-0.07	-1.28	1.70	-0.02	-	-	-	0.89	-	-	1.22
<b>TPES</b>	<b>26.64</b>	<b>259.03</b>	<b>12.07</b>	<b>138.58</b>	<b>5.70</b>	<b>55.62</b>	<b>6.62</b>	<b>123.31</b>	<b>0.04</b>	<b>0.08</b>	<b>627.69</b>
Transfers	-	-9.90	11.61	-	-	-	-	-	-	-	1.71
Statistical differences	0.04	0.55	-0.48	-1.01	-	-	-	0.04	-0.57	-	-1.44
Electricity plants	-8.90	-2.73	-30.91	-47.28	-5.70	-55.62	-5.89	-5.18	97.55	-0.08	-64.74
CHP plants	-1.98	-	-1.27	-2.56	-	-	-	-8.87	6.63	-	-8.05
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-3.74	-	-	-	-	-	-	-0.05	-	-	-3.79
Gas works	-	-	-0.02	0.01	-	-	-	-	-	-	-0.00
Coke/pat.fuel/BKB/PB plants	-0.11	-	-1.46	-	-	-	-	-	-	-	-1.57
Oil refineries	-	-249.88	242.84	-	-	-	-	-	-	-	-7.04
Petrochemical plants	-	3.53	-2.98	-	-	-	-	-	-	-	0.54
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.77	-	-0.97	-	-	-	-5.29	-	-	-5.48
Energy industry own use	-0.40	-0.43	-12.68	-23.35	-	-	-	-13.15	-4.08	-	-54.09
Losses	-0.34	-0.08	-0.24	-1.16	-	-	-	-0.06	-16.60	-	-18.48
<b>TFC</b>	<b>11.21</b>	<b>0.87</b>	<b>216.46</b>	<b>62.26</b>	<b>-</b>	<b>-</b>	<b>0.73</b>	<b>90.75</b>	<b>82.98</b>	<b>-</b>	<b>465.25</b>
<b>INDUSTRY</b>	<b>10.87</b>	<b>0.87</b>	<b>29.84</b>	<b>29.76</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>40.68</b>	<b>32.55</b>	<b>-</b>	<b>144.56</b>
Iron and steel	6.75	-	0.61	6.00	-	-	-	3.20	3.55	-	20.12
Chemical and petrochemical	0.21	-	4.58	5.24	-	-	-	0.12	2.54	-	12.69
Non-ferrous metals	0.93	-	1.83	1.13	-	-	0.00	0.01	2.95	-	6.86
Non-metallic minerals	1.20	-	4.14	4.01	-	-	-	2.69	1.23	-	13.27
Transport equipment	-	-	0.07	0.04	-	-	-	-	-	-	0.11
Machinery	0.00	-	0.05	0.01	-	-	-	0.00	0.04	-	0.10
Mining and quarrying	0.47	-	1.78	0.62	-	-	-	-	1.50	-	4.38
Food and tobacco	0.13	-	0.99	2.72	-	-	-	19.14	2.72	-	25.70
Paper pulp and printing	0.23	-	0.70	1.18	-	-	-	9.55	2.11	-	13.77
Wood and wood products	-	-	0.01	0.06	-	-	-	0.09	0.02	-	0.18
Construction	-	-	0.47	0.00	-	-	-	0.00	0.04	-	0.51
Textile and leather	0.12	-	0.10	0.34	-	-	-	0.07	0.66	-	1.29
Non-specified	0.82	0.87	14.51	8.40	-	-	0.00	5.81	15.17	-	45.58
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>134.28</b>	<b>7.54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>19.89</b>	<b>0.35</b>	<b>-</b>	<b>162.06</b>
Domestic aviation	-	-	4.52	-	-	-	-	-	-	-	4.52
Road	-	-	125.97	5.73	-	-	-	19.89	0.00	-	151.59
Rail	0.00	-	1.02	-	-	-	-	-	0.28	-	1.31
Pipeline transport	-	-	-	1.78	-	-	-	-	0.06	-	1.84
Domestic navigation	-	-	2.11	-	-	-	-	-	-	-	2.11
Non-specified	-	-	0.66	0.03	-	-	-	-	0.01	-	0.69
<b>OTHER</b>	<b>0.21</b>	<b>-</b>	<b>31.79</b>	<b>13.05</b>	<b>-</b>	<b>-</b>	<b>0.73</b>	<b>30.18</b>	<b>50.08</b>	<b>-</b>	<b>126.04</b>
Residential	0.08	-	13.68	11.02	-	-	0.02	25.26	25.63	-	75.68
Comm. and public services	0.00	-	2.85	1.99	-	-	0.01	0.93	20.86	-	26.64
Agriculture/forestry	0.00	-	12.70	-	-	-	0.00	3.90	2.82	-	19.42
Fishing	-	-	0.13	0.04	-	-	-	0.00	0.03	-	0.21
Non-specified	0.13	-	2.43	0.00	-	-	0.69	0.10	0.75	-	4.09
<b>NON-ENERGY USE</b>	<b>0.14</b>	<b>-</b>	<b>20.54</b>	<b>11.91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>32.59</b>
in industry/transf./energy	0.00	-	20.48	11.91	-	-	-	-	-	-	32.39
of which: chem./petrochem.	-	-	9.54	11.91	-	-	-	-	-	-	21.45
in transport	-	-	0.04	-	-	-	-	-	-	-	0.04
in other	0.13	-	0.03	-	-	-	-	-	-	-	0.16
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>44.54</b>	<b>7.21</b>	<b>156.36</b>	<b>238.42</b>	<b>21.87</b>	<b>646.71</b>	<b>34.16</b>	<b>61.76</b>	<b>-</b>	<b>0.39</b>	<b>1211.42</b>
Electricity plants	34.89	7.21	150.13	226.92	21.87	646.71	34.16	12.08	-	0.39	1134.36
CHP plants	9.65	-	6.23	11.51	-	-	-	49.68	-	-	77.07
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.33</b>	<b>3.33</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	3.33	3.33

## Non-OECD Asia (excluding China)

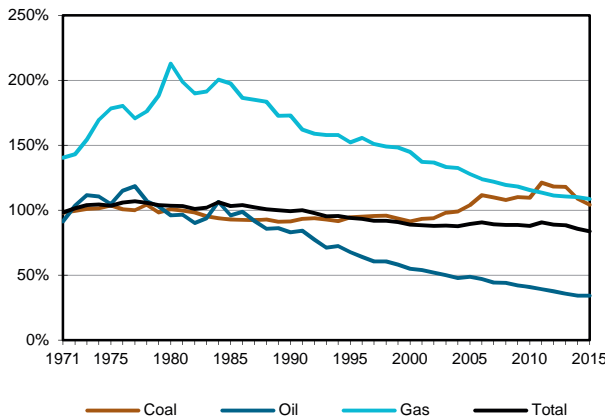
**Figure 1. Energy production**



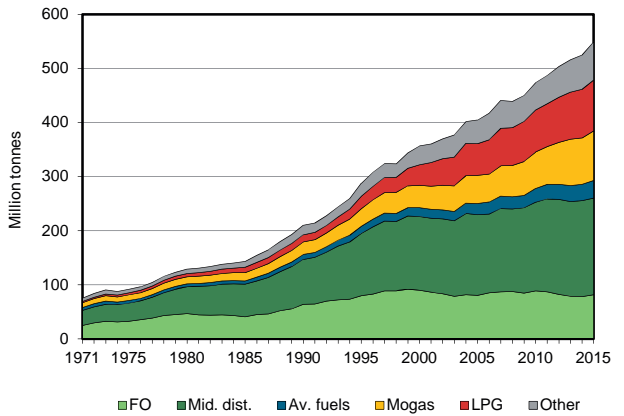
**Figure 2. Total primary energy supply<sup>2</sup>**



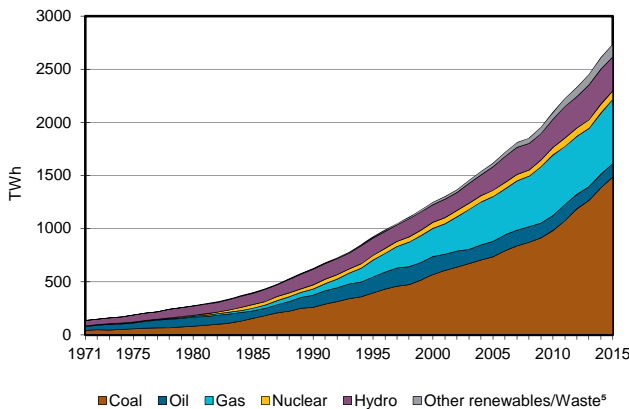
**Figure 3. Energy self-sufficiency<sup>3</sup>**



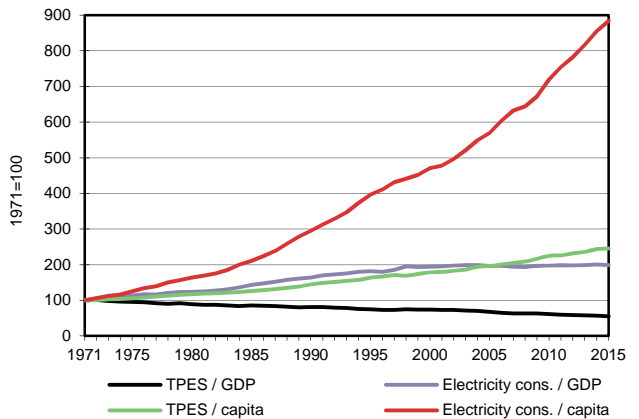
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Non-OECD Asia (excluding China)

2015

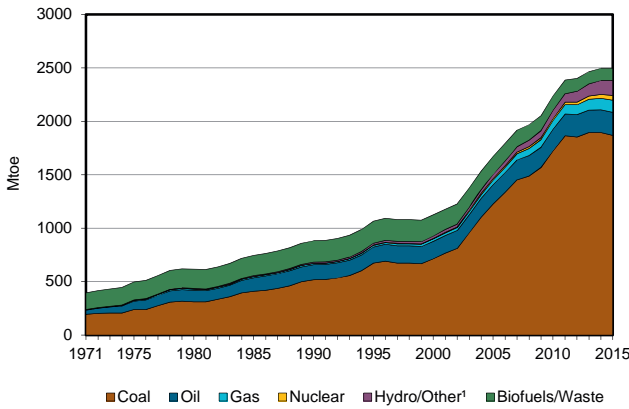
Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	574.10	172.93	-	267.26	20.84	27.44	32.41	384.13	-	-	1479.12
Imports	215.88	394.27	270.81	61.50	-	-	-	0.46	3.12	-	946.04
Exports	-231.32	-53.72	-205.85	-81.95	-	-	-	-0.78	-1.17	-	-574.79
Intl. marine bunkers	-	-	-48.70	-	-	-	-	-	-	-	-48.70
Intl. aviation bunkers	-	-	-26.55	-	-	-	-	-	-	-	-26.55
Stock changes	-6.73	3.83	-2.09	-0.87	-	-	-	-0.11	-	-	-5.97
<b>TPES</b>	<b>551.93</b>	<b>517.32</b>	<b>-12.39</b>	<b>245.94</b>	<b>20.84</b>	<b>27.44</b>	<b>32.41</b>	<b>383.71</b>	<b>1.94</b>	<b>-</b>	<b>1769.15</b>
Transfers	-	-1.54	2.37	-	-	-	-	-	-	-	0.84
Statistical differences	-2.21	-5.16	-3.64	0.27	-	-	-0.00	-0.00	0.60	-	-10.13
Electricity plants	-355.45	-	-31.16	-119.14	-20.84	-27.44	-31.65	-21.91	231.91	-	-375.67
CHP plants	-9.94	-	-0.36	-0.18	-	-	-	-	3.54	1.07	-5.87
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-14.71	-	-	-	-	-	-	-	-	-	-14.71
Gas works	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Coke/pat.fuel/BKB/PB plants	-3.65	-	-	-	-	-	-	-	-	-	-3.65
Oil refineries	-	-508.59	501.62	-	-	-	-	-	-	-	-6.96
Petrochemical plants	-	0.00	-	-	-	-	-	-	-	-	0.00
Liquefaction plants	-	0.46	-	-0.86	-	-	-	-	-	-	-0.40
Other transformation	-	-	-	-0.05	-	-	-	-16.14	-	-	-16.19
Energy industry own use	-2.58	-0.63	-20.44	-25.03	-	-	-	-0.00	-13.90	-0.06	-62.65
Losses	-0.24	-0.20	-	-4.95	-	-	-	-	-31.47	-0.03	-36.89
<b>TFC</b>	<b>163.14</b>	<b>1.67</b>	<b>436.00</b>	<b>96.01</b>	<b>-</b>	<b>-</b>	<b>0.77</b>	<b>345.65</b>	<b>192.62</b>	<b>0.97</b>	<b>1236.84</b>
<b>INDUSTRY</b>	<b>145.92</b>	<b>-</b>	<b>53.75</b>	<b>39.84</b>	<b>-</b>	<b>-</b>	<b>0.04</b>	<b>57.41</b>	<b>84.54</b>	<b>0.24</b>	<b>381.75</b>
Iron and steel	51.18	-	1.71	0.86	-	-	-	-	8.78	-	62.54
Chemical and petrochemical	5.93	-	9.24	5.23	-	-	-	0.01	8.10	-	28.51
Non-ferrous metals	2.51	-	0.13	0.04	-	-	-	-	1.69	-	4.36
Non-metallic minerals	42.32	-	17.17	1.05	-	-	-	0.00	4.51	-	65.05
Transport equipment	-	-	0.03	0.60	-	-	-	-	1.17	-	1.79
Machinery	-	-	1.03	0.24	-	-	-	0.00	7.55	-	8.82
Mining and quarrying	-	-	2.73	0.00	-	-	-	0.00	0.12	-	2.86
Food and tobacco	1.27	-	2.39	0.21	-	-	-	5.44	4.47	-	13.78
Paper pulp and printing	3.47	-	0.26	0.89	-	-	-	0.11	1.91	-	6.63
Wood and wood products	-	-	0.31	0.01	-	-	-	-	0.34	-	0.66
Construction	-	-	1.12	0.01	-	-	-	0.00	0.12	-	1.25
Textile and leather	2.23	-	1.58	0.08	-	-	-	-	5.04	-	8.93
Non-specified	37.02	-	16.05	30.62	-	-	0.04	51.85	40.76	0.24	176.57
<b>TRANSPORT</b>	<b>0.02</b>	<b>-</b>	<b>228.49</b>	<b>7.76</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.70</b>	<b>1.82</b>	<b>-</b>	<b>241.77</b>
Domestic aviation	-	-	7.38	-	-	-	-	-	-	-	7.38
Road	-	-	211.44	7.40	-	-	-	3.69	-	-	222.53
Rail	0.01	-	4.10	-	-	-	-	-	1.82	-	5.93
Pipeline transport	-	-	-	0.35	-	-	-	-	-	-	0.35
Domestic navigation	-	-	5.38	-	-	-	-	0.01	-	-	5.39
Non-specified	0.00	-	0.18	-	-	-	-	-	-	-	0.19
<b>OTHER</b>	<b>17.00</b>	<b>-</b>	<b>70.47</b>	<b>13.38</b>	<b>-</b>	<b>-</b>	<b>0.73</b>	<b>284.55</b>	<b>106.26</b>	<b>0.73</b>	<b>493.12</b>
Residential	4.59	-	40.54	10.42	-	-	0.63	276.14	52.30	0.40	385.02
Comm. and public services	5.58	-	7.64	2.63	-	-	0.06	7.61	29.92	0.29	53.73
Agriculture/forestry	0.02	-	17.28	0.18	-	-	-	0.01	17.85	0.00	35.35
Fishing	-	-	1.31	-	-	-	-	0.00	0.11	-	1.42
Non-specified	6.81	-	3.70	0.16	-	-	0.03	0.78	6.09	0.03	17.60
<b>NON-ENERGY USE</b>	<b>0.20</b>	<b>1.67</b>	<b>83.30</b>	<b>35.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>120.20</b>
in industry/transf./energy	0.20	1.67	83.22	35.03	-	-	-	-	-	-	120.12
of which: chem./petrochem.	-	1.67	57.73	35.03	-	-	-	-	-	-	94.44
in transport	-	-	0.07	-	-	-	-	-	-	-	0.07
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1488.90</b>	<b>-</b>	<b>125.16</b>	<b>604.95</b>	<b>79.96</b>	<b>319.05</b>	<b>77.79</b>	<b>41.96</b>	<b>-</b>	<b>-</b>	<b>2737.76</b>
Electricity plants	1449.69	-	124.04	604.17	79.96	319.05	77.79	41.96	-	-	2696.64
CHP plants	39.22	-	1.12	0.78	-	-	-	-	-	-	41.12
<b>Heat generated - PJ</b>	<b>44.65</b>	<b>-</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>44.71</b>
CHP plants	44.65	-	0.06	-	-	-	-	-	-	-	44.71
Heat plants	-	-	-	-	-	-	-	-	-	-	-

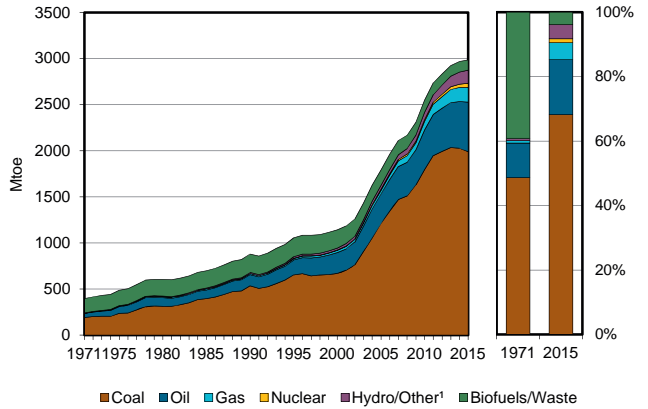
1. Includes peat.

## China (P.R. of China and Hong Kong, China)

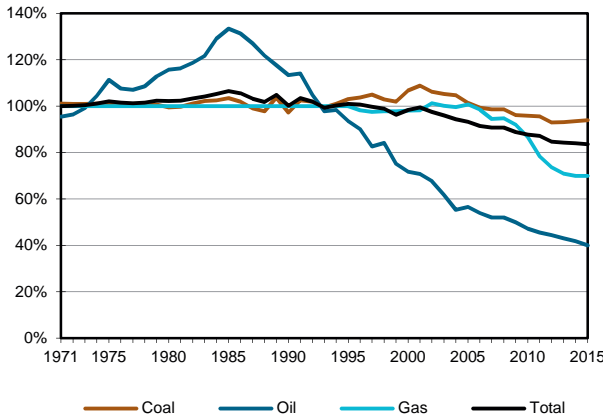
**Figure 1. Energy production**



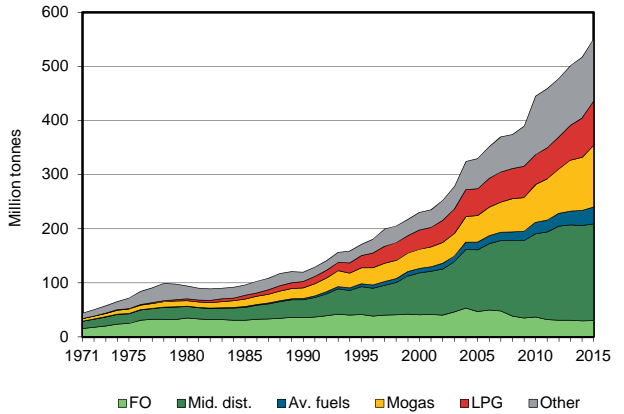
**Figure 2. Total primary energy supply<sup>2</sup>**



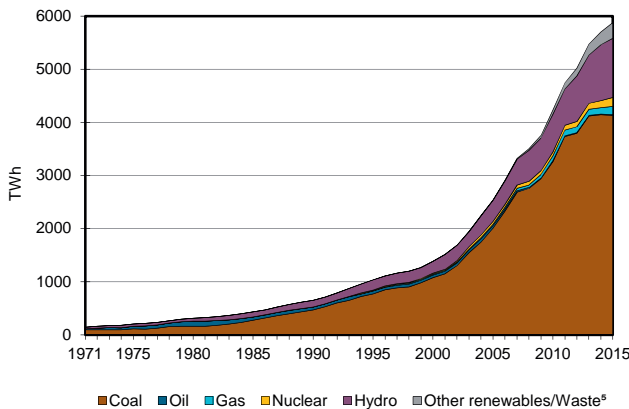
**Figure 3. Energy self-sufficiency<sup>3</sup>**



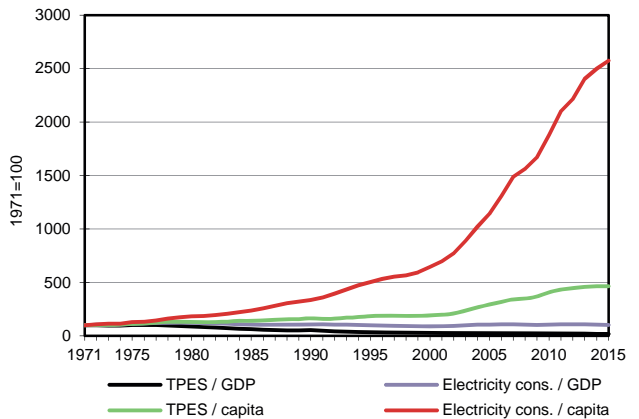
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.



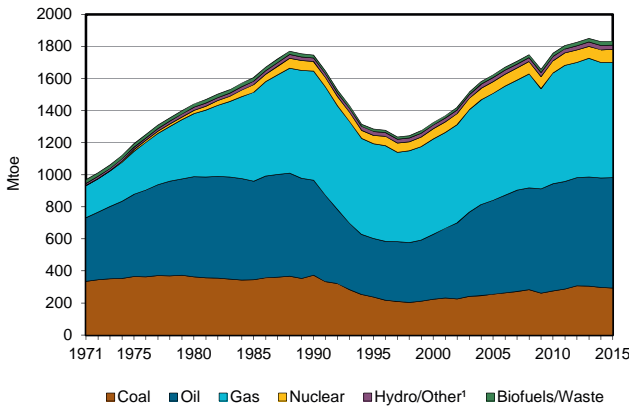
## China (P.R. of China and Hong Kong, China)

2015

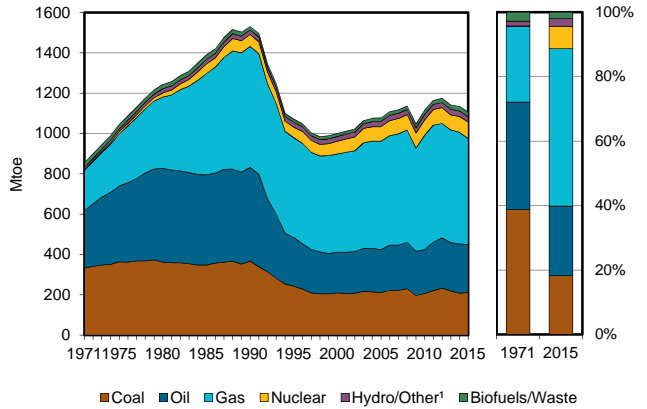
Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1868.16	214.76	-	112.62	44.51	95.84	46.24	113.61	-	-	2495.74
Imports	115.64	335.48	72.84	51.29	-	-	-	0.00	1.54	-	576.81
Exports	-9.60	-2.87	-42.06	-2.71	-	-	-	-	-1.71	-	-58.95
Intl. marine bunkers	-	-	-17.79	-	-	-	-	-	-	-	-17.79
Intl. aviation bunkers	-	-	-14.20	-	-	-	-	-	-	-	-14.20
Stock changes	14.64	-6.24	-2.86	-	-	-	-	-	-	-	5.54
<b>TPES</b>	<b>1988.84</b>	<b>541.14</b>	<b>-4.08</b>	<b>161.20</b>	<b>44.51</b>	<b>95.84</b>	<b>46.24</b>	<b>113.62</b>	<b>-0.16</b>	<b>-</b>	<b>2987.14</b>
Transfers	-0.97	-1.09	2.49	-	-	-	-	-	-	-	0.43
Statistical differences	-9.24	-0.05	2.46	0.69	-	-	0.00	0.02	-0.01	-	-6.14
Electricity plants	-925.69	-0.13	-2.31	-28.39	-44.51	-95.84	-19.98	-21.92	505.86	-	-632.90
CHP plants	-	-	-	-	-	-	-	-0.03	0.01	-	-0.02
Heat plants	-121.45	-0.07	-4.63	-5.26	-	-	-	-1.47	-	95.90	-36.98
Blast furnaces	-103.84	-	-	-	-	-	-	-	-	-	-103.84
Gas works	-4.78	-	-0.30	1.35	-	-	-	-0.01	-	-	-3.74
Coke/pat.fuel/BKB/PB plants	-61.14	-	-	-	-	-	-	-	-	-	-61.14
Oil refineries	-	-533.29	517.38	-	-	-	-	-	-	-	-15.91
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-3.64	2.19	-	-	-	-	-	-	-	-	-1.46
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-56.07	-4.40	-30.77	-21.72	-	-	-	-	-56.42	-11.47	-180.86
Losses	-	-0.87	-0.00	-1.84	-	-	-	-	-26.09	-1.15	-29.95
<b>TFC</b>	<b>702.01</b>	<b>3.42</b>	<b>480.25</b>	<b>106.03</b>	<b>-</b>	<b>-</b>	<b>26.26</b>	<b>90.20</b>	<b>423.19</b>	<b>83.28</b>	<b>1914.64</b>
<b>INDUSTRY</b>	<b>539.88</b>	<b>2.07</b>	<b>55.41</b>	<b>38.54</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>-</b>	<b>276.52</b>	<b>55.72</b>	<b>968.35</b>
Iron and steel	191.78	-	0.96	3.59	-	-	-	-	45.86	5.66	247.85
Chemical and petrochemical	90.58	-	12.45	11.51	-	-	-	-	46.71	26.89	188.14
Non-ferrous metals	16.57	-	1.04	3.33	-	-	-	-	47.35	3.50	71.79
Non-metallic minerals	161.98	-	6.13	6.66	-	-	-	-	26.71	0.26	201.73
Transport equipment	2.90	-	0.75	2.54	-	-	-	-	8.19	1.10	15.48
Machinery	12.78	-	2.09	3.82	-	-	-	-	35.38	1.05	55.13
Mining and quarrying	7.17	-	2.87	0.87	-	-	-	-	8.90	0.89	20.69
Food and tobacco	23.48	-	0.89	1.89	-	-	-	-	9.42	3.62	39.31
Paper pulp and printing	8.76	-	0.33	0.85	-	-	-	-	6.42	4.88	21.25
Wood and wood products	2.76	-	0.27	0.18	-	-	-	-	2.99	0.16	6.35
Construction	4.51	-	7.25	0.18	-	-	-	-	6.01	0.22	18.16
Textile and leather	9.89	-	0.49	0.66	-	-	-	-	16.66	6.89	34.59
Non-specified	6.71	2.07	19.90	2.46	-	-	0.21	-	15.93	0.60	47.87
<b>TRANSPORT</b>	<b>2.44</b>	<b>-</b>	<b>264.49</b>	<b>16.60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.05</b>	<b>15.45</b>	<b>-</b>	<b>301.03</b>
Domestic aviation	-	-	18.01	-	-	-	-	-	-	-	18.01
Road	-	-	220.45	16.29	-	-	-	2.05	10.10	-	248.90
Rail	2.44	-	3.23	-	-	-	-	-	5.35	-	11.01
Pipeline transport	-	-	0.00	0.31	-	-	-	-	-	-	0.31
Domestic navigation	-	-	20.94	-	-	-	-	-	-	-	20.94
Non-specified	0.00	-	1.86	-	-	-	-	-	-	-	1.87
<b>OTHER</b>	<b>104.10</b>	<b>-</b>	<b>69.48</b>	<b>40.91</b>	<b>-</b>	<b>-</b>	<b>26.05</b>	<b>88.15</b>	<b>131.22</b>	<b>27.56</b>	<b>487.45</b>
Residential	49.18	-	35.95	30.42	-	-	21.81	88.15	66.07	22.41	313.99
Comm. and public services	20.18	-	15.81	10.40	-	-	3.56	-	28.69	2.16	80.82
Agriculture/forestry	13.64	-	17.72	0.08	-	-	0.64	-	8.94	0.03	41.04
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	21.09	-	-	-	-	-	0.04	0.00	27.51	2.96	51.60
<b>NON-ENERGY USE</b>	<b>55.59</b>	<b>1.36</b>	<b>90.88</b>	<b>9.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>157.80</b>
in industry/transf./energy	55.59	1.36	66.81	9.98	-	-	-	-	-	-	133.74
of which: chem./petrochem.	-	1.36	55.38	9.98	-	-	-	-	-	-	66.72
in transport	-	-	1.23	-	-	-	-	-	-	-	1.23
in other	-	-	22.83	-	-	-	-	-	-	-	22.83
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>4133.88</b>	<b>-</b>	<b>9.87</b>	<b>158.20</b>	<b>170.79</b>	<b>1114.47</b>	<b>231.15</b>	<b>63.83</b>	<b>-</b>	<b>-</b>	<b>5882.19</b>
Electricity plants	4133.88	-	9.87	158.20	170.79	1114.47	231.15	63.73	-	-	5882.09
CHP plants	-	-	-	-	-	-	-	0.10	-	-	0.10
<b>Heat generated - PJ</b>	<b>3605.29</b>	<b>-</b>	<b>166.98</b>	<b>198.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>45.40</b>	<b>-</b>	<b>-</b>	<b>4016.05</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	3605.29	-	166.98	198.37	-	-	-	45.40	-	-	4016.05

## Non-OECD Europe and Eurasia

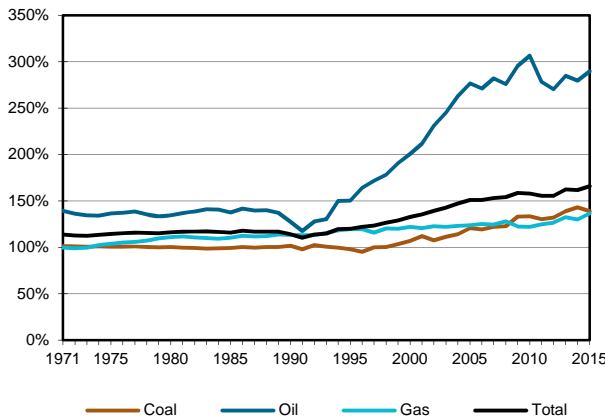
**Figure 1. Energy production**



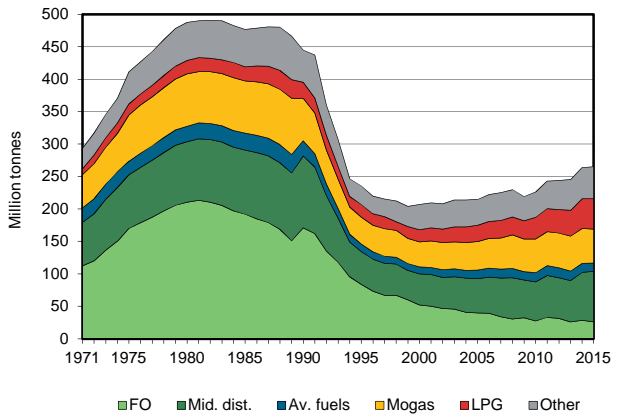
**Figure 2. Total primary energy supply<sup>2</sup>**



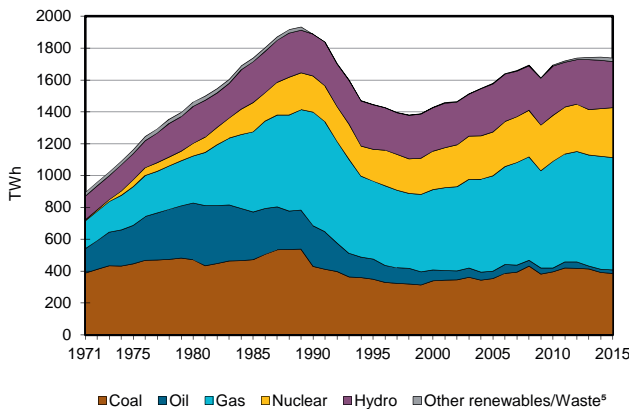
**Figure 3. Energy self-sufficiency<sup>3</sup>**



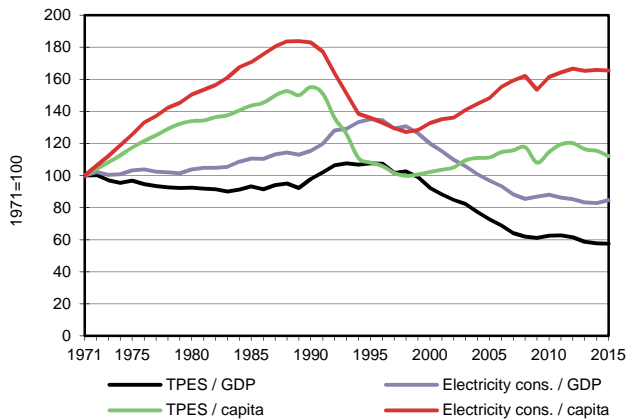
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Non-OECD Europe and Eurasia

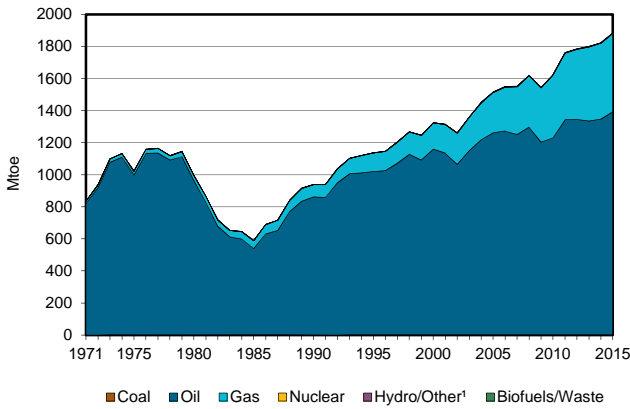
2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	292.38	688.43	-	718.33	82.05	24.88	1.76	24.58	-	0.84	1833.25
Imports	30.61	57.01	40.24	54.68	-	-	-	0.71	6.66	-	189.91
Exports	-114.52	-354.39	-164.25	-242.90	-	-	-	-1.83	-8.17	-	-886.05
Intl. marine bunkers	-	-	-21.42	-	-	-	-	-	-	-	-21.42
Intl. aviation bunkers	-	-	-7.71	-	-	-	-	-	-	-	-7.71
Stock changes	2.23	-1.85	1.55	-4.24	-	-	-	0.02	-	-	-2.29
<b>TPES</b>	<b>210.71</b>	<b>389.20</b>	<b>-151.58</b>	<b>525.86</b>	<b>82.05</b>	<b>24.88</b>	<b>1.76</b>	<b>23.48</b>	<b>-1.51</b>	<b>0.84</b>	<b>1105.69</b>
Transfers	-	-1.71	1.81	-	-	-	-	-	-	-	0.11
Statistical differences	-3.18	-0.03	8.13	1.50	-	-	-	-0.05	-0.56	0.60	6.41
Electricity plants	-33.86	-	-2.33	-19.86	-81.55	-24.88	-1.52	-0.13	71.51	-0.26	-92.87
CHP plants	-81.56	-0.01	-4.58	-192.54	-0.50	-	-	-3.18	77.94	89.77	-114.65
Heat plants	-11.49	-0.59	-5.86	-54.08	-	-	-0.02	-3.35	-0.00	67.07	-8.32
Blast furnaces	-28.26	-	-	-	-	-	-	-	-	-	-28.26
Gas works	-0.03	-0.00	-	-0.00	-	-	-	-	-	-	-0.03
Coke/pat.fuel/BKB/PB plants	-12.30	-	-	-	-	-	-	-0.00	-	-	-12.30
Oil refineries	-	-379.90	377.32	-	-	-	-	-	-	-	-2.58
Petrochemical plants	-	0.52	-0.50	-	-	-	-	-	-	-	0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-0.18	0.39	-	-2.39	-	-	-	-0.39	-	-	-2.57
Energy industry own use	-3.56	-1.00	-19.66	-36.55	-	-	-	-0.27	-27.21	-17.47	-105.72
Losses	-2.28	-6.22	-0.03	-8.89	-	-	-0.00	-0.00	-15.07	-11.26	-43.75
<b>TFC</b>	<b>34.01</b>	<b>0.65</b>	<b>202.71</b>	<b>213.06</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>16.10</b>	<b>105.11</b>	<b>129.30</b>	<b>701.15</b>
<b>INDUSTRY</b>	<b>24.78</b>	<b>0.53</b>	<b>21.88</b>	<b>52.51</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.98</b>	<b>45.39</b>	<b>43.85</b>	<b>190.92</b>
Iron and steel	14.95	-	0.84	15.24	-	-	-	0.40	8.85	8.81	49.09
Chemical and petrochemical	0.67	0.03	8.84	7.83	-	-	-	0.09	5.54	13.97	36.97
Non-ferrous metals	1.19	-	0.36	0.44	-	-	-	0.00	9.79	0.28	12.05
Non-metallic minerals	2.90	0.00	1.35	11.94	-	-	-	0.20	2.63	2.49	21.51
Transport equipment	0.03	-	0.18	0.55	-	-	-	0.01	1.31	2.00	4.07
Machinery	0.09	-	0.34	1.49	-	-	0.00	0.02	2.29	3.34	7.57
Mining and quarrying	0.55	-	1.79	2.18	-	-	-	0.02	3.89	0.98	9.42
Food and tobacco	0.29	0.00	0.96	3.14	-	-	0.00	0.20	2.68	5.13	12.40
Paper pulp and printing	0.01	-	0.17	0.52	-	-	-	0.26	1.83	4.08	6.86
Wood and wood products	0.00	-	0.19	0.29	-	-	0.00	0.65	0.62	0.94	2.69
Construction	0.11	-	3.76	2.51	-	-	-	0.01	1.40	0.73	8.52
Textile and leather	0.01	-	0.06	0.24	-	-	0.00	0.02	0.53	0.45	1.31
Non-specified	3.98	0.50	3.05	6.14	-	-	-	0.11	4.03	0.66	18.47
<b>TRANSPORT</b>	<b>0.05</b>	<b>-</b>	<b>101.47</b>	<b>32.85</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.52</b>	<b>8.51</b>	<b>-</b>	<b>143.39</b>
Domestic aviation	-	-	5.54	-	-	-	-	-	-	-	5.54
Road	-	-	91.06	0.90	-	-	-	0.52	0.04	-	92.51
Rail	0.01	-	2.29	-	-	-	-	0.00	5.18	-	7.49
Pipeline transport	-	-	0.23	31.95	-	-	-	-	1.98	-	34.16
Domestic navigation	-	-	0.81	-	-	-	-	-	-	-	0.81
Non-specified	0.04	-	1.53	0.00	-	-	-	-	1.31	-	2.88
<b>OTHER</b>	<b>8.54</b>	<b>0.07</b>	<b>27.63</b>	<b>87.29</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>13.60</b>	<b>51.21</b>	<b>85.44</b>	<b>273.99</b>
Residential	5.19	-	11.74	70.60	-	-	0.10	11.82	25.79	57.90	183.15
Comm. and public services	2.39	-	3.91	14.39	-	-	0.10	1.40	20.71	21.06	63.96
Agriculture/forestry	0.24	0.01	7.54	1.65	-	-	0.01	0.26	4.20	2.82	16.74
Fishing	0.00	-	0.58	0.00	-	-	-	0.00	0.02	0.01	0.62
Non-specified	0.72	0.06	3.85	0.65	-	-	-	0.12	0.49	3.65	9.53
<b>NON-ENERGY USE</b>	<b>0.65</b>	<b>0.05</b>	<b>51.74</b>	<b>40.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>92.85</b>
in industry/transf./energy	0.65	0.05	51.40	40.41	-	-	-	-	-	-	92.51
of which: chem./petrochem.	0.18	0.00	38.88	39.12	-	-	-	-	-	-	78.18
in transport	-	-	0.18	-	-	-	-	-	-	-	0.18
in other	-	-	0.16	-	-	-	-	-	-	-	0.16
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>386.22</b>	<b>0.01</b>	<b>21.17</b>	<b>705.50</b>	<b>312.91</b>	<b>289.26</b>	<b>16.94</b>	<b>5.02</b>	<b>-</b>	<b>0.76</b>	<b>1737.79</b>
Electricity plants	126.99	-	8.69	75.54	312.91	289.26	16.94	0.45	-	0.02	830.80
CHP plants	259.24	0.01	12.48	629.96	-	-	-	4.57	-	0.73	906.98
<b>Heat generated - PJ</b>	<b>1531.26</b>	<b>18.00</b>	<b>253.82</b>	<b>4238.98</b>	<b>21.05</b>	<b>-</b>	<b>339.65</b>	<b>164.71</b>	<b>0.54</b>	<b>35.14</b>	<b>6603.15</b>
CHP plants	1158.60	0.14	60.12	2464.10	21.05	-	-	55.27	-	24.60	3783.88
Heat plants	372.65	17.86	193.69	1774.88	-	-	339.65	109.44	0.54	10.54	2819.27

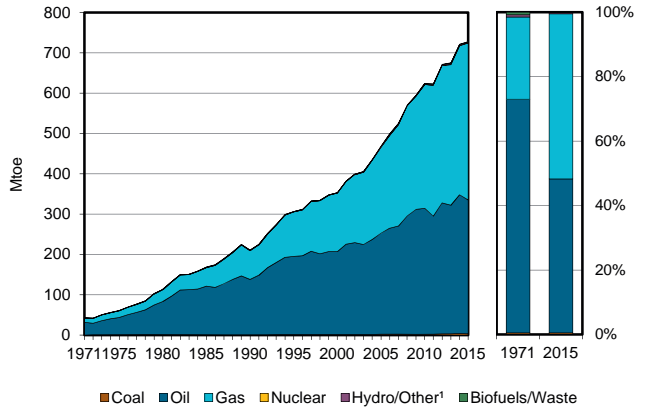
1. Includes peat.

### Middle East

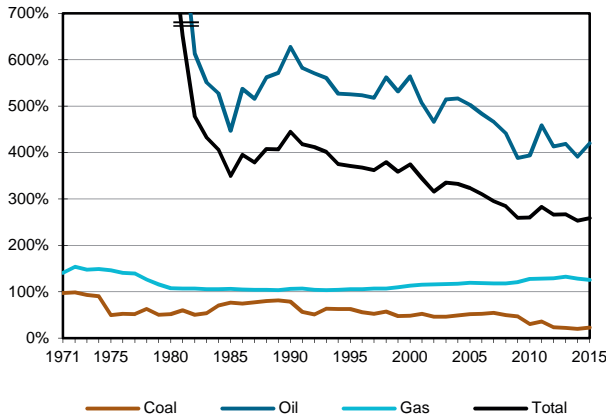
**Figure 1. Energy production**



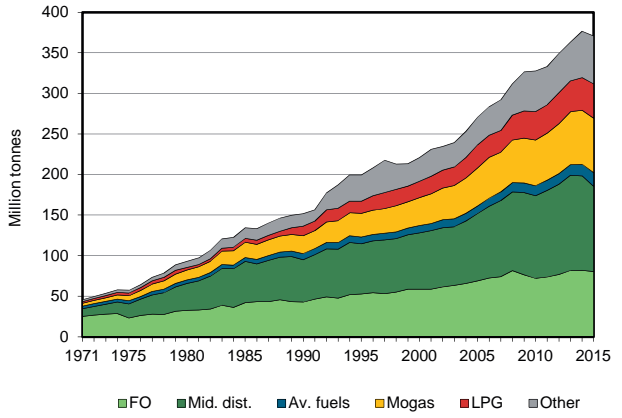
**Figure 2. Total primary energy supply<sup>2</sup>**



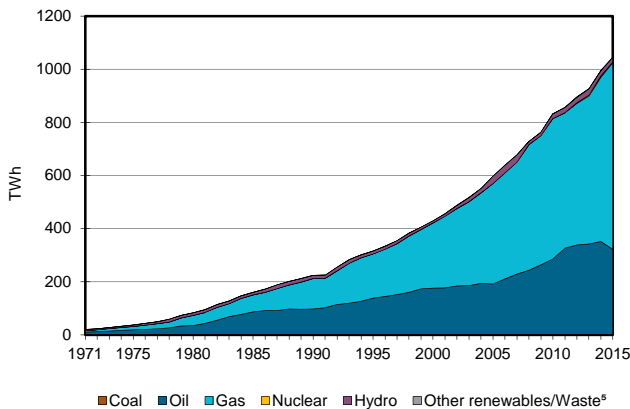
**Figure 3. Energy self-sufficiency<sup>3</sup>**



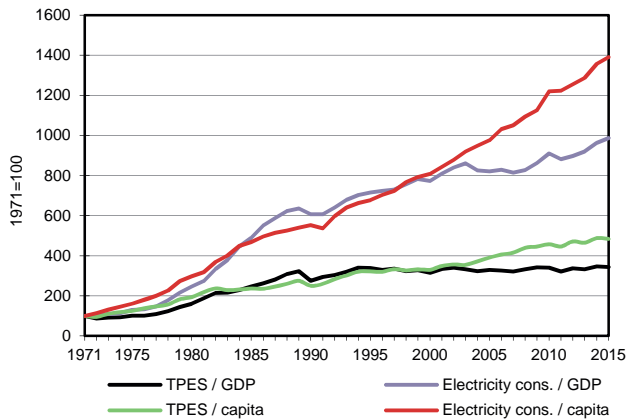
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 700%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Middle East

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.73	1392.34	-	487.58	0.76	1.51	0.28	0.80	-	-	1884.00
Imports	2.62	13.06	81.49	28.96	-	-	-	0.07	1.34	-	127.53
Exports	-0.13	-913.61	-202.65	-126.70	-	-	-	-	-0.63	-	-1243.72
Intl. marine bunkers	-	-	-26.10	-	-	-	-	-	-	-	-26.10
Intl. aviation bunkers	-	-	-16.66	-	-	-	-	-	-	-	-16.66
Stock changes	-	5.65	-1.87	0.00	-	-	-	-	-	-	3.78
<b>TPES</b>	<b>3.21</b>	<b>497.45</b>	<b>-165.79</b>	<b>389.83</b>	<b>0.76</b>	<b>1.51</b>	<b>0.28</b>	<b>0.87</b>	<b>0.71</b>	<b>-</b>	<b>728.84</b>
Transfers	-	-95.84	104.22	-	-	-	-	-	-	-	8.38
Statistical differences	0.41	5.14	-5.66	0.24	-	-	-	-	-1.92	-	-1.79
Electricity plants	-0.16	-33.76	-61.17	-166.57	-0.76	-1.51	-0.10	-0.01	90.00	-	-174.04
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.48	-	-	-	-	-	-	-	-	-	-0.48
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-0.13	-	-	-	-	-	-	-	-	-	-0.13
Oil refineries	-	-369.32	364.53	-	-	-	-	-	-	-	-4.79
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	5.79	-	-14.04	-	-	-	-	-	-	-8.25
Other transformation	-	0.46	-0.57	-	-	-	-	-0.09	-	-	-0.21
Energy industry own use	-0.16	-4.33	-12.97	-37.38	-	-	-	-	-5.31	-	-60.15
Losses	-0.07	-0.16	-	-0.05	-	-	-	-	-11.61	-	-11.89
<b>TFC</b>	<b>2.62</b>	<b>5.43</b>	<b>222.58</b>	<b>172.03</b>	<b>-</b>	<b>-</b>	<b>0.18</b>	<b>0.77</b>	<b>71.87</b>	<b>-</b>	<b>475.48</b>
<b>INDUSTRY</b>	<b>2.40</b>	<b>5.43</b>	<b>28.13</b>	<b>97.67</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>-</b>	<b>14.40</b>	<b>-</b>	<b>148.04</b>
Iron and steel	0.11	-	-	1.55	-	-	-	-	0.45	-	2.11
Chemical and petrochemical	-	-	0.24	16.49	-	-	-	-	0.96	-	17.69
Non-ferrous metals	-	-	-	-	-	-	-	-	0.97	-	0.97
Non-metallic minerals	0.68	-	0.15	0.91	-	-	-	-	0.09	-	1.83
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	0.06	-	-	-	-	0.07	-	0.13
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1.62	5.43	27.74	78.65	-	-	0.00	-	11.86	-	125.30
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>129.07</b>	<b>6.66</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>-</b>	<b>135.78</b>
Domestic aviation	-	-	1.35	-	-	-	-	-	-	-	1.35
Road	-	-	123.29	6.28	-	-	-	-	-	-	129.57
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	0.07	0.39	-	-	-	-	-	-	0.46
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	4.36	-	-	-	-	-	0.05	-	4.40
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>19.30</b>	<b>46.81</b>	<b>-</b>	<b>-</b>	<b>0.18</b>	<b>0.77</b>	<b>57.42</b>	<b>-</b>	<b>124.49</b>
Residential	0.01	-	13.30	39.39	-	-	0.14	0.36	31.09	-	84.29
Comm. and public services	-	-	1.80	5.87	-	-	0.04	0.25	19.10	-	27.05
Agriculture/forestry	-	-	3.09	1.39	-	-	-	-	3.35	-	7.83
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	1.11	0.16	-	-	-	0.16	3.89	-	5.32
<b>NON-ENERGY USE</b>	<b>0.21</b>	<b>-</b>	<b>46.08</b>	<b>20.89</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>67.18</b>
in industry/transf./energy	0.21	-	46.06	20.89	-	-	-	-	-	-	67.16
of which: chem./petrochem.	-	-	38.32	20.65	-	-	-	-	-	-	58.97
in transport	-	-	0.01	-	-	-	-	-	-	-	0.01
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>0.46</b>	<b>112.28</b>	<b>208.84</b>	<b>703.78</b>	<b>2.91</b>	<b>17.61</b>	<b>0.64</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>1046.53</b>
Electricity plants	0.46	112.28	208.84	703.78	2.91	17.61	0.64	0.02	-	-	1046.53
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-





# OECD COUNTRIES

## Australia

Figure 1. Energy production

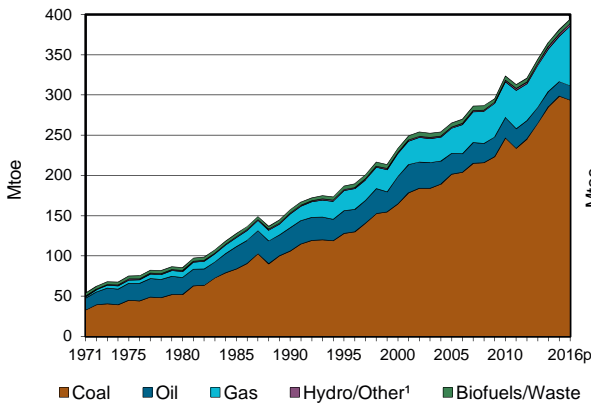


Figure 2. Total primary energy supply<sup>2</sup>

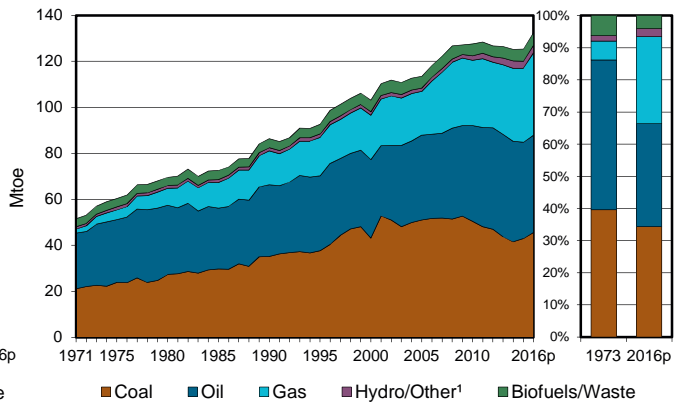


Figure 3. Energy self-sufficiency

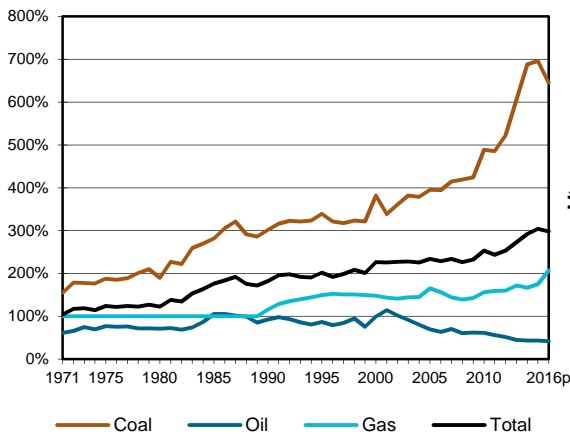


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

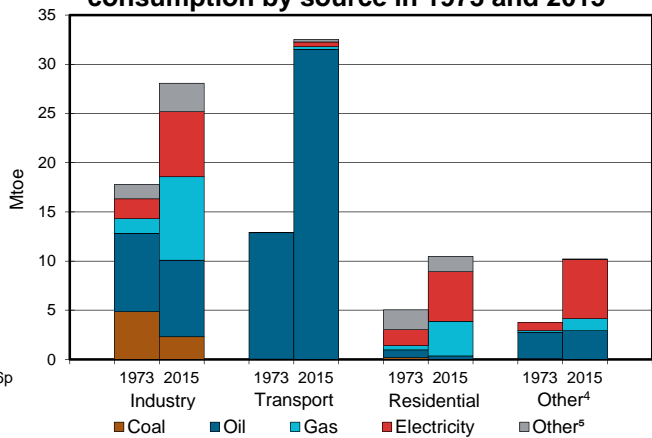


Figure 5. Electricity generation by source

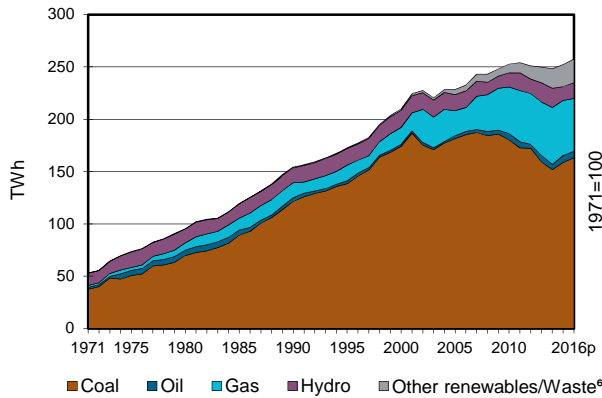
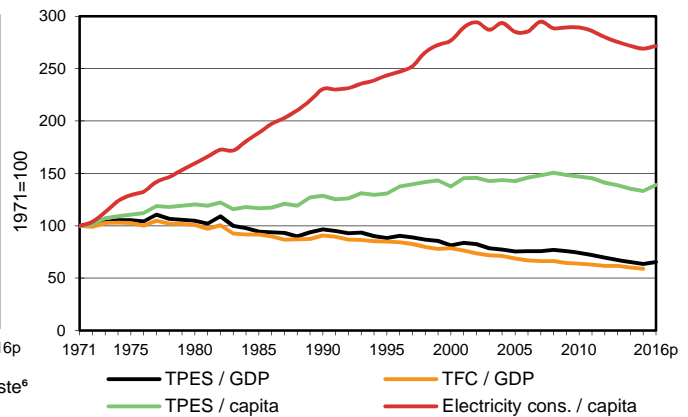


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Australia

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	298.58	18.09	-	56.36	-	1.15	1.86	5.29	-	-	381.33
Imports	0.17	19.84	23.18	5.14	-	-	-	-	-	-	48.32
Exports	-254.00	-12.72	-1.88	-29.28	-	-	-	-	-	-	-297.89
Intl. marine bunkers	-	-	-0.76	-	-	-	-	-	-	-	-0.76
Intl. aviation bunkers	-	-	-3.89	-	-	-	-	-	-	-	-3.89
Stock changes	-1.84	0.26	-0.24	-	-	-	-	-	-	-	-1.81
<b>TPES</b>	<b>42.91</b>	<b>25.47</b>	<b>16.41</b>	<b>32.22</b>	-	<b>1.15</b>	<b>1.86</b>	<b>5.29</b>	-	-	<b>125.30</b>
Transfers	-	0.43	4.07	-	-	-	-	-	-	-	4.50
Statistical differences	-0.05	-0.40	1.22	0.45	-	-	-	-0.04	0.00	-	1.18
Electricity plants	-38.27	-	-1.34	-9.81	-	-1.15	-1.50	-0.36	20.54	-	-31.88
CHP plants	-0.49	-	-0.03	-2.07	-	-	-	-0.54	1.16	-	-1.98
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.60 e	-	-	-	-	-	-	-	-	-	-0.60
Gas works	0.00	-	-	-0.00	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.32	-	-	-	-	-	-	-	-	-	-0.32
Oil refineries	-	-25.51	25.56	-	-	-	-	-	-	-	0.05
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.08	-	-0.07	-	-	-	-	-	-	0.01
Energy industry own use	-0.85	-0.05	-3.34	-7.20	-	-	-	-	-2.29	-	-13.73
Losses	-	-	-	-	-	-	-	-	-1.23	-	-1.23
<b>TFC</b>	<b>2.33</b>	<b>0.02</b>	<b>42.56</b>	<b>13.51</b>	-	-	<b>0.35</b>	<b>4.35</b>	<b>18.17</b>	-	<b>81.30</b>
<b>INDUSTRY</b>	<b>2.32</b>	<b>0.02</b>	<b>4.47</b>	<b>7.71</b>	-	-	-	<b>2.87</b>	<b>6.61</b>	-	<b>24.00</b>
Iron and steel	0.31 e	-	0.02	0.30	-	-	-	-	0.29	-	0.93
Chemical and petrochemical	0.17	-	0.15	1.62	-	-	-	0.10	0.37	-	2.40
Non-ferrous metals	1.11	-	0.93	3.07	-	-	-	0.05	2.94	-	8.09
Non-metallic minerals	0.40	-	0.20	1.17	-	-	-	0.05	0.39	-	2.20
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.03	0.07	-	-	-	-	0.15	-	0.24
Mining and quarrying	0.05	-	2.46	0.14	-	-	-	0.00	1.45	-	4.10
Food and tobacco	0.19	0.00	0.12	0.79	-	-	-	2.20	0.53	-	3.83
Paper, pulp and printing	0.07	-	0.05	0.32	-	-	-	0.17	0.35	-	0.95
Wood and wood products	0.01	-	0.01	0.05	-	-	-	0.31	0.07	-	0.44
Construction	0.00	-	0.50	0.07	-	-	-	-	0.04	-	0.61
Textile and leather	0.01	0.01	0.01	0.11	-	-	-	-	0.05	-	0.19
Non-specified	0.01	-	0.00	0.00	-	-	-	-	0.00	-	0.02
<b>TRANSPORT</b>	<b>0.00</b>	-	<b>31.53</b>	<b>0.27</b>	-	-	-	<b>0.25</b>	<b>0.47</b>	-	<b>32.52</b>
Domestic aviation	-	-	3.03	-	-	-	-	-	-	-	3.03
Road	-	-	26.69	0.09	-	-	-	0.25	-	-	27.02
Rail	0.00	-	1.05	-	-	-	-	-	0.24	-	1.29
Pipeline transport	-	-	0.03	0.17	-	-	-	-	0.02	-	0.21
Domestic navigation	-	-	0.56	-	-	-	-	-	-	-	0.56
Non-specified	-	-	0.17	0.01	-	-	-	-	0.22	-	0.40
<b>OTHER</b>	<b>0.01</b>	-	<b>3.29</b>	<b>4.73</b>	-	-	<b>0.35</b>	<b>1.24</b>	<b>11.09</b>	-	<b>20.71</b>
Residential	0.00	-	0.37	3.49	-	-	0.34	1.19	5.10	-	10.49
Comm. and public services	0.01	-	0.79	1.21	-	-	0.01	0.05	5.77	-	7.84
Agriculture/forestry	-	-	2.13	0.03	-	-	-	-	0.22	-	2.38
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>3.26</b>	<b>0.81</b>	-	-	-	-	-	-	<b>4.07</b>
in industry/transf./energy	-	-	3.26	0.81	-	-	-	-	-	-	4.07
of which: chem./petrochem.	-	-	1.56	0.81	-	-	-	-	-	-	2.37
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>158.61</b>	-	<b>6.80</b>	<b>52.46</b>	-	<b>13.36</b>	<b>17.44</b>	<b>3.61</b>	-	-	<b>252.28</b>
Electricity plants	156.71	-	6.67	43.30	-	13.36	17.44	1.37	-	-	238.85
CHP plants	1.91	-	0.13	9.16	-	-	-	2.24	-	-	13.43
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Australia

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	293.62	17.86	-	73.95	-	1.30	2.00	5.36	-	-	394.09
Imports	0.14	15.93	27.12	5.79	-	-	-	-	-	-	48.99
Exports	-251.97	-11.71	-1.60	-41.32	-	-	-	-	-	-	-306.61
Intl. marine bunkers	-	-	-0.87	-	-	-	-	-	-	-	-0.87
Intl. aviation bunkers	-	-	-4.12	-	-	-	-	-	-	-	-4.12
Stock changes	3.77	0.23	-0.49	-2.66	-	-	-	-	-	-	0.85
<b>TPES</b>	<b>45.57</b>	<b>22.30</b>	<b>20.04</b>	<b>35.75</b>	<b>-</b>	<b>1.30</b>	<b>2.00</b>	<b>5.36</b>	<b>-</b>	<b>-</b>	<b>132.32</b>
Electricity and Heat Output											
Elec. generated - TWh	163.26	-	5.96	50.53	-	15.09	18.94	3.71	-	-	257.49
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	68.0	85.4	157.5	233.6	323.7	365.7	381.3	394.1
Net imports (Mtoe)	-8.4	-16.6	-64.5	-127.1	-185.9	-235.0	-249.6	-257.6
Total primary energy supply (Mtoe)	57.1	69.6	86.4	103.1	127.6	125.3	125.3	132.3
Net oil imports (Mtoe)	9.2	11.3	5.1	3.6	20.5	28.9	28.4	29.7
Oil supply (Mtoe)	26.6	30.1	31.2	34.2	41.6	43.8	41.9	42.3
Electricity consumption (TWh) <sup>1</sup>	56.6	86.9	145.5	195.2	236.3	236.4	238.1	243.5
GDP (billion 2010 USD)	415.4	500.3	673.6	954.7	1293.8	1445.3	1485.3	1521.6
GDP PPP (billion 2010 USD)	301.3	363.0	488.6	692.6	938.6	1048.5	1077.5	1106.6
Population (millions)	13.61	14.81	17.17	19.18	22.22	23.66	24.07	24.37
Industrial production index (2010=100)	..	51.0	67.5	84.6	100.0	109.3	110.5	111.9
Total self-sufficiency <sup>2</sup>	1.19	1.23	1.82	2.27	2.54	2.92	3.04	2.98
Coal self-sufficiency <sup>2</sup>	1.78	1.90	3.02	3.81 <sup>e</sup>	4.89	6.88	6.96	6.44
Oil self-sufficiency <sup>2</sup>	0.75	0.71	0.93	0.99	0.61	0.44	0.43	0.42
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.16	1.48	1.56	1.67	1.75	2.07
TPES/GDP (toe per thousand 2010 USD)	0.14	0.14	0.13	0.11	0.10	0.09	0.08	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.19	0.19	0.18	0.15	0.14	0.12	0.12	0.12
TPES/population (toe per capita)	4.19	4.70	5.03	5.37	5.74	5.29	5.21	5.43
Net oil imports/GDP (toe per thousand 2010 USD)	0.02	0.02	0.01	0.00	0.02	0.02	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.06	0.06	0.05	0.04	0.03	0.03	0.03	0.03
Oil supply/population (toe per capita)	1.95	2.03	1.82	1.78	1.87	1.85	1.74	1.74
Share of renewables in TPES	0.08	0.07	0.06	0.06	0.06	0.07	0.07	0.07
Share of renewables in electricity generation	0.18	0.14	0.10	0.08	0.09	0.15	0.14	0.15
TFC/GDP (toe per thousand 2010 USD)	0.10	0.09	0.08	0.07	0.06	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.13	0.13	0.12	0.10	0.08	0.08	0.08	..
TFC/population (toe per capita)	2.91	3.16	3.30	3.63	3.45	3.42	3.38	..
Elect. cons./GDP (kWh per 2010 USD)	0.14	0.17	0.22	0.20	0.18	0.16	0.16	0.16
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.19	0.24	0.30	0.28	0.25	0.23	0.22	0.22
Elect. cons./population (kWh per capita)	4158	5869	8475	10179	10636	9992	9893	9991
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	147.7	127.0	122.9	100.0	98.4	93.6	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	225.5	137.1	130.8	100.0	115.0	101.7	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Austria

Figure 1. Energy production

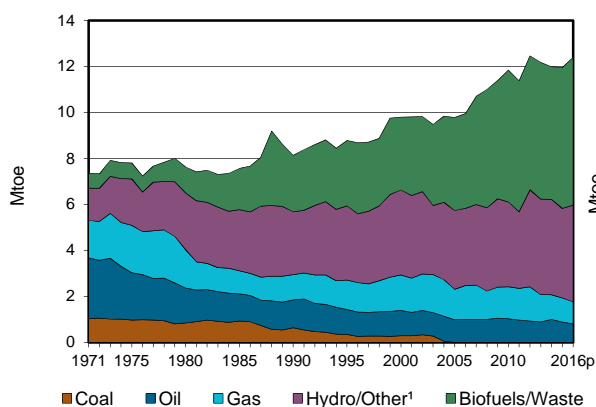


Figure 2. Total primary energy supply<sup>2</sup>

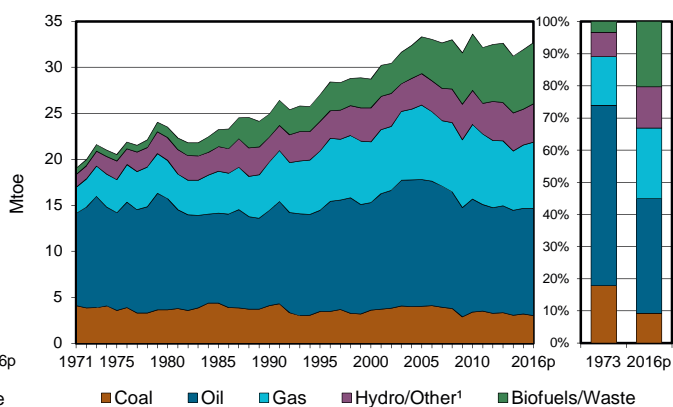


Figure 3. Energy self-sufficiency

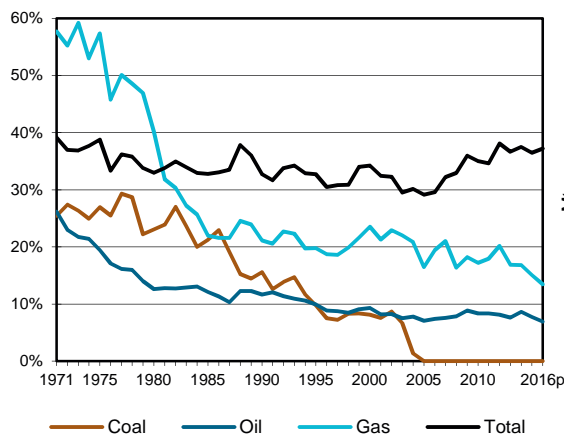


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

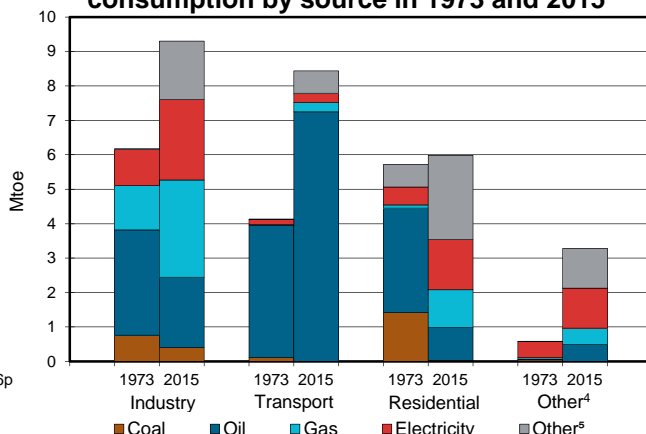


Figure 5. Electricity generation by source

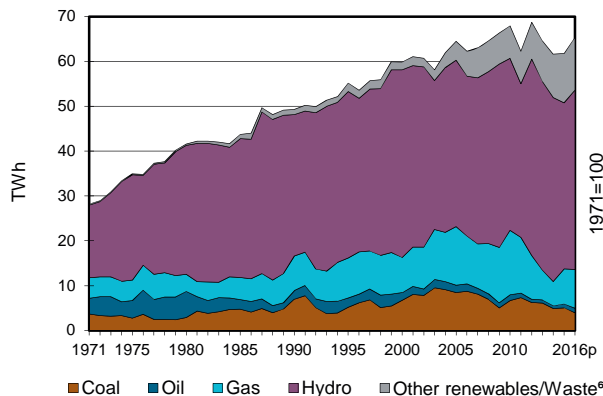
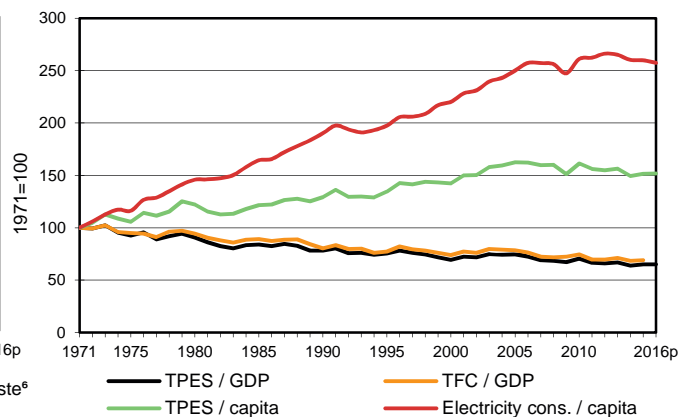


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Austria

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	0.00	0.89	-	1.04	-	3.19	0.72	6.13	-	0.00	11.96
Imports	2.76	8.25	5.82	9.43	-	-	-	0.95	2.53	-	29.73
Exports	-0.05	-	-2.61	-4.44	-	-	-	-0.54	-1.66	-	-9.30
Intl. marine bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Intl. aviation bunkers	-	-	-0.69	-	-	-	-	-	-	-	-0.69
Stock changes	0.47	-0.18	0.04	0.85	-	-	-	-0.06	-	-	1.12
<b>TPES</b>	<b>3.18</b>	<b>8.95</b>	<b>2.54</b>	<b>6.88</b>	-	<b>3.19</b>	<b>0.72</b>	<b>6.47</b>	<b>0.86</b>	<b>0.00</b>	<b>32.79</b>
Transfers	-	0.44	-0.43	-	-	-	-	-	-	-	0.01
Statistical differences	-0.01	-0.00	-	-	-	-	-	-	-	-	-0.01
Electricity plants	-0.90	-	-0.04	-0.42	-	-3.19	-0.50	-0.93	4.54	-0.00	-1.43
CHP plants	-0.19	-	-0.19	-1.13	-	-	-	-0.98	0.77	1.19	-0.52
Heat plants	-	-	-0.03	-0.29	-	-	-0.03	-0.62	-	0.81	-0.16
Blast furnaces	-1.12	-	-0.02	-0.04	-	-	-	-	-	-	-1.18
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.04	-	-	-	-	-	-	-	-	-	-0.04
Oil refineries	-	-9.40	9.33	-	-	-	-	-	-	-	-0.07
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-	-0.00
Energy industry own use	-0.46	-	-0.42	-0.33	-	-	-	-0.04	-0.66	-	-1.91
Losses	-0.02	-	-	-0.00	-	-	-	-	-0.29	-0.17	-0.49
<b>TFC</b>	<b>0.43</b>	-	<b>10.75</b>	<b>4.67</b>	-	-	<b>0.19</b>	<b>3.90</b>	<b>5.23</b>	<b>1.83</b>	<b>27.00</b>
<b>INDUSTRY</b>	<b>0.39</b>	-	<b>0.57</b>	<b>2.50</b>	-	-	-	<b>1.39</b>	<b>2.34</b>	<b>0.30</b>	<b>7.49</b>
Iron and steel	0.23	-	0.00	0.42	-	-	-	0.00	0.22	0.01	0.88
Chemical and petrochemical	0.02	-	0.02	0.42	-	-	-	0.10	0.38	0.06	1.00
Non-ferrous metals	0.00	-	0.00	0.11	-	-	-	0.00	0.08	0.01	0.21
Non-metallic minerals	0.07	-	0.07	0.30	-	-	-	0.28	0.16	0.00	0.88
Transport equipment	-	-	0.00	0.04	-	-	-	0.00	0.07	0.02	0.13
Machinery	-	-	0.03	0.19	-	-	-	0.02	0.32	0.04	0.60
Mining and quarrying	-	-	0.01	0.05	-	-	-	0.00	0.10	0.00	0.15
Food and tobacco	0.00	-	0.05	0.30	-	-	-	0.02	0.21	0.07	0.65
Paper, pulp and printing	0.07	-	0.01	0.51	-	-	-	0.61	0.42	0.02	1.62
Wood and wood products	-	-	0.01	0.05	-	-	-	0.29	0.15	0.06	0.57
Construction	-	-	0.34	0.04	-	-	-	0.04	0.05	0.01	0.48
Textile and leather	-	-	0.00	0.04	-	-	-	0.00	0.04	0.00	0.08
Non-specified	-	-	0.01	0.05	-	-	-	0.03	0.15	0.01	0.24
<b>TRANSPORT</b>	-	-	<b>7.23</b>	<b>0.27</b>	-	-	-	<b>0.65</b>	<b>0.27</b>	-	<b>8.41</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	7.16	0.02	-	-	-	0.64	0.00	-	7.82
Rail	-	-	0.04	-	-	-	-	0.00	0.17	-	0.22
Pipeline transport	-	-	-	0.25	-	-	-	-	0.02	-	0.27
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	0.00	0.07	-	0.07
<b>OTHER</b>	<b>0.03</b>	-	<b>1.45</b>	<b>1.58</b>	-	-	<b>0.19</b>	<b>1.86</b>	<b>2.62</b>	<b>1.53</b>	<b>9.26</b>
Residential	0.03	-	0.96	1.10	-	-	0.14	1.58	1.46	0.72	5.98
Comm. and public services	0.00	-	0.26	0.47	-	-	0.05	0.08	1.07	0.80	2.73
Agriculture/forestry	0.00	-	0.22	0.01	-	-	0.00	0.21	0.10	0.01	0.55
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.02</b>	-	<b>1.50</b>	<b>0.32</b>	-	-	-	-	-	-	<b>1.83</b>
in industry/transf./energy	0.02	-	1.47	0.32	-	-	-	-	-	-	1.81
of which: chem./petrochem.	0.01	-	1.05	0.32	-	-	-	-	-	-	1.39
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>5.08</b>	-	<b>0.86</b>	<b>7.78</b>	-	<b>37.06</b>	<b>5.78</b>	<b>5.19</b>	-	<b>0.02</b>	<b>61.76</b>
Electricity plants	4.47	-	0.23	2.73	-	37.06	5.78	2.48	-	0.02	52.76
CHP plants	0.61	-	0.63	5.06	-	-	-	2.71	-	-	9.00
<b>Heat generated - PJ</b>	<b>3.92</b>	-	<b>4.75</b>	<b>31.24</b>	-	-	<b>0.65</b>	<b>43.23</b>	-	<b>0.11</b>	<b>83.90</b>
CHP plants	3.92	-	3.65	20.44	-	-	-	21.80	-	-	49.82
Heat plants	-	-	1.10	10.80	-	-	0.65	21.43	-	0.11	34.08

1. Includes peat.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Austria

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.00	0.81	-	0.96	-	3.43	0.76	6.43	-	0.00	12.40
Imports	2.86	7.59	6.38	11.85	-	-	-	0.86	2.27	-	31.82
Exports	-0.03	-	-2.52	-5.70	-	-	-	-0.59	-1.65	-	-10.49
Intl. marine bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Intl. aviation bunkers	-	-	-0.75	-	-	-	-	-	-	-	-0.75
Stock changes	0.18	0.22	-0.03	0.05	-	-	-	-0.06	-	-	0.35
<b>TPES</b>	<b>3.01</b>	<b>8.62</b>	<b>3.06</b>	<b>7.17</b>	<b>-</b>	<b>3.43</b>	<b>0.76</b>	<b>6.64</b>	<b>0.62</b>	<b>0.00</b>	<b>33.30</b>
Electricity and Heat Output											
Elec. generated - TWh	3.99	-	0.97	8.68	-	39.93	6.28	5.44	-	0.02	65.29
Heat generated - PJ	3.62	-	6.44	30.04	-	-	0.57	45.79	-	0.11	86.57

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	7.9	7.6	8.1	9.8	11.8	12.0	12.0	12.4
Net imports (Mtoe)	13.9	16.1	17.4	19.1	21.8	21.6	20.4	21.3
Total primary energy supply (Mtoe)	21.5	23.2	24.9	28.6	33.8	32.0	32.8	33.3
Net oil imports (Mtoe)	9.7	11.0	9.7	11.0	11.7	11.1	11.5	11.5
Oil supply (Mtoe)	12.1	12.1	10.4	11.7	12.3	11.4	11.5	11.7
Electricity consumption (TWh) <sup>1</sup>	27.5	35.4	46.9	56.7	70.1	71.4	72.0	72.3
GDP (billion 2010 USD)	170.6	207.7	259.4	336.0	390.2	407.3	411.2	417.3
GDP PPP (billion 2010 USD)	153.3	186.6	233.0	301.8	350.5	365.8	369.3	374.8
Population (millions)	7.59	7.55	7.68	8.01	8.36	8.54	8.63	8.74
Industrial production index (2010=100)	33.2	40.7	53.3	77.4	100.0	108.1	110.4	112.5
Total self-sufficiency <sup>2</sup>	0.37	0.33	0.33	0.34	0.35	0.37	0.36	0.37
Coal self-sufficiency <sup>2</sup>	0.26	0.23	0.16	0.08	0.00	0.00	0.00	0.00
Oil self-sufficiency <sup>2</sup>	0.22	0.13	0.12	0.09	0.08	0.09	0.08	0.07
Natural gas self-sufficiency <sup>2</sup>	0.59	0.40	0.21	0.24	0.17	0.17	0.15	0.13
TPES/GDP (toe per thousand 2010 USD)	0.13	0.11	0.10	0.09	0.09	0.08	0.08	0.08
TPES/GDP PPP (toe per thousand 2010 USD)	0.14	0.12	0.11	0.09	0.10	0.09	0.09	0.09
TPES/population (toe per capita)	2.83	3.07	3.24	3.57	4.05	3.75	3.80	3.81
Net oil imports/GDP (toe per thousand 2010 USD)	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.07	0.06	0.04	0.03	0.03	0.03	0.03	0.03
Oil supply/population (toe per capita)	1.60	1.60	1.35	1.46	1.47	1.34	1.33	1.34
Share of renewables in TPES	0.11	0.16	0.20	0.23	0.27	0.30	0.29	0.30
Share of renewables in electricity generation	0.61	0.70	0.66	0.73	0.66	0.81	0.77	0.78
TFC/GDP (toe per thousand 2010 USD)	0.10	0.09	0.08	0.07	0.07	0.07	0.07	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.11	0.10	0.09	0.08	0.08	0.07	0.07	..
TFC/population (toe per capita)	2.19	2.47	2.58	2.94	3.31	3.10	3.13	..
Elect. cons./GDP (kWh per 2010 USD)	0.16	0.17	0.18	0.17	0.18	0.18	0.18	0.17
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.18	0.19	0.20	0.19	0.20	0.20	0.20	0.19
Elect. cons./population (kWh per capita)	3621	4685	6111	7076	8385	8361	8347	8269
Industry cons. <sup>3</sup> /industrial production (2010=100)	199.4	166.7	135.6	106.1	100.0	92.0	90.2	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	461.1	232.7	169.4	119.7	100.0	97.2	92.5	..

1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.



## Belgium

Figure 1. Energy production

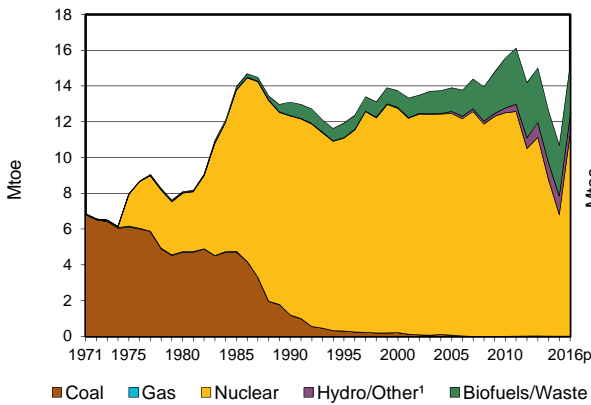


Figure 2. Total primary energy supply<sup>2</sup>

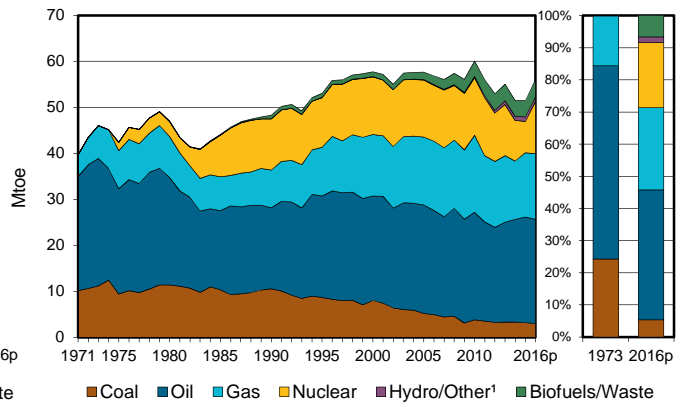


Figure 3. Energy self-sufficiency

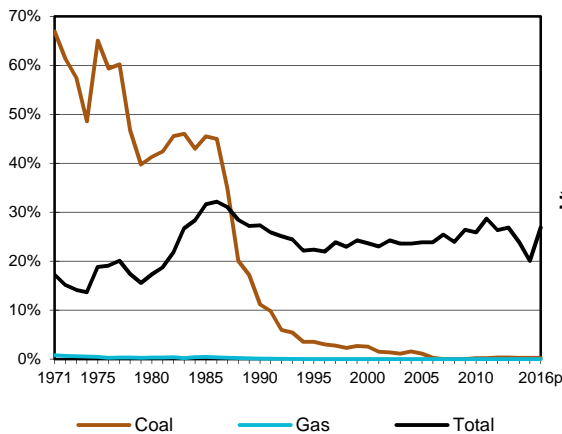


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

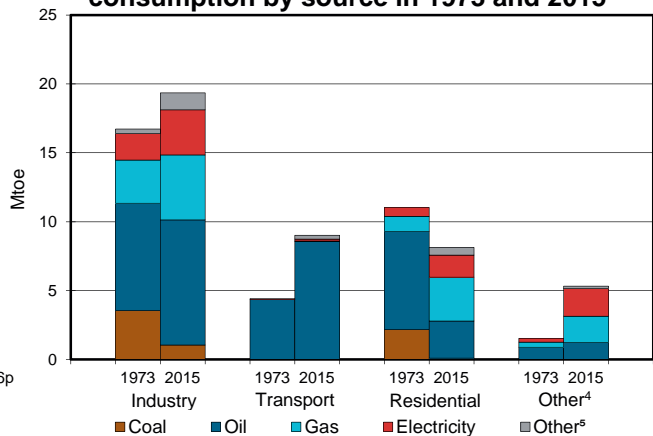


Figure 5. Electricity generation by source

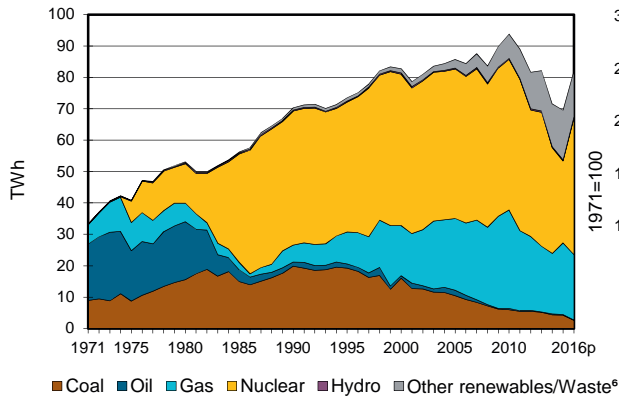
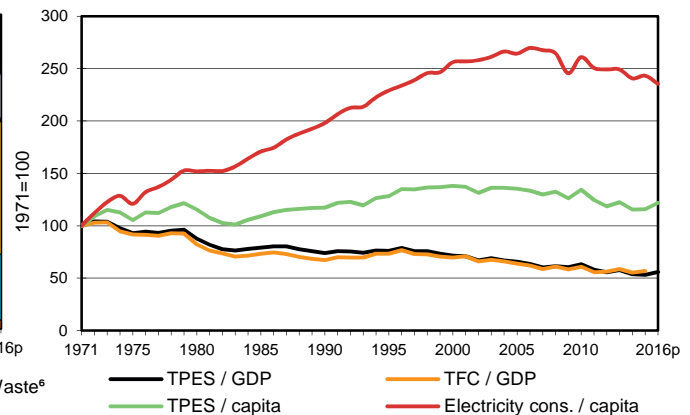


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Belgium

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.01	-	-	-	6.80	0.03	0.77	2.84	-	0.24	10.68
Imports	3.16	35.68	24.69	15.31	-	-	-	0.80	2.04	-	81.69
Exports	-0.06	-3.65	-25.37	-1.44	-	-	-	-0.12	-0.23	-	-30.88
Intl. marine bunkers	-	-	-5.82	-	-	-	-	-	-	-	-5.82
Intl. aviation bunkers	-	-	-1.45	-	-	-	-	-	-	-	-1.45
Stock changes	0.09	0.04	-1.18	0.09	-	-	-	-	-	-	-0.96
<b>TPES</b>	<b>3.20</b>	<b>32.07</b>	<b>-9.13</b>	<b>13.96</b>	<b>6.80</b>	<b>0.03</b>	<b>0.77</b>	<b>3.51</b>	<b>1.81</b>	<b>0.24</b>	<b>53.27</b>
Transfers	-	2.38	-2.21	-	-	-	-	-	-	-	0.17
Statistical differences	0.01	-0.01	-0.02	-0.07	-	-	-0.00	0.00	-0.07	0.00	-0.17
Electricity plants	-0.89	-	-0.00	-1.81	-6.80	-0.03	-0.74	-0.93	4.73	-0.24	-6.72
CHP plants	-0.01	-	-0.03	-1.84	-	-	-	-0.86	1.26	0.66	-0.83
Heat plants	-	-	-	-0.00	-	-	-0.00	-	-	0.00	-0.00
Blast furnaces	-0.89 e	-	-	-	-	-	-	-	-	-	-0.89
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Oil refineries	-	-35.65	35.47	-	-	-	-	-	-	-	-0.19
Petrochemical plants	-	1.22	-1.27	-	-	-	-	-	-	-	-0.05
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.25	-	-1.22	-0.36	-	-	-	-0.03	-0.36	-0.14	-2.37
Losses	-0.01	-	-	-0.02	-	-	-0.00	-	-0.33	-0.01	-0.36
<b>TFC</b>	<b>1.13</b>	<b>-</b>	<b>21.58</b>	<b>9.86</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>1.70</b>	<b>7.03</b>	<b>0.51</b>	<b>41.83</b>
<b>INDUSTRY</b>	<b>0.82</b>	<b>-</b>	<b>1.81</b>	<b>3.74</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.81</b>	<b>3.26</b>	<b>0.44</b>	<b>10.88</b>
Iron and steel	0.40 e	-	0.01	0.44	-	-	-	-	0.34	-	1.20
Chemical and petrochemical	-	-	1.47	1.18	-	-	-	0.02	1.13	0.36	4.15
Non-ferrous metals	-	-	0.00	0.12	-	-	-	-	0.17	-	0.29
Non-metallic minerals	0.35	-	0.05	0.49	-	-	-	0.24	0.24	-	1.38
Transport equipment	-	-	0.01	0.07	-	-	-	-	0.19	-	0.27
Machinery	-	-	0.02	0.12	-	-	-	0.00	0.05	-	0.19
Mining and quarrying	-	-	-	0.01	-	-	-	-	0.04	-	0.05
Food and tobacco	0.02	-	0.01	0.81	-	-	-	0.07	0.49	0.05	1.45
Paper, pulp and printing	0.02	-	0.01	0.14	-	-	-	0.30	0.22	0.03	0.71
Wood and wood products	-	-	-	0.03	-	-	-	0.17	0.03	-	0.23
Construction	-	-	0.07	0.07	-	-	-	-	0.08	-	0.22
Textile and leather	-	-	0.00	0.09	-	-	-	0.00	0.10	0.00	0.19
Non-specified	0.02	-	0.15	0.17	-	-	-	0.02	0.19	-	0.56
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>8.54</b>	<b>0.05</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.26</b>	<b>0.14</b>	<b>-</b>	<b>8.99</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	8.31	0.00	-	-	-	0.26	0.00	-	8.57
Rail	-	-	0.05	-	-	-	-	-	0.14	-	0.18
Pipeline transport	-	-	-	0.04	-	-	-	-	0.00	-	0.05
Domestic navigation	-	-	0.19	-	-	-	-	-	-	-	0.19
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.09</b>	<b>-</b>	<b>3.92</b>	<b>5.09</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>0.62</b>	<b>3.63</b>	<b>0.07</b>	<b>13.44</b>
Residential	0.08	-	2.70	3.19	-	-	0.02	0.52	1.62	0.00	8.14
Comm. and public services	-	-	0.88	1.69	-	-	0.00	0.05	1.87	0.07	4.56
Agriculture/forestry	0.01	-	0.31	0.22	-	-	-	0.05	0.14	0.00	0.72
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>NON-ENERGY USE</b>	<b>0.21</b>	<b>-</b>	<b>7.31</b>	<b>0.99</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.52</b>
in industry/transf./energy	0.21	-	7.29	0.99	-	-	-	-	-	-	8.49
of which: chem./petrochem.	0.21	-	6.41	0.99	-	-	-	-	-	-	7.61
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>4.25</b>	<b>-</b>	<b>0.21</b>	<b>22.82</b>	<b>26.10</b>	<b>0.32</b>	<b>8.65</b>	<b>6.76</b>	<b>-</b>	<b>0.44</b>	<b>69.55</b>
Electricity plants	4.16	-	0.01	11.92	26.10	0.32	8.65	3.35	-	0.15	54.66
CHP plants	0.09	-	0.20	10.89	-	-	-	3.41	-	0.29	14.89
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.50</b>	<b>23.56</b>	<b>-</b>	<b>-</b>	<b>0.06</b>	<b>3.62</b>	<b>-</b>	<b>10.10</b>	<b>37.84</b>
CHP plants	-	-	0.50	23.51	-	-	-	3.62	-	10.10	37.73
Heat plants	-	-	-	0.05	-	-	0.06	-	-	-	0.11

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Belgium

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.01	-	-	-	11.34	0.03	0.73	2.83	-	0.24	15.17
Imports	2.87	33.87	25.66	14.93	-	-	-	0.99	1.26	-	79.58
Exports	-0.05	-2.68	-26.54	-0.58	-	-	-	-0.12	-0.73	-	-30.70
Intl. marine bunkers	-	-	-6.66	-	-	-	-	-	-	-	-6.66
Intl. aviation bunkers	-	-	-1.41	-	-	-	-	-	-	-	-1.41
Stock changes	0.15	0.06	0.35	-0.08	-	-	-	-	-	-	0.48
<b>TPES</b>	<b>2.97</b>	<b>31.25</b>	<b>-8.60</b>	<b>14.27</b>	<b>11.34</b>	<b>0.03</b>	<b>0.73</b>	<b>3.70</b>	<b>0.53</b>	<b>0.24</b>	<b>56.47</b>
Electricity and Heat Output											
Elec. generated - TWh	2.62	-	0.11	20.84	43.52	0.33	8.13	6.26	-	0.21	82.01
Heat generated - PJ	-	-	0.50	23.56	-	-	0.06	3.62	-	10.10	37.84

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	6.5	8.1	13.1	13.7	15.6	12.7	10.7	15.2
Net imports (Mtoe)	43.1	42.3	39.8	50.6	53.9	47.6	50.8	48.9
Total primary energy supply (Mtoe)	46.0	46.8	47.9	58.1	60.1	53.0	53.3	56.5
Net oil imports (Mtoe)	31.5	26.4	22.3	29.6	32.8	29.4	31.4	30.3
Oil supply (Mtoe)	27.7	23.3	17.6	22.7	23.4	22.3	23.0	22.7
Electricity consumption (TWh) <sup>1</sup>	38.4	48.3	63.6	84.6	91.5	86.5	87.8	85.5
GDP (billion 2010 USD)	225.4	270.9	330.5	412.5	483.6	500.7	508.1	514.2
GDP PPP (billion 2010 USD)	203.8	245.0	298.9	373.0	437.2	452.8	459.6	465.3
Population (millions)	9.73	9.86	9.97	10.25	10.88	11.16	11.21	11.27
Industrial production index (2010=100)	48.5	52.2	63.1	70.9	100.0	103.8	103.7	108.0
Total self-sufficiency <sup>2</sup>	0.14	0.17	0.27	0.24	0.26	0.24	0.20	0.27
Coal self-sufficiency <sup>2</sup>	0.57	0.41	0.11	0.03	0.00	0.00	0.00	0.00
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	0.01	0.00	0.00	0.00	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.20	0.17	0.15	0.14	0.12	0.11	0.10	0.11
TPES/GDP PPP (toe per thousand 2010 USD)	0.23	0.19	0.16	0.16	0.14	0.12	0.12	0.12
TPES/population (toe per capita)	4.73	4.74	4.81	5.67	5.52	4.75	4.75	5.01
Net oil imports/GDP (toe per thousand 2010 USD)	0.14	0.10	0.07	0.07	0.07	0.06	0.06	0.06
Oil supply/GDP (toe per thousand 2010 USD)	0.12	0.09	0.05	0.06	0.05	0.04	0.05	0.04
Oil supply/population (toe per capita)	2.85	2.37	1.77	2.22	2.15	2.00	2.05	2.01
Share of renewables in TPES	0.00	0.00	0.01	0.01	0.05	0.06	0.07	0.07
Share of renewables in electricity generation	0.01	0.01	0.01	0.01	0.07	0.17	0.21	0.17
TFC/GDP (toe per thousand 2010 USD)	0.15	0.12	0.10	0.10	0.09	0.08	0.08	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.17	0.13	0.11	0.11	0.10	0.09	0.09	..
TFC/population (toe per capita)	3.47	3.28	3.22	4.07	3.91	3.60	3.73	..
Elect. cons./GDP (kWh per 2010 USD)	0.17	0.18	0.19	0.21	0.19	0.17	0.17	0.17
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.19	0.20	0.21	0.23	0.21	0.19	0.19	0.18
Elect. cons./population (kWh per capita)	3948	4894	6380	8252	8404	7752	7834	7586
Industry cons. <sup>3</sup> /industrial production (2010=100)	188.3	143.2	116.7	151.6	100.0	101.2	101.9	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	201.8	107.1	83.2	134.2	100.0	110.0	110.2	..

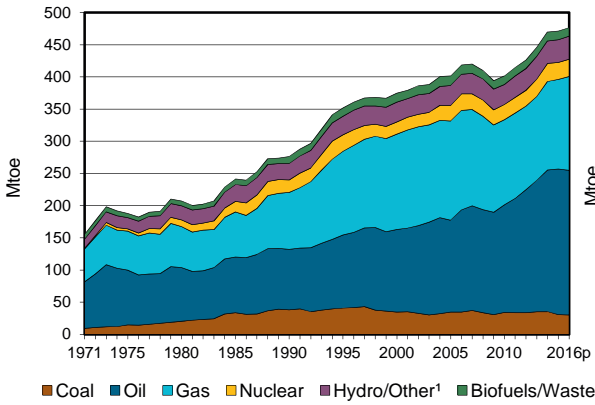
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

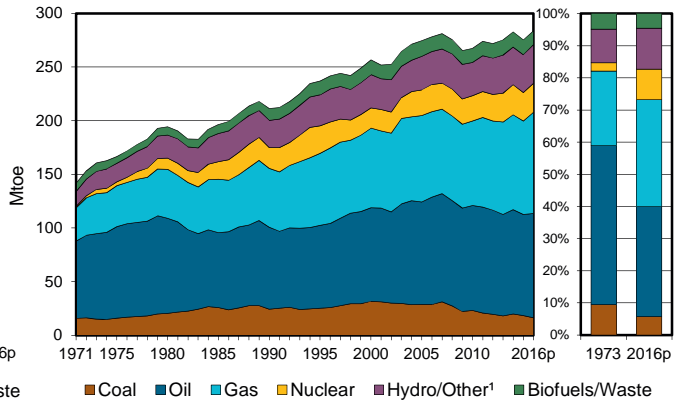
3. Includes non-energy use.

## Canada

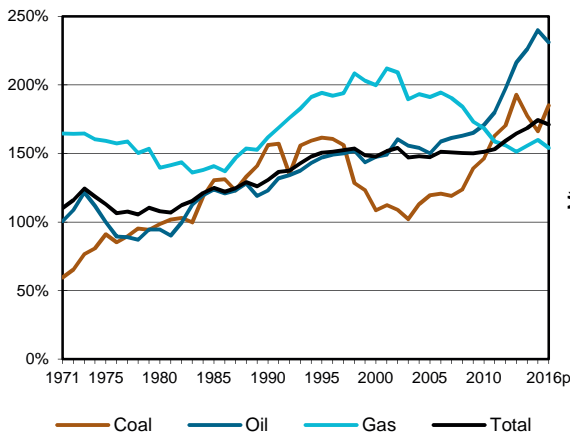
**Figure 1. Energy production**



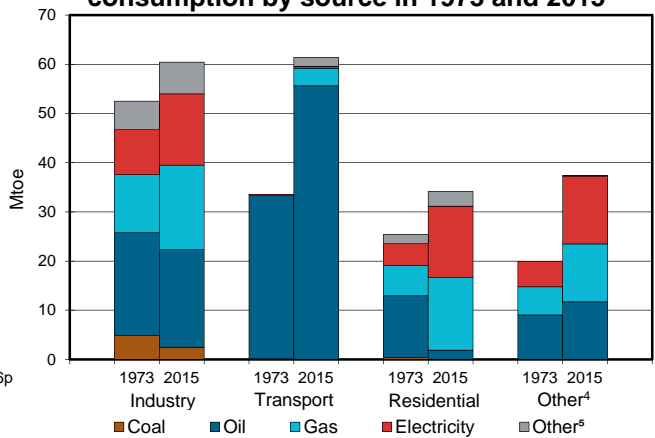
**Figure 2. Total primary energy supply<sup>2</sup>**



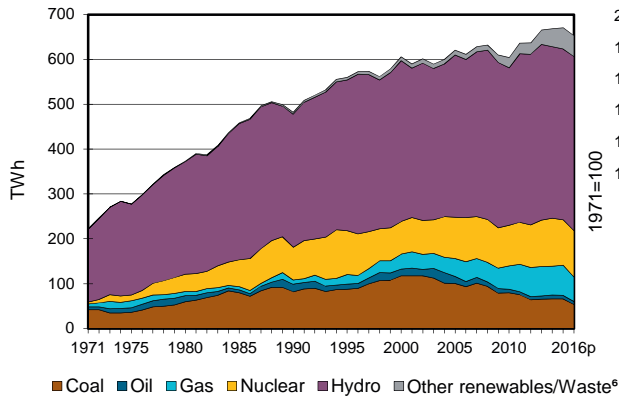
**Figure 3. Energy self-sufficiency**



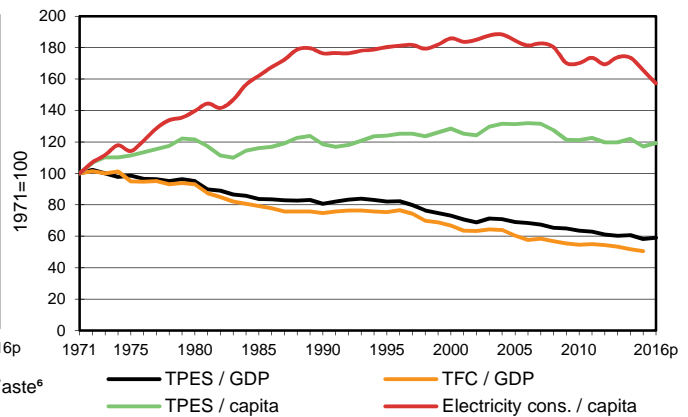
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Canada

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	30.61	226.23	-	139.11	26.43	32.73	2.57	13.65	-	-	471.33
Imports	5.11	50.45	11.67	16.30	-	-	-	0.97	0.75	-	85.25
Exports	-18.21	-170.86	-22.69	-65.99	-	-	-	-0.81	-5.87	-	-284.42
Intl. marine bunkers	-	-	-0.18	-	-	-	-	-	-	-	-0.18
Intl. aviation bunkers	-	-	-0.86	-	-	-	-	-	-	-	-0.86
Stock changes	0.91	-0.25	0.81	-2.39	-	-	-	-	-	-	-0.93
<b>TPES</b>	<b>18.42</b>	<b>105.57</b>	<b>-11.24</b>	<b>87.03</b>	<b>26.43</b>	<b>32.73</b>	<b>2.57</b>	<b>13.81</b>	<b>-5.12</b>	-	<b>270.19</b>
Transfers	-	-10.37	14.79	-	-	-	-	-	-	-	4.43
Statistical differences	0.24	-4.23	12.53	9.37	-	-	-	-	0.67	-	18.58
Electricity plants	-15.31	-	-1.90	-11.37	-26.43	-32.73	-2.52	-2.90	56.33	-	-36.84
CHP plants	-	-	-0.02	-3.21	-	-	-	-0.07	1.35	0.53	-1.41
Heat plants	-0.00	-	-	-	-	-	-	-0.19	-	0.10	-0.09
Blast furnaces	-0.74 e	-	-	-	-	-	-	-	-	-	-0.74
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Oil refineries	-	-93.41	90.64	-	-	-	-	-	-	-	-2.77
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	2.43	-	-3.20	-	-	-	-	-	-	-0.77
Energy industry own use	-0.00	-	-15.76	-31.32	-	-	-	-0.00	-4.23	-	-51.32
Losses	-	-	-	-	-	-	-	-	-5.75	-	-5.75
<b>TFC</b>	<b>2.51</b>	-	<b>89.04</b>	<b>47.28</b>	-	-	<b>0.04</b>	<b>10.64</b>	<b>43.26</b>	<b>0.64</b>	<b>193.42</b>
<b>INDUSTRY</b>	<b>2.45</b>	-	<b>4.90</b>	<b>14.22</b>	-	-	-	<b>5.85</b>	<b>14.49</b>	<b>0.60</b>	<b>42.51</b>
Iron and steel	1.49 e	-	-	1.64	-	-	-	0.00	0.73	0.00	3.87
Chemical and petrochemical	-	-	-	4.45	-	-	-	-	1.74	0.28	6.48
Non-ferrous metals	0.19	-	-	0.68	-	-	-	-	4.40	-	5.26
Non-metallic minerals	0.47	-	0.35	0.76	-	-	-	0.14	0.59	-	2.31
Transport equipment	-	-	-	0.33	-	-	-	-	0.31	-	0.63
Machinery	-	-	-	0.68	-	-	-	-	0.18	-	0.87
Mining and quarrying	0.04	-	1.08	0.62	-	-	-	-	0.65	-	2.39
Food and tobacco	-	-	-	1.50	-	-	-	-	0.50	0.00	2.00
Paper, pulp and printing	-	-	0.16	1.62	-	-	-	5.71	3.21	0.07	10.78
Wood and wood products	-	-	0.45	0.66	-	-	-	-	0.33	-	1.43
Construction	-	-	1.47	0.38	-	-	-	-	-	0.00	1.85
Textile and leather	-	-	-	0.09	-	-	-	-	0.07	-	0.16
Non-specified	0.25	-	1.39	0.82	-	-	-	-	1.77	0.25	4.49
<b>TRANSPORT</b>	-	-	<b>55.59</b>	<b>3.58</b>	-	-	-	<b>1.78</b>	<b>0.44</b>	-	<b>61.38</b>
Domestic aviation	-	-	4.82	-	-	-	-	-	-	-	4.82
Road	-	-	47.22	0.04	-	-	-	1.78	0.09	-	49.13
Rail	-	-	2.16	-	-	-	-	-	-	-	2.16
Pipeline transport	-	-	0.01	3.49	-	-	-	-	0.35	-	3.85
Domestic navigation	-	-	1.27	-	-	-	-	-	-	-	1.27
Non-specified	-	-	0.11	0.05	-	-	-	-	-	-	0.16
<b>OTHER</b>	<b>0.01</b>	-	<b>10.20</b>	<b>26.58</b>	-	-	<b>0.04</b>	<b>3.02</b>	<b>28.33</b>	<b>0.03</b>	<b>68.21</b>
Residential	0.01	-	1.88	14.76	-	-	-	3.00	14.54	-	34.19
Comm. and public services	-	-	3.62	10.98	-	-	-	0.02	10.16	0.01	24.78
Agriculture/forestry	-	-	4.70	0.84	-	-	-	0.00	0.84	-	6.37
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	0.04	-	2.80	0.02	2.86
<b>NON-ENERGY USE</b>	<b>0.05</b>	-	<b>18.35</b>	<b>2.91</b>	-	-	-	-	-	-	<b>21.31</b>
in industry/transf./energy	0.05	-	14.96	2.91	-	-	-	-	-	-	17.93
of which: chem./petrochem.	-	-	11.11	2.91	-	-	-	-	-	-	14.02
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	3.37	-	-	-	-	-	-	-	3.37
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>65.98</b>	-	<b>8.15</b>	<b>67.18</b>	<b>101.42</b>	<b>380.61</b>	<b>34.63</b>	<b>12.78</b>	-	-	<b>670.74</b>
Electricity plants	65.98	-	8.14	51.73	101.42	380.61	34.63	12.52	-	-	655.03
CHP plants	-	-	0.01	15.45	-	-	-	0.25	-	-	15.71
<b>Heat generated - PJ</b>	<b>0.01</b>	-	<b>0.39</b>	<b>21.05</b>	-	-	-	<b>5.16</b>	-	-	<b>26.61</b>
CHP plants	-	-	0.39	21.05	-	-	-	0.86	-	-	22.30
Heat plants	0.01	-	-	-	-	-	-	4.30	-	-	4.31

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Canada

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	30.09	224.59	-	145.70	26.92	33.38	2.69	13.03	-	-	476.40
Imports	4.56	49.40	11.64	17.09	-	-	-	0.93	0.81	-	84.43
Exports	-18.09	-167.05	-21.16	-68.77	-	-	-	-1.12	-6.35	-	-282.54
Intl. marine bunkers	-	-	-0.15	-	-	-	-	-	-	-	-0.15
Intl. aviation bunkers	-	-	-0.80	-	-	-	-	-	-	-	-0.80
Stock changes	-0.31	-0.16	0.87	0.52	-	-	-	-	-	-	0.92
<b>TPES</b>	<b>16.25</b>	<b>106.78</b>	<b>-9.61</b>	<b>94.55</b>	<b>26.92</b>	<b>33.38</b>	<b>2.69</b>	<b>12.84</b>	<b>-5.54</b>	<b>-</b>	<b>278.26</b>
Electricity and Heat Output											
Elec. generated - TWh	53.79	-	6.64	54.77	103.29	388.09	36.11	10.42	-	-	653.10
Heat generated - PJ	0.01	-	0.39	21.05	-	-	-	5.16	-	-	26.61

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	198.2	207.2	276.4	374.9	401.4	469.9	471.3	476.4
Net imports (Mtoe)	-35.6	-12.3	-59.3	-127.7	-141.5	-185.6	-199.2	-198.1
Total primary energy supply (Mtoe)	159.4	191.9	211.3	253.6	265.3	278.8	270.2	278.3
Net oil imports (Mtoe)	-14.5	8.4	-14.9	-39.0	-67.6	-119.4	-131.4	-127.2
Oil supply (Mtoe)	79.4	88.5	76.5	87.1	97.8	97.2	94.3	97.2
Electricity consumption (TWh) <sup>1</sup>	230.4	313.9	447.7	522.8	530.3	565.6	544.5	522.0
GDP (billion 2010 USD)	616.8	781.3	1014.1	1342.7	1613.5	1779.6	1796.4	1822.7
GDP PPP (billion 2010 USD)	520.3	659.1	855.5	1132.8	1361.1	1501.3	1515.4	1537.2
Population (millions)	22.49	24.52	27.69	30.69	34.01	35.54	35.85	36.20
Industrial production index (2010=100)	57.2	62.8	77.2	111.7	100.0	110.8	110.0	110.6
Total self-sufficiency <sup>2</sup>	1.24	1.08	1.31	1.48	1.51	1.69	1.74	1.71
Coal self-sufficiency <sup>2</sup>	0.77	0.99	1.56	1.09	1.46	1.77	1.66	1.85
Oil self-sufficiency <sup>2</sup>	1.22	0.94	1.23	1.47	1.71	2.26	2.40	2.31
Natural gas self-sufficiency <sup>2</sup>	1.65	1.40	1.62	2.00	1.68	1.56	1.60	1.54
TPES/GDP (toe per thousand 2010 USD)	0.26	0.25	0.21	0.19	0.16	0.16	0.15	0.15
TPES/GDP PPP (toe per thousand 2010 USD)	0.31	0.29	0.25	0.22	0.19	0.19	0.18	0.18
TPES/population (toe per capita)	7.08	7.83	7.63	8.27	7.80	7.84	7.54	7.69
Net oil imports/GDP (toe per thousand 2010 USD)	-0.02	0.01	-0.01	-0.03	-0.04	-0.07	-0.07	-0.07
Oil supply/GDP (toe per thousand 2010 USD)	0.13	0.11	0.08	0.06	0.06	0.05	0.05	0.05
Oil supply/population (toe per capita)	3.53	3.61	2.76	2.84	2.88	2.73	2.63	2.68
Share of renewables in TPES	0.15	0.15	0.17	0.18 e	0.17	0.18	0.18	0.18
Share of renewables in electricity generation	0.72	0.68	0.62	0.61 e	0.61	0.63	0.63	0.66
TFC/GDP (toe per thousand 2010 USD)	0.21	0.20	0.16	0.14	0.12	0.11	0.11	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.25	0.24	0.19	0.17	0.14	0.13	0.13	..
TFC/population (toe per capita)	5.84	6.33	5.84	6.24	5.53	5.52	5.40	..
Elect. cons./GDP (kWh per 2010 USD)	0.37	0.40	0.44	0.39	0.33	0.32	0.30	0.29
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.44	0.48	0.52	0.46	0.39	0.38	0.36	0.34
Elect. cons./population (kWh per capita)	10242	12804	16168	17037	15595	15911	15188	14418
Industry cons. <sup>3</sup> /industrial production (2010=100)	149.6	158.9	129.4	107.4	100.0	90.8	89.6	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	174.2	154.3	106.1	87.6	100.0	85.9	86.3	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

Chile

Figure 1. Energy production

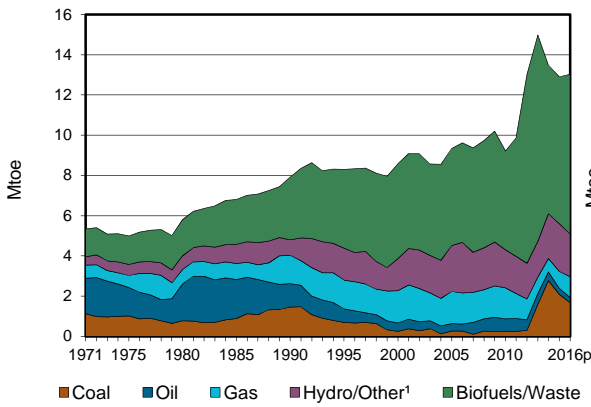


Figure 2. Total primary energy supply²

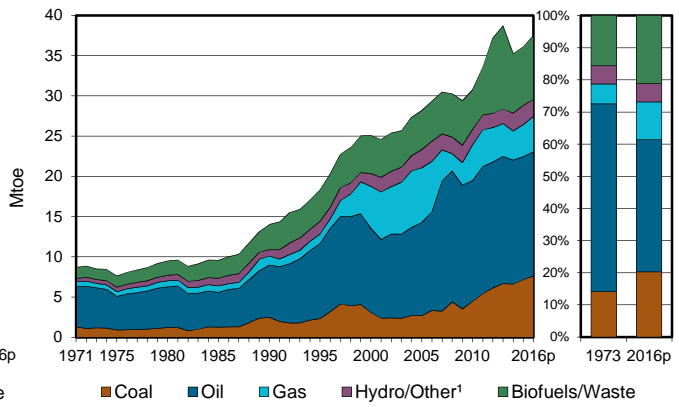


Figure 3. Energy self-sufficiency

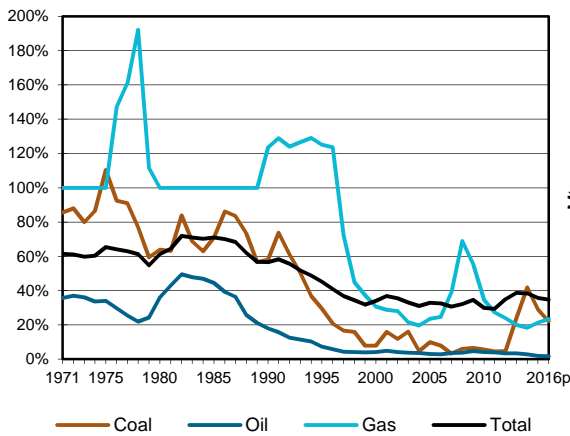


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015³

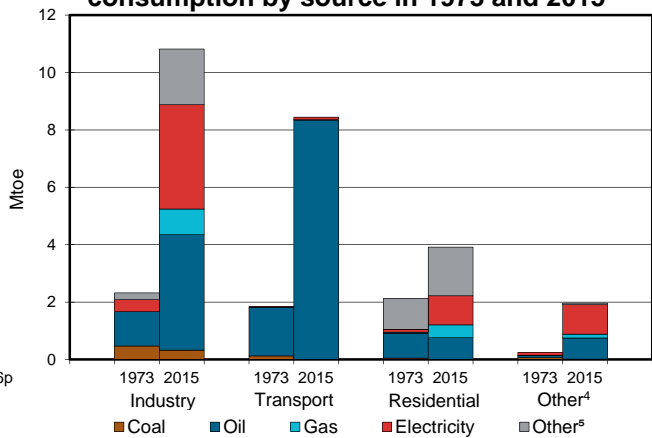


Figure 5. Electricity generation by source

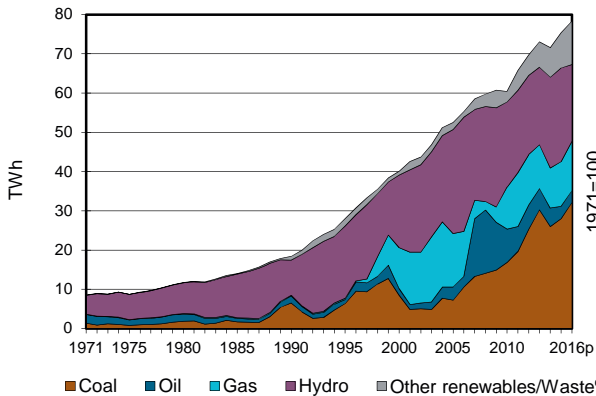
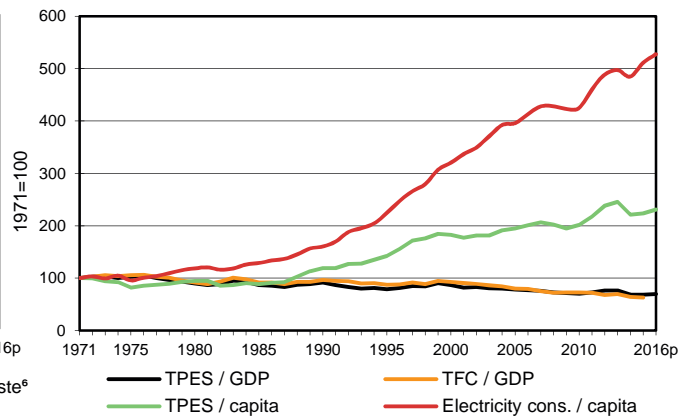


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## Chile

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	2.09	0.30	-	0.85	-	2.05	0.32 e	7.30	-	-	12.91
Imports	5.68	8.70	7.56	3.13	-	-	-	-	-	-	25.07
Exports	-0.59	-	-0.49	-	-	-	-	-	-	-	-1.08
Intl. marine bunkers	-	-	-0.13	-	-	-	-	-	-	-	-0.13
Intl. aviation bunkers	-	-	-0.57	-	-	-	-	-	-	-	-0.57
Stock changes	-0.01	-0.04	-0.04	0.00	-	-	-	-	-	-	-0.09
<b>TPES</b>	<b>7.17</b>	<b>8.96</b>	<b>6.34</b>	<b>3.98</b>	-	<b>2.05</b>	<b>0.32</b>	<b>7.30</b>	-	-	<b>36.11</b>
Transfers	-	1.06	-1.00	-	-	-	-	-	-	-	0.06
Statistical differences	-0.01	0.30	-0.28	-0.29	-	-	-	0.07	-0.07	-	-0.28
Electricity plants	-6.56	-	-0.76	-1.94	-	-2.05	-0.29	-	6.00	-	-5.60
CHP plants	-	-	-	-	-	-	-	-3.64	0.48	-	-3.15
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.12 e	-	-	-	-	-	-	-	-	-	-0.12
Gas works	0.01	-	-	0.00	-	-	-	-0.00	-	-	0.01
Coke/pat. fuel/BKB/PB plants	0.01	-	-	-	-	-	-	-	-	-	0.01
Oil refineries	-	-10.32	9.91	-	-	-	-	-	-	-	-0.41
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.07 e	-	-	-0.07
Energy industry own use	-0.14	-	-0.34	-0.21	-	-	-	-	-0.34	-	-1.04
Losses	-0.02	-	-	-0.03	-	-	-	-	-0.32	-	-0.37
<b>TFC</b>	<b>0.33</b>	-	<b>13.87</b>	<b>1.51</b>	-	-	<b>0.03</b>	<b>3.66</b>	<b>5.75</b>	-	<b>25.15</b>
<b>INDUSTRY</b>	<b>0.32</b>	-	<b>3.93</b>	<b>0.77</b>	-	-	-	<b>1.94</b>	<b>3.63</b>	-	<b>10.60</b>
Iron and steel	0.06 e	-	0.00	0.03	-	-	-	-	0.06	-	0.15
Chemical and petrochemical	-	-	-	0.06	-	-	-	-	0.00	-	0.07
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	0.00	-	0.23	0.01	-	-	-	0.01	0.04	-	0.29
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	0.06	-	2.29	0.17	-	-	-	0.00	2.15	-	4.67
Food and tobacco	0.07	-	0.00	0.00	-	-	-	-	-	-	0.07
Paper, pulp and printing	-	-	0.18	0.09	-	-	-	1.47	0.41	-	2.16
Wood and wood products	-	-	0.00	-	-	-	-	-	-	-	0.00
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.13	-	1.23	0.40	-	-	-	0.46	0.96	-	3.18
<b>TRANSPORT</b>	-	-	<b>8.34</b>	<b>0.03</b>	-	-	-	-	<b>0.08</b>	-	<b>8.45</b>
Domestic aviation	-	-	0.53	-	-	-	-	-	-	-	0.53
Road	-	-	7.49	0.03	-	-	-	-	0.01	-	7.53
Rail	-	-	0.03	-	-	-	-	-	0.07	-	0.10
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.29	-	-	-	-	-	-	-	0.29
Non-specified	-	-	-	0.00	-	-	-	-	-	-	0.00
<b>OTHER</b>	<b>0.01</b>	-	<b>1.50</b>	<b>0.58</b>	-	-	<b>0.03</b>	<b>1.72</b>	<b>2.03</b>	-	<b>5.88</b>
Residential	0.00	-	0.76	0.44	-	-	-	1.70	1.01	-	3.91
Comm. and public services	0.01	-	0.53	0.13	-	-	-	0.03	1.01	-	1.71
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	0.21	0.00	-	-	-	-	0.01	-	0.22
Non-specified	-	-	-	-	-	-	0.03 e	-	-	-	0.03
<b>NON-ENERGY USE</b>	-	-	<b>0.10</b>	<b>0.13</b>	-	-	-	-	-	-	<b>0.23</b>
in industry/transf./energy	-	-	0.10	0.13	-	-	-	-	-	-	0.23
of which: chem./petrochem.	-	-	0.00	0.13	-	-	-	-	-	-	0.13
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>28.00</b>	-	<b>3.16</b>	<b>11.36</b>	-	<b>23.88</b>	<b>3.38</b>	<b>5.62</b>	-	-	<b>75.39</b>
Electricity plants	28.00	-	3.16	11.36	-	23.88	3.38	-	-	-	69.77
CHP plants	-	-	-	-	-	-	-	5.62	-	-	5.62
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	..	-	-	-
CHP plants	-	-	-	-	-	-	-	..	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Chile

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.68	0.26	-	1.03	-	1.68	0.44	7.94	-	-	13.03
Imports	6.55	8.69	7.59	3.68	-	-	-	-	-	-	26.51
Exports	-0.61	-	-0.42	-0.31	-	-	-	-	-	-	-1.34
Intl. marine bunkers	-	-	-0.13	-	-	-	-	-	-	-	-0.13
Intl. aviation bunkers	-	-	-0.57	-	-	-	-	-	-	-	-0.57
Stock changes	-	0.10	-0.08	0.00	-	-	-	-	-	-	0.02
<b>TPES</b>	<b>7.62</b>	<b>9.05</b>	<b>6.38</b>	<b>4.40</b>	<b>-</b>	<b>1.68</b>	<b>0.44</b>	<b>7.94</b>	<b>-</b>	<b>-</b>	<b>37.52</b>
Electricity and Heat Output											
Elec. generated - TWh	32.09	-	2.98	12.63	-	19.55	4.83	6.22	-	-	78.31
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	5.1	5.8	7.9	8.6	9.2	13.5	12.9	13.0
Net imports (Mtoe)	3.7	4.0	7.0	17.7	22.3	22.8	24.0	25.2
Total primary energy supply (Mtoe)	8.5	9.5	14.0	25.2	30.9	35.2	36.1	37.5
Net oil imports (Mtoe)	3.5	3.4	5.9	11.1	15.4	15.8	15.8	15.9
Oil supply (Mtoe)	5.0	5.1	6.5	10.5	15.0	15.4	15.3	15.4
Electricity consumption (TWh) <sup>1</sup>	7.8	10.3	16.4	38.4	56.4	67.2	71.7	74.6
GDP (billion 2010 USD)	40.8	52.7	76.2	144.8	217.5	257.2	263.1	267.3
GDP PPP (billion 2010 USD)	58.3	75.2	108.8	206.7	310.5	367.1	375.6	381.8
Population (millions)	10.07	11.17	13.18	15.40	17.09	17.84	18.05	18.20
Industrial production index (2010=100)	..	..	..	79.2	100.0	112.2	112.4	111.5
Total self-sufficiency <sup>2</sup>	0.60	0.61	0.57	0.34	0.30	0.38	0.36	0.35
Coal self-sufficiency <sup>2</sup>	0.80	0.64	0.58	0.08	0.06	0.42	0.29	0.22
Oil self-sufficiency <sup>2</sup>	0.36	0.36	0.18	0.04	0.04	0.03	0.02	0.02
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.23	0.31	0.35	0.18	0.21	0.23
TPES/GDP (toe per thousand 2010 USD)	0.21	0.18	0.18	0.17	0.14	0.14	0.14	0.14
TPES/GDP PPP (toe per thousand 2010 USD)	0.15	0.13	0.13	0.12	0.10	0.10	0.10	0.10
TPES/population (toe per capita)	0.84	0.85	1.06	1.63	1.80	1.98	2.00	2.06
Net oil imports/GDP (toe per thousand 2010 USD)	0.09	0.06	0.08	0.08	0.07	0.06	0.06	0.06
Oil supply/GDP (toe per thousand 2010 USD)	0.12	0.10	0.08	0.07	0.07	0.06	0.06	0.06
Oil supply/population (toe per capita)	0.49	0.45	0.49	0.68	0.88	0.86	0.85	0.85
Share of renewables in TPES	0.21	0.26	0.28	0.25	0.22	0.27 e	0.27	0.27
Share of renewables in electricity generation	0.64	0.68	0.54	0.49	0.40	0.42	0.44	0.39
TFC/GDP (toe per thousand 2010 USD)	0.16	0.14	0.15	0.14	0.11	0.10	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.11	0.10	0.10	0.10	0.08	0.07	0.07	..
TFC/population (toe per capita)	0.65	0.65	0.84	1.32	1.40	1.40	1.39	..
Elect. cons./GDP (kWh per 2010 USD)	0.19	0.20	0.22	0.26	0.26	0.26	0.27	0.28
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.13	0.14	0.15	0.19	0.18	0.18	0.19	0.20
Elect. cons./population (kWh per capita)	772	923	1247	2490	3301	3768	3972	4100
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	117.3	100.0	102.9	98.9	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	80.7	100.0	117.5	107.5	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Czech Republic

Figure 1. Energy production

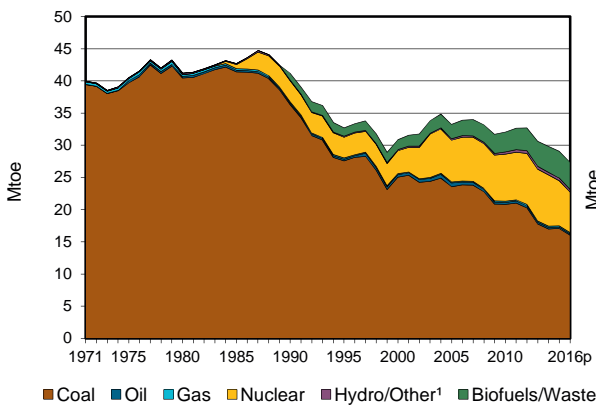


Figure 2. Total primary energy supply<sup>2</sup>

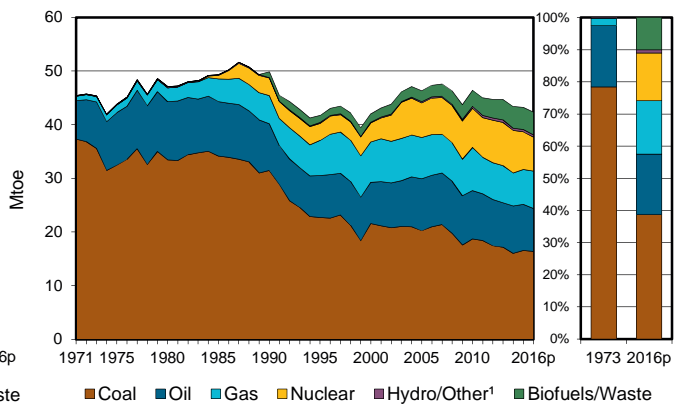


Figure 3. Energy self-sufficiency

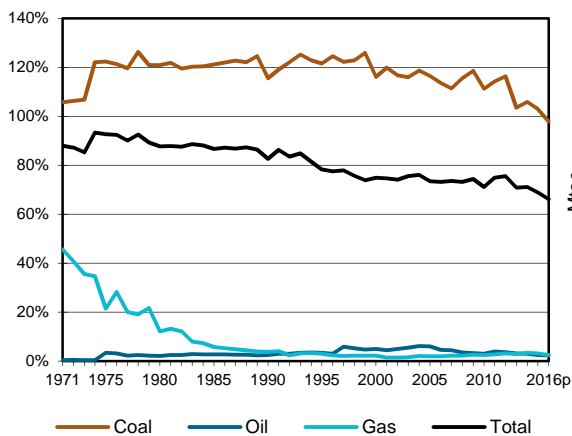


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

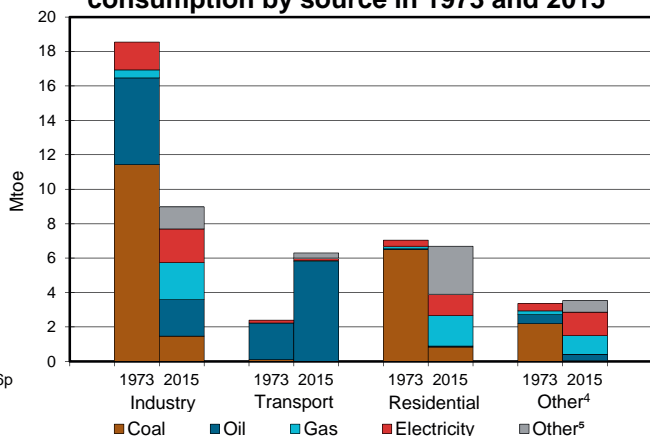


Figure 5. Electricity generation by source

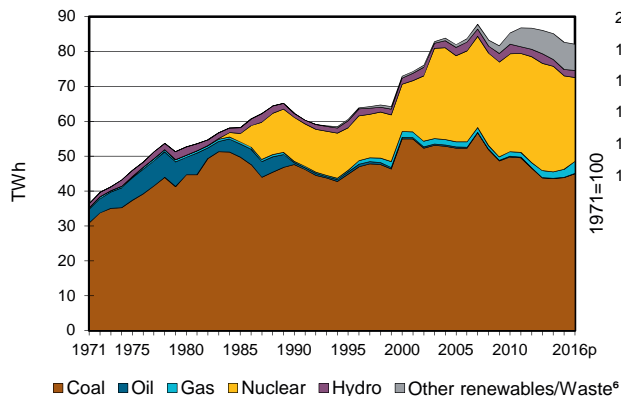
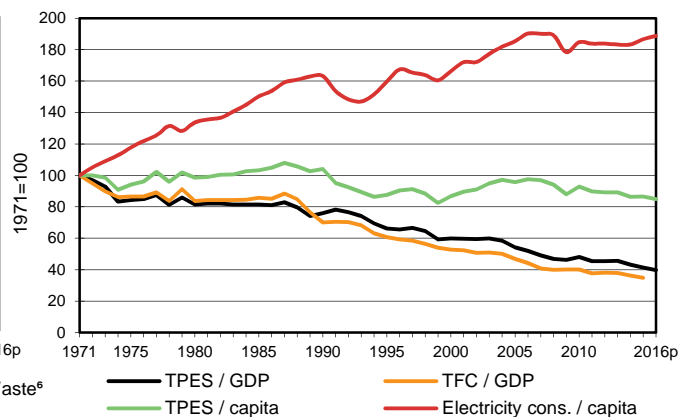


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Czech Republic

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	17.06	0.21	-	0.20	7.02	0.15	0.26	4.14	-	0.01	29.06
Imports	2.78	7.25	3.91	6.16	-	-	-	0.37	1.39	0.00	21.85
Exports	-3.09	-0.03	-2.42	-	-	-	-	-0.37	-2.46	-0.00	-8.37
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.29	-	-	-	-	-	-	-	-0.29
Stock changes	-0.19	-0.01	-0.01	0.11	-	-	-	0.01	-	-	-0.10
<b>TPES</b>	<b>16.57</b>	<b>7.42</b>	<b>1.18</b>	<b>6.48</b>	<b>7.02</b>	<b>0.15</b>	<b>0.26</b>	<b>4.14</b>	<b>-1.08</b>	<b>0.00</b>	<b>42.15</b>
Transfers	-	0.13	-0.11	-	-	-	-	-	-	-	0.02
Statistical differences	-0.36	0.01	-	-	-	-	-	-	-0.20	0.00	-0.56
Electricity plants	-1.93	-	-0.00	-0.10	-6.99	-0.15	-0.24	-0.03	3.46	-0.01	-6.02
CHP plants	-10.12	-	-0.04	-0.50	-0.02	-	-	-1.13	3.65	2.29	-5.88
Heat plants	-0.07	-	-0.01	-0.55	-	-	-	-0.05	-0.00	0.60	-0.06
Blast furnaces	-0.78	-	-	-	-	-	-	-	-	-	-0.78
Gas works	-0.23	-	-	-	-	-	-	-	-	-	-0.23
Coke/pat. fuel/BKB/PB plants	-0.02	-	-	-	-	-	-	-	-	-	-0.02
Oil refineries	-	-7.62	7.64	-	-	-	-	-	-	-	0.02
Petrochemical plants	-	0.07	-0.06	-	-	-	-	-	-	-	0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.66	-	-0.25	-0.09	-	-	-	-	-0.79	-0.65	-2.45
Losses	-0.06	-	-	-0.12	-	-	-	-	-0.35	-0.16	-0.68
<b>TFC</b>	<b>2.34</b>	<b>-</b>	<b>8.34</b>	<b>5.12</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>2.93</b>	<b>4.68</b>	<b>2.08</b>	<b>25.52</b>
<b>INDUSTRY</b>	<b>1.00</b>	<b>-</b>	<b>0.31</b>	<b>2.08</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.67</b>	<b>1.95</b>	<b>0.62</b>	<b>6.62</b>
Iron and steel	0.54	-	-	0.20	-	-	-	0.00	0.23	0.08	1.05
Chemical and petrochemical	0.22	-	0.04	0.27	-	-	-	0.00	0.30	0.26	1.10
Non-ferrous metals	0.00	-	-	0.04	-	-	-	0.00	0.03	0.00	0.07
Non-metallic minerals	0.14	-	0.01	0.51	-	-	-	0.19	0.20	0.01	1.05
Transport equipment	0.01	-	0.00	0.13	-	-	-	0.00	0.24	0.04	0.42
Machinery	0.01	-	0.01	0.26	-	-	-	0.00	0.34	0.06	0.69
Mining and quarrying	-	-	-	0.05	-	-	-	0.00	0.03	0.00	0.08
Food and tobacco	0.05	-	0.01	0.30	-	-	-	0.01	0.14	0.08	0.58
Paper, pulp and printing	0.03	-	0.00	0.11	-	-	-	0.29	0.14	0.03	0.61
Wood and wood products	0.00	-	0.00	0.02	-	-	-	0.16	0.04	0.00	0.23
Construction	0.00	-	0.05	0.08	-	-	-	0.00	0.03	0.01	0.18
Textile and leather	0.00	-	0.00	0.05	-	-	-	0.00	0.05	0.01	0.12
Non-specified	0.00	-	0.18	0.05	-	-	-	0.01	0.17	0.05	0.45
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>5.65</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>0.14</b>	<b>-</b>	<b>6.15</b>
Domestic aviation	-	-	0.04	-	-	-	-	-	-	-	0.04
Road	-	-	5.52	0.04	-	-	-	0.30	0.01	-	5.86
Rail	0.00	-	0.09	-	-	-	-	-	0.13	-	0.22
Pipeline transport	-	-	-	0.03	-	-	-	-	0.00	-	0.03
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.87</b>	<b>-</b>	<b>0.42</b>	<b>2.88</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>1.97</b>	<b>2.60</b>	<b>1.46</b>	<b>10.22</b>
Residential	0.84	-	0.05	1.79	-	-	0.01	1.75	1.24	1.02	6.69
Comm. and public services	0.03	-	0.03	0.98	-	-	0.00	0.09	1.28	0.44	2.85
Agriculture/forestry	0.01	-	0.33	0.05	-	-	-	0.12	0.08	0.01	0.60
Fishing	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Non-specified	0.00	-	0.01	0.06	-	-	-	-	-	-	0.07
<b>NON-ENERGY USE</b>	<b>0.46</b>	<b>-</b>	<b>1.96</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.52</b>
in industry/transf./energy	0.46	-	1.80	0.10	-	-	-	-	-	-	2.36
of which: chem./petrochem.	0.40	-	1.13	0.10	-	-	-	-	-	-	1.62
in transport	-	-	0.16	-	-	-	-	-	-	-	0.16
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>43.84</b>	<b>-</b>	<b>0.09</b>	<b>2.26</b>	<b>26.84</b>	<b>1.80</b>	<b>2.92</b>	<b>4.87</b>	<b>-</b>	<b>0.00</b>	<b>82.62</b>
Electricity plants	8.01	-	0.02	0.59	26.84	1.80	2.84	0.10	-	-	40.19
CHP plants	35.83	-	0.07	1.68	-	-	0.08	4.77	-	0.00	42.42
<b>Heat generated - PJ</b>	<b>75.95</b>	<b>-</b>	<b>1.07</b>	<b>31.45</b>	<b>0.90</b>	<b>-</b>	<b>1.70</b>	<b>9.99</b>	<b>0.01</b>	<b>0.23</b>	<b>121.31</b>
CHP plants	73.89	-	0.85	11.27	0.90	-	0.36	8.53	-	-	95.79
Heat plants	2.06	-	0.23	20.19	-	-	1.34	1.46	0.01	0.23	25.51

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Czech Republic

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	16.06	0.19	-	0.18	6.30	0.17	0.24	4.21	-	0.00	27.37
Imports	2.73	5.43	4.84	6.71	-	-	-	0.37	1.19	0.00	21.27
Exports	-3.06	-0.03	-2.19	-	-	-	-	-0.35	-2.13	-0.00	-7.77
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.32	-	-	-	-	-	-	-	-0.32
Stock changes	0.68	0.00	0.02	0.12	-	-	-	-0.00	-	-	0.82
<b>TPES</b>	<b>16.41</b>	<b>5.59</b>	<b>2.36</b>	<b>7.01</b>	<b>6.30</b>	<b>0.17</b>	<b>0.24</b>	<b>4.23</b>	<b>-0.94</b>	<b>0.00</b>	<b>41.38</b>
Electricity and Heat Output											
Elec. generated - TWh	44.96	-	0.09	3.43	24.10	2.00	2.71	4.82	-	-	82.10
Heat generated - PJ	76.91	-	0.99	33.15	0.88	-	1.53	10.53	0.01	0.23	124.23

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	38.5	41.2	41.2	30.8	32.1	29.8	29.1	27.4
Net imports (Mtoe)	7.0	6.4	7.6	9.4	11.5	12.7	13.5	13.5
Total primary energy supply (Mtoe)	45.2	47.0	49.8	41.2	45.1	42.0	42.2	41.4
Net oil imports (Mtoe)	8.9	10.9	8.6	7.5	9.0	8.9	8.7	8.1
Oil supply (Mtoe)	8.7	10.8	8.7	7.7	9.0	8.8	8.6	8.0
Electricity consumption (TWh) <sup>1</sup>	37.0	47.3	57.9	58.5	66.5	66.0	67.3	68.3
GDP (billion 2010 USD)	107.0	126.9	144.1	151.4	207.0	214.1	223.8	229.3
GDP PPP (billion 2010 USD)	149.7	177.5	201.7	211.9	289.7	299.7	313.3	320.9
Population (millions)	9.92	10.33	10.36	10.27	10.52	10.53	10.54	10.56
Industrial production index (2010=100)	..	..	83.9	70.0	100.0	110.1	115.2	118.6
Total self-sufficiency <sup>2</sup>	0.85	0.88	0.83	0.75	0.71	0.71	0.69	0.66
Coal self-sufficiency <sup>2</sup>	1.07 e	1.21	1.15	1.16	1.11	1.06	1.03	0.98
Oil self-sufficiency <sup>2</sup>	0.01	0.02	0.03	0.05	0.03	0.03	0.02	0.02
Natural gas self-sufficiency <sup>2</sup>	0.36	0.12	0.04	0.02	0.03	0.03	0.03	0.03
TPES/GDP (toe per thousand 2010 USD)	0.42	0.37	0.35	0.27	0.22	0.20	0.19	0.18
TPES/GDP PPP (toe per thousand 2010 USD)	0.30	0.26	0.25	0.19	0.16	0.14	0.13	0.13
TPES/population (toe per capita)	4.55	4.55	4.80	4.01	4.29	3.99	4.00	3.92
Net oil imports/GDP (toe per thousand 2010 USD)	0.08	0.09	0.06	0.05	0.04	0.04	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.08	0.09	0.06	0.05	0.04	0.04	0.04	0.03
Oil supply/population (toe per capita)	0.87	1.05	0.84	0.75	0.85	0.84	0.82	0.75
Share of renewables in TPES	0.00	0.00	0.02	0.04	0.07	0.10	0.10	0.11
Share of renewables in electricity generation	0.03	0.05	0.02	0.03	0.07	0.11	0.11	0.11
TFC/GDP (toe per thousand 2010 USD)	0.29	0.27	0.23	0.17	0.13	0.12	0.11	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.21	0.20	0.16	0.12	0.09	0.09	0.08	..
TFC/population (toe per capita)	3.16	3.36	3.18	2.54	2.57	2.41	2.42	..
Elect. cons./GDP (kWh per 2010 USD)	0.35	0.37	0.40	0.39	0.32	0.31	0.30	0.30
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.25	0.27	0.29	0.28	0.23	0.22	0.22	0.21
Elect. cons./population (kWh per capita)	3730	4575	5584	5694	6322	6271	6384	6462
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	212.0	161.0	100.0	86.1	79.2	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	204.0	140.8	100.0	89.1	69.8	..

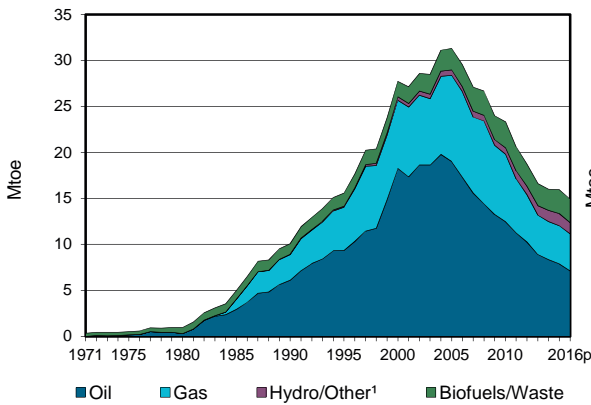
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.

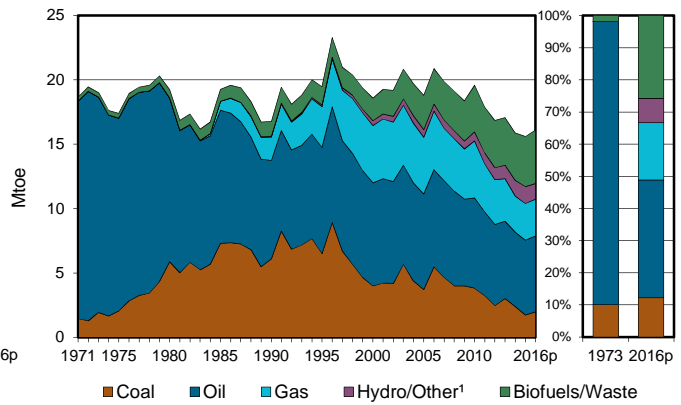
3. Includes non-energy use.

## Denmark

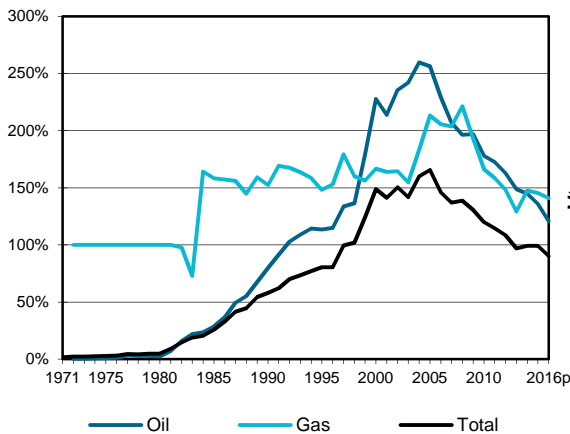
**Figure 1. Energy production**



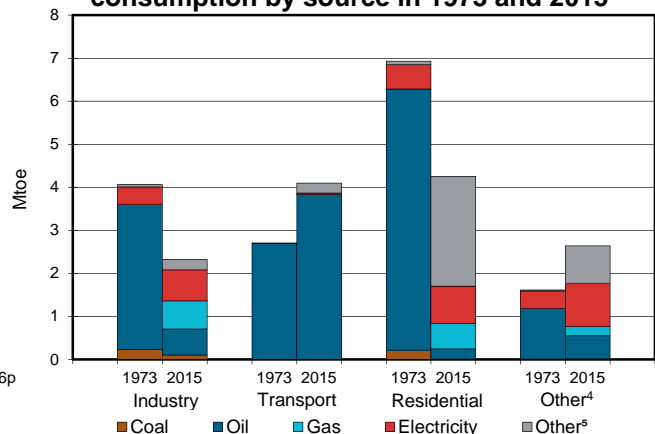
**Figure 2. Total primary energy supply<sup>2</sup>**



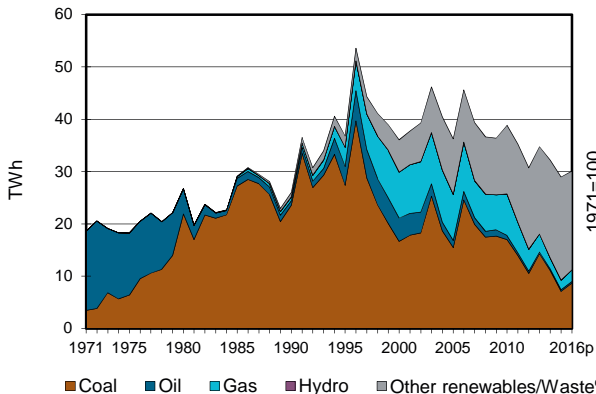
**Figure 3. Energy self-sufficiency**



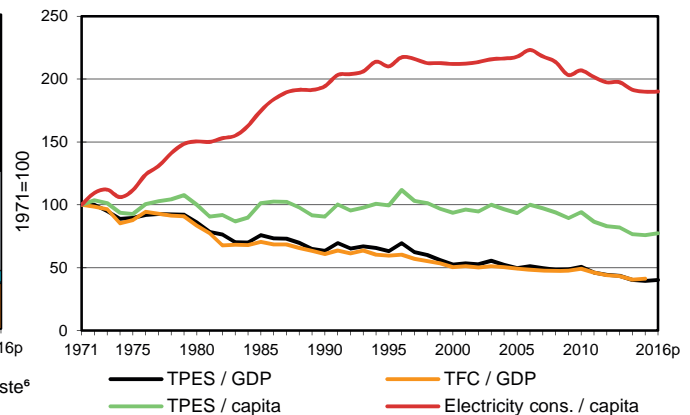
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Denmark

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	7.90	-	4.14	-	0.00	1.30	2.60	-	0.00	15.95
Imports	1.52	4.39	9.53	0.59	-	-	-	1.30	1.35	0.00	18.68
Exports	-0.05	-4.98	-8.55	-1.97	-	-	-	-0.03	-0.84	-	-16.41
Intl. marine bunkers	-	-	-0.76	-	-	-	-	-	-	-	-0.76
Intl. aviation bunkers	-	-	-0.87	-	-	-	-	-	-	-	-0.87
Stock changes	0.26	-0.04	-0.80	0.08	-	-	-	c	-	-	-0.49
<b>TPES</b>	<b>1.73</b>	<b>7.27</b>	<b>-1.46</b>	<b>2.85</b>	<b>-</b>	<b>0.00</b>	<b>1.30</b>	<b>3.88</b>	<b>0.51</b>	<b>0.01</b>	<b>16.10</b>
Transfers	-	1.83	-1.81	-	-	-	-	-	-	-	0.01
Statistical differences	0.10	0.26	-0.17	0.02	-	-	-	-0.01	0.00	-0.01	0.18
Electricity plants	-	-	-0.01	-	-	-0.00	-1.27	-0.00	1.27	-	-0.00
CHP plants	-1.71	-	-0.08	-0.45	-	-	-	-1.88	1.22	2.05	-0.83
Heat plants	-0.00	-	-0.02	-0.37	-	-	-0.02	-0.54	-0.02	1.00	0.02
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	0.01	-	-	-0.01	-	-	-	-	-	-	0.00
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-9.36	9.10	-	-	-	-	-	-	-	-0.26
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.35	-0.58	-	-	-	-0.00	-0.18	-0.03	-1.14
Losses	-0.00	-	-	-0.00	-	-	-	-	-0.16	-0.61	-0.77
<b>TFC</b>	<b>0.13</b>	<b>-</b>	<b>5.20</b>	<b>1.45</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.45</b>	<b>2.64</b>	<b>2.41</b>	<b>13.31</b>
<b>INDUSTRY</b>	<b>0.11</b>	<b>-</b>	<b>0.40</b>	<b>0.65</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.16</b>	<b>0.72</b>	<b>0.08</b>	<b>2.11</b>
Iron and steel	-	-	0.00	0.04	-	-	-	0.00	0.04	0.00	0.08
Chemical and petrochemical	0.02	-	0.01	0.11	-	-	-	-	0.12	0.01	0.26
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	0.06	-	0.18	0.10	-	-	-	0.04	0.06	0.01	0.44
Transport equipment	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.02
Machinery	-	-	0.02	0.05	-	-	-	0.02	0.12	0.01	0.22
Mining and quarrying	0.00	-	0.02	0.02	-	-	-	0.03	0.01	0.00	0.08
Food and tobacco	0.03	-	0.05	0.27	-	-	-	0.01	0.20	0.02	0.59
Paper, pulp and printing	-	-	0.00	0.03	-	-	-	0.00	0.03	0.00	0.07
Wood and wood products	-	-	0.00	0.00	-	-	-	0.05	0.02	0.00	0.07
Construction	-	-	0.12	0.01	-	-	-	0.00	0.03	-	0.16
Textile and leather	-	-	-	0.01	-	-	-	0.00	0.01	0.00	0.02
Non-specified	0.00	-	0.00	0.01	-	-	-	0.01	0.07	0.01	0.11
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3.80</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.23</b>	<b>0.03</b>	<b>-</b>	<b>4.07</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	3.52	0.00	-	-	-	0.23	-	-	3.76
Rail	-	-	0.08	-	-	-	-	-	0.03	-	0.11
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.13	-	-	-	-	-	-	-	0.13
Non-specified	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>OTHER</b>	<b>0.03</b>	<b>-</b>	<b>0.76</b>	<b>0.80</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.06</b>	<b>1.88</b>	<b>2.33</b>	<b>6.88</b>
Residential	0.01	-	0.24	0.58	-	-	0.01	0.97	0.88	1.57	4.25
Comm. and public services	0.00	-	0.06	0.17	-	-	0.00	0.04	0.86	0.73	1.87
Agriculture/forestry	0.02	-	0.33	0.04	-	-	-	0.05	0.15	0.04	0.63
Fishing	-	-	0.12	-	-	-	-	-	-	-	0.12
Non-specified	-	-	-	0.01	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.25</b>
in industry/transf./energy	-	-	0.21	-	-	-	-	-	-	-	0.21
of which: chem./petrochem.	-	-	0.00	-	-	-	-	-	-	-	0.00
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>7.11</b>	<b>-</b>	<b>0.31</b>	<b>1.82</b>	<b>-</b>	<b>0.02</b>	<b>14.74</b>	<b>4.96</b>	<b>-</b>	<b>-</b>	<b>28.95</b>
Electricity plants	-	-	0.01	-	-	0.02	14.74	0.00	-	-	14.77
CHP plants	7.11	-	0.30	1.82	-	-	-	4.96	-	-	14.18
<b>Heat generated - PJ</b>	<b>26.02</b>	<b>-</b>	<b>1.41</b>	<b>23.57</b>	<b>-</b>	<b>-</b>	<b>3.48</b>	<b>72.64</b>	<b>0.79</b>	<b>0.16</b>	<b>128.07</b>
CHP plants	25.95	-	0.76	8.21	-	-	-	51.10	-	-	86.01
Heat plants	0.07	-	0.65	15.37	-	-	3.48	21.54	0.79	0.16	42.06

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Denmark

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	7.11	-	4.04	-	0.00	1.22	2.56	-	0.00	14.93
Imports	1.59	3.94	9.18	0.61	-	-	-	1.62	1.29	0.00	18.23
Exports	-0.01	-4.40	-8.44	-1.90	-	-	-	-0.03	-0.85	-	-15.62
Intl. marine bunkers	-	-	-0.70	-	-	-	-	-	-	-	-0.70
Intl. aviation bunkers	-	-	-0.99	-	-	-	-	-	-	-	-0.99
Stock changes	0.40	0.08	0.10	0.11	-	-	-	c	-	-	0.69
<b>TPES</b>	<b>1.97</b>	<b>6.73</b>	<b>-0.84</b>	<b>2.86</b>	<b>-</b>	<b>0.00</b>	<b>1.22</b>	<b>4.15</b>	<b>0.43</b>	<b>0.01</b>	<b>16.54</b>
Electricity and Heat Output											
Elec. generated - TWh	8.68	-	0.30	2.18	-	0.02	13.53	5.38	-	-	30.09
Heat generated - PJ	24.92	-	1.42	25.75	-	-	4.79	75.25	0.55	0.13	132.81

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	0.4	1.0	10.1	27.7	23.4	16.0	16.0	14.9
Net imports (Mtoe)	20.4	19.2	8.7	-7.5	-3.5	2.1	2.3	2.6
Total primary energy supply (Mtoe)	19.0	19.1	17.4	18.6	19.5	16.1	16.1	16.5
Net oil imports (Mtoe)	18.6	13.2	2.8	-8.5	-3.8	-0.7	0.4	0.3
Oil supply (Mtoe)	16.7	12.7	7.7	8.0	7.0	5.8	5.8	5.9
Electricity consumption (TWh) <sup>1</sup>	17.2	23.6	30.6	34.6	35.1	33.1	33.0	33.3
GDP (billion 2010 USD)	167.8	186.4	229.1	298.2	322.0	335.6	341.0	345.4
GDP PPP (billion 2010 USD)	124.5	138.3	170.1	221.4	239.0	249.1	253.1	256.4
Population (millions)	5.02	5.12	5.14	5.34	5.55	5.64	5.68	5.73
Industrial production index (2010=100)	..	63.0	83.0	110.7	100.0	103.2	104.5	108.4
Total self-sufficiency <sup>2</sup>	0.02	0.05	0.58	1.49	1.20	0.99	0.99	0.90
Coal self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	0.00	0.02	0.80	2.28	1.78	1.45	1.36	1.21
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.52	1.67	1.66	1.48	1.45	1.41
TPES/GDP (toe per thousand 2010 USD)	0.11	0.10	0.08	0.06	0.06	0.05	0.05	0.05
TPES/GDP PPP (toe per thousand 2010 USD)	0.15	0.14	0.10	0.08	0.08	0.06	0.06	0.06
TPES/population (toe per capita)	3.78	3.73	3.38	3.49	3.51	2.85	2.83	2.89
Net oil imports/GDP (toe per thousand 2010 USD)	0.11	0.07	0.01	-0.03	-0.01	-0.00	0.00	0.00
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.07	0.03	0.03	0.02	0.02	0.02	0.02
Oil supply/population (toe per capita)	3.33	2.48	1.49	1.50	1.26	1.02	1.02	1.03
Share of renewables in TPES	0.02	0.03	0.06	0.10	0.20	0.28	0.30	0.30
Share of renewables in electricity generation	0.00	0.00	0.03	0.16	0.32	0.56	0.66	0.61
TFC/GDP (toe per thousand 2010 USD)	0.09	0.08	0.06	0.05	0.05	0.04	0.04	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.12	0.11	0.08	0.06	0.06	0.05	0.05	..
TFC/population (toe per capita)	3.05	2.88	2.56	2.67	2.70	2.28	2.34	..
Elect. cons./GDP (kWh per 2010 USD)	0.10	0.13	0.13	0.12	0.11	0.10	0.10	0.10
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.14	0.17	0.18	0.16	0.15	0.13	0.13	0.13
Elect. cons./population (kWh per capita)	3428	4598	5946	6485	6328	5860	5812	5814
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	214.8	134.3	108.8	100.0	84.8	84.4	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	520.5	183.1	117.3	100.0	75.8	75.3	..

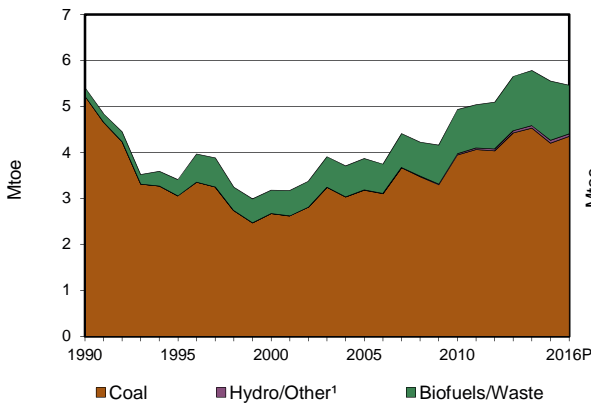
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

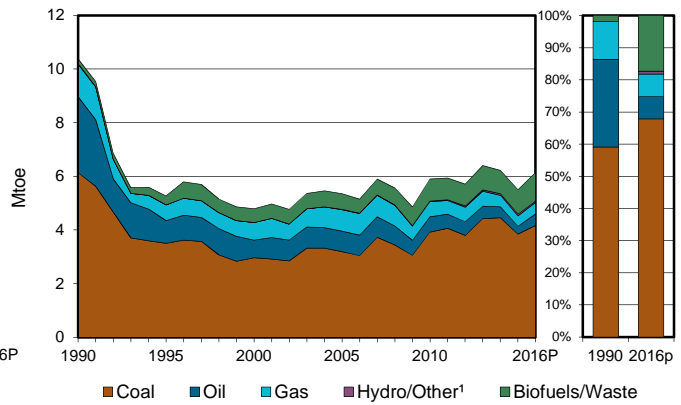
3. Includes non-energy use.

## Estonia

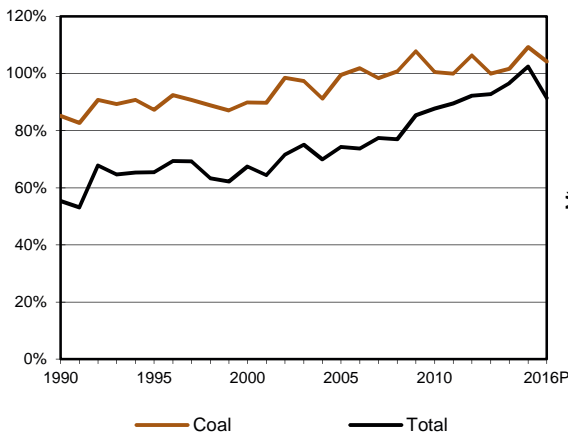
**Figure 1. Energy production**



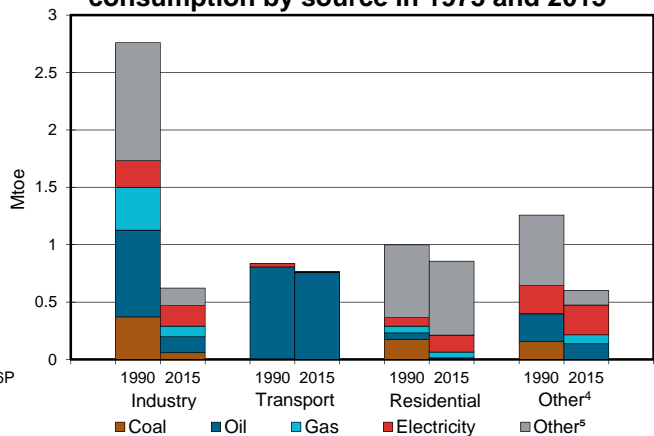
**Figure 2. Total primary energy supply<sup>2</sup>**



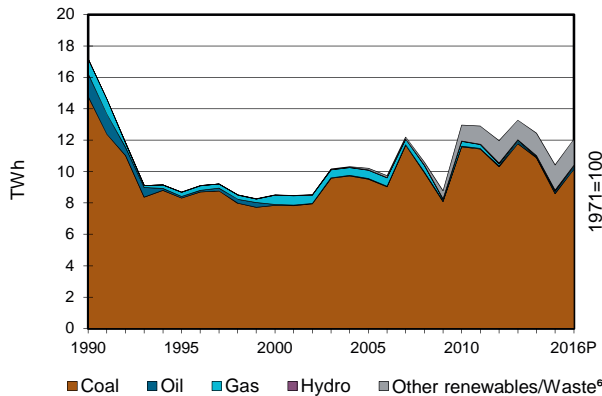
**Figure 3. Energy self-sufficiency**



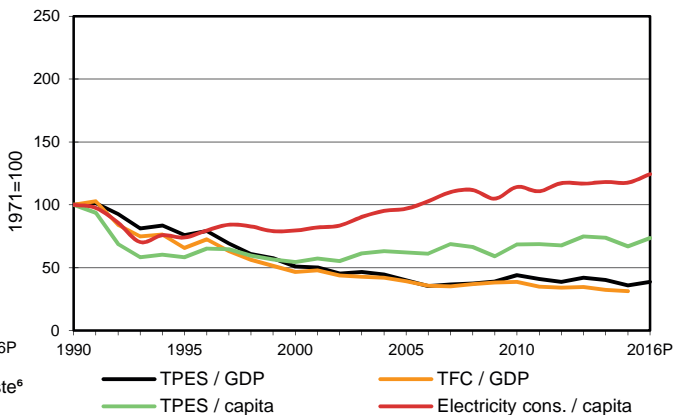
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Estonia

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	4.20	-	-	-	-	0.00	0.06	1.29	-	-	5.55
Imports	0.00	-	1.72	0.39	-	-	-	0.02	0.47	-	2.59
Exports	-0.02	-0.72	-0.37	-	-	-	-	-0.39	-0.55	-	-2.05
Intl. marine bunkers	-	-	-0.29	-	-	-	-	-	-	-	-0.29
Intl. aviation bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Stock changes	-0.34	-	-0.01	-	-	-	-	-0.01	-	-	-0.36
<b>TPES</b>	<b>3.85</b>	<b>-0.72</b>	<b>1.02</b>	<b>0.39</b>	<b>-</b>	<b>0.00</b>	<b>0.06</b>	<b>0.91</b>	<b>-0.08</b>	<b>-</b>	<b>5.42</b>
Transfers	-	-0.08	0.08	-	-	-	-	-	-	-	0.00
Statistical differences	0.10	-	-0.01	-	-	-	-	-	-	-	0.09
Electricity plants	-2.34	-	-0.02	-	-	-0.00	-0.06	-0.01	0.79	-	-1.64
CHP plants	-0.17	-	-0.00	-0.01	-	-	-	-0.29	0.11	0.27	-0.09
Heat plants	-0.03	-	-0.02	-0.15	-	-	-	-0.10	-	0.24	-0.06
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Coke/pat. fuel/BKB/PB plants	-0.00	-	-	-	-	-	-	-	-	-	-0.00
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-1.29	0.80	-	-	-	-	-	-	-	-	-0.49
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.02	-	-0.02	-0.01	-	-	-	-0.01	-0.17	-0.01	-0.23
Losses	-	-	-	-	-	-	-	-	-0.06	-0.07	-0.13
<b>TFC</b>	<b>0.07</b>	<b>-</b>	<b>1.04</b>	<b>0.22</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.50</b>	<b>0.59</b>	<b>0.43</b>	<b>2.84</b>
<b>INDUSTRY</b>	<b>0.03</b>	<b>-</b>	<b>0.07</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.12</b>	<b>0.18</b>	<b>0.04</b>	<b>0.52</b>
Iron and steel	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Chemical and petrochemical	-	-	0.01	0.00	-	-	-	0.00	0.01	0.02	0.04
Non-ferrous metals	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Non-metallic minerals	0.03	-	0.00	0.02	-	-	-	0.01	0.01	0.00	0.07
Transport equipment	-	-	0.00	0.00	-	-	-	0.00	0.01	0.00	0.01
Machinery	-	-	0.00	0.01	-	-	-	0.00	0.02	0.01	0.03
Mining and quarrying	-	-	0.01	0.00	-	-	-	-	0.00	0.00	0.01
Food and tobacco	-	-	0.01	0.02	-	-	-	0.00	0.03	0.00	0.06
Paper, pulp and printing	-	-	-	0.02	-	-	-	0.01	0.03	0.00	0.06
Wood and wood products	-	-	0.01	0.01	-	-	-	0.08	0.03	0.00	0.13
Construction	-	-	0.03	0.01	-	-	-	0.00	0.01	0.00	0.05
Textile and leather	-	-	0.00	0.00	-	-	-	0.00	0.01	0.00	0.01
Non-specified	-	-	0.00	0.00	-	-	-	0.01	0.02	0.00	0.03
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>0.75</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.00</b>	<b>-</b>	<b>0.76</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	0.72	0.00	-	-	-	0.00	0.00	-	0.73
Rail	-	-	0.02	-	-	-	-	-	0.00	-	0.02
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.15</b>	<b>0.13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.38</b>	<b>0.41</b>	<b>0.39</b>	<b>1.46</b>
Residential	0.01	-	0.01	0.05	-	-	-	0.36	0.15	0.28	0.86
Comm. and public services	0.00	-	0.03	0.07	-	-	-	0.01	0.24	0.11	0.47
Agriculture/forestry	-	-	0.10	0.01	-	-	-	0.00	0.02	0.00	0.13
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.03</b>	<b>-</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.10</b>
in industry/transf./energy	0.03	-	0.07	-	-	-	-	-	-	-	0.10
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.00	-	-	-	-	-	-	-	0.00
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>8.60</b>	<b>-</b>	<b>0.13</b>	<b>0.06</b>	<b>-</b>	<b>0.03</b>	<b>0.72</b>	<b>0.89</b>	<b>-</b>	<b>-</b>	<b>10.42</b>
Electricity plants	8.24	-	0.13	-	-	0.03	0.72	0.07	-	-	9.18
CHP plants	0.36	-	0.00	0.06	-	-	-	0.82	-	-	1.24
<b>Heat generated - PJ</b>	<b>4.95</b>	<b>-</b>	<b>0.62</b>	<b>5.55</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10.08</b>	<b>-</b>	<b>-</b>	<b>21.20</b>
CHP plants	4.07	-	0.02	0.19	-	-	-	6.95	-	-	11.23
Heat plants	0.88	-	0.60	5.36	-	-	-	3.13	-	-	9.98

1. Includes peat and oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Estonia

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	4.35	-	-	-	-	0.00	0.05	1.06	-	-	5.46
Imports	0.01	-	1.81	0.43	-	-	-	0.00	0.31	-	2.56
Exports	-	-0.61	-0.44	-	-	-	-	..	-0.48	-	-1.54
Intl. marine bunkers	-	-	-0.27	-	-	-	-	-	-	-	-0.27
Intl. aviation bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Stock changes	-0.18	-	-0.04	-	-	-	-	..	-	-	-0.22
<b>TPES</b>	<b>4.17</b>	<b>-0.61</b>	<b>1.04</b>	<b>0.43</b>	<b>-</b>	<b>0.00</b>	<b>0.05</b>	<b>1.06</b>	<b>-0.18</b>	<b>-</b>	<b>5.97</b>
Electricity and Heat Output											
Elec. generated - TWh	10.13	-	0.15	0.07	-	0.04	0.61	1.05	-	-	12.05
Heat generated - PJ	5.26	-	0.66	5.91	-	-	-	10.73	-	-	22.56

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat and oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

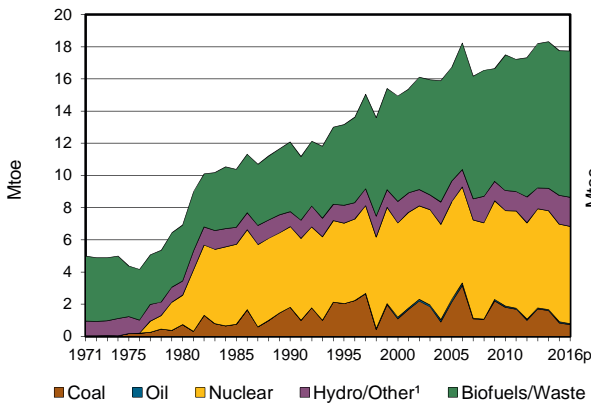
## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	..	..	5.4	3.2	4.9	5.8	5.6	5.5
Net imports (Mtoe)	..	..	4.5	1.6	0.9	0.7	0.6	1.0
Total primary energy supply (Mtoe)	..	..	9.8	4.7	5.6	6.0	5.4	6.0
Net oil imports (Mtoe)	..	..	3.2	0.8	0.8	0.8	0.6	0.8
Oil supply (Mtoe)	..	..	2.8	0.7	0.6	0.4	0.3	0.4
Electricity consumption (TWh) <sup>1</sup>	..	..	9.0	6.3	8.7	8.9	8.8	9.3
GDP (billion 2010 USD)	..	..	15.0	14.1	19.5	22.8	23.2	23.5
GDP PPP (billion 2010 USD)	..	..	22.1	20.9	28.8	33.7	34.2	34.7
Population (millions)	..	..	1.59	1.40	1.33	1.32	1.31	1.32
Industrial production index (2010=100)	..	..	..	59.9	100.0	131.1	128.2	131.1
Total self-sufficiency <sup>2</sup>	..	..	0.55	0.67	0.88	0.97	1.02	0.91
Coal self-sufficiency <sup>2</sup>	..	..	0.85	0.90	1.01	1.02	1.09	1.04
Oil self-sufficiency <sup>2</sup>	..	..	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	..	..	0.65	0.33	0.29	0.26	0.23	0.25
TPES/GDP PPP (toe per thousand 2010 USD)	..	..	0.44	0.23	0.20	0.18	0.16	0.17
TPES/population (toe per capita)	..	..	6.16	3.37	4.22	4.55	4.13	4.54
Net oil imports/GDP (toe per thousand 2010 USD)	..	..	0.21	0.06	0.04	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	..	..	0.19	0.05	0.03	0.02	0.01	0.02
Oil supply/population (toe per capita)	..	..	1.79	0.46	0.43	0.31	0.22	0.32
Share of renewables in TPES	..	..	0.02	0.11	0.15	0.14	0.17	0.18
Share of renewables in electricity generation	..	..	-	0.00	0.08	0.11	0.14	0.13
TFC/GDP (toe per thousand 2010 USD)	..	..	0.39	0.18	0.15	0.13	0.12	..
TFC/GDP PPP (toe per thousand 2010 USD)	..	..	0.27	0.12	0.10	0.09	0.08	..
TFC/population (toe per capita)	..	..	3.69	1.84	2.22	2.19	2.17	..
Elect. cons./GDP (kWh per 2010 USD)	..	..	0.60	0.45	0.44	0.39	0.38	0.40
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	..	..	0.41	0.30	0.30	0.26	0.26	0.27
Elect. cons./population (kWh per capita)	..	..	5691	4528	6499	6725	6698	7077
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	188.1	100.0	76.5	73.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	163.7	100.0	85.6	80.9	..

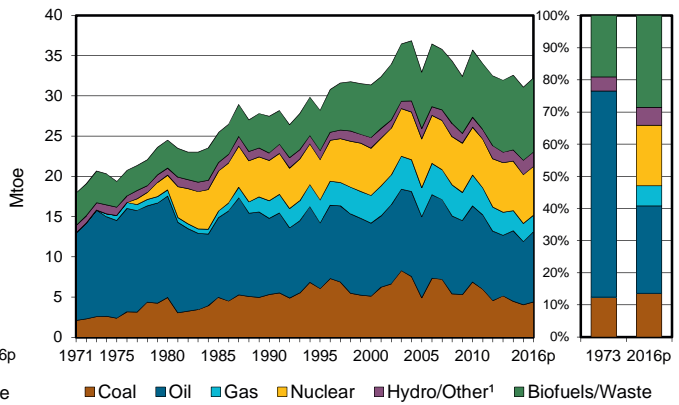
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## Finland

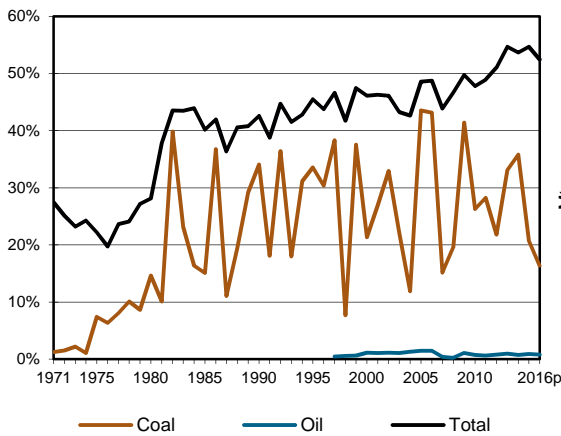
**Figure 1. Energy production**



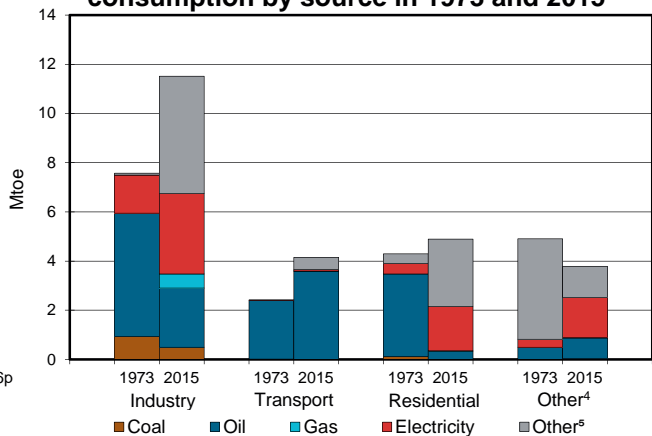
**Figure 2. Total primary energy supply<sup>2</sup>**



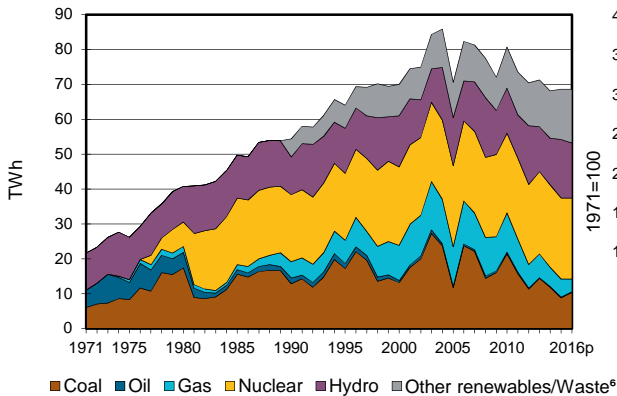
**Figure 3. Energy self-sufficiency**



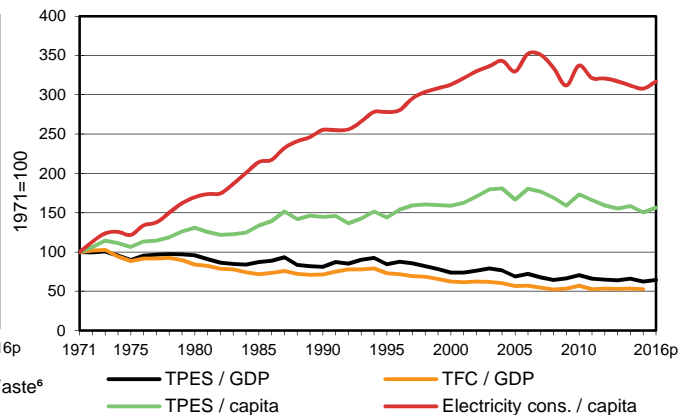
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Finland

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.84	0.07	-	-	6.06	1.44	0.20	8.99	-	0.16	17.75
Imports	2.56	11.12	5.30	2.24	-	-	-	0.14	1.85	-	23.20
Exports	-0.09	-	-6.91	-0.00	-	-	-	-0.04	-0.44	-	-7.48
Intl. marine bunkers	-	-	-0.29	-	-	-	-	-	-	-	-0.29
Intl. aviation bunkers	-	-	-0.64	-	-	-	-	-	-	-	-0.64
Stock changes	0.72	-0.58	-0.21	-	-	-	-	0.00	-	-	-0.06
<b>TPES</b>	<b>4.03</b>	<b>10.61</b>	<b>-2.74</b>	<b>2.24</b>	<b>6.06</b>	<b>1.44</b>	<b>0.20</b>	<b>9.08</b>	<b>1.40</b>	<b>0.16</b>	<b>32.49</b>
Transfers	-	1.26	-1.17	-	-	-	-	-	-	-	0.09
Statistical differences	-0.12	0.80	-0.80	0.00	-	-	-	0.00	0.00	-0.00	-0.11
Electricity plants	-0.61	-	-0.02	-0.01	-6.06	-1.44	-0.20	-0.35	4.05	-0.04	-4.69
CHP plants	-1.83	-	-0.07	-0.91	-	-	-	-2.53	1.85	2.77	-0.72
Heat plants	-0.31	-	-0.15	-0.25	-	-	-	-0.72	-0.03	1.31	-0.15
Blast furnaces	-0.31 e	-	-0.10	-	-	-	-	-	-	-	-0.41
Gas works	-	-	-	0.01	-	-	-	-0.01	-	-	-0.00
Coke/pat. fuel/BKB/PB plants	-0.02	-	-	-	-	-	-	-	-	-	-0.02
Oil refineries	-	-13.06	13.01	-	-	-	-	-	-	-	-0.05
Petrochemical plants	-	0.17	-0.19	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-0.07	0.21	-	-0.25	-	-	-	-	-	-	-0.11
Energy industry own use	-0.18	-	-0.57	-0.18	-	-	-	-0.04	-0.31	-0.01	-1.30
Losses	-0.04	-	-0.05	-	-	-	-	-	-0.21	-0.35	-0.65
<b>TFC</b>	<b>0.54</b>	<b>-</b>	<b>7.15</b>	<b>0.64</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>5.44</b>	<b>6.75</b>	<b>3.83</b>	<b>24.35</b>
<b>INDUSTRY</b>	<b>0.50</b>	<b>-</b>	<b>1.19</b>	<b>0.55</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.51</b>	<b>3.26</b>	<b>1.26</b>	<b>10.28</b>
Iron and steel	0.21 e	-	0.12	0.05	-	-	-	0.00	0.37	0.10	0.85
Chemical and petrochemical	-	-	0.27	0.02	-	-	-	0.02	0.41	0.26	0.98
Non-ferrous metals	0.01	-	0.03	0.00	-	-	-	0.00	0.16	0.05	0.25
Non-metallic minerals	0.07	-	0.09	0.03	-	-	-	0.04	0.05	0.01	0.28
Transport equipment	-	-	0.01	0.00	-	-	-	-	0.02	0.02	0.06
Machinery	-	-	0.03	0.01	-	-	-	0.00	0.18	0.09	0.31
Mining and quarrying	-	-	0.06	-	-	-	-	0.00	0.10	0.00	0.16
Food and tobacco	0.02	-	0.05	0.02	-	-	-	0.01	0.15	0.16	0.40
Paper, pulp and printing	0.20	-	0.10	0.41	-	-	-	3.24	1.58	0.35	5.88
Wood and wood products	0.01	-	0.01	0.00	-	-	-	0.20	0.11	0.16	0.49
Construction	-	-	0.33	-	-	-	-	-	0.03	-	0.36
Textile and leather	-	-	0.00	0.01	-	-	-	-	0.01	0.01	0.03
Non-specified	0.00	-	0.08	0.01	-	-	-	0.01	0.08	0.04	0.22
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3.59</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.50</b>	<b>0.06</b>	<b>-</b>	<b>4.15</b>
Domestic aviation	-	-	0.06	-	-	-	-	-	-	-	0.06
Road	-	-	3.37	0.00	-	-	-	0.50	0.00	-	3.87
Rail	-	-	0.02	-	-	-	-	-	0.06	-	0.08
Pipeline transport	-	-	-	0.00	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.13	-	-	-	-	0.00	-	-	0.14
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.04</b>	<b>-</b>	<b>1.16</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.43</b>	<b>3.43</b>	<b>2.57</b>	<b>8.68</b>
Residential	0.00	-	0.32	0.03	-	-	0.00	1.19	1.80	1.55	4.89
Comm. and public services	0.00	-	0.22	0.03	-	-	-	0.08	1.50	0.88	2.71
Agriculture/forestry	0.03	-	0.35	0.00	-	-	-	0.16	0.13	0.01	0.68
Fishing	-	-	0.03	-	-	-	-	-	-	-	0.03
Non-specified	-	-	0.22	-	-	-	-	0.00	-	0.13	0.36
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.21</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.23</b>
in industry/transf./energy	-	-	1.21	0.02	-	-	-	-	-	-	1.23
of which: chem./petrochem.	-	-	0.80	0.02	-	-	-	-	-	-	0.82
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>8.79</b>	<b>-</b>	<b>0.21</b>	<b>5.20</b>	<b>23.25</b>	<b>16.77</b>	<b>2.35</b>	<b>11.81</b>	<b>-</b>	<b>0.23</b>	<b>68.60</b>
Electricity plants	2.82	-	0.09	0.04	23.25	16.77	2.34	1.49	-	0.06	46.86
CHP plants	5.97	-	0.12	5.15	-	-	0.01	10.31	-	0.17	21.74
<b>Heat generated - PJ</b>	<b>56.72</b>	<b>-</b>	<b>7.36</b>	<b>25.47</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>79.05</b>	<b>0.23</b>	<b>7.74</b>	<b>177.56</b>
CHP plants	45.47	-	2.05	15.87	-	-	0.30	52.49	-	1.27	117.44
Heat plants	11.25	-	5.31	9.61	-	-	0.70	26.56	0.23	6.47	60.13

1. Includes peat.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Finland

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.72	0.07	-	-	6.05	1.36	0.27	9.11	-	0.17	17.74
Imports	2.71	12.41	5.87	2.05	-	-	-	0.12	1.90	-	25.07
Exports	-0.07	-	-9.03	-0.00	-	-	-	-0.03	-0.27	-	-9.41
Intl. marine bunkers	-	-	-0.28	-	-	-	-	-	-	-	-0.28
Intl. aviation bunkers	-	-	-0.65	-	-	-	-	-	-	-	-0.65
Stock changes	1.04	0.04	0.30	-	-	-	-	c	-	-	1.38
<b>TPES</b>	<b>4.39</b>	<b>12.53</b>	<b>-3.79</b>	<b>2.05</b>	<b>6.05</b>	<b>1.36</b>	<b>0.27</b>	<b>9.20</b>	<b>1.63</b>	<b>0.17</b>	<b>33.86</b>
Electricity and Heat Output											
Elec. generated - TWh	10.33	-	0.21	3.64	23.21	15.81	3.10	12.07	-	0.24	68.60
Heat generated - PJ	63.05	-	7.55	23.90	-	-	0.98	85.13	0.20	8.50	189.30

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

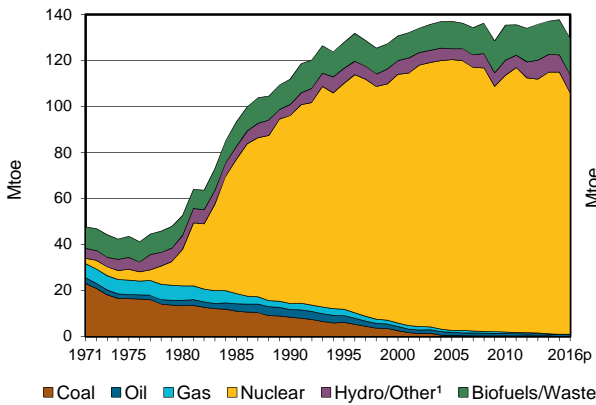
	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	4.9	6.9	12.1	14.9	17.5	18.3	17.8	17.7
Net imports (Mtoe)	16.4	18.3	17.8	18.5	18.0	17.1	15.7	15.7
Total primary energy supply (Mtoe)	21.0	24.6	28.4	32.4	36.6	34.1	32.5	33.9
Net oil imports (Mtoe)	13.6	13.7	10.3	10.5	9.4	9.3	9.5	9.3
Oil supply (Mtoe)	13.3	12.6	9.5	9.1	9.5	8.8	7.9	8.7
Electricity consumption (TWh) <sup>1</sup>	28.2	39.7	62.3	79.2	88.4	83.3	82.5	85.1
GDP (billion 2010 USD)	99.9	122.7	167.1	209.4	247.8	247.1	247.7	251.2
GDP PPP (billion 2010 USD)	83.9	103.0	140.4	175.9	208.2	207.6	208.1	211.0
Population (millions)	4.67	4.78	4.99	5.18	5.36	5.46	5.48	5.50
Industrial production index (2010=100)	34.3	43.9	58.1	91.2	100.0	94.7	93.8	96.0
Total self-sufficiency <sup>2</sup>	0.23	0.28	0.43	0.46	0.48	0.54	0.55	0.52
Coal self-sufficiency <sup>2</sup>	0.02	0.15	0.34	0.21	0.26	0.36	0.21	0.16
Oil self-sufficiency <sup>2</sup>	-	-	-	0.01	0.01	0.01	0.01	0.01
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.21	0.20	0.17	0.15	0.15	0.14	0.13	0.13
TPES/GDP PPP (toe per thousand 2010 USD)	0.25	0.24	0.20	0.18	0.18	0.16	0.16	0.16
TPES/population (toe per capita)	4.51	5.15	5.69	6.26	6.82	6.24	5.93	6.16
Net oil imports/GDP (toe per thousand 2010 USD)	0.14	0.11	0.06	0.05	0.04	0.04	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.13	0.10	0.06	0.04	0.04	0.04	0.03	0.03
Oil supply/population (toe per capita)	2.84	2.64	1.90	1.76	1.76	1.60	1.44	1.59
Share of renewables in TPES	0.23	0.18	0.19	0.24	0.26	0.30	0.32	0.31
Share of renewables in electricity generation	0.40	0.25	0.30	0.33	0.30	0.39	0.45	0.45
TFC/GDP (toe per thousand 2010 USD)	0.19	0.16	0.13	0.12	0.11	0.10	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.23	0.19	0.16	0.14	0.13	0.12	0.12	..
TFC/population (toe per capita)	4.11	4.05	4.48	4.72	4.93	4.52	4.44	..
Elect. cons./GDP (kWh per 2010 USD)	0.28	0.32	0.37	0.38	0.36	0.34	0.33	0.34
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.34	0.39	0.44	0.45	0.43	0.40	0.40	0.40
Elect. cons./population (kWh per capita)	6047	8295	12487	15306	16485	15246	15050	15487
Industry cons. <sup>3</sup> /industrial production (2010=100)	183.0	136.3	150.6	115.1	100.0	100.6	101.7	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	576.2	336.1	181.8	110.7	100.0	99.3	101.4	..

1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

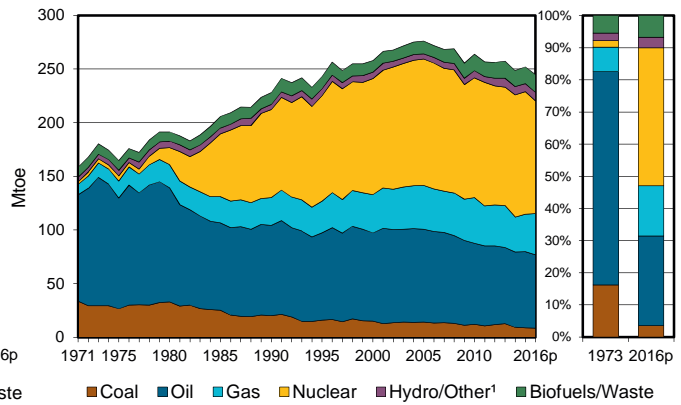


## France

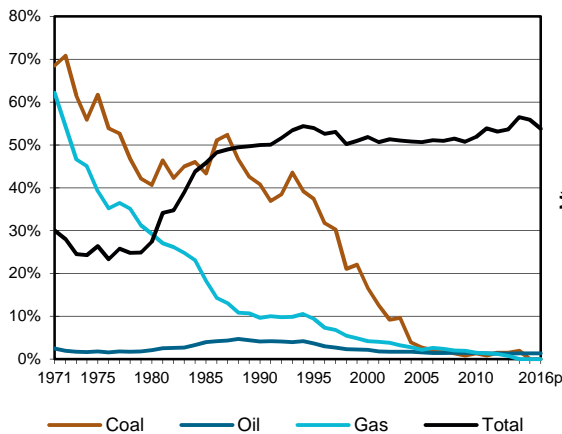
**Figure 1. Energy production**



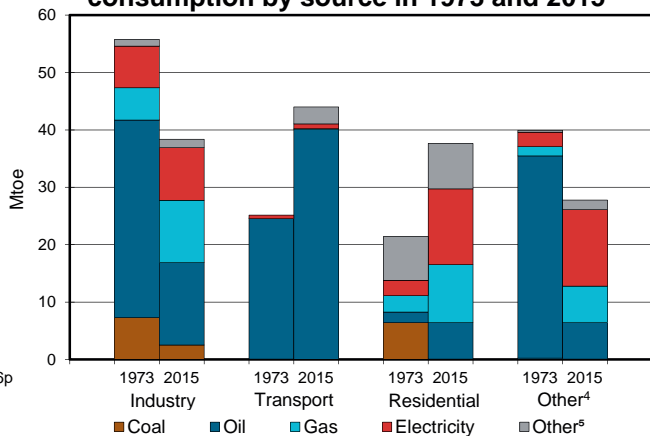
**Figure 2. Total primary energy supply<sup>2</sup>**



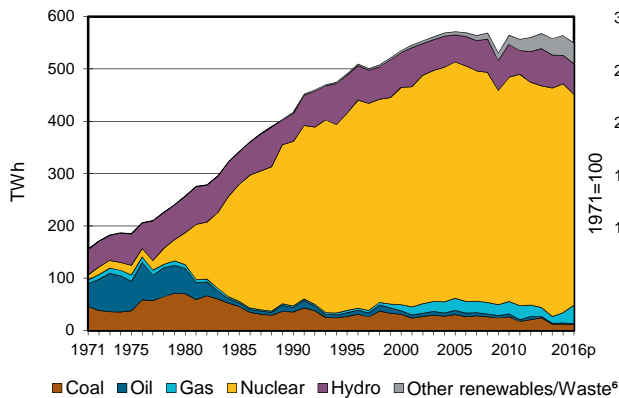
**Figure 3. Energy self-sufficiency**



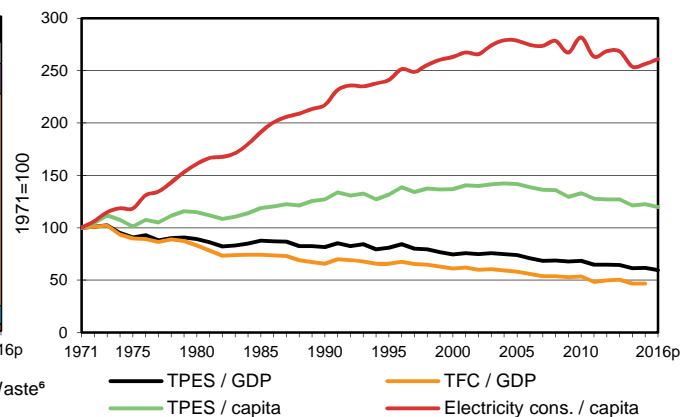
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## France

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	0.97	-	0.02	114.00	4.68	2.81	15.27	-	0.01	137.76
Imports	8.70	57.50	41.30	39.44	-	-	-	0.61	0.86	-	148.40
Exports	-0.02	-0.10	-21.16	-4.86	-	-	-	-0.18	-6.37	-	-32.68
Intl. marine bunkers	-	-	-1.62	-	-	-	-	-	-	-	-1.62
Intl. aviation bunkers	-	-	-5.94	-	-	-	-	-	-	-	-5.94
Stock changes	0.14	0.11	-0.07	0.44	-	-	-	-0.03	-	-	0.59
<b>TPES</b>	<b>8.82</b>	<b>58.49</b>	<b>12.51</b>	<b>35.03</b>	<b>114.00</b>	<b>4.68</b>	<b>2.81</b>	<b>15.67</b>	<b>-5.51</b>	<b>0.01</b>	<b>246.51</b>
Transfers	-	0.36	-0.13	-	-	-	-	-	-	-	0.23
Statistical differences	0.01	-0.07	-2.02	-0.91	-	-	-0.00	0.03	0.28	-0.33	-3.01
Electricity plants	-2.69	-	-0.41	-1.57	-114.00	-4.68	-2.49	-1.23	47.05	-	-80.03
CHP plants	-0.17	-	-0.24	-2.06	-	-	-	-2.28	1.41	1.90	-1.44
Heat plants	-0.17	-	-0.07	-0.65	-	-	-0.18	-0.59	-0.00	1.34	-0.34
Blast furnaces	-1.80 e	-	-	-	-	-	-	-	-	-	-1.80
Gas works	-	-	-	0.01	-	-	-	-0.01	-	-	0.00
Coke/pat. fuel/BKB/PB plants	-0.52	-	-	-	-	-	-	-	-	-	-0.52
Oil refineries	-	-59.94	60.67	-	-	-	-	-	-	-	0.73
Petrochemical plants	-	1.16	-1.21	-	-	-	-	-	-	-	-0.05
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-0.32	-0.32
Energy industry own use	-0.92	-	-1.87	-1.91	-	-	-	-0.05	-3.59	-0.07	-8.42
Losses	-	-	-	-0.46	-	-	-	-	-3.10	-0.17	-3.73
<b>TFC</b>	<b>2.57</b>	<b>-</b>	<b>67.23</b>	<b>27.47</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>11.54</b>	<b>36.54</b>	<b>2.35</b>	<b>147.83</b>
<b>INDUSTRY</b>	<b>2.19</b>	<b>-</b>	<b>2.25</b>	<b>10.28</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.36</b>	<b>9.20</b>	<b>0.10</b>	<b>25.39</b>
Iron and steel	1.27 e	-	0.03	0.21	-	-	-	0.02	0.16	-	1.67
Chemical and petrochemical	0.36	-	0.26	2.97	-	-	-	0.10	1.69	-	5.38
Non-ferrous metals	-	-	0.01	0.18	-	-	-	-	0.75	-	0.94
Non-metallic minerals	0.26	-	0.68	1.47	-	-	-	0.14	0.69	-	3.24
Transport equipment	0.01	-	0.02	0.37	-	-	-	0.01	0.59	-	1.00
Machinery	0.02	-	0.11	0.63	-	-	-	0.00	1.11	-	1.88
Mining and quarrying	-	-	0.19	0.04	-	-	-	0.01	0.14	-	0.38
Food and tobacco	0.27	-	0.26	2.62	-	-	-	0.13	1.78	-	5.06
Paper, pulp and printing	0.02	-	0.05	0.96	-	-	-	0.61	0.67	-	2.31
Wood and wood products	-	-	0.05	0.06	-	-	-	0.32	0.19	-	0.61
Construction	-	-	0.53	0.28	-	-	-	0.00	0.58	-	1.39
Textile and leather	-	-	0.02	0.20	-	-	-	0.00	0.14	-	0.36
Non-specified	-	-	0.05	0.28	-	-	0.00	0.02	0.72	0.10	1.16
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>39.83</b>	<b>0.15</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.95</b>	<b>0.88</b>	<b>-</b>	<b>43.80</b>
Domestic aviation	-	-	0.80	-	-	-	-	-	-	-	0.80
Road	-	-	38.40	0.10	-	-	-	2.95	0.01	-	41.46
Rail	-	-	0.16	-	-	-	-	-	0.86	-	1.02
Pipeline transport	-	-	-	0.02	-	-	-	-	-	-	0.02
Domestic navigation	-	-	0.47	-	-	-	-	-	-	-	0.47
Non-specified	-	-	-	0.03	-	-	-	-	-	-	0.03
<b>OTHER</b>	<b>0.08</b>	<b>-</b>	<b>12.70</b>	<b>16.48</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>7.23</b>	<b>26.46</b>	<b>2.25</b>	<b>65.33</b>
Residential	0.04	-	6.37	10.18	-	-	0.09	6.46	13.11	1.38	37.63
Comm. and public services	0.04	-	2.32	6.11	-	-	0.03	0.62	12.58	0.82	22.53
Agriculture/forestry	0.00	-	3.07	0.19	-	-	0.01	0.14	0.69	0.01	4.11
Fishing	-	-	0.27	0.00	-	-	0.01	-	0.02	-	0.29
Non-specified	-	-	0.66	-	-	-	-	-	0.07	0.05	0.78
<b>NON-ENERGY USE</b>	<b>0.30</b>	<b>-</b>	<b>12.46</b>	<b>0.55</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13.30</b>
in industry/transf./energy	0.30	-	12.15	0.55	-	-	-	-	-	-	13.00
of which: chem./petrochem.	-	-	9.29	0.55	-	-	-	-	-	-	9.83
in transport	-	-	0.22	-	-	-	-	-	-	-	0.22
in other	0.00	-	0.08	-	-	-	-	-	-	-	0.08
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>12.17</b>	<b>-</b>	<b>2.16</b>	<b>19.79</b>	<b>437.43</b>	<b>54.44</b>	<b>29.33</b>	<b>8.17</b>	<b>-</b>	<b>-</b>	<b>563.49</b>
Electricity plants	11.74	-	1.73	9.11	437.43	54.44	29.33	3.27	-	-	547.05
CHP plants	0.43	-	0.43	10.68	-	-	-	4.90	-	-	16.45
<b>Heat generated - PJ</b>	<b>7.60</b>	<b>-</b>	<b>9.43</b>	<b>58.18</b>	<b>-</b>	<b>-</b>	<b>3.84</b>	<b>56.33</b>	<b>0.01</b>	<b>0.50</b>	<b>135.89</b>
CHP plants	0.95	-	6.81	33.56	-	-	-	38.16	-	-	79.49
Heat plants	6.64	-	2.61	24.62	-	-	3.84	18.17	0.01	0.50	56.40

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## France

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	0.93	-	0.02	105.08	5.05	2.87	15.81	-	0.01	129.77
Imports	8.08	55.20	39.22	41.24	-	-	-	0.88	1.79	-	146.40
Exports	-0.05	-0.06	-20.38	-3.34	-	-	-	-0.20	-5.28	-	-29.31
Intl. marine bunkers	-	-	-1.45	-	-	-	-	-	-	-	-1.45
Intl. aviation bunkers	-	-	-5.96	-	-	-	-	-	-	-	-5.96
Stock changes	0.56	1.04	-0.20	0.36	-	-	-	-0.01	-	-	1.74
<b>TPES</b>	<b>8.58</b>	<b>57.10</b>	<b>11.23</b>	<b>38.28</b>	<b>105.08</b>	<b>5.05</b>	<b>2.87</b>	<b>16.48</b>	<b>-3.49</b>	<b>0.01</b>	<b>241.19</b>
Electricity and Heat Output											
Elec. generated - TWh	11.26	-	2.05	34.81	403.21	58.73	30.05	9.50	-	-	549.60
Heat generated - PJ	7.60	-	9.43	58.18	-	-	3.84	56.33	0.01	0.50	135.89

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	44.2	52.6	111.9	130.7	135.4	137.1	137.8	129.8
Net imports (Mtoe)	145.5	149.0	119.4	132.6	131.0	114.3	115.7	117.1
Total primary energy supply (Mtoe)	180.1	191.8	224.0	251.9	261.2	242.7	246.5	241.2
Net oil imports (Mtoe)	128.7	112.3	85.9	89.8	81.8	76.7	77.6	74.0
Oil supply (Mtoe)	119.8	106.3	84.0	82.2	75.6	70.3	71.0	68.3
Electricity consumption (TWh) <sup>1</sup>	168.3	243.9	347.6	440.1	503.0	462.0	468.4	478.1
GDP (billion 2010 USD)	1224.0	1492.1	1907.3	2346.5	2646.8	2748.2	2777.5	2810.5
GDP PPP (billion 2010 USD)	1083.4	1320.7	1688.2	2076.9	2342.8	2425.0	2455.9	2485.0
Population (millions)	53.33	55.15	58.23	60.87	64.97	66.23	66.50	66.67
Industrial production index (2010=100)	81.5	89.6	110.7	114.4	100.0	98.6	100.4	100.8
Total self-sufficiency <sup>2</sup>	0.25	0.27	0.50	0.52	0.52	0.57	0.56	0.54
Coal self-sufficiency <sup>2</sup>	0.62	0.41	0.41	0.17	0.01	0.02	-	-
Oil self-sufficiency <sup>2</sup>	0.02	0.02	0.04	0.02	0.01	0.01	0.01	0.01
Natural gas self-sufficiency <sup>2</sup>	0.47	0.29	0.10	0.04	0.02	0.00	0.00	0.00
TPES/GDP (toe per thousand 2010 USD)	0.15	0.13	0.12	0.11	0.10	0.09	0.09	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.17	0.15	0.13	0.12	0.11	0.10	0.10	0.10
TPES/population (toe per capita)	3.38	3.48	3.85	4.14	4.02	3.67	3.71	3.62
Net oil imports/GDP (toe per thousand 2010 USD)	0.11	0.08	0.05	0.04	0.03	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.07	0.04	0.04	0.03	0.03	0.03	0.02
Oil supply/population (toe per capita)	2.25	1.93	1.44	1.35	1.16	1.06	1.07	1.02
Share of renewables in TPES	0.08	0.08	0.07	0.06	0.08	0.09	0.09	0.10
Share of renewables in electricity generation	0.27 e	0.27 e	0.13 e	0.13	0.14	0.17	0.16	0.17
TFC/GDP (toe per thousand 2010 USD)	0.12	0.10	0.08	0.07	0.06	0.05	0.05	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.13	0.11	0.09	0.08	0.07	0.06	0.06	..
TFC/population (toe per capita)	2.67	2.56	2.46	2.68	2.48	2.20	2.22	..
Elect. cons./GDP (kWh per 2010 USD)	0.14	0.16	0.18	0.19	0.19	0.17	0.17	0.17
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.16	0.19	0.21	0.21	0.22	0.19	0.19	0.19
Elect. cons./population (kWh per capita)	3156	4423	5970	7229	7741	6975	7043	7171
Industry cons. <sup>3</sup> /industrial production (2010=100)	170.6	150.7	102.6	109.6	100.0	97.0	95.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	273.3	216.5	100.7	106.6	100.0	97.8	92.9	..

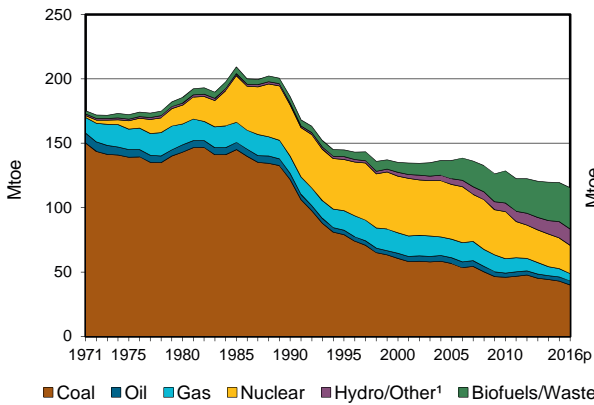
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

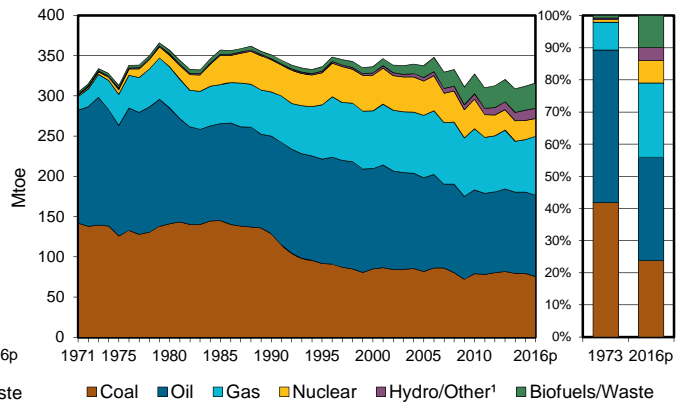
3. Includes non-energy use.

## Germany

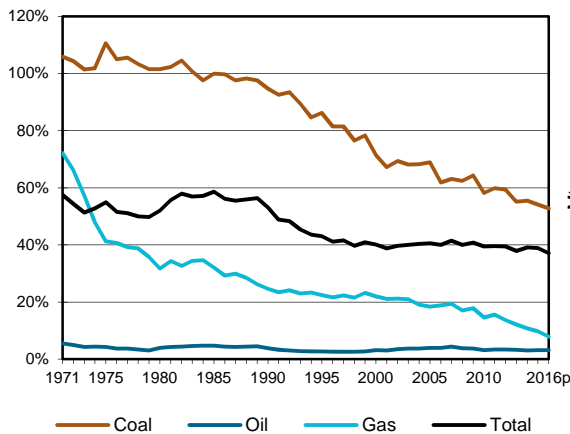
**Figure 1. Energy production**



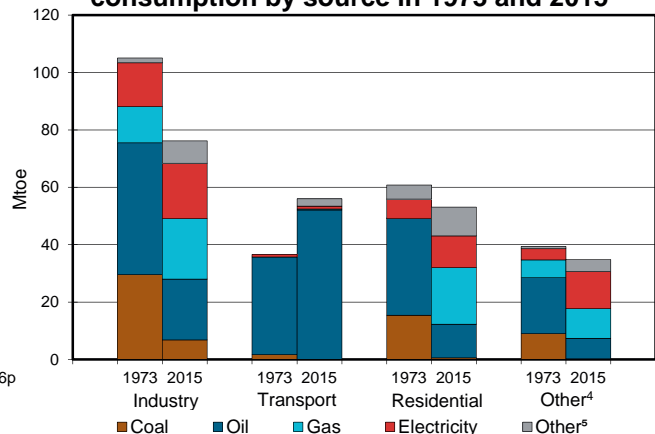
**Figure 2. Total primary energy supply<sup>2</sup>**



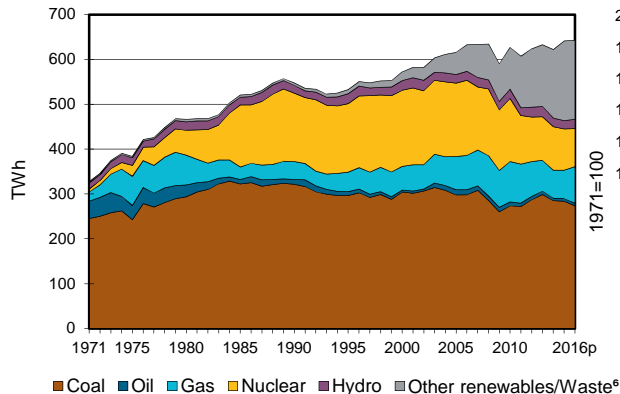
**Figure 3. Energy self-sufficiency**



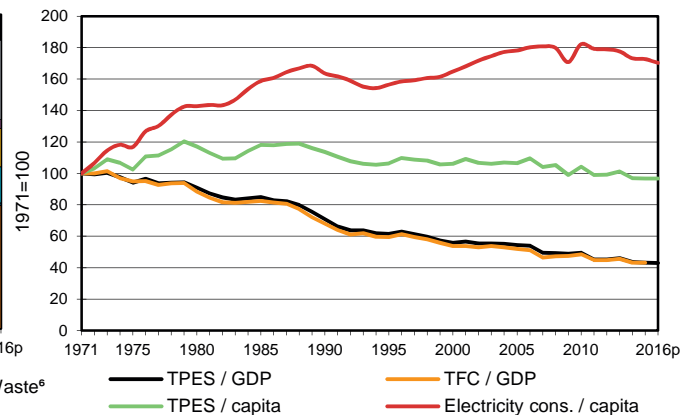
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Germany

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	43.00	3.18	-	6.33	23.92	1.63	11.03	30.48	-	-	119.57
Imports	37.48	92.66	38.07	85.89	-	-	-	1.04	3.18	-	258.33
Exports	-1.40	-0.34	-22.13	-27.23	-	-	-	-1.57	-7.33	-0.00	-60.02
Intl. marine bunkers	-	-	-2.39	-	-	-	-	-	-	-	-2.39
Intl. aviation bunkers	-	-	-8.05	-	-	-	-	-	-	-	-8.05
Stock changes	0.33	0.28	-0.40	0.14	-	-	-	-	-	-	0.36
<b>TPES</b>	<b>79.41</b>	<b>95.79</b>	<b>5.09</b>	<b>65.14</b>	<b>23.92</b>	<b>1.63</b>	<b>11.03</b>	<b>29.94</b>	<b>-4.15</b>	<b>-0.00</b>	<b>307.79</b>
Transfers	-	0.44	0.25	-	-	-	-	-	-	-	0.69
Statistical differences	-0.89	-0.30	-0.84	2.01	-	-	-	-0.00	-	-	-0.01
Electricity plants	-56.16	-	-0.90	-1.52	-23.92	-1.63	-10.26	-5.59	45.19	-	-54.79
CHP plants	-6.79	-	-0.41	-10.42	-	-	-	-8.10	9.93	7.82	-7.96
Heat plants	-0.40	-	-0.12	-2.15	-	-	-0.03	-1.45	-	3.10	-1.05
Blast furnaces	-5.51	-	-0.10	-	-	-	-	-	-	-	-5.61
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.69	-	-0.45	-	-	-	-	-	-	-	-1.13
Oil refineries	-	-102.20	101.35	-	-	-	-	-	-	-	-0.85
Petrochemical plants	-	6.26	-6.41	-	-	-	-	-	-	-	-0.15
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.83	-	-5.40	-1.40	-	-	-	-0.54	-4.50	-0.27	-12.95
Losses	-0.54	-	-	-	-	-	-	-0.02	-2.20	-1.06	-3.82
<b>TFC</b>	<b>7.60</b>	<b>-</b>	<b>92.06</b>	<b>51.66</b>	<b>-</b>	<b>-</b>	<b>0.74</b>	<b>14.25</b>	<b>44.27</b>	<b>9.59</b>	<b>220.17</b>
<b>INDUSTRY</b>	<b>6.43</b>	<b>-</b>	<b>3.03</b>	<b>18.70</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.64</b>	<b>19.34</b>	<b>4.14</b>	<b>55.27</b>
Iron and steel	3.26	-	0.08	2.11	-	-	-	0.00	2.24	0.04	7.73
Chemical and petrochemical	1.04	-	1.67	4.89	-	-	-	0.26	4.60	2.32	14.78
Non-ferrous metals	0.03	-	0.07	0.81	-	-	-	0.01	1.36	0.03	2.31
Non-metallic minerals	1.38	-	0.42	2.48	-	-	-	1.20	1.06	0.02	6.56
Transport equipment	0.04	-	0.04	0.87	-	-	-	0.01	1.59	0.32	2.88
Machinery	0.02	-	0.24	1.70	-	-	-	0.06	2.87	0.24	5.13
Mining and quarrying	0.06	-	0.03	0.10	-	-	-	0.02	0.15	0.00	0.37
Food and tobacco	0.21	-	0.18	2.64	-	-	-	0.06	1.56	0.23	4.89
Paper, pulp and printing	0.37	-	0.05	2.07	-	-	-	0.69	1.83	0.66	5.68
Wood and wood products	-	-	0.01	0.12	-	-	-	1.20	0.39	0.07	1.79
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	0.01	-	0.02	0.24	-	-	-	0.00	0.19	0.05	0.52
Non-specified	0.00	-	0.21	0.66	-	-	-	0.13	1.48	0.16	2.64
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>51.73</b>	<b>0.43</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.57</b>	<b>0.97</b>	<b>-</b>	<b>55.69</b>
Domestic aviation	-	-	0.73	-	-	-	-	-	-	-	0.73
Road	-	-	50.22	0.18	-	-	-	2.55	0.02	-	52.96
Rail	-	-	0.32	-	-	-	-	0.02	0.95	-	1.29
Pipeline transport	-	-	-	0.25	-	-	-	-	-	-	0.25
Domestic navigation	-	-	0.32	-	-	-	-	-	-	-	0.32
Non-specified	-	-	0.14	-	-	-	-	-	-	-	0.14
<b>OTHER</b>	<b>0.78</b>	<b>-</b>	<b>18.80</b>	<b>30.17</b>	<b>-</b>	<b>-</b>	<b>0.74</b>	<b>8.04</b>	<b>23.96</b>	<b>5.45</b>	<b>87.93</b>
Residential	0.60	-	11.68	19.73	-	-	0.66	5.32	11.07	4.07	53.12
Comm. and public services	0.18	-	7.00	10.43	-	-	0.08	2.72	12.89	1.38	34.69
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.12	-	-	-	-	-	-	-	0.12
<b>NON-ENERGY USE</b>	<b>0.39</b>	<b>-</b>	<b>18.51</b>	<b>2.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.27</b>
in industry/transf./energy	0.39	-	18.17	2.37	-	-	-	-	-	-	20.94
of which: chem./petrochem.	0.02	-	14.82	2.37	-	-	-	-	-	-	17.21
in transport	-	-	0.32	-	-	-	-	-	-	-	0.32
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>283.71</b>	<b>-</b>	<b>6.21</b>	<b>63.02</b>	<b>91.79</b>	<b>18.98</b>	<b>119.89</b>	<b>57.38</b>	<b>-</b>	<b>-</b>	<b>640.97</b>
Electricity plants	261.38	-	3.66	9.02	91.79	18.98	119.12	21.52	-	-	525.46
CHP plants	22.33	-	2.55	54.00	-	-	0.77	35.86	-	-	115.51
<b>Heat generated - PJ</b>	<b>151.35</b>	<b>-</b>	<b>4.88</b>	<b>190.07</b>	<b>-</b>	<b>-</b>	<b>9.37</b>	<b>101.89</b>	<b>-</b>	<b>-</b>	<b>457.56</b>
CHP plants	139.45	-	0.85	117.02	-	-	4.95	65.28	-	-	327.54
Heat plants	11.90	-	4.03	73.05	-	-	4.43	36.61	-	-	130.02

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Germany

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	39.83	3.20	-	5.74	22.06	1.80	10.85	31.97	-	-	115.45
Imports	36.54	92.63	39.33	85.20	-	-	-	1.01	2.44	-	257.16
Exports	-1.46	-0.10	-22.53	-19.27	-	-	-	-1.59	-6.78	-0.00	-51.73
Intl. marine bunkers	-	-	-2.79	-	-	-	-	-	-	-	-2.79
Intl. aviation bunkers	-	-	-8.55	-	-	-	-	-	-	-	-8.55
Stock changes	0.47	0.77	-0.74	1.49	-	-	-	-	-	-	1.99
<b>TPES</b>	<b>75.39</b>	<b>96.50</b>	<b>4.72</b>	<b>73.16</b>	<b>22.06</b>	<b>1.80</b>	<b>10.85</b>	<b>31.40</b>	<b>-4.35</b>	<b>-0.00</b>	<b>311.53</b>
Electricity and Heat Output											
Elec. generated - TWh	273.65	-	5.93	81.35	84.63	20.91	117.58	58.86	-	-	642.89
Heat generated - PJ	136.90	-	5.05	206.90	-	-	8.18	103.65	-	-	460.69

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	171.7	185.6	186.2	135.2	128.6	119.7	119.6	115.5
Net imports (Mtoe)	171.1	183.4	167.3	205.7	203.9	196.0	198.3	205.4
Total primary energy supply (Mtoe)	334.7	357.2	351.2	336.6	326.0	305.7	307.8	311.5
Net oil imports (Mtoe)	160.8	148.9	122.1	126.9	112.1	107.2	108.3	109.3
Oil supply (Mtoe)	158.7	143.9	121.4	124.8	104.3	100.7	100.9	101.2
Electricity consumption (TWh) <sup>1</sup>	367.5	453.9	527.4	545.5	594.1	569.8	573.0	572.3
GDP (billion 2010 USD)	1729.0	2040.5	2568.6	3123.9	3417.1	3634.1	3696.6	3765.6
GDP PPP (billion 2010 USD)	1624.6	1917.4	2413.6	2935.3	3210.8	3414.7	3473.5	3538.0
Population (millions)	78.96	78.30	79.36	81.46	80.28	80.98	81.69	82.73
Industrial production index (2010=100)	62.3	67.2	81.1	89.4	100.0	110.5	110.9	112.3
Total self-sufficiency <sup>2</sup>	0.51	0.52	0.53	0.40	0.39	0.39	0.39	0.37
Coal self-sufficiency <sup>2</sup>	1.01	1.02	0.95	0.71	0.58	0.55	0.54	0.53
Oil self-sufficiency <sup>2</sup>	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
Natural gas self-sufficiency <sup>2</sup>	0.57	0.32	0.25	0.22	0.15	0.11	0.10	0.08
TPES/GDP (toe per thousand 2010 USD)	0.19	0.18	0.14	0.11	0.10	0.08	0.08	0.08
TPES/GDP PPP (toe per thousand 2010 USD)	0.21	0.19	0.15	0.11	0.10	0.09	0.09	0.09
TPES/population (toe per capita)	4.24	4.56	4.43	4.13	4.06	3.78	3.77	3.77
Net oil imports/GDP (toe per thousand 2010 USD)	0.09	0.07	0.05	0.04	0.03	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.09	0.07	0.05	0.04	0.03	0.03	0.03	0.03
Oil supply/population (toe per capita)	2.01	1.84	1.53	1.53	1.30	1.24	1.24	1.22
Share of renewables in TPES	0.01	0.02	0.02	0.03	0.09	0.12	0.13	0.13
Share of renewables in electricity generation	0.05	0.05	0.04	0.06	0.17	0.26	0.29	0.29
TFC/GDP (toe per thousand 2010 USD)	0.14	0.12	0.09	0.07	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.15	0.13	0.10	0.08	0.07	0.06	0.06	..
TFC/population (toe per capita)	3.06	3.18	3.03	2.84	2.85	2.67	2.70	..
Elect. cons./GDP (kWh per 2010 USD)	0.21	0.22	0.21	0.17	0.17	0.16	0.16	0.15
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.23	0.24	0.22	0.19	0.19	0.17	0.17	0.16
Elect. cons./population (kWh per capita)	4654	5796	6646	6697	7399	7035	7015	6917
Industry cons. <sup>3</sup> /industrial production (2010=100)	217.4	194.2	140.9	109.6	100.0	89.5	88.6	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	313.8	227.8	138.2	130.1	100.0	83.5	81.2	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Greece

Figure 1. Energy production

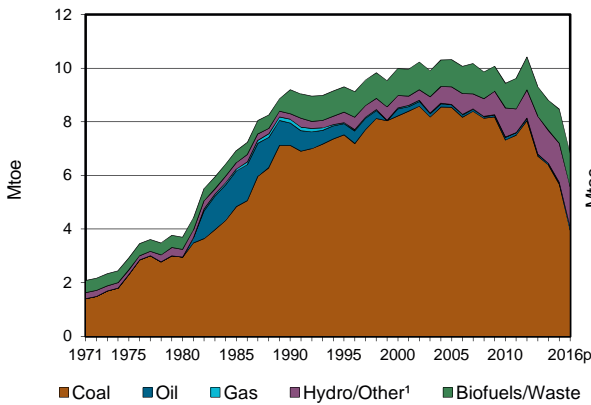


Figure 2. Total primary energy supply<sup>2</sup>

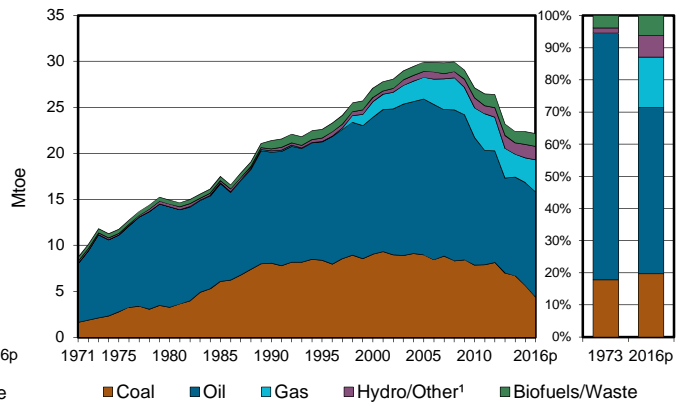


Figure 3. Energy self-sufficiency

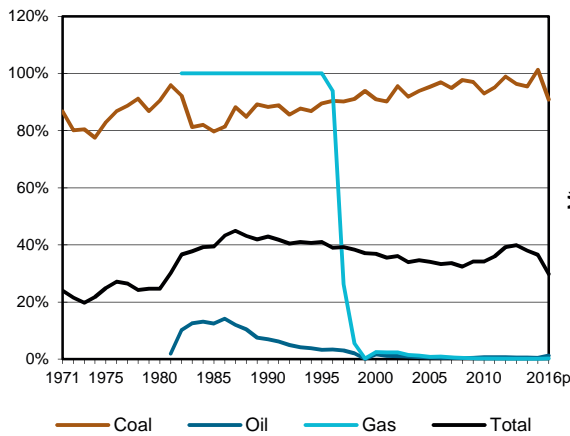


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

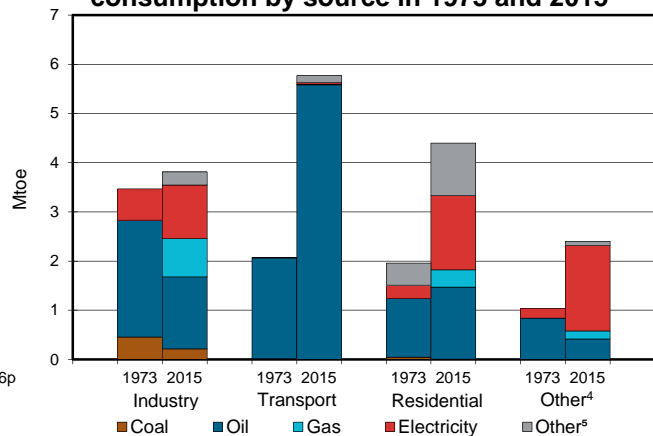


Figure 5. Electricity generation by source

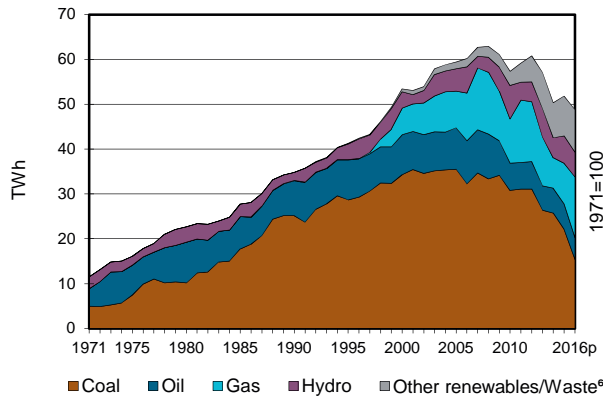
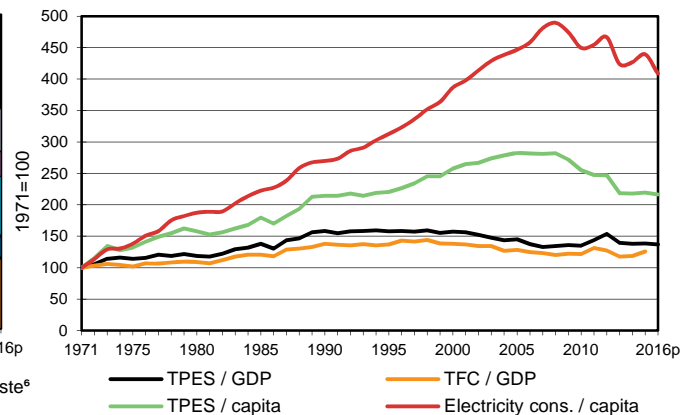


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## Greece

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	5.68	0.06	-	0.00	-	0.52	0.94	1.27	-	-	8.47
Imports	0.16	26.66	4.26	2.67	-	-	-	0.14	0.95	-	34.85
Exports	-	-0.08	-16.25	-	-	-	-	-0.01	-0.13	-	-16.47
Intl. marine bunkers	-	-	-1.78	-	-	-	-	-	-	-	-1.78
Intl. aviation bunkers	-	-	-0.82	-	-	-	-	-	-	-	-0.82
Stock changes	-0.23	-0.45	-0.38	-0.00	-	-	-	0.01	-	-	-1.05
<b>TPES</b>	<b>5.61</b>	<b>26.19</b>	<b>-14.98</b>	<b>2.68</b>	<b>-</b>	<b>0.52</b>	<b>0.94</b>	<b>1.40</b>	<b>0.83</b>	<b>-</b>	<b>23.19</b>
Transfers	-	2.00	-1.99	-	-	-	-	-	-	-	0.01
Statistical differences	-0.01	-0.10	0.00	-0.02	-	-	-	-0.00	-	-	-0.14
Electricity plants	-3.45	-	-1.09	-1.11	-	-0.52	-0.73	-0.01	3.59	-	-3.33
CHP plants	-1.92	-	-0.42	-0.21	-	-	-	-0.09	0.87	0.05	-1.72
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-28.09	28.67	-	-	-	-	-	-	-	0.58
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-	-0.00
Energy industry own use	-	-	-1.28	-0.01	-	-	-	-0.00	-0.49	-	-1.79
Losses	-	-	-	-0.01	-	-	-	-	-0.42	-	-0.43
<b>TFC</b>	<b>0.22</b>	<b>-</b>	<b>8.92</b>	<b>1.32</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>1.30</b>	<b>4.37</b>	<b>0.05</b>	<b>16.38</b>
<b>INDUSTRY</b>	<b>0.22</b>	<b>-</b>	<b>1.13</b>	<b>0.43</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.26</b>	<b>1.09</b>	<b>-</b>	<b>3.13</b>
Iron and steel	-	-	0.02	0.01	-	-	-	-	0.06	-	0.09
Chemical and petrochemical	-	-	0.06	0.04	-	-	-	0.06	0.06	-	0.22
Non-ferrous metals	0.17	-	0.00	0.25	-	-	-	-	0.41	-	0.83
Non-metallic minerals	0.05	-	0.58	0.01	-	-	-	0.02	0.09	-	0.74
Transport equipment	-	-	0.01	-	-	-	-	0.00	0.01	-	0.02
Machinery	-	-	0.02	0.00	-	-	-	0.00	0.02	-	0.04
Mining and quarrying	-	-	0.08	-	-	-	-	0.00	0.00	-	0.09
Food and tobacco	-	-	0.15	0.07	-	-	-	0.15	0.16	-	0.52
Paper, pulp and printing	-	-	0.02	0.02	-	-	-	0.00	0.04	-	0.08
Wood and wood products	-	-	0.00	0.00	-	-	-	0.02	0.01	-	0.03
Construction	-	-	0.12	-	-	-	-	0.01	-	-	0.13
Textile and leather	-	-	0.01	0.01	-	-	-	-	0.02	-	0.03
Non-specified	-	-	0.06	0.03	-	-	0.00	0.00	0.22	-	0.31
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.56</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>0.03</b>	<b>-</b>	<b>5.76</b>
Domestic aviation	-	-	0.17	-	-	-	-	-	-	-	0.17
Road	-	-	4.82	0.02	-	-	-	0.14	0.00	-	4.98
Rail	-	-	0.04	-	-	-	-	0.00	0.02	-	0.06
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.53	-	-	-	-	-	-	-	0.53
Non-specified	-	-	0.00	-	-	-	-	-	0.02	-	0.02
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>1.88</b>	<b>0.52</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>0.89</b>	<b>3.24</b>	<b>0.05</b>	<b>6.80</b>
Residential	0.00	-	1.46	0.36	-	-	0.19	0.83	1.51	0.05	4.40
Comm. and public services	-	-	0.12	0.17	-	-	0.01	0.04	1.54	-	1.87
Agriculture/forestry	0.00	-	0.03	0.00	-	-	0.00	0.03	0.19	-	0.26
Fishing	-	-	0.01	-	-	-	0.00	-	-	-	0.01
Non-specified	0.00	-	0.25	0.00	-	-	-	0.00	-	-	0.25
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.35</b>	<b>0.35</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.70</b>
in industry/transf./energy	-	-	0.33	0.35	-	-	-	-	-	-	0.68
of which: chem./petrochem.	-	-	0.14	0.35	-	-	-	-	-	-	0.49
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>22.11</b>	<b>-</b>	<b>5.66</b>	<b>9.09</b>	<b>-</b>	<b>6.10</b>	<b>8.52</b>	<b>0.34</b>	<b>-</b>	<b>-</b>	<b>51.82</b>
Electricity plants	14.63	-	4.79	7.67	-	6.10	8.52	0.04	-	-	41.75
CHP plants	7.47	-	0.87	1.42	-	-	-	0.31	-	-	10.07
<b>Heat generated - PJ</b>	<b>2.08</b>	<b>-</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.09</b>
CHP plants	2.08	-	0.01	-	-	-	-	-	-	-	2.09
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Greece

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	3.96	0.15	-	0.01	-	0.48	0.99	1.25	-	-	6.83
Imports	0.20	28.12	4.20	3.46	-	-	-	0.15	0.85	-	36.98
Exports	-0.01	-0.16	-18.20	-	-	-	-	-0.01	-0.09	-	-18.47
Intl. marine bunkers	-	-	-1.72	-	-	-	-	-	-	-	-1.72
Intl. aviation bunkers	-	-	-0.81	-	-	-	-	-	-	-	-0.81
Stock changes	0.20	-0.35	0.22	0.02	-	-	-	-0.00	-	-	0.09
<b>TPES</b>	<b>4.36</b>	<b>27.76</b>	<b>-16.31</b>	<b>3.49</b>	<b>-</b>	<b>0.48</b>	<b>0.99</b>	<b>1.39</b>	<b>0.76</b>	<b>-</b>	<b>22.91</b>
Electricity and Heat Output											
Elec. generated - TWh	15.41	-	4.85	13.56	-	5.54	9.08	0.37	-	-	48.81
Heat generated - PJ	2.08	-	0.01	-	-	-	-	-	-	-	2.09

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	2.3	3.7	9.2	10.0	9.4	8.8	8.5	6.8
Net imports (Mtoe)	12.0	13.7	15.3	21.8	21.3	16.9	18.4	18.5
Total primary energy supply (Mtoe)	11.8	15.0	21.4	27.1	27.6	23.1	23.2	22.9
Net oil imports (Mtoe)	11.6	13.2	14.3	19.3	17.0	13.4	14.6	14.0
Oil supply (Mtoe)	9.1	10.9	12.1	14.9	13.9	10.7	11.2	11.5
Electricity consumption (TWh) <sup>1</sup>	13.8	21.7	32.9	49.6	59.3	55.1	56.6	52.7
GDP (billion 2010 USD)	151.2	184.6	197.7	251.5	299.4	244.9	244.3	244.3
GDP PPP (billion 2010 USD)	158.4	193.4	207.1	263.5	313.7	256.5	256.0	256.0
Population (millions)	9.02	9.74	10.27	10.81	11.12	10.89	10.86	10.88
Industrial production index (2010=100)	69.4	92.7	102.0	122.4	100.0	87.8	88.7	90.7
Total self-sufficiency <sup>2</sup>	0.20	0.25	0.43	0.37	0.34	0.38	0.37	0.30
Coal self-sufficiency <sup>2</sup>	0.80	0.90	0.88	0.91	0.93	0.95	1.01	0.91
Oil self-sufficiency <sup>2</sup>	-	-	0.07	0.02	0.01	0.01	0.01	0.01
Natural gas self-sufficiency <sup>2</sup>	-	-	1.00	0.02	0.00	0.00	0.00	0.00
TPES/GDP (toe per thousand 2010 USD)	0.08	0.08	0.11	0.11	0.09	0.09	0.09	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.07	0.08	0.10	0.10	0.09	0.09	0.09	0.09
TPES/population (toe per capita)	1.31	1.54	2.09	2.51	2.48	2.12	2.14	2.11
Net oil imports/GDP (toe per thousand 2010 USD)	0.08	0.07	0.07	0.08	0.06	0.05	0.06	0.06
Oil supply/GDP (toe per thousand 2010 USD)	0.06	0.06	0.06	0.06	0.05	0.04	0.05	0.05
Oil supply/population (toe per capita)	1.00	1.12	1.18	1.38	1.25	0.99	1.03	1.05
Share of renewables in TPES	0.05	0.05	0.05	0.05	0.08	0.11	0.12	0.12
Share of renewables in electricity generation	0.15	0.15	0.05	0.08	0.18	0.24	0.29	0.31
TFC/GDP (toe per thousand 2010 USD)	0.06	0.06	0.07	0.07	0.07	0.06	0.07	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.05	0.06	0.07	0.07	0.06	0.06	0.06	..
TFC/population (toe per capita)	0.95	1.10	1.41	1.71	1.75	1.42	1.51	..
Elect. cons./GDP (kWh per 2010 USD)	0.09	0.12	0.17	0.20	0.20	0.23	0.23	0.22
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.09	0.11	0.16	0.19	0.19	0.22	0.22	0.21
Elect. cons./population (kWh per capita)	1532	2224	3200	4586	5334	5063	5212	4847
Industry cons. <sup>3</sup> /industrial production (2010=100)	109.9	103.6	98.4	91.9	100.0	94.4	94.5	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	166.3	159.3	97.7	99.1	100.0	80.6	80.1	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Hungary

Figure 1. Energy production

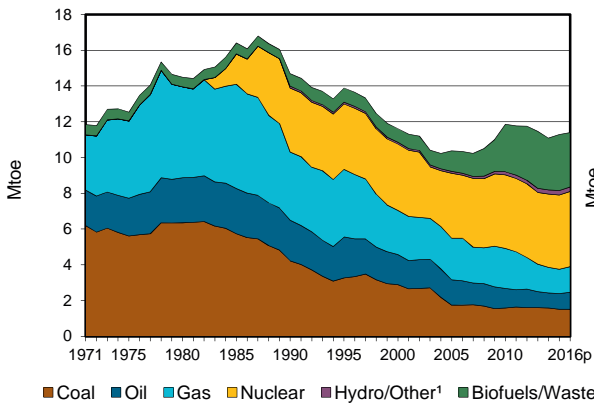


Figure 2. Total primary energy supply<sup>2</sup>

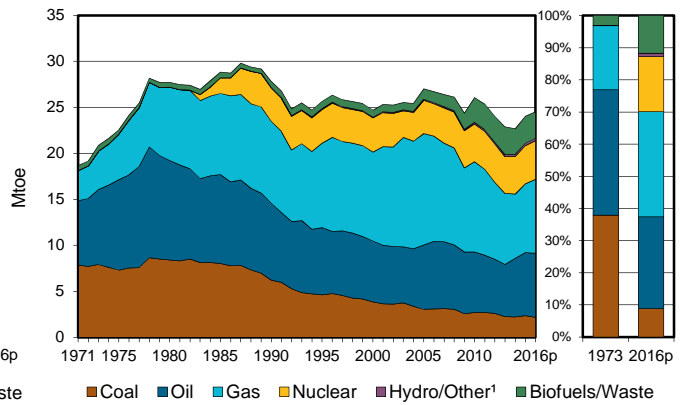


Figure 3. Energy self-sufficiency

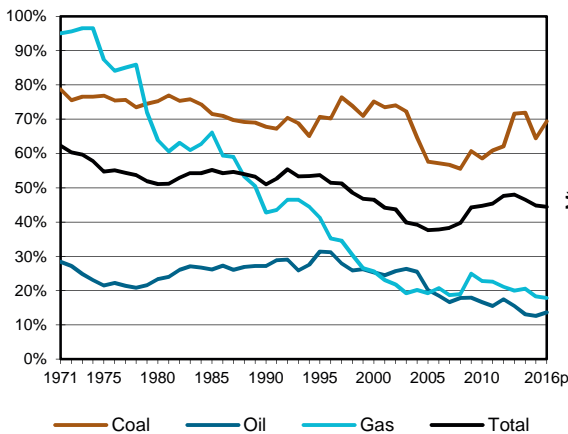


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

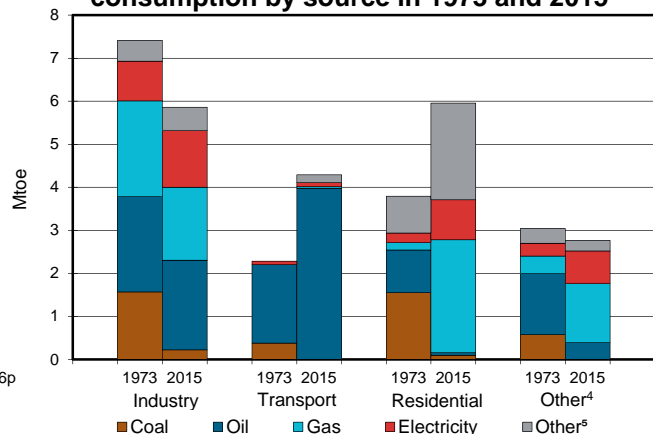


Figure 5. Electricity generation by source

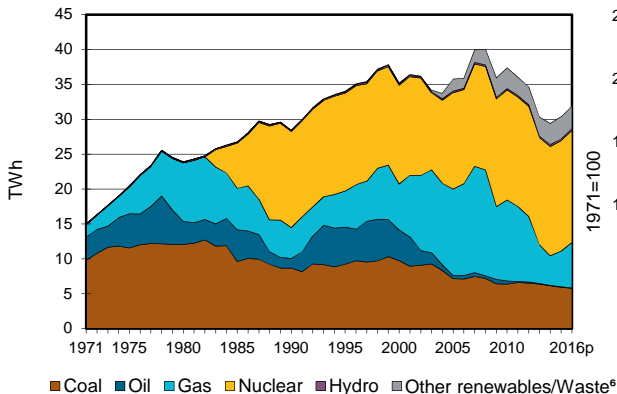
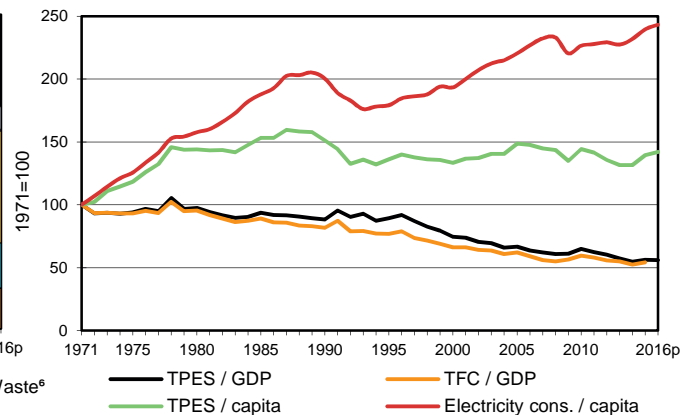


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Hungary

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.52	0.87	-	1.37	4.15	0.02	0.23	3.15	-	-	11.30
Imports	1.11	6.63	2.71	5.68	-	-	-	0.23	1.71	-	18.06
Exports	-0.31	-0.12	-2.63	-0.46	-	-	-	-0.43	-0.54	-	-4.48
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.18	-	-	-	-	-	-	-	-0.18
Stock changes	0.04	-0.22	-0.21	0.90	-	-	-	-0.01	-	-	0.51
<b>TPES</b>	<b>2.36</b>	<b>7.16</b>	<b>-0.30</b>	<b>7.49</b>	<b>4.15</b>	<b>0.02</b>	<b>0.23</b>	<b>2.94</b>	<b>1.18</b>	-	<b>25.21</b>
Transfers	-	0.00	0.01	-	-	-	-	-	-	-	0.01
Statistical differences	-0.01	-	-0.00	0.23	-	-	-	0.00	-0.07	-0.02	0.13
Electricity plants	-1.45	-	-0.01	-0.26	-	-0.02	-0.07	-0.36	0.85	-	-1.33
CHP plants	-0.10	-	-0.01	-0.79	-4.15	-	-0.00	-0.33	1.76	0.49	-3.13
Heat plants	-0.08	-	-0.01	-0.58	-	-	-0.09	-0.07	-	0.75	-0.08
Blast furnaces	-0.27	-	-	-0.03	-	-	-	-	-	-	-0.30
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Oil refineries	-	-7.55	7.52	-	-	-	-	-	-	-	-0.02
Petrochemical plants	-	0.36	-0.38	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.04	-	-0.14	-	-	-	-	-	-	-0.11
Energy industry own use	-0.08	-	-0.31	-0.08	-	-	-	-0.01	-0.29	-0.17	-0.95
Losses	-0.01	-	-	-0.10	-	-	-	-	-0.32	-0.09	-0.52
<b>TFC</b>	<b>0.33</b>	<b>0.00</b>	<b>6.51</b>	<b>5.72</b>	-	-	<b>0.06</b>	<b>2.17</b>	<b>3.11</b>	<b>0.97</b>	<b>18.87</b>
<b>INDUSTRY</b>	<b>0.21</b>	-	<b>0.64</b>	<b>1.25</b>	-	-	<b>0.00</b>	<b>0.18</b>	<b>1.32</b>	<b>0.35</b>	<b>3.96</b>
Iron and steel	0.17	-	0.00	0.04	-	-	-	0.00	0.05	0.02	0.29
Chemical and petrochemical	-	-	0.37	0.23	-	-	-	0.00	0.28	0.22	1.10
Non-ferrous metals	-	-	0.00	0.07	-	-	-	-	0.03	0.01	0.11
Non-metallic minerals	0.03	-	0.08	0.18	-	-	-	0.07	0.12	0.00	0.49
Transport equipment	-	-	0.00	0.07	-	-	-	0.00	0.13	0.01	0.21
Machinery	0.00	-	0.01	0.16	-	-	0.00	0.00	0.21	0.01	0.39
Mining and quarrying	-	-	0.01	0.00	-	-	-	0.00	0.01	-	0.02
Food and tobacco	0.00	-	0.01	0.29	-	-	0.00	0.06	0.19	0.03	0.59
Paper, pulp and printing	-	-	0.00	0.06	-	-	-	0.01	0.07	0.05	0.19
Wood and wood products	-	-	0.00	0.00	-	-	-	0.03	0.02	-	0.06
Construction	0.00	-	0.13	0.04	-	-	0.00	0.00	0.02	0.00	0.21
Textile and leather	-	-	-	0.02	-	-	-	0.00	0.02	0.00	0.04
Non-specified	-	-	0.00	0.08	-	-	-	0.01	0.16	0.01	0.26
<b>TRANSPORT</b>	-	-	<b>3.91</b>	<b>0.03</b>	-	-	-	<b>0.18</b>	<b>0.10</b>	-	<b>4.22</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	3.85	0.00	-	-	-	0.18	0.00	-	4.03
Rail	-	-	0.05	-	-	-	-	-	0.10	-	0.15
Pipeline transport	-	-	-	0.03	-	-	-	-	0.00	-	0.03
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.10</b>	-	<b>0.45</b>	<b>4.00</b>	-	-	<b>0.06</b>	<b>1.81</b>	<b>1.69</b>	<b>0.61</b>	<b>8.72</b>
Residential	0.09	-	0.06	2.63	-	-	0.01	1.76	0.93	0.47	5.95
Comm. and public services	0.00	-	0.04	1.26	-	-	0.02	0.04	0.68	0.14	2.18
Agriculture/forestry	0.00	-	0.35	0.11	-	-	0.03	0.01	0.07	0.00	0.58
Fishing	-	-	0.00	0.00	-	-	-	0.00	0.00	-	0.00
Non-specified	0.00	-	0.00	-	-	-	-	-	-	-	0.00
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>0.00</b>	<b>1.51</b>	<b>0.44</b>	-	-	-	-	-	-	<b>1.97</b>
in industry/transf./energy	0.01	0.00	1.44	0.44	-	-	-	-	-	-	1.90
of which: chem./petrochem.	0.01	0.00	1.30	0.44	-	-	-	-	-	-	1.75
in transport	-	-	0.07	-	-	-	-	-	-	-	0.07
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>5.91</b>	-	<b>0.08</b>	<b>5.11</b>	<b>15.83</b>	<b>0.23</b>	<b>0.88</b>	<b>2.30</b>	-	-	<b>30.34</b>
Electricity plants	5.80	-	0.05	1.64	-	0.23	0.86	1.28	-	-	9.87
CHP plants	0.11	-	0.03	3.46	15.83	-	0.02	1.02	-	-	20.48
<b>Heat generated - PJ</b>	<b>5.51</b>	-	<b>0.30</b>	<b>36.14</b>	<b>0.80</b>	-	<b>3.45</b>	<b>5.82</b>	-	-	<b>52.02</b>
CHP plants	2.56	-	0.05	13.61	0.80	-	0.11	3.52	-	-	20.65
Heat plants	2.95	-	0.25	22.53	-	-	3.34	2.31	-	-	31.38

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Hungary

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.51	0.96	-	1.43	4.20	0.02	0.23	3.03	-	-	11.39
Imports	1.05	6.28	3.05	7.22	-	-	-	0.25	1.54	-	19.39
Exports	-0.37	-0.09	-2.70	-0.89	-	-	-	-0.43	-0.45	-	-4.93
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.20	-	-	-	-	-	-	-	-0.20
Stock changes	-0.02	-0.01	-0.31	0.27	-	-	-	0.01	-	-	-0.06
<b>TPES</b>	<b>2.18</b>	<b>7.13</b>	<b>-0.15</b>	<b>8.03</b>	<b>4.20</b>	<b>0.02</b>	<b>0.23</b>	<b>2.86</b>	<b>1.09</b>	<b>-</b>	<b>25.60</b>
Electricity and Heat Output											
Elec. generated - TWh	5.76	-	0.08	6.49	16.05	0.26	0.94	2.27	-	-	31.85
Heat generated - PJ	5.58	-	0.11	34.41	0.85	-	3.43	6.85	-	-	51.22

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	12.7	14.5	14.7	11.6	11.9	11.1	11.3	11.4
Net imports (Mtoe)	8.7	14.3	14.2	13.9	15.1	14.2	13.6	14.5
Total primary energy supply (Mtoe)	21.3	28.3	28.8	25.0	26.5	23.8	25.2	25.6
Net oil imports (Mtoe)	6.5	8.3	6.4	5.2	5.8	5.8	6.6	6.5
Oil supply (Mtoe)	8.2	10.8	8.4	6.6	6.6	6.4	6.9	7.0
Electricity consumption (TWh) <sup>1</sup>	20.4	28.9	35.6	33.8	38.8	39.2	40.3	40.9
GDP (billion 2010 USD)	72.3	92.7	103.8	106.6	130.3	138.6	142.9	145.7
GDP PPP (billion 2010 USD)	119.2	152.7	171.0	175.7	214.7	228.3	235.5	240.1
Population (millions)	10.43	10.71	10.37	10.21	10.00	9.87	9.84	9.82
Industrial production index (2010=100)	..	49.3	48.1	70.5	100.0	112.9	121.2	122.4
Total self-sufficiency <sup>2</sup>	0.60	0.51	0.51	0.46	0.45	0.47	0.45	0.44
Coal self-sufficiency <sup>2</sup>	0.77	0.75	0.68	0.75	0.59	0.72	0.64	0.69
Oil self-sufficiency <sup>2</sup>	0.25	0.23	0.27	0.25	0.17	0.13	0.13	0.14
Natural gas self-sufficiency <sup>2</sup>	0.97	0.64	0.43	0.26	0.23	0.21	0.18	0.18
TPES/GDP (toe per thousand 2010 USD)	0.29	0.31	0.28	0.23	0.20	0.17	0.18	0.18
TPES/GDP PPP (toe per thousand 2010 USD)	0.18	0.19	0.17	0.14	0.12	0.10	0.11	0.11
TPES/population (toe per capita)	2.04	2.65	2.78	2.45	2.65	2.42	2.56	2.61
Net oil imports/GDP (toe per thousand 2010 USD)	0.09	0.09	0.06	0.05	0.04	0.04	0.05	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.12	0.08	0.06	0.05	0.05	0.05	0.05
Oil supply/population (toe per capita)	0.78	1.01	0.81	0.65	0.65	0.65	0.70	0.71
Share of renewables in TPES	0.03	0.02	0.03	0.03	0.11	0.12	0.12	0.12
Share of renewables in electricity generation	0.01	0.01	0.01 e	0.01 e	0.08	0.11	0.11	0.10
TFC/GDP (toe per thousand 2010 USD)	0.23	0.23	0.20	0.16	0.15	0.13	0.13	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.14	0.14	0.12	0.10	0.09	0.08	0.08	..
TFC/population (toe per capita)	1.59	2.01	2.00	1.69	1.90	1.80	1.92	..
Elect. cons./GDP (kWh per 2010 USD)	0.28	0.31	0.34	0.32	0.30	0.28	0.28	0.28
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.17	0.19	0.21	0.19	0.18	0.17	0.17	0.17
Elect. cons./population (kWh per capita)	1957	2699	3430	3309	3877	3968	4099	4164
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	434.4	353.0	150.5	100.0	107.9	105.0	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	375.0	247.0	123.5	100.0	95.8	97.9	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Iceland

Figure 1. Energy production

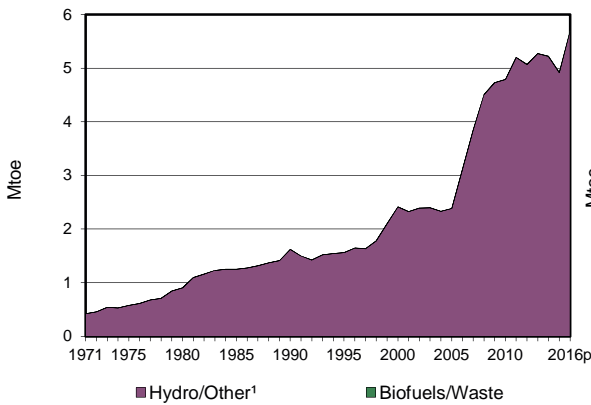


Figure 2. Total primary energy supply<sup>2</sup>

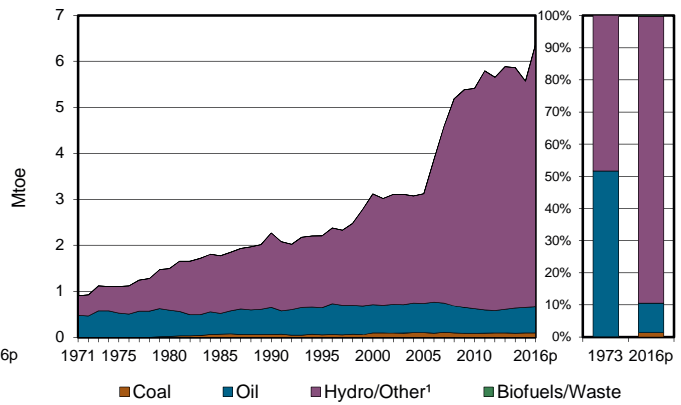


Figure 3. Energy self-sufficiency

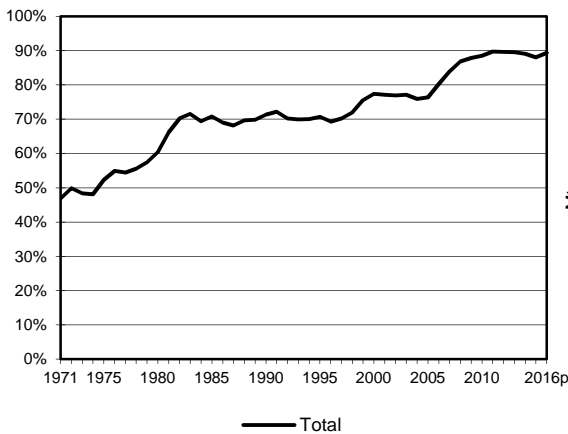


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

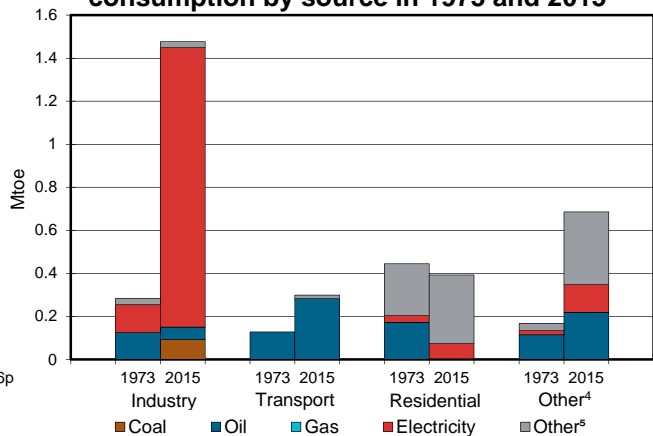


Figure 5. Electricity generation by source

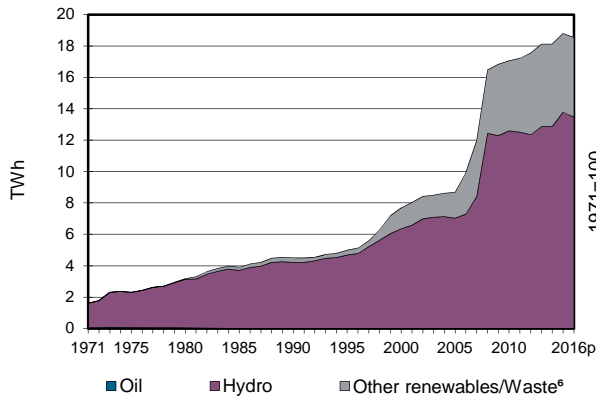
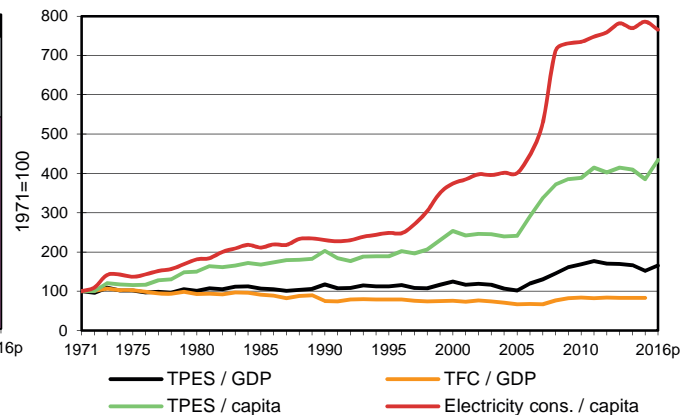


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Iceland

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.19	3.73	0.00	-	-	4.92
Imports	0.09	-	0.85	-	-	-	-	0.01	-	-	0.95
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Intl. aviation bunkers	-	-	-0.22	-	-	-	-	-	-	-	-0.22
Stock changes	-	-	-0.02	-	-	-	-	-	-	-	-0.02
<b>TPES</b>	<b>0.09</b>	-	<b>0.56</b>	-	-	<b>1.19</b>	<b>3.73</b>	<b>0.02</b>	-	-	<b>5.58</b>
Transfers	-	-	0.00	-	-	-	-	-	-	-	0.00
Statistical differences	-	-	0.00	-	-	-	-0.02	-	0.02	0.03	0.03
Electricity plants	-	-	-0.00	-	-	-1.19	-0.35	-	1.23	-	-0.31
CHP plants	-	-	-	-	-	-	-2.65	-	0.39	0.16	-2.10
Heat plants	-	-	-	-	-	-	-0.62	-	-0.02	0.47	-0.17
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.07	-	-0.07
Losses	-	-	-	-	-	-	-0.01	-	-0.05	-0.07	-0.13
<b>TFC</b>	<b>0.09</b>	-	<b>0.56</b>	-	-	-	<b>0.08</b>	<b>0.02</b>	<b>1.50</b>	<b>0.60</b>	<b>2.85</b>
<b>INDUSTRY</b>	<b>0.09</b>	-	<b>0.04</b>	-	-	-	<b>0.01</b>	-	<b>1.30</b>	<b>0.01</b>	<b>1.46</b>
Iron and steel	0.09	-	0.01	-	-	-	-	-	0.09	-	0.19
Chemical and petrochemical	-	-	-	-	-	-	-	-	0.01	-	0.01
Non-ferrous metals	-	-	0.00	-	-	-	-	-	1.14	-	1.14
Non-metallic minerals	-	-	-	-	-	-	-	-	0.00	-	0.00
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	-	-	-	-	-	0.00	-	0.00
Mining and quarrying	-	-	-	-	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	0.00	-	-	-	-	-	0.05	-	0.06
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.00	-	0.00
Wood and wood products	-	-	-	-	-	-	-	-	0.00	-	0.00
Construction	-	-	0.02	-	-	-	-	-	0.00	-	0.03
Textile and leather	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	0.00	-	-	-	0.01	-	0.00	0.01	0.03
<b>TRANSPORT</b>	-	-	<b>0.28</b>	-	-	-	-	<b>0.02</b>	<b>0.00</b>	-	<b>0.30</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	0.27	-	-	-	-	0.02 e	-	-	0.28
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>OTHER</b>	-	-	<b>0.22</b>	-	-	-	<b>0.07</b>	-	<b>0.20</b>	<b>0.59</b>	<b>1.07</b>
Residential	-	-	0.00	-	-	-	0.01	-	0.07	0.31	0.39
Comm. and public services	-	-	-	-	-	-	0.04	-	0.10	0.25	0.40
Agriculture/forestry	-	-	0.01	-	-	-	0.01	-	0.02	0.01	0.04
Fishing	-	-	0.20	-	-	-	0.01	-	0.00	0.02	0.24
Non-specified	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	-	-	<b>0.02</b>	-	-	-	-	-	-	-	<b>0.02</b>
in industry/transf./energy	-	-	0.02	-	-	-	-	-	-	-	0.02
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	-	-	<b>0.00</b>	-	-	<b>13.78</b>	<b>5.01</b>	-	-	-	<b>18.80</b>
Electricity plants	-	-	0.00	-	-	13.78	0.50	-	-	-	14.28
CHP plants	-	-	-	-	-	-	4.52	-	-	-	4.52
<b>Heat generated - PJ</b>	-	-	<b>0.03</b>	-	-	-	<b>25.87</b>	-	<b>0.70</b>	-	<b>26.61</b>
CHP plants	-	-	-	-	-	-	6.87	-	-	-	6.87
Heat plants	-	-	0.03	-	-	-	19.00	-	0.70	-	19.74

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Iceland

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.16	4.53	0.00	-	-	5.69
Imports	0.09	-	0.95	-	-	-	-	0.02	-	-	1.06
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Intl. aviation bunkers	-	-	-0.32	-	-	-	-	-	-	-	-0.32
Stock changes	-	-	-0.01	-	-	-	-	-0.00	-	-	-0.01
<b>TPES</b>	<b>0.09</b>	<b>-</b>	<b>0.57</b>	<b>-</b>	<b>-</b>	<b>1.16</b>	<b>4.53</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>6.37</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.00	-	-	13.47	5.07	-	-	-	18.55
Heat generated - PJ	-	-	0.02	-	-	-	32.97	-	1.15	-	34.14

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	0.5	0.9	1.6	2.4	4.8	5.2	4.9	5.7
Net imports (Mtoe)	0.7	0.6	0.8	1.0	0.8	0.8	1.0	1.1
Total primary energy supply (Mtoe)	1.1	1.5	2.3	3.1	5.4	5.9	5.6	6.4
Net oil imports (Mtoe)	0.7	0.6	0.7	0.9	0.7	0.8	0.9	1.0
Oil supply (Mtoe)	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
Electricity consumption (TWh) <sup>1</sup>	2.1	2.9	4.1	7.4	16.4	17.6	18.2	18.0
GDP (billion 2010 USD)	4.2	6.1	8.0	10.3	13.3	14.6	15.2	16.3
GDP PPP (billion 2010 USD)	3.9	5.6	7.3	9.5	12.2	13.4	14.0	14.6
Population (millions)	0.21	0.23	0.26	0.28	0.32	0.33	0.33	0.34
Industrial production index (2010=100)	..	..	..	..	..	..	..	-
Total self-sufficiency <sup>2</sup>	0.48	0.60	0.71	0.77	0.88	0.89	0.88	0.89
Coal self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.27	0.25	0.28	0.30	0.41	0.40	0.37	0.39
TPES/GDP PPP (toe per thousand 2010 USD)	0.29	0.27	0.31	0.33	0.44	0.44	0.40	0.44
TPES/population (toe per capita)	5.28	6.57	8.90	11.10	17.03	17.94	16.87	19.02
Net oil imports/GDP (toe per thousand 2010 USD)	0.16	0.10	0.09	0.08	0.05	0.05	0.06	0.06
Oil supply/GDP (toe per thousand 2010 USD)	0.14	0.09	0.07	0.06	0.04	0.04	0.04	0.04
Oil supply/population (toe per capita)	2.72	2.52	2.30	2.16	1.68	1.70	1.69	1.71
Share of renewables in TPES	0.48	0.60	0.71	0.77	0.89	0.89	0.88	0.90
Share of renewables in electricity generation	0.96	0.99	1.00	1.00	1.00	1.00	1.00	1.00
TFC/GDP (toe per thousand 2010 USD)	0.24	0.21	0.17	0.17	0.19	0.19	0.19	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.26	0.23	0.19	0.19	0.21	0.20	0.20	..
TFC/population (toe per capita)	4.83	5.62	5.32	6.29	7.96	8.38	8.62	..
Elect. cons./GDP (kWh per 2010 USD)	0.50	0.48	0.52	0.72	1.23	1.21	1.20	1.11
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.54	0.52	0.56	0.78	1.34	1.31	1.30	1.23
Elect. cons./population (kWh per capita)	9910	12689	16137	26221	51447	53899	55054	53645
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

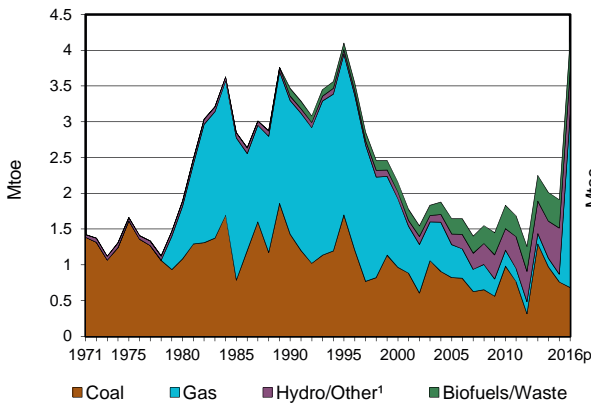
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

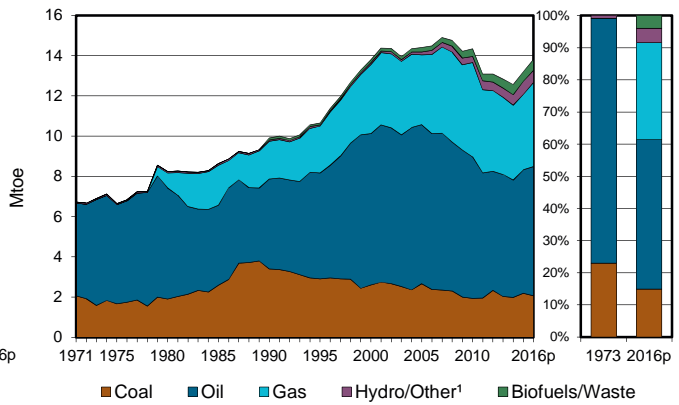
3. Includes non-energy use.

### Ireland

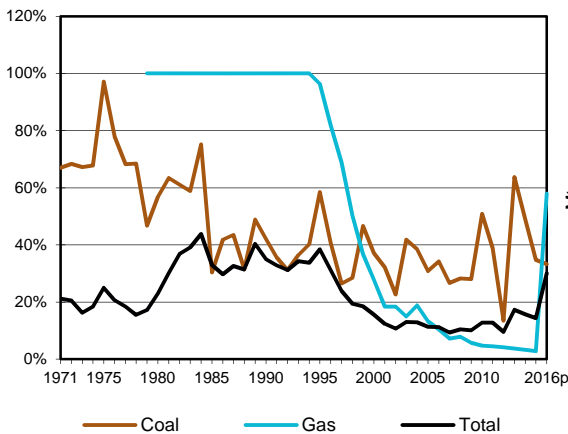
**Figure 1. Energy production**



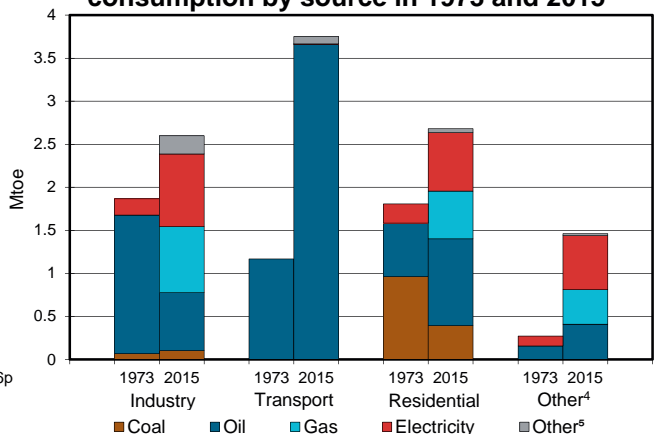
**Figure 2. Total primary energy supply²**



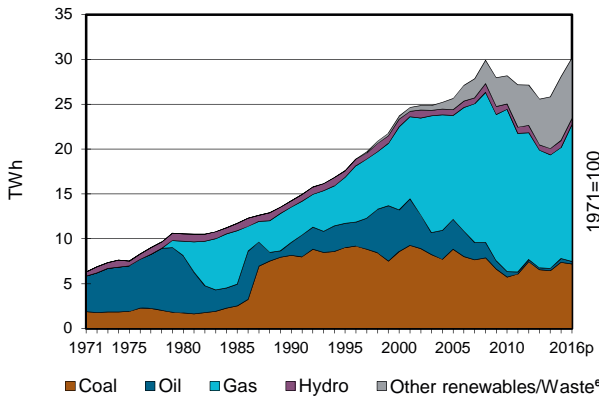
**Figure 3. Energy self-sufficiency**



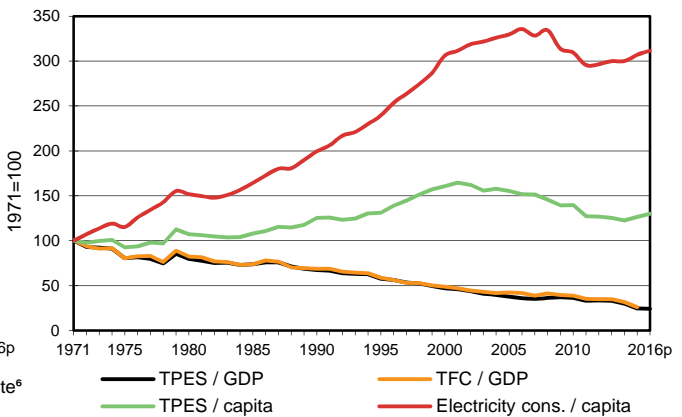
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015³**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Ireland

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	0.76	-	-	0.11	-	0.07	0.58	0.39	-	-	1.91
Imports	1.48	3.72	5.45	3.62	-	-	-	0.09	0.15	-	14.52
Exports	-0.02	-	-1.75	-	-	-	-	-0.00	-0.09	-	-1.86
Intl. marine bunkers	-	-	-0.16	-	-	-	-	-	-	-	-0.16
Intl. aviation bunkers	-	-	-0.82	-	-	-	-	-	-	-	-0.82
Stock changes	-0.03	-0.28	-0.04	0.02	-	-	-	0.00	-	-	-0.34
<b>TPES</b>	<b>2.19</b>	<b>3.44</b>	<b>2.69</b>	<b>3.75</b>	-	<b>0.07</b>	<b>0.58</b>	<b>0.48</b>	<b>0.06</b>	-	<b>13.26</b>
Transfers	-	-0.03	0.02	-	-	-	-	-	-	-	-0.01
Statistical differences	0.01	-	-0.14	-0.04	-	-	-	0.01	-0.04	-	-0.20
Electricity plants	-1.67	-	-0.08	-1.62	-	-0.07	-0.57	-0.13	2.23	-	-1.90
CHP plants	-0.01	-	-0.01	-0.28	-	-	-	-0.01	0.19	-	-0.12
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Oil refineries	-	-3.46	3.39	-	-	-	-	-	-	-	-0.07
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.04	-	-0.04	-	-	-	-	-	-	0.00
Energy industry own use	-0.01	-	-0.13	-	-	-	-	-	-0.10	-	-0.23
Losses	-	-	-	-0.06	-	-	-	-	-0.18	-	-0.24
<b>TFC</b>	<b>0.50</b>	-	<b>5.75</b>	<b>1.72</b>	-	-	<b>0.01</b>	<b>0.35</b>	<b>2.16</b>	-	<b>10.49</b>
<b>INDUSTRY</b>	<b>0.11</b>	-	<b>0.47</b>	<b>0.77</b>	-	-	-	<b>0.21</b>	<b>0.85</b>	-	<b>2.40</b>
Iron and steel	-	-	0.00	-	-	-	-	-	-	-	0.00
Chemical and petrochemical	-	-	0.03	0.06	-	-	-	-	0.15	-	0.25
Non-ferrous metals	-	-	0.03	0.42	-	-	-	-	0.07	-	0.52
Non-metallic minerals	0.08	-	0.17	0.02	-	-	-	0.07	0.05	-	0.39
Transport equipment	-	-	0.01	0.00	-	-	-	-	0.02	-	0.03
Machinery	-	-	0.01	0.13	-	-	-	-	0.13	-	0.27
Mining and quarrying	-	-	0.04	0.01	-	-	-	-	0.06	-	0.11
Food and tobacco	0.02	-	0.13	0.10	-	-	-	0.03	0.18	-	0.47
Paper, pulp and printing	-	-	0.00	0.00	-	-	-	-	0.02	-	0.03
Wood and wood products	-	-	0.00	0.00	-	-	-	0.12	0.04	-	0.16
Construction	-	-	-	-	-	-	-	-	0.01	-	0.01
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
Non-specified	-	-	0.05	0.01	-	-	-	-	0.11	-	0.17
<b>TRANSPORT</b>	-	-	<b>3.64</b>	<b>0.00</b>	-	-	-	<b>0.09</b>	<b>0.00</b>	-	<b>3.73</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	3.52	0.00	-	-	-	0.09	-	-	3.61
Rail	-	-	0.04	-	-	-	-	-	0.00	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.07	-	-	-	-	-	-	-	0.07
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.39</b>	-	<b>1.42</b>	<b>0.95</b>	-	-	<b>0.01</b>	<b>0.05</b>	<b>1.31</b>	-	<b>4.14</b>
Residential	0.39	-	1.01	0.55	-	-	0.01	0.03	0.68	-	2.68
Comm. and public services	-	-	0.24	0.40	-	-	0.00	0.02	0.58	-	1.24
Agriculture/forestry	-	-	0.17	-	-	-	-	-	0.05	-	0.22
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>0.22</b>	-	-	-	-	-	-	-	<b>0.22</b>
in industry/transf./energy	-	-	0.20	-	-	-	-	-	-	-	0.20
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>7.39</b>	-	<b>0.41</b>	<b>12.37</b>	-	<b>0.81</b>	<b>6.58</b>	<b>0.55</b>	-	-	<b>28.10</b>
Electricity plants	7.37	-	0.35	10.33	-	0.81	6.58	0.51	-	-	25.94
CHP plants	0.02	-	0.06	2.04	-	-	-	0.04	-	-	2.16
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes peat.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Ireland

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.68	-	-	2.43	-	0.06	0.54	0.42	-	-	4.13
Imports	1.16	3.27	5.73	1.70	-	-	-	0.13	0.07	-	12.06
Exports	-0.01	-	-1.60	-	-	-	-	-0.00	-0.14	-	-1.75
Intl. marine bunkers	-	-	-0.15	-	-	-	-	-	-	-	-0.15
Intl. aviation bunkers	-	-	-0.80	-	-	-	-	-	-	-	-0.80
Stock changes	0.23	0.00	-0.02	0.06	-	-	-	-0.01	-	-	0.26
<b>TPES</b>	<b>2.06</b>	<b>3.27</b>	<b>3.16</b>	<b>4.19</b>	<b>-</b>	<b>0.06</b>	<b>0.54</b>	<b>0.54</b>	<b>-0.06</b>	<b>-</b>	<b>13.75</b>
Electricity and Heat Output											
Elec. generated - TWh	7.20	-	0.29	15.24	-	0.68	6.16	0.57	-	-	30.14
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	1.1	1.9	3.5	2.2	1.8	2.0	1.9	4.1
Net imports (Mtoe)	6.0	6.6	7.1	12.3	13.2	11.7	12.7	10.3
Total primary energy supply (Mtoe)	6.9	8.2	9.9	13.8	14.4	12.8	13.3	13.8
Net oil imports (Mtoe)	5.5	5.8	5.1	8.2	7.7	6.6	7.4	7.4
Oil supply (Mtoe)	5.3	5.5	4.5	7.5	7.0	5.8	6.1	6.4
Electricity consumption (TWh) <sup>1</sup>	6.6	9.8	13.2	22.1	26.7	26.2	27.0	27.6
GDP (billion 2010 USD)	42.1	57.9	82.6	165.1	221.3	239.9	303.0	318.8
GDP PPP (billion 2010 USD)	37.5	51.5	73.6	147.0	197.1	213.7	269.8	283.9
Population (millions)	3.07	3.40	3.51	3.80	4.56	4.62	4.64	4.68
Industrial production index (2010=100)	..	11.6	21.5	68.1	100.0	116.0	158.8	159.6
Total self-sufficiency <sup>2</sup>	0.16	0.23	0.35	0.16	0.13	0.16	0.14	0.30
Coal self-sufficiency <sup>2</sup>	0.67	0.57	0.42	0.37	0.51	0.49	0.35	0.33
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	1.00	1.00	0.28	0.05	0.03	0.03	0.58
TPES/GDP (toe per thousand 2010 USD)	0.16	0.14	0.12	0.08	0.06	0.05	0.04	0.04
TPES/GDP PPP (toe per thousand 2010 USD)	0.18	0.16	0.13	0.09	0.07	0.06	0.05	0.05
TPES/population (toe per capita)	2.25	2.42	2.83	3.63	3.15	2.76	2.86	2.94
Net oil imports/GDP (toe per thousand 2010 USD)	0.13	0.10	0.06	0.05	0.03	0.03	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.13	0.10	0.05	0.05	0.03	0.02	0.02	0.02
Oil supply/population (toe per capita)	1.71	1.62	1.28	1.98	1.54	1.26	1.32	1.37
Share of renewables in TPES	0.01	0.01	0.02	0.02	0.05	0.08	0.08	0.08
Share of renewables in electricity generation	0.09	0.08	0.05	0.05	0.13	0.25	0.28	0.24
TFC/GDP (toe per thousand 2010 USD)	0.12	0.11	0.09	0.07	0.05	0.04	0.04	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.14	0.12	0.10	0.07	0.06	0.05	0.04	..
TFC/population (toe per capita)	1.66	1.87	2.15	2.83	2.51	2.20	2.26	..
Elect. cons./GDP (kWh per 2010 USD)	0.16	0.17	0.16	0.13	0.12	0.11	0.09	0.09
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.18	0.19	0.18	0.15	0.14	0.12	0.10	0.10
Elect. cons./population (kWh per capita)	2152	2878	3776	5798	5861	5679	5811	5901
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	815.3	436.2	182.2	100.0	84.5	66.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	1419.7	402.9	203.7	100.0	54.6	43.6	..

1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

Israel

Figure 1. Energy production

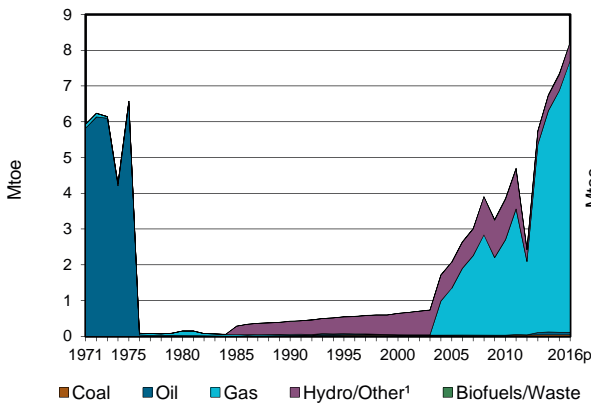


Figure 2. Total primary energy supply<sup>2</sup>

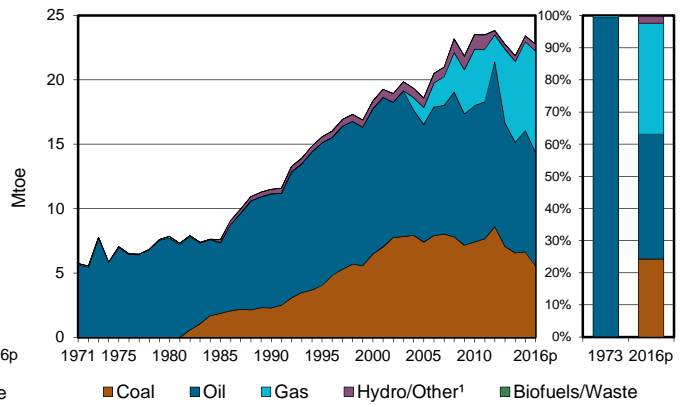


Figure 3. Energy self-sufficiency

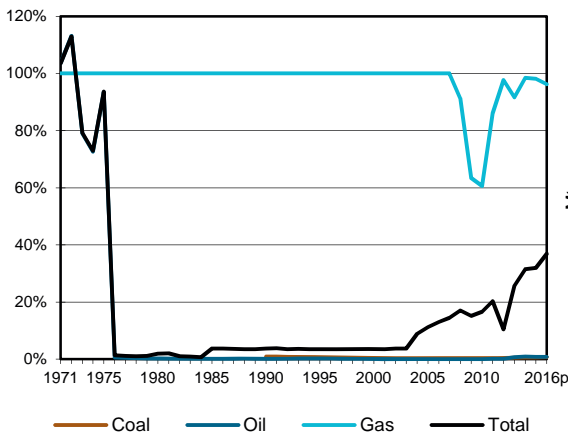


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

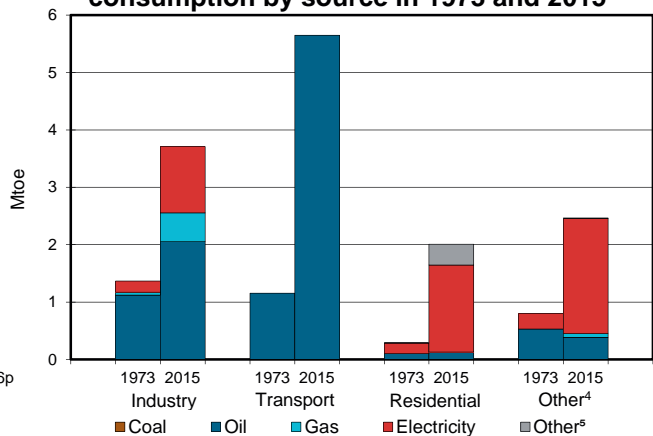


Figure 5. Electricity generation by source

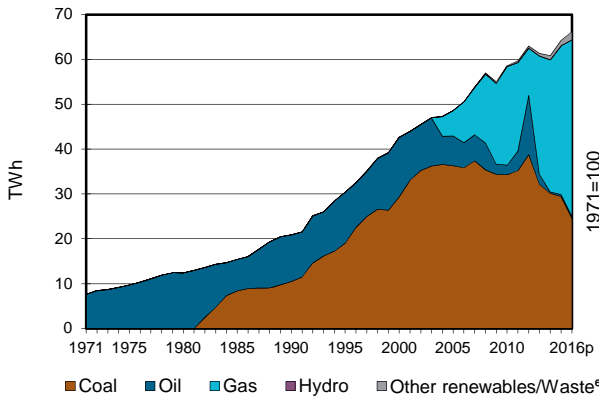
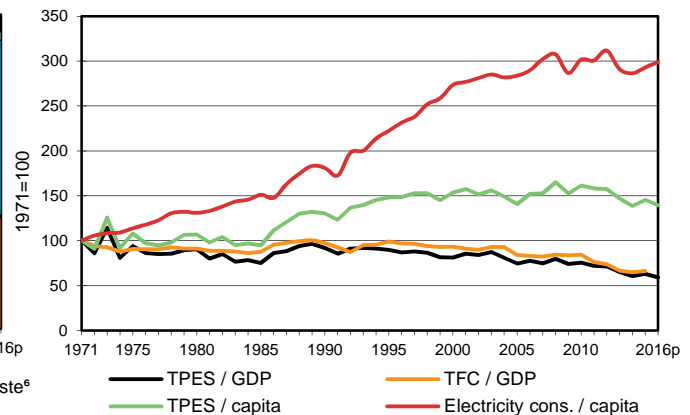


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Israel

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	0.04	0.08	-	6.75 e	-	0.00	0.45 e	0.02 e	-	-	7.35
Imports	6.58	15.06	1.78	0.13 e	-	-	-	0.00 e	-	-	23.56
Exports	-	-	-6.25	-	-	-	-	-	-0.45	-	-6.69
Intl. marine bunkers	-	-	-0.25	-	-	-	-	-	-	-	-0.25
Intl. aviation bunkers	-	-	-0.92	-	-	-	-	-	-	-	-0.92
Stock changes	-0.00	-0.24	0.18	-	-	-	-	-	-	-	-0.06
<b>TPES</b>	<b>6.62</b>	<b>14.90</b>	<b>-5.46</b>	<b>6.88</b>	<b>-</b>	<b>0.00</b>	<b>0.45</b>	<b>0.03</b>	<b>-0.45</b>	<b>-</b>	<b>22.98</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.21	-0.13	-0.58	0.26	-	-	-	-	0.04	-	-0.61
Electricity plants	-6.41	-	-0.12	-5.64 e	-	-0.00	-0.10	-0.02 e	5.52	-	-6.75
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-14.77	14.37	-	-	-	-	-	-	-	-0.40
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-0.95 e	-	-	-	-	-0.23	-	-1.18
Losses	-	-	-	-	-	-	-	-	-0.21	-	-0.21
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>8.22</b>	<b>0.56</b>	<b>-</b>	<b>-</b>	<b>0.36</b>	<b>0.01</b>	<b>4.68</b>	<b>-</b>	<b>13.82</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>0.46</b>	<b>0.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.16</b>	<b>-</b>	<b>2.12</b>
Iron and steel	-	-	-	-	-	-	-	-	0.04 e	-	0.04
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	0.04 e	-	0.04
Machinery	-	-	-	-	-	-	-	-	0.23 e	-	0.23
Mining and quarrying	-	-	-	-	-	-	-	-	0.20 e	-	0.20
Food and tobacco	-	-	-	-	-	-	-	-	0.15 e	-	0.15
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.01 e	-	0.01
Wood and wood products	-	-	-	-	-	-	-	-	0.05 e	-	0.05
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	0.02 e	-	0.02
Non-specified	-	-	0.46	0.50 e	-	-	-	-	0.42 e	-	1.38
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.65</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.65</b>
Domestic aviation	-	-	0.02	-	-	-	-	-	-	-	0.02
Road	-	-	5.63	-	-	-	-	-	-	-	5.63
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>0.52</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>0.36</b>	<b>0.01</b>	<b>3.52</b>	<b>-</b>	<b>4.47</b>
Residential	-	-	0.13	-	-	-	0.36 e	0.00 e	1.51	-	2.01
Comm. and public services	-	-	0.13	-	-	-	-	-	1.49	-	1.62
Agriculture/forestry	-	-	0.01	-	-	-	-	-	0.22 e	-	0.23
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.24	0.07 e	-	-	-	0.00 e	0.29	-	0.61
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.59</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.59</b>
in industry/transf./energy	-	-	1.59	-	-	-	-	-	-	-	1.59
of which: chem./petrochem.	-	-	1.04	-	-	-	-	-	-	-	1.04
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>29.44</b>	<b>-</b>	<b>0.42</b>	<b>33.15</b>	<b>-</b>	<b>0.02</b>	<b>1.12</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>64.23</b>
Electricity plants	29.44	-	0.42	33.15	-	0.02	1.12	0.07	-	-	64.23
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes oil shale.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Israel

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.04	0.08	-	7.58	-	0.00	0.50	0.02	-	-	8.22
Imports	5.24	13.96	1.78	0.29	-	-	-	0.00	-	-	21.28
Exports	-	-	-5.82	-	-	-	-	-	-0.45	-	-6.27
Intl. marine bunkers	-	-	-0.15	-	-	-	-	-	-	-	-0.15
Intl. aviation bunkers	-	-	-0.99	-	-	-	-	-	-	-	-0.99
Stock changes	0.23	-	-	-	-	-	-	-	-	-	0.23
<b>TPES</b>	<b>5.52</b>	<b>14.03</b>	<b>-5.19</b>	<b>7.87</b>	<b>-</b>	<b>0.00</b>	<b>0.50</b>	<b>0.03</b>	<b>-0.45</b>	<b>-</b>	<b>22.32</b>
Electricity and Heat Output											
Elec. generated - TWh	24.55	-	0.42	39.39	-	0.02	1.72	0.07	-	-	66.17
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes oil shale.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	6.2	0.2	0.4	0.6	3.9	6.8	7.4	8.2
Net imports (Mtoe)	2.4	8.5	11.4	18.2	20.5	15.9	16.9	15.0
Total primary energy supply (Mtoe)	7.8	7.8	11.5	18.2	23.2	21.5	23.0	22.3
Net oil imports (Mtoe)	2.4	8.5	9.0	12.3	11.7	9.7	10.6	9.9
Oil supply (Mtoe)	7.7	7.7	8.8	11.3	10.6	8.6	9.4	8.9
Electricity consumption (TWh) <sup>1</sup>	8.2	11.7	19.5	39.8	53.0 e	54.2	56.6	58.5
GDP (billion 2010 USD)	51.8	65.8	95.2	170.7	233.8	270.7	277.5	287.9
GDP PPP (billion 2010 USD)	48.8	61.9	89.6	160.7	220.0	254.8	261.2	269.9
Population (millions)	3.28	3.88	4.66	6.30	7.62	8.21	8.38	8.49
Industrial production index (2010=100)	..	..	43.3	76.5	100.0	106.6	109.1	108.8
Total self-sufficiency <sup>2</sup>	0.79	0.02	0.04	0.04	0.17	0.32	0.32	0.37
Coal self-sufficiency <sup>2</sup>	-	-	0.01	0.00	0.00	0.01	0.01	0.01
Oil self-sufficiency <sup>2</sup>	0.79	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.00	1.00	0.61	0.98 e	0.98 e	0.96
TPES/GDP (toe per thousand 2010 USD)	0.15	0.12	0.12	0.11	0.10	0.08	0.08	0.08
TPES/GDP PPP (toe per thousand 2010 USD)	0.16	0.13	0.13	0.11	0.11	0.08	0.09	0.08
TPES/population (toe per capita)	2.37	2.02	2.46	2.89	3.04	2.61	2.74	2.63
Net oil imports/GDP (toe per thousand 2010 USD)	0.05	0.13	0.09	0.07	0.05	0.04	0.04	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.15	0.12	0.09	0.07	0.05	0.03	0.03	0.03
Oil supply/population (toe per capita)	2.35	1.99	1.89	1.79	1.39	1.04	1.13	1.04
Share of renewables in TPES	-	-	0.03	0.03	0.05	0.02	0.02	0.02
Share of renewables in electricity generation	-	-	-	0.00	0.00	0.02	0.02	0.03
TFC/GDP (toe per thousand 2010 USD)	0.07	0.07	0.07	0.07	0.06	0.05	0.05	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.07	0.08	0.08	0.07	0.05	0.05	..
TFC/population (toe per capita)	1.10	1.16	1.50	1.90	1.95	1.61	1.65	..
Elect. cons./GDP (kWh per 2010 USD)	0.16	0.18	0.20	0.23	0.23 e	0.20	0.20	0.20
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.17	0.19	0.22	0.25	0.24 e	0.21	0.22	0.22
Elect. cons./population (kWh per capita)	2498	3022	4175	6308	6956 e	6604	6752	6889
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	145.2	119.9	100.0	102.8	98.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	167.2	126.7	100.0	80.0	81.2	..

1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.



Italy

Figure 1. Energy production

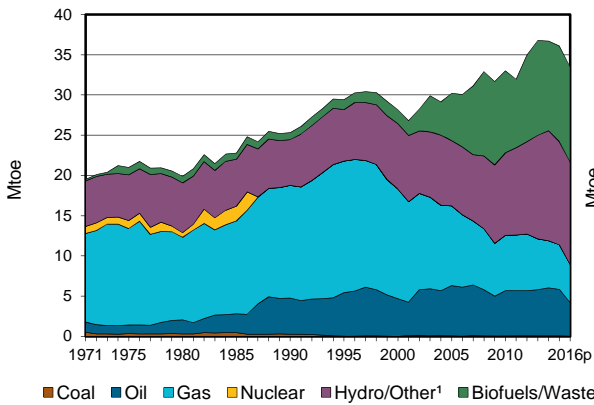


Figure 2. Total primary energy supply<sup>2</sup>

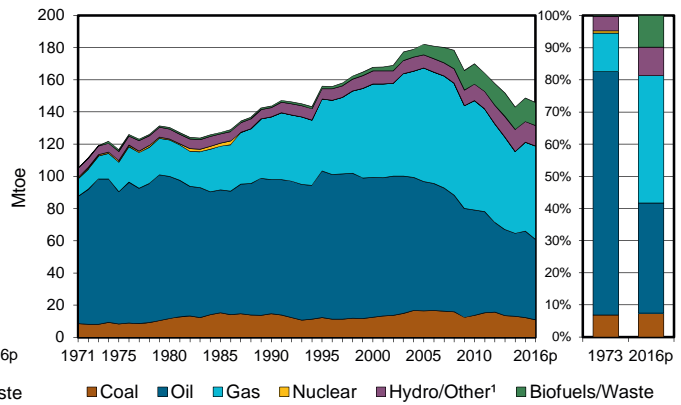


Figure 3. Energy self-sufficiency

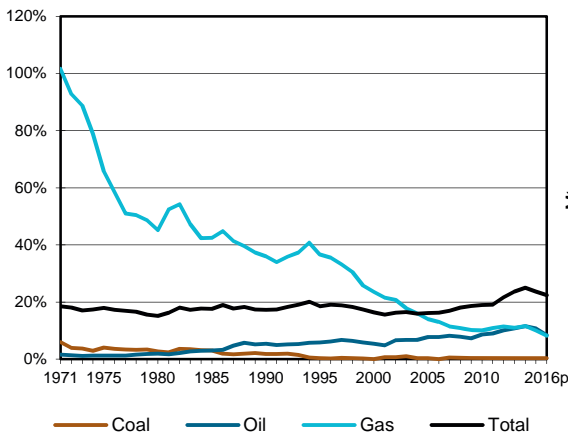


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

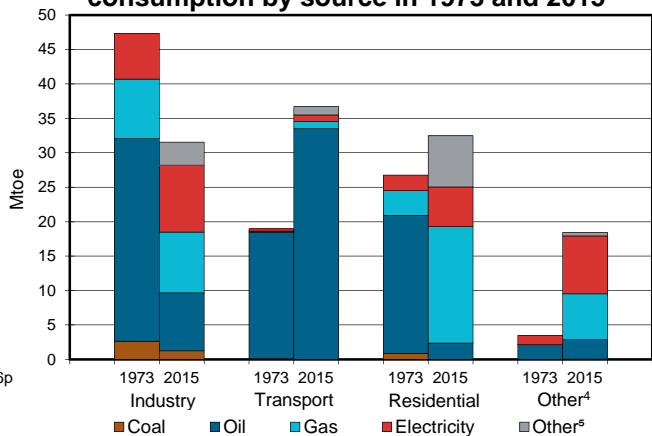


Figure 5. Electricity generation by source

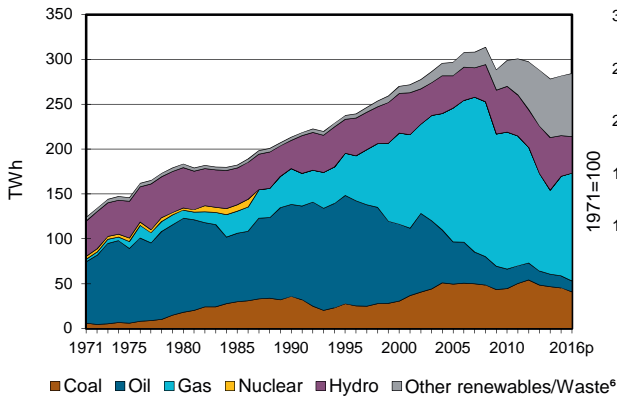
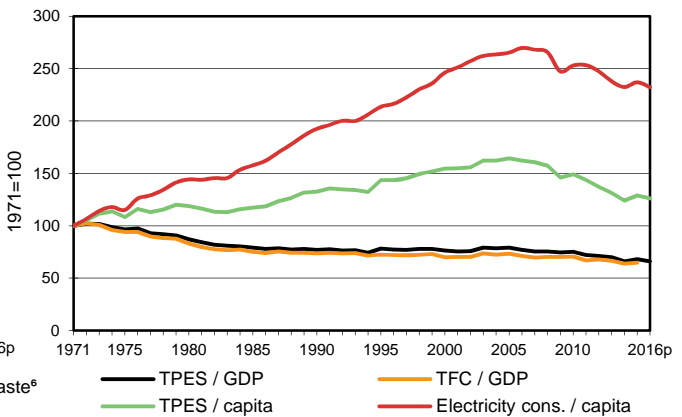


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Italy

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	0.05	5.79	-	5.54	-	3.92	8.91	11.89	-	-	36.09
Imports	12.64	68.82	11.91	50.16	-	-	-	2.80	4.37	-	150.71
Exports	-0.26	-1.27	-27.02	-0.18	-	-	-	-0.11	-0.38	-	-29.24
Intl. marine bunkers	-	-	-1.90	-	-	-	-	-	-	-	-1.90
Intl. aviation bunkers	-	-	-3.17	-	-	-	-	-	-	-	-3.17
Stock changes	-0.07	-0.19	0.60	-0.24	-	-	-	0.01	-	-	0.11
<b>TPES</b>	<b>12.36</b>	<b>73.14</b>	<b>-19.58</b>	<b>55.29</b>	<b>-</b>	<b>3.92</b>	<b>8.91</b>	<b>14.59</b>	<b>3.99</b>	<b>-</b>	<b>152.60</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0.00	-0.08	1.13	0.00	-	-	-	0.00	-	-0.00	1.06
Electricity plants	-9.79	-	-0.80	-6.19	-	-3.92	-8.57	-2.86	15.97	-	-16.15
CHP plants	-0.67	-	-3.73	-14.17	-	-	-	-3.30	8.25	5.09	-8.53
Heat plants	-	-	-	-	-	-	-0.04	-0.09	-	0.09	-0.04
Blast furnaces	-0.70 e	-	-	-	-	-	-	-	-	-	-0.70
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	0.14	-	-	-	-	-	-	-	-	-	0.14
Oil refineries	-	-74.72	75.14	-	-	-	-	-	-	-	0.42
Petrochemical plants	-	1.67	-1.71	-	-	-	-	-	-	-	-0.05
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.01	-	-	-0.01
Energy industry own use	-0.02	-	-3.33	-1.12	-	-	-	-	-1.78	-1.31	-7.56
Losses	-	-	-	-0.26	-	-	-	-	-1.70	-0.02	-1.98
<b>TFC</b>	<b>1.32</b>	<b>-</b>	<b>47.14</b>	<b>33.55</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>8.33</b>	<b>24.72</b>	<b>3.85</b>	<b>119.21</b>
<b>INDUSTRY</b>	<b>1.25</b>	<b>-</b>	<b>2.78</b>	<b>8.27</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.66</b>	<b>9.69</b>	<b>2.70</b>	<b>25.36</b>
Iron and steel	1.11 e	-	0.09	1.19	-	-	-	-	1.50	0.16	4.05
Chemical and petrochemical	0.00	-	0.27	0.94	-	-	-	0.08	1.20	0.81	3.29
Non-ferrous metals	0.00	-	0.03	0.38	-	-	-	-	0.21	0.00	0.62
Non-metallic minerals	0.14	-	1.69	1.89	-	-	-	0.31	0.77	0.17	4.97
Transport equipment	-	-	-	-	-	-	-	-	0.30	0.10	0.40
Machinery	-	-	0.28	1.33	-	-	-	0.00	1.72	0.03	3.36
Mining and quarrying	-	-	0.02	0.03	-	-	-	-	0.05	0.00	0.11
Food and tobacco	-	-	0.19	1.10	-	-	-	0.05	1.04	0.32	2.71
Paper, pulp and printing	-	-	0.07	0.61	-	-	-	0.00	0.75	0.94	2.37
Wood and wood products	-	-	-	0.03	-	-	-	0.13	0.26	0.03	0.45
Construction	-	-	0.02	0.21	-	-	-	0.00	0.12	0.00	0.35
Textile and leather	-	-	0.08	0.54	-	-	-	0.00	0.45	0.04	1.11
Non-specified	0.00	-	0.03	0.02	-	-	0.01	0.08	1.31	0.11	1.56
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>33.19</b>	<b>1.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.17</b>	<b>0.93</b>	<b>-</b>	<b>36.37</b>
Domestic aviation	-	-	0.70	-	-	-	-	-	-	-	0.70
Road	-	-	31.54	0.90	-	-	-	1.17	0.01	-	33.61
Rail	-	-	0.02	-	-	-	-	-	0.44	-	0.46
Pipeline transport	-	-	-	0.19	-	-	-	-	0.03	-	0.22
Domestic navigation	-	-	0.93	-	-	-	-	-	-	-	0.93
Non-specified	-	-	-	-	-	-	-	-	0.45	-	0.45
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>5.21</b>	<b>23.62</b>	<b>-</b>	<b>-</b>	<b>0.29</b>	<b>6.50</b>	<b>14.10</b>	<b>1.16</b>	<b>50.87</b>
Residential	-	-	2.37	16.98	-	-	0.14	6.39	5.69	0.91	32.49
Comm. and public services	-	-	0.56	6.50	-	-	0.11	0.08	7.92	0.22	15.39
Agriculture/forestry	-	-	1.99	0.14	-	-	0.02	0.03	0.47	0.01	2.66
Fishing	-	-	0.15	-	-	-	0.02	-	0.02	-	0.19
Non-specified	-	-	0.13	-	-	-	-	-	-	0.02	0.14
<b>NON-ENERGY USE</b>	<b>0.07</b>	<b>-</b>	<b>5.97</b>	<b>0.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.61</b>
in industry/transf./energy	-	-	5.65	0.57	-	-	-	-	-	-	6.22
of which: chem./petrochem.	-	-	3.46	0.57	-	-	-	-	-	-	4.03
in transport	-	-	0.32	-	-	-	-	-	-	-	0.32
in other	0.07	-	-	-	-	-	-	-	-	-	0.07
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>45.39</b>	<b>-</b>	<b>13.38</b>	<b>110.86</b>	<b>-</b>	<b>45.54</b>	<b>44.57</b>	<b>21.83</b>	<b>-</b>	<b>-</b>	<b>281.56</b>
Electricity plants	43.06	-	3.31	38.13	-	45.54	44.57	11.09	-	-	185.69
CHP plants	2.33	-	10.08	72.73	-	-	-	10.73	-	-	95.88
<b>Heat generated - PJ</b>	<b>6.12</b>	<b>-</b>	<b>32.73</b>	<b>135.47</b>	<b>-</b>	<b>-</b>	<b>0.78</b>	<b>41.85</b>	<b>-</b>	<b>-</b>	<b>216.95</b>
CHP plants	6.12	-	32.73	135.47	-	-	-	38.89	-	-	213.20
Heat plants	-	-	-	-	-	-	0.78	2.96	-	-	3.74

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Italy

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	0.03	4.19	-	4.74	-	3.53	9.20	11.82	-	-	33.50
Imports	11.17	67.26	14.63	53.45	-	-	-	2.74	3.71	-	152.97
Exports	-0.33	-1.80	-28.10	-0.17	-	-	-	-0.23	-0.53	-	-31.17
Intl. marine bunkers	-	-	-2.13	-	-	-	-	-	-	-	-2.13
Intl. aviation bunkers	-	-	-3.30	-	-	-	-	-	-	-	-3.30
Stock changes	0.02	-0.10	-0.81	0.05	-	-	-	0.00	-	-	-0.84
<b>TPES</b>	<b>10.89</b>	<b>69.55</b>	<b>-19.70</b>	<b>58.06</b>	<b>-</b>	<b>3.53</b>	<b>9.20</b>	<b>14.34</b>	<b>3.18</b>	<b>-</b>	<b>149.04</b>
Electricity and Heat Output											
Elec. generated - TWh	40.98	-	11.96	120.17	-	41.00	47.02	22.99	-	-	284.13
Heat generated - PJ	2.26	-	16.88	146.87	-	-	0.80	42.91	-	-	209.71

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	20.4	19.9	25.3	28.2	33.0	36.7	36.1	33.5
Net imports (Mtoe)	107.8	116.8	127.3	152.4	148.5	115.1	121.5	121.8
Total primary energy supply (Mtoe)	119.1	130.8	146.6	171.5	173.7	146.8	152.6	149.0
Net oil imports (Mtoe)	98.3	92.8	85.1	88.0	66.8	50.1	52.4	52.0
Oil supply (Mtoe)	90.3	88.2	83.3	86.9	65.3	51.6	53.6	49.9
Electricity consumption (TWh) <sup>1</sup>	134.6	175.2	235.1	301.8	325.7	304.1	309.7	303.2
GDP (billion 2010 USD)	1074.6	1379.8	1749.2	2060.2	2125.1	2043.5	2059.5	2077.6
GDP PPP (billion 2010 USD)	1051.4	1350.0	1711.4	2015.8	2079.2	1999.4	2015.1	2032.8
Population (millions)	54.75	56.43	56.72	56.94	59.83	60.79	60.73	60.62
Industrial production index (2010=100)	72.8	90.0	101.6	117.0	100.0	90.5	92.1	93.2
Total self-sufficiency <sup>2</sup>	0.17	0.15	0.17	0.16	0.19	0.25	0.24	0.22
Coal self-sufficiency <sup>2</sup>	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00
Oil self-sufficiency <sup>2</sup>	0.01	0.02	0.05	0.05	0.09	0.12	0.11	0.08
Natural gas self-sufficiency <sup>2</sup>	0.89	0.45	0.36	0.24	0.10	0.12	0.10	0.08
TPES/GDP (toe per thousand 2010 USD)	0.11	0.09	0.08	0.08	0.08	0.07	0.07	0.07
TPES/GDP PPP (toe per thousand 2010 USD)	0.11	0.10	0.09	0.09	0.08	0.07	0.08	0.07
TPES/population (toe per capita)	2.18	2.32	2.58	3.01	2.90	2.41	2.51	2.46
Net oil imports/GDP (toe per thousand 2010 USD)	0.09	0.07	0.05	0.04	0.03	0.02	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.02
Oil supply/population (toe per capita)	1.65	1.56	1.47	1.53	1.09	0.85	0.88	0.82
Share of renewables in TPES	0.05	0.05	0.04	0.06 e	0.13	0.18	0.17	0.17
Share of renewables in electricity generation	0.29	0.27	0.16 e	0.19 e	0.26	0.43	0.39	0.38
TFC/GDP (toe per thousand 2010 USD)	0.09	0.07	0.07	0.06	0.06	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.09	0.08	0.07	0.06	0.06	0.06	0.06	..
TFC/population (toe per capita)	1.76	1.81	2.03	2.26	2.24	1.92	1.96	..
Elect. cons./GDP (kWh per 2010 USD)	0.13	0.13	0.13	0.15	0.15	0.15	0.15	0.15
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.13	0.13	0.14	0.15	0.16	0.15	0.15	0.15
Elect. cons./population (kWh per capita)	2458	3105	4145	5300	5443	5002	5099	5002
Industry cons. <sup>3</sup> /industrial production (2010=100)	165.2	125.7	110.5	99.9	100.0	89.9	87.1	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	332.8	203.7	133.8	94.9	100.0	77.1	75.4	..

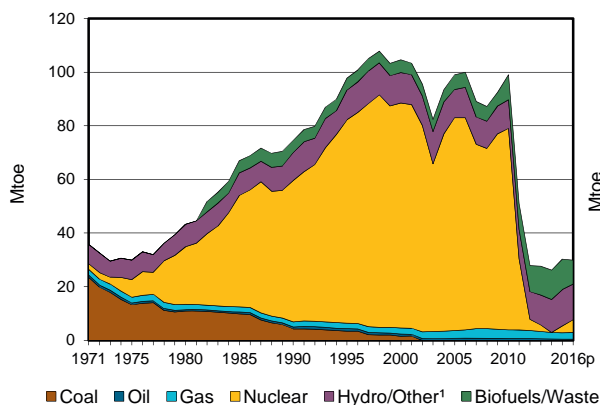
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

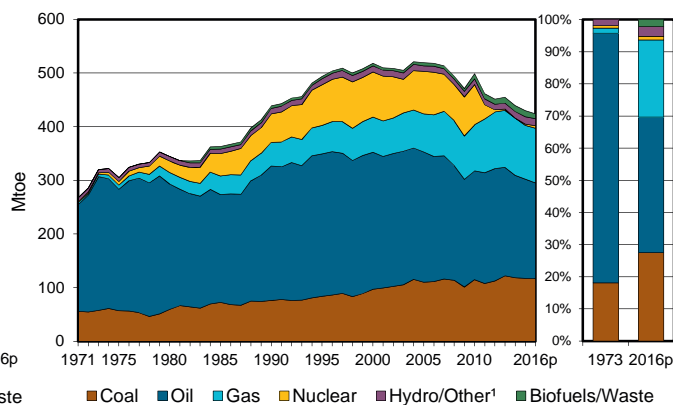
3. Includes non-energy use.

## Japan

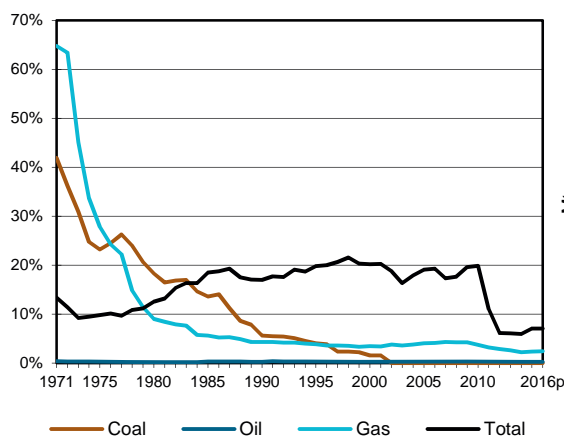
**Figure 1. Energy production**



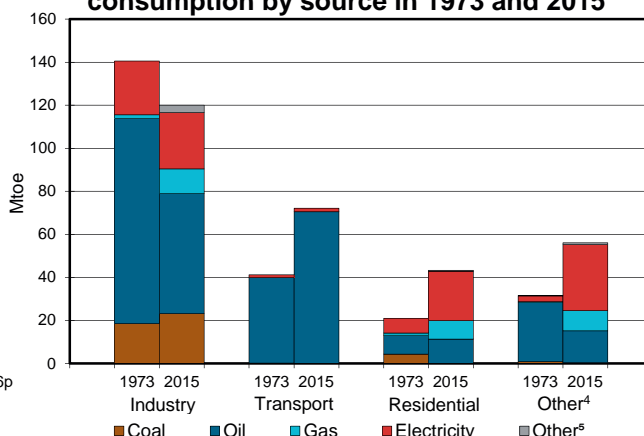
**Figure 2. Total primary energy supply<sup>2</sup>**



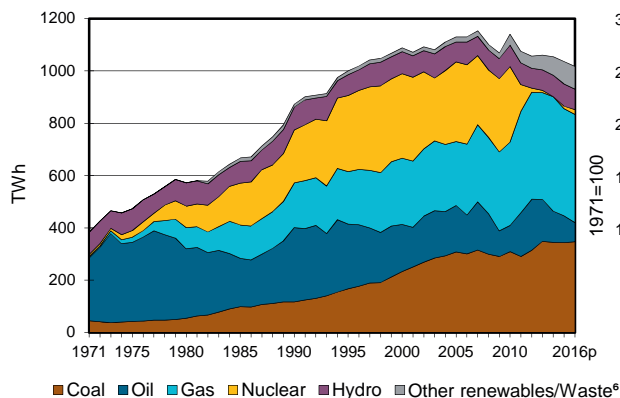
**Figure 3. Energy self-sufficiency**



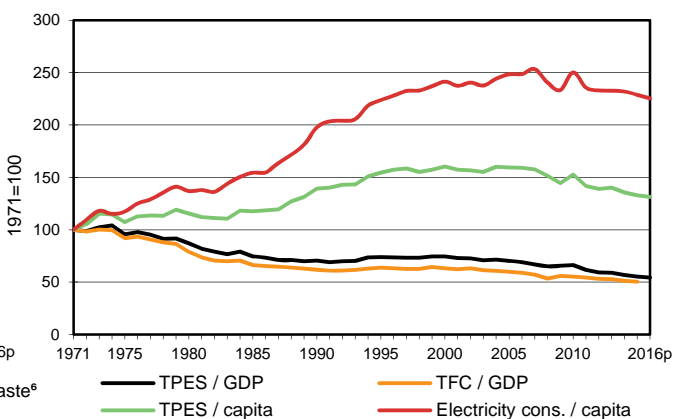
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Japan

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	0.47	-	2.38	2.46	7.33	6.25 e	11.39	-	-	30.28
Imports	118.00	167.91	44.28	97.65	-	-	-	-	-	-	427.84
Exports	-0.55	-	-18.21	-	-	-	-	-	-	-	-18.76
Intl. marine bunkers	-	-	-4.30	-	-	-	-	-	-	-	-4.30
Intl. aviation bunkers	-	-	-6.46	-	-	-	-	-	-	-	-6.46
Stock changes	0.01	1.23	-0.06	-0.00	-	-	-	-	-	-	1.17
<b>TPES</b>	<b>117.46</b>	<b>169.61</b>	<b>15.25</b>	<b>100.03</b>	<b>2.46</b>	<b>7.33</b>	<b>6.25 e</b>	<b>11.39</b>	-	-	<b>429.79</b>
Transfers	-	-1.02	0.90	-	-	-	-	-	-	-	-0.12
Statistical differences	-1.37	-0.57	-4.00	4.11	-	-	0.00	0.04	0.18	-0.00	-1.59
Electricity plants	-69.57	-4.94	-15.31	-71.77	-2.46	-7.33	-5.75 e	-7.96	89.03	-	-96.05
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-0.01	-0.32	-	-	-	-	-0.09	0.53	0.12
Blast furnaces	-18.15 e	-	-	-	-	-	-	-	-	-	-18.15
Gas works	-	-	-1.12	1.40	-	-	-	-	-	-	0.28
Coke/pat. fuel/BKB/PB plants	0.89	-	-0.58	-	-	-	-	-0.11	-	-	0.19
Oil refineries	-	-167.21	169.28	-	-	-	-	-	-	-	2.06
Petrochemical plants	-	4.43	-4.60	-	-	-	-	-	-	-	-0.17
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.01 e	-	-	-0.01
Energy industry own use	-5.64	-0.00	-7.78	-4.00	-	-	-	-	-3.82	-0.02	-21.27
Losses	-	-	-	-	-	-	-	-	-3.67	-	-3.67
<b>TFC</b>	<b>23.63</b>	<b>0.30</b>	<b>152.04</b>	<b>29.45</b>	-	-	<b>0.50</b>	<b>3.34</b>	<b>81.63</b>	<b>0.51</b>	<b>291.41</b>
<b>INDUSTRY</b>	<b>22.86</b>	<b>0.03</b>	<b>18.51</b>	<b>11.13</b>	-	-	-	<b>3.32</b>	<b>26.24</b>	-	<b>82.09</b>
Iron and steel	13.12 e	-	1.37	2.22	-	-	-	0.05	5.50	-	22.27
Chemical and petrochemical	3.93	0.03	7.56	1.60	-	-	-	0.14	4.29	-	17.54
Non-ferrous metals	0.22	-	0.30	0.18	-	-	-	0.03	0.76	-	1.49
Non-metallic minerals	3.84	-	2.09	0.88	-	-	-	0.52	1.93	-	9.27
Transport equipment	0.08	-	0.12	0.32	-	-	-	-	2.01	-	2.53
Machinery	0.07	-	0.56	1.62	-	-	-	-	3.69	-	5.94
Mining and quarrying	-	-	0.37	0.10	-	-	-	-	0.14	-	0.61
Food and tobacco	0.01	-	1.62	1.81	-	-	-	-	2.14	-	5.58
Paper, pulp and printing	1.59	-	0.76	0.55	-	-	-	2.58	2.48	-	7.96
Wood and wood products	-	-	0.10	0.03	-	-	-	-	0.30	-	0.43
Construction	-	-	2.12	0.05	-	-	-	-	0.61	-	2.78
Textile and leather	-	-	0.65	0.57	-	-	-	-	0.30	-	1.52
Non-specified	-	-	0.89	1.20	-	-	-	-	2.08	-	4.16
<b>TRANSPORT</b>	<b>0.00</b>	-	<b>69.73</b>	<b>0.07</b>	-	-	-	-	<b>1.54</b>	-	<b>71.35</b>
Domestic aviation	-	-	3.34	-	-	-	-	-	-	-	3.34
Road	-	-	63.01	0.07	-	-	-	-	-	-	63.08
Rail	0.00	-	0.18	-	-	-	-	-	1.54	-	1.72
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	3.21	-	-	-	-	-	-	-	3.21
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.39</b>	-	<b>25.54</b>	<b>17.95</b>	-	-	<b>0.50</b>	<b>0.02</b>	<b>53.85</b>	<b>0.51</b>	<b>98.77</b>
Residential	-	-	11.24	8.64	-	-	0.31	0.02	23.02	0.03	43.26
Comm. and public services	0.39	-	13.56	9.31	-	-	0.12	-	28.10	0.48	51.97
Agriculture/forestry	-	-	0.19	0.00	-	-	0.07	-	0.19	-	0.45
Fishing	-	-	0.55	0.00	-	-	-	-	0.05	-	0.60
Non-specified	-	-	-	-	-	-	-	-	2.50 e	-	2.50
<b>NON-ENERGY USE</b>	<b>0.37</b>	<b>0.27</b>	<b>38.25</b>	<b>0.30</b>	-	-	-	-	-	-	<b>39.19</b>
in industry/transf./energy	0.37	0.27	36.93	0.30	-	-	-	-	-	-	37.88
of which: chem./petrochem.	0.33	0.27	33.08	0.30	-	-	-	-	-	-	33.98
in transport	-	-	0.78	-	-	-	-	-	-	-	0.78
in other	-	-	0.54	-	-	-	-	-	-	-	0.54
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>343.22</b>	<b>24.68</b>	<b>77.85</b>	<b>409.83</b>	<b>9.44</b>	<b>85.19</b>	<b>43.60 e</b>	<b>41.46</b>	-	-	<b>1035.27</b>
Electricity plants	343.22	24.68	77.85	409.83	9.44	85.19	43.60 e	41.46	-	-	1035.27
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	<b>0.34</b>	<b>14.30</b>	-	-	<b>4.01</b>	-	<b>3.62</b>	-	<b>22.27</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	0.34	14.30	-	-	4.01	-	3.62	-	22.27

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Japan

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	0.45	-	2.51	4.71	6.76	6.52	8.91	-	-	29.85
Imports	117.41	164.92	40.90	99.19	-	-	-	-	-	-	422.42
Exports	-0.72	-	-18.42	-	-	-	-	-	-	-	-19.14
Intl. marine bunkers	-	-	-4.53	-	-	-	-	-	-	-	-4.53
Intl. aviation bunkers	-	-	-6.51	-	-	-	-	-	-	-	-6.51
Stock changes	-0.16	1.50	0.31	0.03	-	-	-	-	-	-	1.68
<b>TPES</b>	<b>116.53</b>	<b>166.87</b>	<b>11.74</b>	<b>101.73</b>	<b>4.71</b>	<b>6.76</b>	<b>6.52</b>	<b>8.91</b>	-	-	<b>423.76</b>
Electricity and Heat Output											
Elec. generated - TWh	347.14	11.00	62.48	413.33	18.06	78.58	51.27	35.94	-	-	1017.79
Heat generated - PJ	-	-	0.34	14.30	-	-	4.01	-	3.62	-	22.27

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	29.5	43.3	74.6	104.6	99.0	26.2	30.3	29.9
Net imports (Mtoe)	316.8	318.8	377.6	429.2	409.6	420.1	409.1	403.3
Total primary energy supply (Mtoe)	320.4	344.5	438.6	517.9	498.5	439.2	429.8	423.8
Net oil imports (Mtoe)	273.1	251.7	263.2	269.9	211.7	197.4	194.0	187.4
Oil supply (Mtoe)	248.9	233.7	250.3	255.1	202.3	190.9	184.9	178.6
Electricity consumption (TWh) <sup>1</sup>	442.2	550.9	840.7	1052.7	1101.4	1014.0	998.7	982.6
GDP (billion 2010 USD)	2358.9	2976.7	4682.8	5348.9	5700.1	5914.0	5986.1	6045.9
GDP PPP (billion 2010 USD)	1803.4	2275.7	3580.1	4004.8	4323.6	4437.0	4462.3	4496.0
Population (millions)	108.90	117.06	123.61	126.83	128.04	127.12	126.98	126.76
Industrial production index (2010=100)	59.0	69.7	102.8	104.3	100.0	98.7	97.4	97.1
Total self-sufficiency <sup>2</sup>	0.09	0.13	0.17	0.20	0.20	0.06	0.07	0.07
Coal self-sufficiency <sup>2</sup>	0.31	0.18	0.06	0.02	-	-	-	-
Oil self-sufficiency <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural gas self-sufficiency <sup>2</sup>	0.45	0.09	0.04	0.03	0.04	0.02	0.02	0.02
TPES/GDP (toe per thousand 2010 USD)	0.14	0.12	0.09	0.10	0.09	0.07	0.07	0.07
TPES/GDP PPP (toe per thousand 2010 USD)	0.18	0.15	0.12	0.13	0.12	0.10	0.10	0.09
TPES/population (toe per capita)	2.94	2.94	3.55	4.08	3.89	3.46	3.38	3.34
Net oil imports/GDP (toe per thousand 2010 USD)	0.12	0.08	0.06	0.05	0.04	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.08	0.05	0.05	0.04	0.03	0.03	0.03
Oil supply/population (toe per capita)	2.29	2.00	2.02	2.01	1.58	1.50	1.46	1.41
Share of renewables in TPES	0.02	0.02	0.03	0.03 e	0.04 e	0.05 e	0.05 e	0.05
Share of renewables in electricity generation	0.14	0.16	0.11	0.09 e	0.11 e	0.14 e	0.16 e	0.16
TFC/GDP (toe per thousand 2010 USD)	0.10	0.08	0.06	0.06	0.05	0.05	0.05	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.13	0.10	0.08	0.08	0.07	0.07	0.07	..
TFC/population (toe per capita)	2.15	1.98	2.32	2.59	2.41	2.32	2.30	..
Elect. cons./GDP (kWh per 2010 USD)	0.19	0.19	0.18	0.20	0.19	0.17	0.17	0.16
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.25	0.24	0.24	0.26	0.26	0.23	0.22	0.22
Elect. cons./population (kWh per capita)	4060	4707	6802	8300	8602	7976	7865	7752
Industry cons. <sup>3</sup> /industrial production (2010=100)	183.5	131.2	105.8	102.8	100.0	92.9	94.9	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	266.6	158.8	110.6	111.4	100.0	90.5	94.6	..

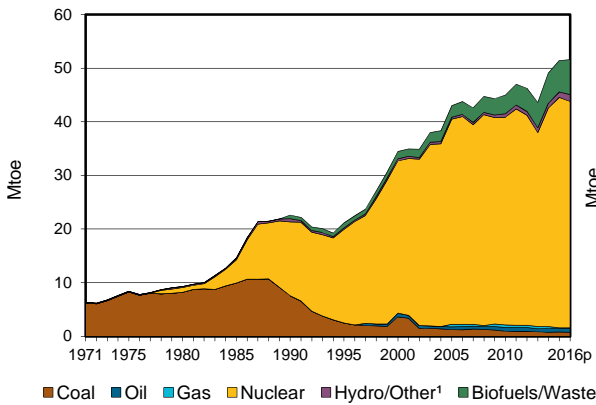
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

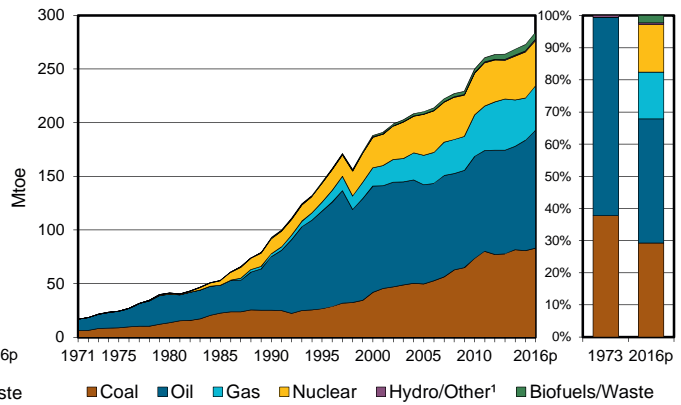
3. Includes non-energy use.

## Korea

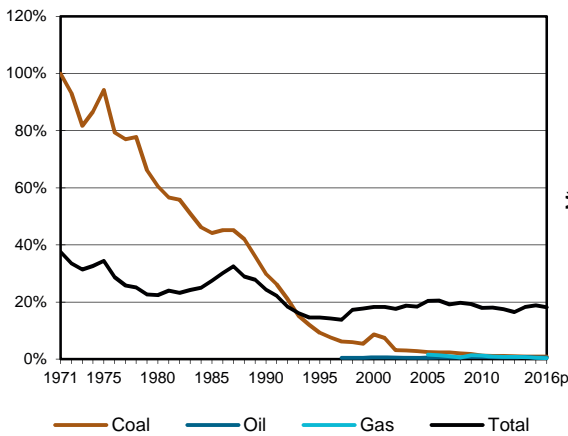
**Figure 1. Energy production**



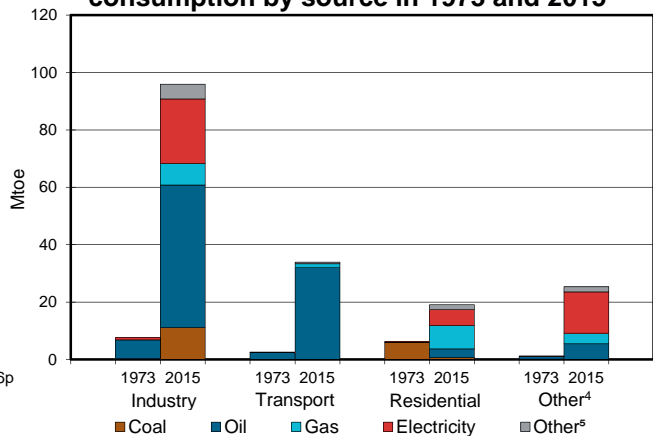
**Figure 2. Total primary energy supply<sup>2</sup>**



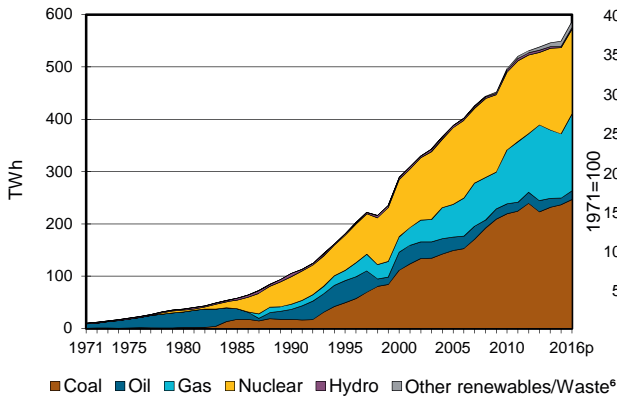
**Figure 3. Energy self-sufficiency**



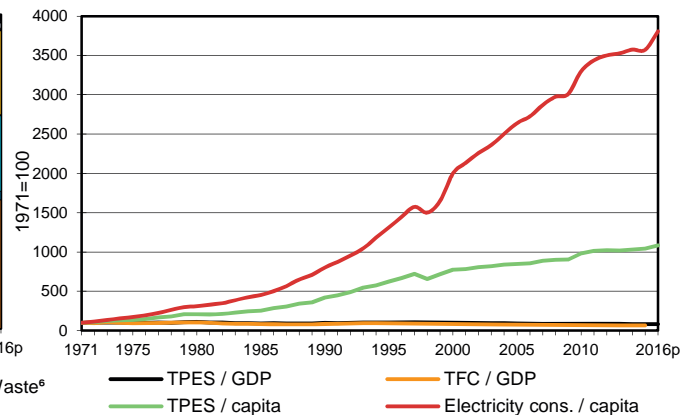
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## Korea

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.78	0.66	-	0.17	42.94	0.18	0.77	5.85	-	0.06	51.42
Imports	81.13	142.11	37.60	38.93	-	-	-	0.01	-	-	299.78
Exports	-	-0.35	-62.43	-	-	-	-	-	-	-	-62.77
Intl. marine bunkers	-	-	-9.43	-	-	-	-	-	-	-	-9.43
Intl. aviation bunkers	-	-	-4.41	-	-	-	-	-	-	-	-4.41
Stock changes	-1.08	-1.43	0.35	0.23	-	-	-	0.02	-	-	-1.91
<b>TPES</b>	<b>80.84</b>	<b>141.00</b>	<b>-38.31</b>	<b>39.34</b>	<b>42.94</b>	<b>0.18</b>	<b>0.77</b>	<b>5.88</b>	-	<b>0.06</b>	<b>272.69</b>
Transfers	-	-3.03	3.51	-	-	-	-	-0.42	-	-	0.06
Statistical differences	0.60	0.19	1.44	0.40	-	-	0.00	0.39	0.06	-0.35	2.72
Electricity plants	-49.42	-	-2.13	-13.80	-42.94	-0.18	-0.61	-0.65	43.01	-0.03	-66.75
CHP plants	-6.95	-	-1.99	-5.33	-	-	-	-0.24	4.23	4.31	-5.96
Heat plants	-	-	-0.12	-0.05	-	-	-	-0.47	-	0.52	-0.12
Blast furnaces	-8.96 e	-	-	-	-	-	-	-	-	-	-8.96
Gas works	-	-	-0.09	0.00	-	-	-	-	-	-	-0.09
Coke/pat. fuel/BKB/PB plants	-1.19	-	-	-	-	-	-	-	-	-	-1.19
Oil refineries	-	-147.91	144.51	-	-	-	-	-	-	-	-3.40
Petrochemical plants	-	9.76	-9.40	-	-	-	-	-	-	-	0.36
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-3.12	-0.00	-7.11	-0.07	-	-	-	-	-3.11	-0.08	-13.50
Losses	-	-	-	-	-	-	-	-	-1.59	-0.06	-1.65
<b>TFC</b>	<b>11.80</b>	-	<b>90.30</b>	<b>20.50</b>	-	-	<b>0.16</b>	<b>4.49</b>	<b>42.60</b>	<b>4.36</b>	<b>174.21</b>
<b>INDUSTRY</b>	<b>10.59</b>	-	<b>3.49</b>	<b>7.41</b>	-	-	<b>0.00</b>	<b>2.51</b>	<b>22.56</b>	<b>2.57</b>	<b>49.14</b>
Iron and steel	7.07 e	-	0.10	1.53	-	-	-	0.01	4.67	0.00	13.38
Chemical and petrochemical	0.11	-	0.55	1.44	-	-	-	0.28	4.21	1.65	8.24
Non-ferrous metals	-	-	0.03	0.32	-	-	-	-	0.73	0.00	1.07
Non-metallic minerals	2.74	-	0.52	0.52	-	-	-	0.84	1.06	0.00	5.68
Transport equipment	-	-	0.24	0.62	-	-	-	0.00	2.09	0.01	2.96
Machinery	-	-	0.08	0.94	-	-	-	0.00	6.42	0.00	7.44
Mining and quarrying	-	-	0.06	-	-	-	-	0.00	0.14	-	0.20
Food and tobacco	0.03	-	0.08	0.64	-	-	-	0.11	0.90	0.11	1.87
Paper, pulp and printing	0.04	-	0.03	0.21	-	-	-	0.61	0.86	0.22	1.97
Wood and wood products	-	-	0.01	0.05	-	-	-	0.17	0.17	0.01	0.40
Construction	-	-	0.84	0.01	-	-	-	0.03	-	-	0.88
Textile and leather	0.06	-	0.09	0.32	-	-	-	0.07	1.03	0.37	1.93
Non-specified	0.54	-	0.87	0.81	-	-	0.00	0.39	0.29	0.20	3.11
<b>TRANSPORT</b>	-	-	<b>31.64</b>	<b>1.16</b>	-	-	-	<b>0.42</b>	<b>0.19</b>	-	<b>33.41</b>
Domestic aviation	-	-	1.23	-	-	-	-	-	-	-	1.23
Road	-	-	30.07	1.16	-	-	-	0.42	-	-	31.66
Rail	-	-	0.11	-	-	-	-	-	0.19	-	0.30
Pipeline transport	-	-	0.00	-	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.22	-	-	-	-	-	-	-	0.22
Non-specified	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>OTHER</b>	<b>0.66</b>	-	<b>8.40</b>	<b>11.92</b>	-	-	<b>0.16</b>	<b>1.56</b>	<b>19.84</b>	<b>1.79</b>	<b>44.33</b>
Residential	0.66	-	3.06	8.17	-	-	0.03	0.11	5.49	1.55	19.06
Comm. and public services	-	-	2.55	3.75	-	-	0.10	1.39	13.10	0.24	21.13
Agriculture/forestry	-	-	0.50	0.00	-	-	0.02	0.07	1.00	-	1.59
Fishing	-	-	0.90	-	-	-	-	-	0.26	-	1.16
Non-specified	-	-	1.39	-	-	-	-	-	-	-	1.39
<b>NON-ENERGY USE</b>	<b>0.55</b>	-	<b>46.78</b>	-	-	-	-	-	-	-	<b>47.33</b>
in industry/transf./energy	0.55	-	46.19	-	-	-	-	-	-	-	46.74
of which: chem./petrochem.	0.55	-	44.90	-	-	-	-	-	-	-	45.45
in transport	-	-	0.51	-	-	-	-	-	-	-	0.51
in other	-	-	0.09	-	-	-	-	-	-	-	0.09
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>236.59</b>	-	<b>12.52</b>	<b>122.86</b>	<b>164.76</b>	<b>2.15</b>	<b>7.08</b>	<b>3.15</b>	-	<b>0.13</b>	<b>549.23</b>
Electricity plants	215.98	-	10.06	97.20	164.76	2.15	7.08	2.72	-	0.13	500.07
CHP plants	20.60	-	2.46	25.66	-	-	-	0.43	-	-	49.16
<b>Heat generated - PJ</b>	<b>74.32</b>	-	<b>32.99</b>	<b>72.78</b>	-	-	-	<b>22.20</b>	-	<b>2.67</b>	<b>204.96</b>
CHP plants	74.32	-	29.74	71.01	-	-	-	5.46	-	2.67	183.20
Heat plants	-	-	3.25	1.77	-	-	-	16.74	-	-	21.76

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Korea

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.77	0.68	-	0.14	42.22	0.24	0.95	6.51	-	0.06	51.56
Imports	81.47	150.05	39.43	39.62	-	-	-	-	-	-	310.57
Exports	-	-0.52	-63.83	-	-	-	-	-	-	-	-64.35
Intl. marine bunkers	-	-	-10.44	-	-	-	-	-	-	-	-10.44
Intl. aviation bunkers	-	-	-4.67	-	-	-	-	-	-	-	-4.67
Stock changes	0.85	-0.91	0.14	1.57	-	-	-	-0.00	-	-	1.65
<b>TPES</b>	<b>83.09</b>	<b>149.31</b>	<b>-39.37</b>	<b>41.32</b>	<b>42.22</b>	<b>0.24</b>	<b>0.95</b>	<b>6.50</b>	<b>-</b>	<b>0.06</b>	<b>284.32</b>
Electricity and Heat Output											
Elec. generated - TWh	246.27	-	16.54	147.21	162.00	2.85	8.75	3.08	-	0.13	586.81
Heat generated - PJ	72.42	-	33.14	81.95	-	-	-	23.93	-	2.62	214.07

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	6.8	9.3	22.6	34.4	45.0	49.1	51.4	51.6
Net imports (Mtoe)	13.6	30.8	70.2	165.7	221.1	232.8	237.0	246.2
Total primary energy supply (Mtoe)	21.6	41.3	92.9	188.2	250.0	268.4	272.7	284.3
Net oil imports (Mtoe)	13.2	27.3	51.7	109.5	108.8	109.3	116.9	125.1
Oil supply (Mtoe)	13.3	26.7	49.7	99.0	95.1	96.3	102.7	109.9
Electricity consumption (TWh) <sup>1</sup>	13.5 e	34.8 e	101.7	277.7	481.5	532.7	534.4	572.1
GDP (billion 2010 USD)	79.5	141.1	362.9	710.0	1094.5	1234.3	1266.6	1302.4
GDP PPP (billion 2010 USD)	109.4	194.0	499.1	976.5	1505.3	1697.6	1742.0	1789.9
Population (millions)	34.10	38.12	42.87	47.01	49.41	50.42	50.62	50.85
Industrial production index (2010=100)	..	7.5	22.8	53.4	100.0	108.4	108.1	109.2
Total self-sufficiency <sup>2</sup>	0.31	0.22	0.24	0.18	0.18	0.18	0.19	0.18
Coal self-sufficiency <sup>2</sup>	0.82 e	0.61	0.30	0.09	0.01	0.01	0.01	0.01
Oil self-sufficiency <sup>2</sup>	-	-	-	0.01	0.01	0.01	0.01	0.01
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	0.01	0.01	0.00	0.00
TPES/GDP (toe per thousand 2010 USD)	0.27	0.29	0.26	0.27	0.23	0.22	0.22	0.22
TPES/GDP PPP (toe per thousand 2010 USD)	0.20	0.21	0.19	0.19	0.17	0.16	0.16	0.16
TPES/population (toe per capita)	0.63	1.08	2.17	4.00	5.06	5.32	5.39	5.59
Net oil imports/GDP (toe per thousand 2010 USD)	0.17	0.19	0.14	0.15	0.10	0.09	0.09	0.10
Oil supply/GDP (toe per thousand 2010 USD)	0.17	0.19	0.14	0.14	0.09	0.08	0.08	0.08
Oil supply/population (toe per capita)	0.39	0.70	1.16	2.11	1.93	1.91	2.03	2.16
Share of renewables in TPES	0.01	0.00	0.01	0.00 e	0.01	0.02	0.02	0.02
Share of renewables in electricity generation	0.09	0.05	0.06	0.01 e	0.01	0.02	0.02	0.02
TFC/GDP (toe per thousand 2010 USD)	0.22	0.22	0.18	0.18	0.14	0.14	0.14	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.16	0.16	0.13	0.13	0.11	0.10	0.10	..
TFC/population (toe per capita)	0.51	0.82	1.51	2.70	3.19	3.38	3.44	..
Elect. cons./GDP (kWh per 2010 USD)	0.17 e	0.25 e	0.28	0.39	0.44	0.43	0.42	0.44
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.12 e	0.18 e	0.20	0.28	0.32	0.31	0.31	0.32
Elect. cons./population (kWh per capita)	397 e	914 e	2373	5907	9745	10564	10558	11252
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	215.7	137.9	142.7	100.0	105.9	107.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	311.1	179.0	154.0	100.0	103.7	106.5	..

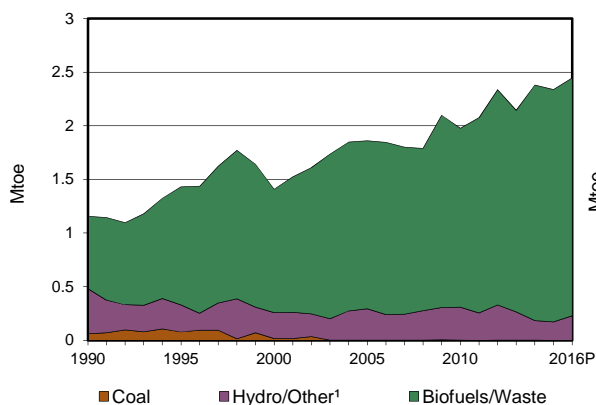
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

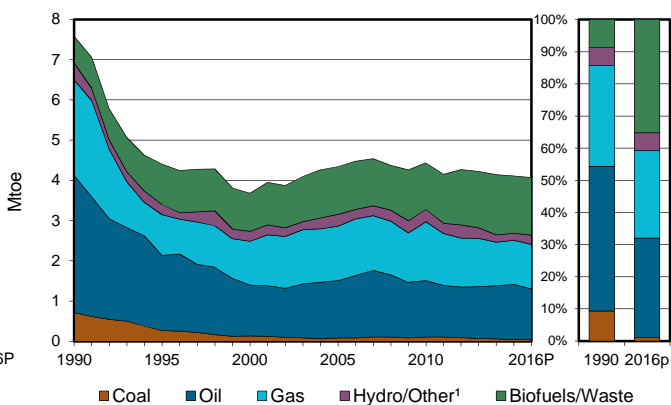
3. Includes non-energy use.

## Latvia

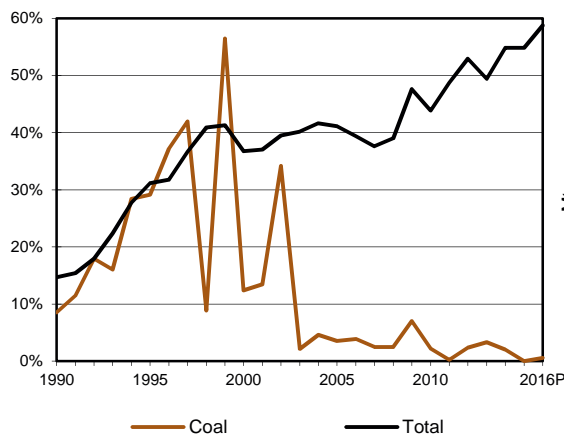
**Figure 1. Energy production**



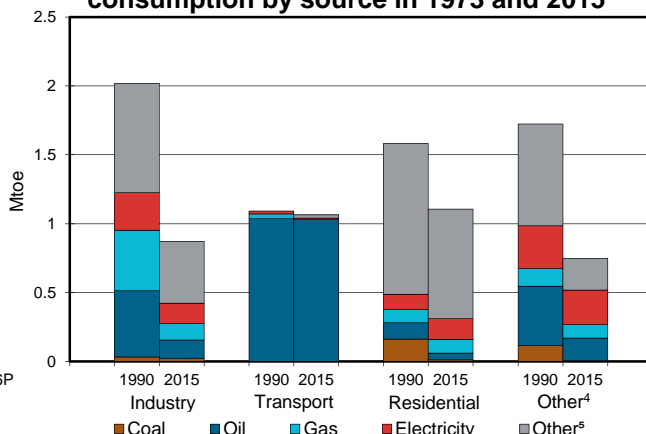
**Figure 2. Total primary energy supply<sup>2</sup>**



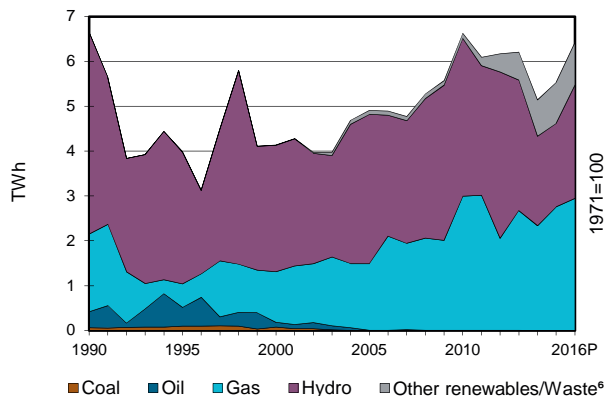
**Figure 3. Energy self-sufficiency**



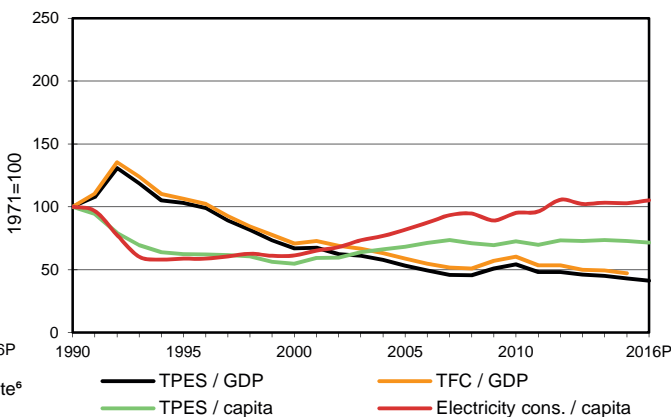
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Latvia

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.16	0.01	2.17	-	-	2.34
Imports	0.04	0.00	2.76	1.08	-	-	-	0.17	0.45	-	4.51
Exports	-0.00	-0.00	-0.97	-	-	-	-	-0.87	-0.29	-	-2.14
Intl. marine bunkers	-	-	-0.25	-	-	-	-	-	-	-	-0.25
Intl. aviation bunkers	-	-	-0.11	-	-	-	-	-	-	-	-0.11
Stock changes	0.01	-	-0.06	0.02	-	-	-	-0.05	-	-	-0.08
<b>TPES</b>	<b>0.05</b>	-	<b>1.37</b>	<b>1.10</b>	-	<b>0.16</b>	<b>0.01</b>	<b>1.42</b>	<b>0.16</b>	-	<b>4.26</b>
Transfers	-	-	0.01	-	-	-	-	-	-	-	0.01
Statistical differences	0.00	-	0.01	-	-	-	-	-	-	-	0.01
Electricity plants	-	-	-	-	-	-0.16	-0.01	-	0.17	-	-
CHP plants	-0.00	-	-	-0.69	-	-	-	-0.28	0.30	0.45	-0.22
Heat plants	-0.00	-	-0.00	-0.06	-	-	-	-0.14	-0.00	0.16	-0.05
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.01	-	-	-0.01
Energy industry own use	-	-	-0.01	-0.02	-	-	-	-	-0.04	-0.03	-0.09
Losses	-	-	-	-0.01	-	-	-	-	-0.04	-0.08	-0.12
<b>TFC</b>	<b>0.04</b>	-	<b>1.38</b>	<b>0.32</b>	-	-	-	<b>1.00</b>	<b>0.56</b>	<b>0.50</b>	<b>3.79</b>
<b>INDUSTRY</b>	<b>0.02</b>	-	<b>0.05</b>	<b>0.12</b>	-	-	-	<b>0.41</b>	<b>0.15</b>	<b>0.03</b>	<b>0.79</b>
Iron and steel	-	-	-	0.01	-	-	-	-	0.00	0.00	0.01
Chemical and petrochemical	-	-	0.00	0.01	-	-	-	0.01	0.01	0.00	0.02
Non-ferrous metals	-	-	-	0.00	-	-	-	-	-	-	0.00
Non-metallic minerals	0.02	-	0.01	0.03	-	-	-	0.06	0.02	0.00	0.13
Transport equipment	-	-	-	0.00	-	-	-	0.00	0.00	0.00	0.01
Machinery	-	-	0.00	0.00	-	-	-	0.00	0.01	0.00	0.02
Mining and quarrying	0.00	-	0.00	0.00	-	-	-	0.00	0.00	-	0.01
Food and tobacco	0.00	-	0.01	0.04	-	-	-	0.01	0.02	0.00	0.08
Paper, pulp and printing	-	-	-	0.00	-	-	-	0.00	0.00	0.00	0.00
Wood and wood products	-	-	0.01	0.01	-	-	-	0.34	0.06	0.03	0.45
Construction	-	-	0.02	0.01	-	-	-	0.00	0.01	0.00	0.04
Textile and leather	0.00	-	-	0.00	-	-	-	0.00	0.00	0.00	0.01
Non-specified	-	-	-	0.00	-	-	-	0.00	0.01	0.00	0.01
<b>TRANSPORT</b>	-	-	<b>1.01</b>	-	-	-	-	<b>0.02</b>	<b>0.01</b>	-	<b>1.04</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	0.94	-	-	-	-	0.02	0.00	-	0.96
Rail	-	-	0.07	-	-	-	-	0.00	0.00	-	0.07
Pipeline transport	-	-	-	-	-	-	-	-	0.00	-	0.00
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>OTHER</b>	<b>0.02</b>	-	<b>0.21</b>	<b>0.20</b>	-	-	-	<b>0.56</b>	<b>0.40</b>	<b>0.47</b>	<b>1.85</b>
Residential	0.01	-	0.05	0.10	-	-	-	0.46	0.15	0.34	1.11
Comm. and public services	0.01	-	0.05	0.09	-	-	-	0.08	0.23	0.12	0.59
Agriculture/forestry	-	-	0.10	0.01	-	-	-	0.02	0.01	0.01	0.15
Fishing	-	-	0.01	0.00	-	-	-	0.00	0.00	-	0.01
Non-specified	-	-	0.00	-	-	-	-	-	0.00	0.00	0.00
<b>NON-ENERGY USE</b>	-	-	<b>0.11</b>	-	-	-	-	-	-	-	<b>0.11</b>
in industry/transf./energy	-	-	0.08	-	-	-	-	-	-	-	0.08
of which: chem./petrochem.	-	-	0.00	-	-	-	-	-	-	-	0.00
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	-	-	<b>0.00</b>	<b>2.76</b>	-	<b>1.86</b>	<b>0.15</b>	<b>0.77</b>	-	-	<b>5.53</b>
Electricity plants	-	-	-	-	-	1.86	0.15	-	-	-	2.01
CHP plants	-	-	0.00	2.76	-	-	-	0.77	-	-	3.53
<b>Heat generated - PJ</b>	<b>0.10</b>	-	<b>0.04</b>	<b>16.02</b>	-	-	-	<b>9.30</b>	<b>0.01</b>	-	<b>25.46</b>
CHP plants	0.07	-	0.01	13.55	-	-	-	5.34	-	-	18.96
Heat plants	0.04	-	0.03	2.46	-	-	-	3.96	0.01	-	6.50

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Latvia

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.00	-	-	-	-	0.22	0.01	2.22	-	-	2.44
Imports	0.04	0.00	2.70	0.92	-	-	-	0.17	0.42	-	4.25
Exports	-0.00	-0.00	-0.83	-	-	-	-	-0.96	-0.33	-	-2.12
Intl. marine bunkers	-	-	-0.31	-	-	-	-	-	-	-	-0.31
Intl. aviation bunkers	-	-	-0.12	-	-	-	-	-	-	-	-0.12
Stock changes	0.01	-	-0.18	0.18	-	-	-	0.01	-	-	0.02
<b>TPES</b>	<b>0.04</b>	<b>-</b>	<b>1.26</b>	<b>1.11</b>	<b>-</b>	<b>0.22</b>	<b>0.01</b>	<b>1.43</b>	<b>0.09</b>	<b>-</b>	<b>4.16</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.00	2.94	-	2.53	0.13	0.82	-	-	6.43
Heat generated - PJ	0.15	-	0.04	17.30	-	-	-	11.48	0.01	-	28.97

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

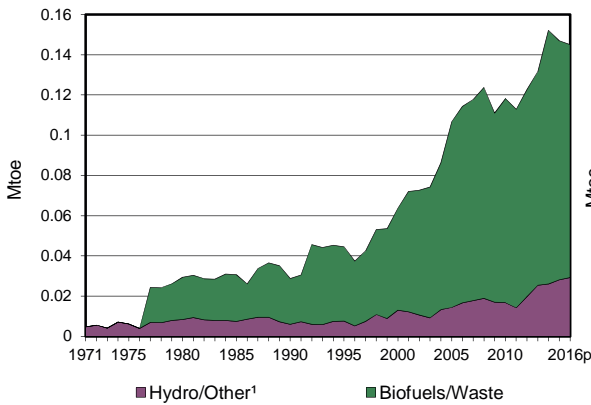
## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	..	..	1.2	1.4	2.0	2.4	2.3	2.4
Net imports (Mtoe)	..	..	7.5	2.4	2.2	1.9	2.4	2.1
Total primary energy supply (Mtoe)	..	..	7.9	3.8	4.5	4.3	4.3	4.2
Net oil imports (Mtoe)	..	..	4.0	1.2	1.7	1.5	1.8	1.9
Oil supply (Mtoe)	..	..	3.4	1.3	1.4	1.3	1.4	1.3
Electricity consumption (TWh) <sup>1</sup>	..	..	9.1	4.9	6.8	7.0	6.9	7.0
GDP (billion 2010 USD)	..	..	..	16.4	23.8	27.6	28.3	28.9
GDP PPP (billion 2010 USD)	..	..	35.1	25.5	36.9	42.8	44.0	44.8
Population (millions)	..	..	2.66	2.37	2.10	1.99	1.98	1.96
Industrial production index (2010=100)	..	..	..	69.8	100.0	113.5	117.6	123.9
Total self-sufficiency <sup>2</sup>	..	..	0.15	0.37	0.44	0.55	0.55	0.59
Coal self-sufficiency <sup>2</sup>	..	..	0.09	0.12	0.02	0.02	-	0.01
Oil self-sufficiency <sup>2</sup>	..	..	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	..	..	..	0.23	0.19	0.16	0.15	0.14
TPES/GDP PPP (toe per thousand 2010 USD)	..	..	0.22	0.15	0.12	0.10	0.10	0.09
TPES/population (toe per capita)	..	..	2.96	1.62	2.15	2.18	2.16	2.12
Net oil imports/GDP (toe per thousand 2010 USD)	..	..	..	0.08	0.07	0.06	0.06	0.06
Oil supply/GDP (toe per thousand 2010 USD)	..	..	..	0.08	0.06	0.05	0.05	0.04
Oil supply/population (toe per capita)	..	..	1.28	0.53	0.67	0.66	0.69	0.64
Share of renewables in TPES	..	..	0.13	0.31	0.32	0.37	0.36	0.39
Share of renewables in electricity generation	..	..	0.68	0.68	0.55	0.55	0.50	0.54
TFC/GDP (toe per thousand 2010 USD)	..	..	..	0.20	0.17	0.14	0.13	..
TFC/GDP PPP (toe per thousand 2010 USD)	..	..	0.18	0.13	0.11	0.09	0.09	..
TFC/population (toe per capita)	..	..	2.41	1.39	1.94	1.94	1.92	..
Elect. cons./GDP (kWh per 2010 USD)	..	..	..	0.30	0.29	0.25	0.24	0.24
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	..	..	0.26	0.19	0.18	0.16	0.16	0.16
Elect. cons./population (kWh per capita)	..	..	3396	2082	3231	3507	3492	3573
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	108.2	100.0	92.1	89.5	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	214.2	100.0	82.0	80.5	..

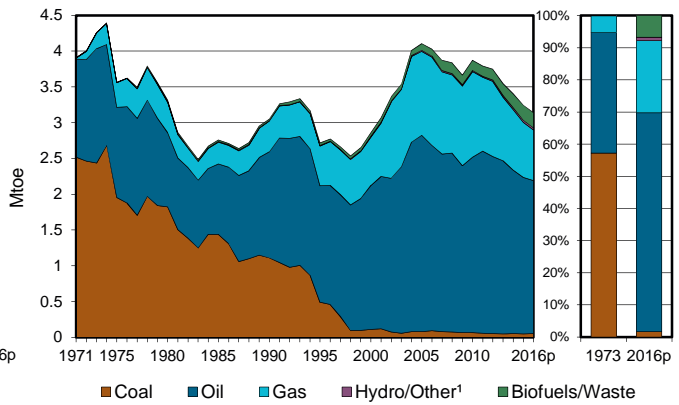
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## Luxembourg

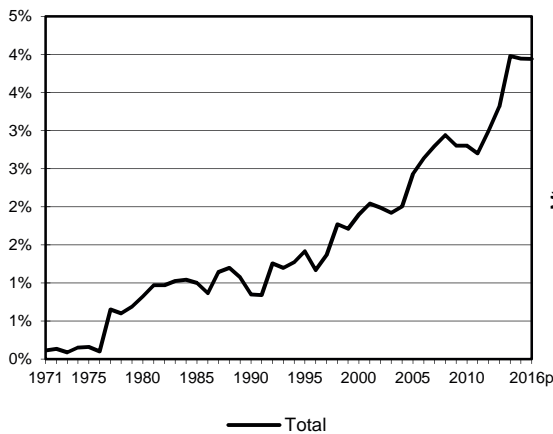
**Figure 1. Energy production**



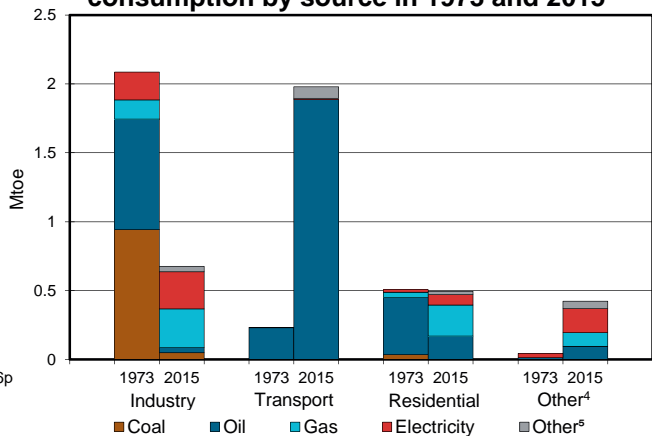
**Figure 2. Total primary energy supply²**



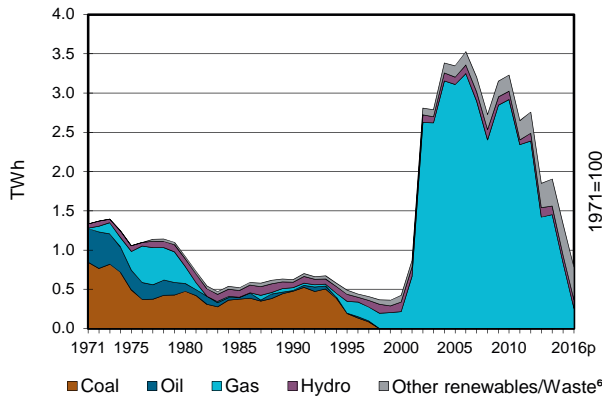
**Figure 3. Energy self-sufficiency**



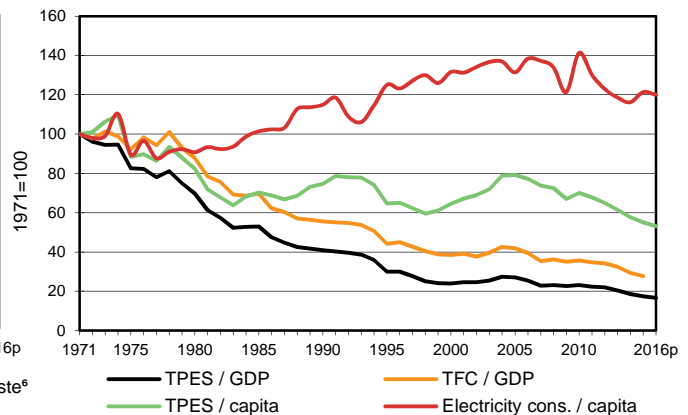
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015³**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Luxembourg

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.01	0.02	0.12	-	-	0.15
Imports	0.05	-	2.63	0.77	-	-	-	0.11	0.65	-	4.21
Exports	-	-	-0.01	-	-	-	-	-0.02	-0.17	-	-0.19
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.46	-	-	-	-	-	-	-	-0.46
Stock changes	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>TPES</b>	<b>0.05</b>	<b>-</b>	<b>2.19</b>	<b>0.77</b>	<b>-</b>	<b>0.01</b>	<b>0.02</b>	<b>0.21</b>	<b>0.48</b>	<b>-</b>	<b>3.73</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	0.00	0.00	-	-	-	-	-0.00	-0.00	0.00
Electricity plants	-	-	-	-0.09	-	-0.01	-0.02	-0.03	0.08	-	-0.07
CHP plants	-	-	-0.00	-0.08	-	-	-	-0.02	0.03	0.05	-0.02
Heat plants	-	-	-	-0.00	-	-	-	-0.00	-	0.01	-0.00
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	0.00	-	-	-	-0.00	-	-	-0.00
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.05	-	-0.05
Losses	-	-	-	-	-	-	-	-	-0.01	-0.01	-0.02
<b>TFC</b>	<b>0.05</b>	<b>-</b>	<b>2.19</b>	<b>0.60</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.14</b>	<b>0.54</b>	<b>0.05</b>	<b>3.57</b>
<b>INDUSTRY</b>	<b>0.05</b>	<b>-</b>	<b>0.01</b>	<b>0.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.04</b>	<b>0.27</b>	<b>0.00</b>	<b>0.65</b>
Iron and steel	0.01	-	-	0.14	-	-	-	-	0.14	-	0.28
Chemical and petrochemical	-	-	0.01	0.02	-	-	-	-	0.03	-	0.06
Non-ferrous metals	-	-	-	c	-	-	-	-	-	-	-
Non-metallic minerals	0.04	-	0.00	0.07	-	-	-	0.02	0.02	-	0.15
Transport equipment	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	0.00	-	-	-	-	0.01	-	0.01
Mining and quarrying	-	-	0.00	0.00	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	0.00	0.01	-	-	-	-	0.02	-	0.03
Paper, pulp and printing	-	-	-	0.00	-	-	-	-	0.00	0.00	0.01
Wood and wood products	-	-	-	0.00	-	-	-	0.02	0.00	-	0.02
Construction	0.00	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Textile and leather	-	-	-	0.03	-	-	-	-	0.01	0.00	0.03
Non-specified	-	-	0.00	0.01	-	-	-	-	0.03	0.00	0.04
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1.88</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.08</b>	<b>0.01</b>	<b>-</b>	<b>1.97</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1.87	-	-	-	-	0.08	0.00	-	1.96
Rail	-	-	0.01	-	-	-	-	-	0.01	-	0.02
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>0.27</b>	<b>0.32</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.02</b>	<b>0.25</b>	<b>0.05</b>	<b>0.92</b>
Residential	0.00	-	0.17	0.23	-	-	0.00	0.02	0.08	-	0.49
Comm. and public services	-	-	0.08	0.10	-	-	-	0.00	0.17	0.05	0.40
Agriculture/forestry	-	-	0.02	-	-	-	-	0.00	0.00	-	0.02
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.03</b>
in industry/transf./energy	-	-	0.02	c	-	-	-	-	-	-	0.02
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.01	-	-	-	-	-	-	-	0.01
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.83</b>	<b>-</b>	<b>0.10</b>	<b>0.21</b>	<b>0.19</b>	<b>-</b>	<b>-</b>	<b>1.33</b>
Electricity plants	-	-	-	0.57	-	0.10	0.21	0.11	-	-	0.99
CHP plants	-	-	-	0.26	-	-	-	0.09	-	-	0.35
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.62</b>	<b>-</b>	<b>-</b>	<b>2.34</b>
CHP plants	-	-	0.00	1.67	-	-	-	0.46	-	-	2.13
Heat plants	-	-	0.01	0.04	-	-	-	0.17	-	-	0.21

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Luxembourg

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.01	0.02	0.12	-	-	0.15
Imports	0.05	-	2.64	0.71	-	-	-	0.12	0.66	-	4.19
Exports	-	-	-0.00	-	-	-	-	-0.03	-0.12	-	-0.15
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.50	-	-	-	-	-	-	-	-0.50
Stock changes	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>TPES</b>	<b>0.05</b>	<b>-</b>	<b>2.14</b>	<b>0.71</b>	<b>-</b>	<b>0.01</b>	<b>0.02</b>	<b>0.21</b>	<b>0.54</b>	<b>-</b>	<b>3.68</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	-	0.26	-	0.11	0.21	0.21	-	-	0.78
Heat generated - PJ	-	-	0.01	1.66	-	-	-	0.63	-	-	2.30

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	-	0.0	0.0	0.1	0.1	0.2	0.2	0.2
Net imports (Mtoe)	4.5	3.6	3.5	3.7	4.5	4.1	4.0	4.0
Total primary energy supply (Mtoe)	4.4	3.6	3.4	3.4	4.2	3.8	3.7	3.7
Net oil imports (Mtoe)	1.7	1.1	1.6	2.4	2.9	2.7	2.6	2.6
Oil supply (Mtoe)	1.6	1.0	1.5	2.0	2.5	2.3	2.2	2.1
Electricity consumption (TWh) <sup>1</sup>	4.1	3.9	5.2	6.8	8.5	7.7	8.2	8.3
GDP (billion 2010 USD)	13.7	14.9	24.1	40.8	53.2	59.7	62.1	64.7
GDP PPP (billion 2010 USD)	11.2	12.2	19.7	33.3	43.5	48.8	50.8	52.9
Population (millions)	0.35	0.36	0.38	0.44	0.51	0.56	0.57	0.58
Industrial production index (2010=100)	63.1	54.9	78.7	99.0	100.0	97.6	98.8	97.7
Total self-sufficiency <sup>2</sup>	0.00	0.01	0.01	0.02	0.03	0.04	0.04	0.04
Coal self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.32	0.24	0.14	0.08	0.08	0.06	0.06	0.06
TPES/GDP PPP (toe per thousand 2010 USD)	0.40	0.29	0.17	0.10	0.10	0.08	0.07	0.07
TPES/population (toe per capita)	12.63	9.78	8.87	7.66	8.31	6.85	6.55	6.30
Net oil imports/GDP (toe per thousand 2010 USD)	0.12	0.07	0.07	0.06	0.05	0.05	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.12	0.07	0.06	0.05	0.05	0.04	0.04	0.03
Oil supply/population (toe per capita)	4.56	2.85	3.88	4.61	4.82	4.09	3.84	3.66
Share of renewables in TPES	0.00	0.01	0.01	0.01	0.03	0.05	0.06	0.06
Share of renewables in electricity generation	0.03	0.12 e	0.13 e	0.41	0.08	0.21	0.32	0.58
TFC/GDP (toe per thousand 2010 USD)	0.21	0.18	0.12	0.08	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.26	0.22	0.14	0.10	0.09	0.08	0.07	..
TFC/population (toe per capita)	8.19	7.45	7.27	7.45	7.75	6.53	6.28	..
Elect. cons./GDP (kWh per 2010 USD)	0.30	0.26	0.22	0.17	0.16	0.13	0.13	0.13
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.37	0.32	0.27	0.21	0.20	0.16	0.16	0.16
Elect. cons./population (kWh per capita)	11778	10789	13662	15643	16795	13812	14418	14265
Industry cons. <sup>3</sup> /industrial production (2010=100)	423.3	390.7	216.2	101.4	100.0	89.3	87.6	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	3225.3	940.0	938.2	238.3	100.0	92.8	98.0	..

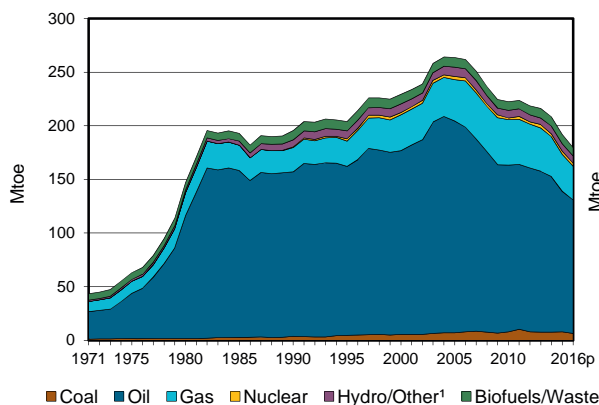
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

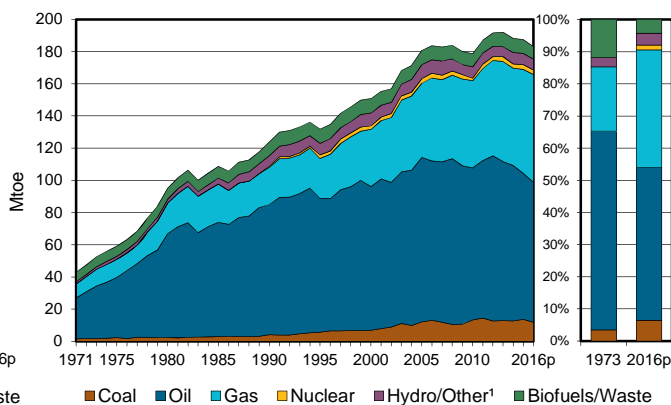
3. Includes non-energy use.

## Mexico

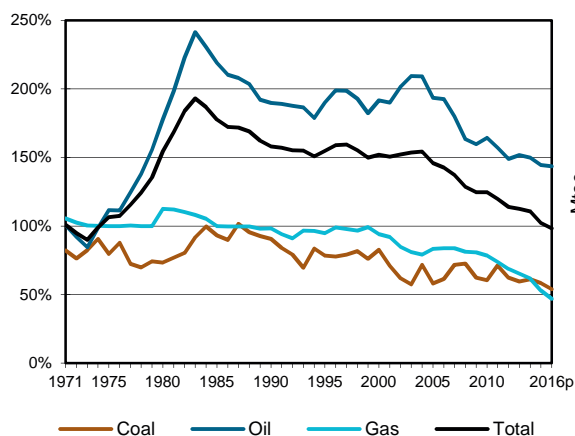
**Figure 1. Energy production**



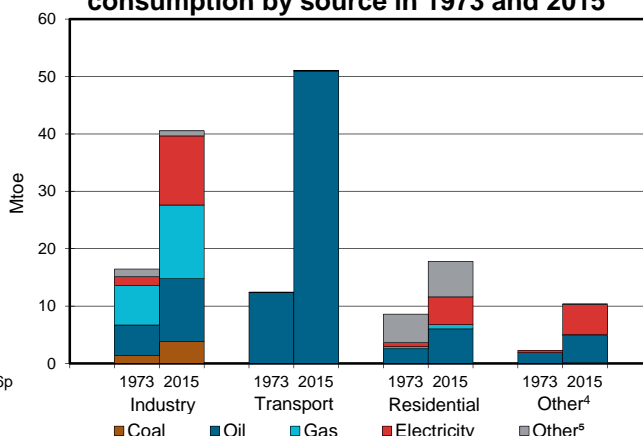
**Figure 2. Total primary energy supply<sup>2</sup>**



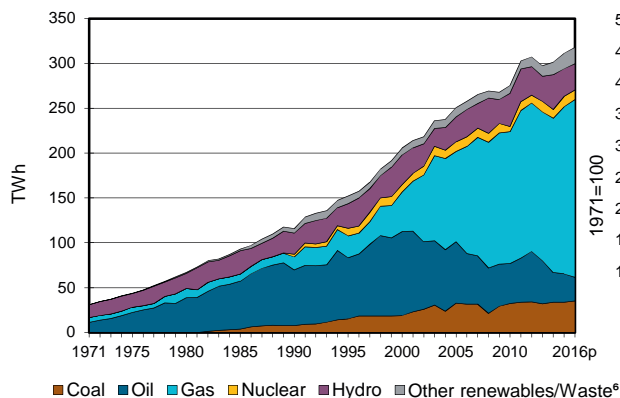
**Figure 3. Energy self-sufficiency**



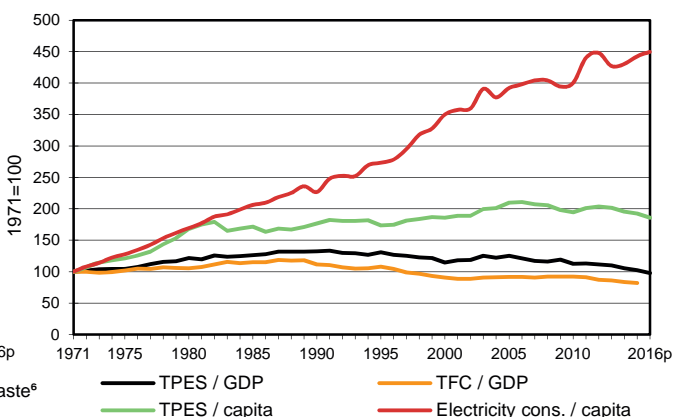
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Mexico

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	7.99	130.95	-	34.36	3.02	2.65	4.20	8.62	-	-	191.79
Imports	5.29 e	0.40	34.67	30.17	-	-	-	-	0.14	-	70.66
Exports	-0.00	-62.28	-9.73	-0.02	-	-	-	-	-0.20	-	-72.24
Intl. marine bunkers	-	-	-0.85	-	-	-	-	-	-	-	-0.85
Intl. aviation bunkers	-	-	-3.45	-	-	-	-	-	-	-	-3.45
Stock changes	0.38 e	0.37	0.56	0.15	-	-	-	-	-	-	1.45
<b>TPES</b>	<b>13.65</b>	<b>69.44</b>	<b>21.19</b>	<b>64.64</b>	<b>3.02</b>	<b>2.65</b>	<b>4.20</b>	<b>8.62</b>	<b>-0.06</b>	-	<b>187.37</b>
Transfers	-	-5.98	7.04	-	-	-	-	-	-	-	1.06
Statistical differences	0.31	2.30	0.93	-3.25	-	-	-	-0.00	0.47	-	0.76
Electricity plants	-8.88 e	-	-7.06	-30.39	-3.02	-2.65	-3.99	-1.49	25.40	-	-32.08
CHP plants	-	-	-0.54	-4.20	-	-	-	-0.21	1.36	-	-3.59
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.72 e	-	-	-	-	-	-	-	-	-	-0.72
Gas works	-	-	-0.77	0.49	-	-	-	-	-	-	-0.28
Coke/pat. fuel/BKB/PB plants	-0.09 e	-	-	-	-	-	-	-	-	-	-0.09
Oil refineries	-	-65.96	57.80	-	-	-	-	-	-	-	-8.17
Petrochemical plants	-	0.15	-0.16	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.06	-	-	-	-	-	-	-	-	0.06
Energy industry own use	-0.39 e	-	-5.71	-13.36	-	-	-	-	-1.54	-	-21.00
Losses	-	-	-	-	-	-	-	-	-3.50	-	-3.50
<b>TFC</b>	<b>3.88</b>	-	<b>72.71</b>	<b>13.93</b>	-	-	<b>0.22</b>	<b>6.92</b>	<b>22.14</b>	-	<b>119.81</b>
<b>INDUSTRY</b>	<b>3.77</b>	-	<b>6.26</b>	<b>12.39</b>	-	-	<b>0.01</b>	<b>0.89</b>	<b>12.04</b>	-	<b>35.36</b>
Iron and steel	0.77 e	-	0.10	2.86	-	-	-	-	0.46	-	4.19
Chemical and petrochemical	-	-	0.29	2.96	-	-	-	-	0.51	-	3.76
Non-ferrous metals	-	-	-	-	-	-	-	-	0.07	-	0.07
Non-metallic minerals	0.16	-	2.99	1.28	-	-	-	-	0.94	-	5.36
Transport equipment	-	-	0.02	0.11	-	-	-	-	0.22	-	0.35
Machinery	-	-	0.05	-	-	-	-	-	-	-	0.05
Mining and quarrying	-	-	0.33	0.21	-	-	-	-	0.91	-	1.45
Food and tobacco	-	-	0.20	0.34	-	-	-	0.79	0.18	-	1.50
Paper, pulp and printing	-	-	0.16	0.65	-	-	-	-	0.26	-	1.08
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.26	-	-	-	-	-	0.04	-	0.31
Textile and leather	-	-	-	-	-	-	-	-	0.01	-	0.01
Non-specified	2.84	-	1.86	3.98	-	-	0.01	0.10	8.44	-	17.23
<b>TRANSPORT</b>	-	-	<b>50.98</b>	<b>0.02</b>	-	-	-	-	<b>0.10</b>	-	<b>51.09</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	49.51	0.02	-	-	-	-	-	-	49.52
Rail	-	-	0.67	-	-	-	-	-	0.10	-	0.77
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.79	-	-	-	-	-	-	-	0.79
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>10.75</b>	<b>1.04</b>	-	-	<b>0.21</b>	<b>6.04</b>	<b>10.00</b>	-	<b>28.03</b>
Residential	-	-	6.02	0.78	-	-	0.12	6.04	4.81	-	17.77
Comm. and public services	-	-	1.60	0.26	-	-	0.08	-	2.04	-	3.99
Agriculture/forestry	-	-	3.13	-	-	-	-	-	0.87	-	4.00
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	2.28	-	2.28
<b>NON-ENERGY USE</b>	<b>0.11</b>	-	<b>4.72</b>	<b>0.49</b>	-	-	-	-	-	-	<b>5.32</b>
in industry/transf./energy	-	-	4.72	0.49	-	-	-	-	-	-	5.21
of which: chem./petrochem.	-	-	3.53	0.49	-	-	-	-	-	-	4.01
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	0.11	-	-	-	-	-	-	-	-	-	0.11
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>33.81</b>	-	<b>31.58</b>	<b>186.25</b>	<b>11.58</b>	<b>30.82</b>	<b>15.32</b>	<b>1.79</b>	-	-	<b>311.14</b>
Electricity plants	33.81 e	-	30.40	172.02	11.58	30.82	15.32	1.42	-	-	295.37
CHP plants	-	-	1.18	14.23	-	-	-	0.37	-	-	15.77
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Mexico

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	6.38	124.65	-	31.48	2.75	2.51	4.23	7.76	-	-	179.76
Imports	5.61	0.47	39.01	35.30	-	-	-	-	0.20	-	80.60
Exports	-0.00	-63.81	-9.16	-0.02	-	-	-	-	-0.20	-	-73.19
Intl. marine bunkers	-	-	-0.89	-	-	-	-	-	-	-	-0.89
Intl. aviation bunkers	-	-	-3.69	-	-	-	-	-	-	-	-3.69
Stock changes	-0.15	-0.17	0.45	0.30	-	-	-	-	-	-	0.43
<b>TPES</b>	<b>11.84</b>	<b>61.15</b>	<b>25.71</b>	<b>67.06</b>	<b>2.75</b>	<b>2.51</b>	<b>4.23</b>	<b>7.76</b>	<b>0.00</b>	<b>-</b>	<b>183.01</b>
Electricity and Heat Output											
Elec. generated - TWh	35.28	-	26.24	198.21	10.57	29.14	16.83	1.60	-	-	317.86
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	47.3	147.0	195.5	229.3	222.5	208.3	191.8	179.8
Net imports (Mtoe)	6.0	-49.4	-69.9	-72.3	-40.4	-14.9	-1.6	7.4
Total primary energy supply (Mtoe)	52.6	95.1	123.7	150.8	178.5	188.2	187.4	183.0
Net oil imports (Mtoe)	5.7	-47.6	-70.4	-76.6	-57.2	-43.6	-36.9	-33.5
Oil supply (Mtoe)	32.5	64.5	80.8	89.3	94.4	96.6	90.6	86.9
Electricity consumption (TWh) <sup>1</sup>	32.8	60.1	99.5	178.1	230.3	259.7	269.8	277.3
GDP (billion 2010 USD)	334.0	516.6	617.9	869.3	1049.9	1177.0	1207.7	1235.5
GDP PPP (billion 2010 USD)	550.4	851.3	1018.2	1432.5	1730.2	1939.6	1990.2	2033.1
Population (millions)	57.09	70.40	87.07	100.90	114.26	119.71	121.01	122.36
Industrial production index (2010=100)	..	54.7	65.2	90.9	100.0	108.7	109.8	109.7
Total self-sufficiency <sup>2</sup>	0.90	1.55	1.58	1.52	1.25	1.11	1.02	0.98
Coal self-sufficiency <sup>2</sup>	0.82	0.73	0.91	0.83	0.60	0.61	0.58	0.54
Oil self-sufficiency <sup>2</sup>	0.85	1.78	1.90	1.92	1.64	1.50	1.44	1.44
Natural gas self-sufficiency <sup>2</sup>	1.00	1.13	0.98	0.94	0.79	0.62	0.53	0.47
TPES/GDP (toe per thousand 2010 USD)	0.16	0.18	0.20	0.17	0.17	0.16	0.16	0.15
TPES/GDP PPP (toe per thousand 2010 USD)	0.10	0.11	0.12	0.11	0.10	0.10	0.09	0.09
TPES/population (toe per capita)	0.92	1.35	1.42	1.49	1.56	1.57	1.55	1.50
Net oil imports/GDP (toe per thousand 2010 USD)	0.02	-0.09	-0.11	-0.09	-0.05	-0.04	-0.03	-0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.12	0.13	0.10	0.09	0.08	0.08	0.07
Oil supply/population (toe per capita)	0.57	0.92	0.93	0.89	0.83	0.81	0.75	0.71
Share of renewables in TPES	0.15	0.10	0.12	0.11	0.09	0.09	0.08	0.08
Share of renewables in electricity generation	0.44	0.27	0.25	0.20	0.17	0.18	0.15	0.15
TFC/GDP (toe per thousand 2010 USD)	0.12	0.13	0.14	0.11	0.11	0.10	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.08	0.08	0.07	0.07	0.06	0.06	..
TFC/population (toe per capita)	0.70	0.94	0.96	0.94	1.03	0.99	0.99	..
Elect. cons./GDP (kWh per 2010 USD)	0.10	0.12	0.16	0.20	0.22	0.22	0.22	0.22
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.06	0.07	0.10	0.12	0.13	0.13	0.14	0.14
Elect. cons./population (kWh per capita)	575	854	1143	1765	2016	2169	2230	2266
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	124.5	133.3	96.5	100.0	92.1	92.5	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	131.4	171.2	120.1	100.0	82.2	79.0	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Netherlands

Figure 1. Energy production

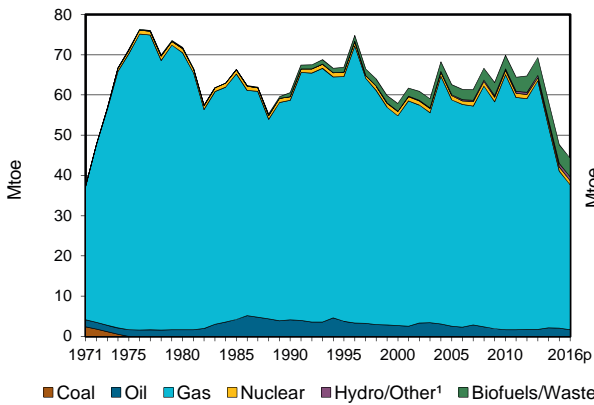


Figure 2. Total primary energy supply<sup>2</sup>

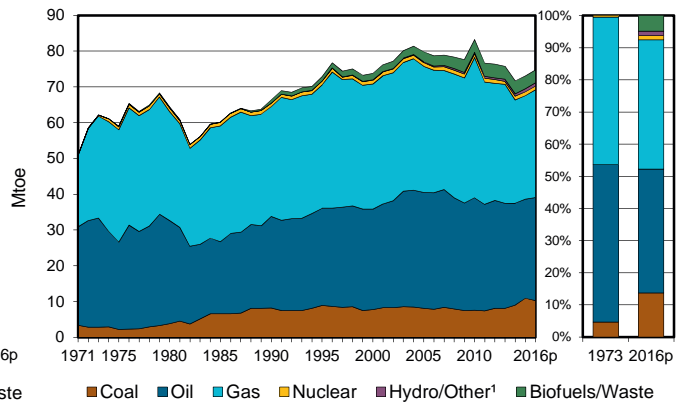


Figure 3. Energy self-sufficiency

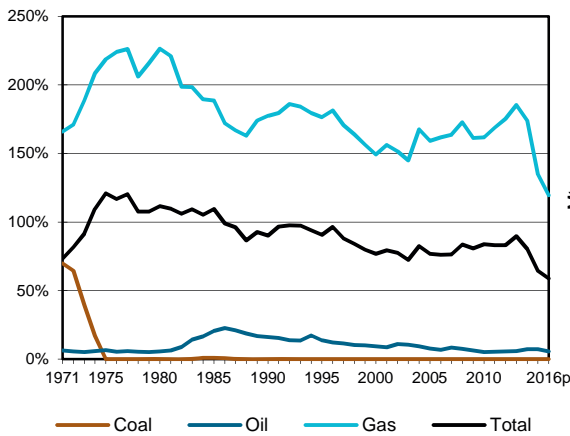


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

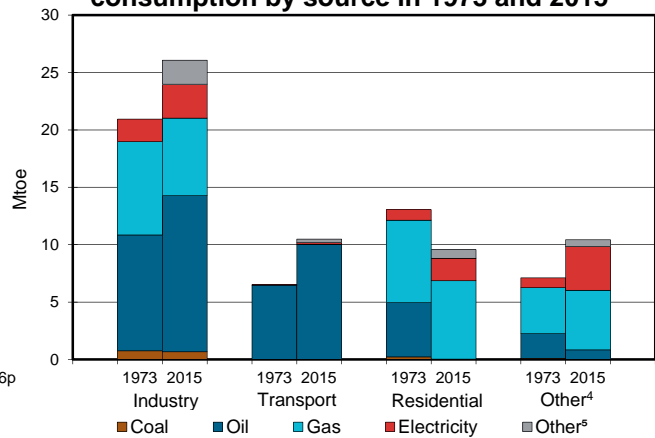


Figure 5. Electricity generation by source

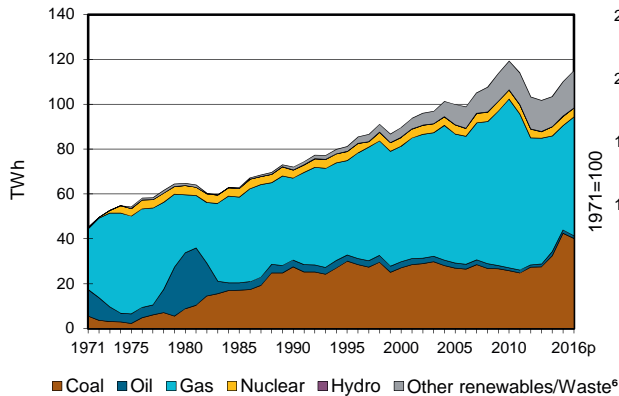
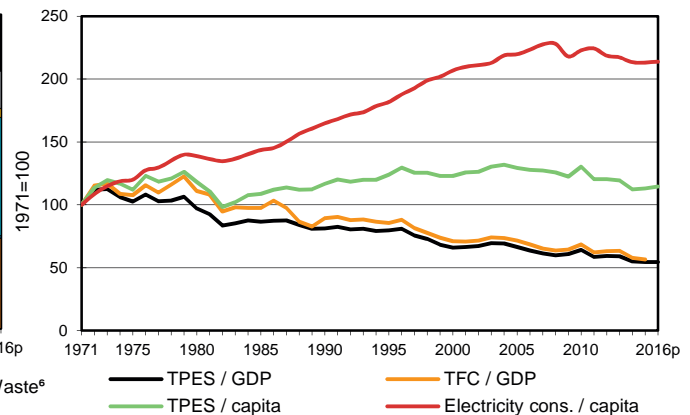


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Netherlands

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	2.05	-	38.99	1.06	0.01	0.84	4.66	-	-	47.62
Imports	34.27	61.17	95.05	27.15	-	-	-	0.57	2.65	-	220.85
Exports	-21.98	-0.64	-110.72	-36.51	-	-	-	-1.64	-1.89	-	-173.38
Intl. marine bunkers	-	-	-12.31	-	-	-	-	-	-	-	-12.31
Intl. aviation bunkers	-	-	-3.78	-	-	-	-	-	-	-	-3.78
Stock changes	-1.36	-0.69	-2.41	-0.72	-	-	-	0.01	-	-	-5.16
<b>TPES</b>	<b>10.93</b>	<b>61.89</b>	<b>-34.17</b>	<b>28.91</b>	<b>1.06</b>	<b>0.01</b>	<b>0.84</b>	<b>3.60</b>	<b>0.75</b>	-	<b>73.83</b>
Transfers	-	-0.08	0.95	-	-	-	-	-	-	-	0.87
Statistical differences	0.14	-	-0.15	-0.59	-	-	-	-	-0.04	0.01	-0.64
Electricity plants	-6.36	-	-	-2.68	-1.06	-0.01	-0.76	-0.45	5.43	-	-5.88
CHP plants	-2.35	-	-0.39	-5.42	-	-	-	-1.89	4.04	2.87	-3.14
Heat plants	-	-	-0.36	-0.19	-	-	-	-0.02	-	0.45	-0.12
Blast furnaces	-1.31 e	-	-	-	-	-	-	-	-	-	-1.31
Gas works	-	-	-0.22	0.26	-	-	-	-0.06	-	-	-0.02
Coke/pat. fuel/BKB/PB plants	-0.17	-	-	-	-	-	-	-	-	-	-0.17
Oil refineries	-	-61.89	61.34	-	-	-	-	-	-	-	-0.55
Petrochemical plants	-	2.46	-2.50	-	-	-	-	-	-	-	-0.04
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-0.41	-0.41
Energy industry own use	-0.19	-	-2.40	-1.48	-	-	-	-	-0.85	-0.37	-5.30
Losses	-	-	-	-0.03	-	-	-	-	-0.45	-0.09	-0.57
<b>TFC</b>	<b>0.68</b>	<b>2.38</b>	<b>22.11</b>	<b>18.78</b>	-	-	<b>0.09</b>	<b>1.18</b>	<b>8.87</b>	<b>2.46</b>	<b>56.55</b>
<b>INDUSTRY</b>	<b>0.67</b>	-	<b>2.76</b>	<b>4.67</b>	-	-	-	<b>0.16</b>	<b>2.95</b>	<b>1.93</b>	<b>13.15</b>
Iron and steel	0.60 e	-	0.00	0.26	-	-	-	-	0.23	0.00	1.09
Chemical and petrochemical	-	-	2.34	1.67	-	-	-	-	1.08	1.68	6.76
Non-ferrous metals	-	-	-	0.06	-	-	-	-	0.17	0.00	0.24
Non-metallic minerals	0.03	-	0.01	0.42	-	-	-	-	0.10	0.00	0.56
Transport equipment	-	-	0.01	0.05	-	-	-	-	0.05	0.00	0.11
Machinery	-	-	0.00	0.24	-	-	-	-	0.24	0.00	0.49
Mining and quarrying	0.01	-	0.01	0.05	-	-	-	-	0.02	0.04	0.13
Food and tobacco	0.02	-	0.01	1.33	-	-	-	0.02	0.55	0.15	2.07
Paper, pulp and printing	-	-	-	0.29	-	-	-	0.00	0.21	0.06	0.56
Wood and wood products	-	-	-	0.01	-	-	-	0.02	0.02	-	0.05
Construction	0.00	-	0.38	0.10	-	-	-	0.01	0.07	-	0.57
Textile and leather	-	-	-	0.06	-	-	-	-	0.03	0.00	0.09
Non-specified	0.01	-	0.00	0.14	-	-	-	0.10	0.17	0.00	0.43
<b>TRANSPORT</b>	-	-	<b>9.95</b>	<b>0.04</b>	-	-	-	<b>0.30</b>	<b>0.15</b>	-	<b>10.44</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	9.53	0.04	-	-	-	0.30	0.02	-	9.88
Rail	-	-	0.03	-	-	-	-	0.00	0.13	-	0.17
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.38	-	-	-	-	-	-	-	0.38
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.00</b>	-	<b>0.85</b>	<b>12.00</b>	-	-	<b>0.09</b>	<b>0.72</b>	<b>5.77</b>	<b>0.53</b>	<b>19.96</b>
Residential	0.00	-	0.04	6.81	-	-	0.02	0.45	1.95	0.29	9.56
Comm. and public services	0.00	-	0.16	3.02	-	-	0.01	0.14	3.07	0.16	6.55
Agriculture/forestry	-	-	0.40	2.17	-	-	0.06	0.13	0.74	0.08	3.58
Fishing	-	-	0.18	-	-	-	-	-	-	-	0.18
Non-specified	-	-	0.07	0.00	-	-	-	0.01	0.01	-	0.09
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>2.38</b>	<b>8.55</b>	<b>2.07</b>	-	-	-	-	-	-	<b>13.01</b>
in industry/transf./energy	0.01	2.38	8.46	2.07	-	-	-	-	-	-	12.92
of which: chem./petrochem.	-	2.38	8.19	2.07	-	-	-	-	-	-	12.64
in transport	-	-	0.05	-	-	-	-	-	-	-	0.05
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>42.55</b>	-	<b>1.43</b>	<b>46.54</b>	<b>4.08</b>	<b>0.09</b>	<b>8.82</b>	<b>6.56</b>	-	-	<b>110.07</b>
Electricity plants	30.63	-	-	17.72	4.08	0.09	8.82	1.77	-	-	63.10
CHP plants	11.92	-	1.43	28.82	-	-	-	4.80	-	-	46.97
<b>Heat generated - PJ</b>	<b>8.09</b>	-	<b>17.09</b>	<b>91.45</b>	-	-	-	<b>22.64</b>	-	-	<b>139.28</b>
CHP plants	8.09	-	5.74	84.60	-	-	-	21.91	-	-	120.34
Heat plants	-	-	11.35	6.85	-	-	-	0.74	-	-	18.94

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Netherlands

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	1.63	-	36.07	1.03	0.01	0.94	4.62	-	-	44.31
Imports	33.46	62.64	94.23	29.89	-	-	-	0.56	2.09	-	222.87
Exports	-24.29	-0.83	-112.82	-40.52	-	-	-	-1.52	-1.66	-	-181.65
Intl. marine bunkers	-	-	-12.16	-	-	-	-	-	-	-	-12.16
Intl. aviation bunkers	-	-	-3.93	-	-	-	-	-	-	-	-3.93
Stock changes	1.10	-0.58	0.57	4.73	-	-	-	-0.05	-	-	5.77
<b>TPES</b>	<b>10.27</b>	<b>62.87</b>	<b>-34.10</b>	<b>30.16</b>	<b>1.03</b>	<b>0.01</b>	<b>0.94</b>	<b>3.61</b>	<b>0.42</b>	<b>-</b>	<b>75.21</b>
Electricity and Heat Output											
Elec. generated - TWh	40.23	-	1.21	52.82	3.96	0.10	9.84	6.76	-	-	114.91
Heat generated - PJ	6.80	-	14.08	73.69	-	-	-	22.53	-	-	117.10

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	56.8	71.8	60.6	57.9	69.9	58.5	47.6	44.3
Net imports (Mtoe)	17.9	3.4	19.2	35.6	31.3	30.5	47.5	41.2
Total primary energy supply (Mtoe)	62.0	64.4	67.2	75.4	83.5	72.9	73.8	75.2
Net oil imports (Mtoe)	41.7	38.2	33.5	43.4	46.0	41.7	44.9	43.2
Oil supply (Mtoe)	30.5	28.9	25.6	28.1	31.5	28.5	27.7	28.8
Electricity consumption (TWh) <sup>1</sup>	48.6	61.8	77.5	103.6	116.4	113.2	113.6	114.6
GDP (billion 2010 USD)	354.1	425.6	530.5	734.7	836.4	851.6	868.3	886.9
GDP PPP (billion 2010 USD)	313.7	376.9	469.9	650.7	740.8	754.3	769.0	785.5
Population (millions)	13.44	14.15	14.95	15.92	16.61	16.86	16.93	17.03
Industrial production index (2010=100)	57.1	63.7	73.4	89.6	100.0	96.7	93.5	95.1
Total self-sufficiency <sup>2</sup>	0.92	1.12	0.90	0.77	0.84	0.80	0.65	0.59
Coal self-sufficiency <sup>2</sup>	0.40	-	-	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	0.05	0.06	0.16	0.09	0.05	0.07	0.07	0.06
Natural gas self-sufficiency <sup>2</sup>	1.89	2.26	1.77	1.49	1.62	1.74	1.35	1.20
TPES/GDP (toe per thousand 2010 USD)	0.18	0.15	0.13	0.10	0.10	0.09	0.09	0.08
TPES/GDP PPP (toe per thousand 2010 USD)	0.20	0.17	0.14	0.12	0.11	0.10	0.10	0.10
TPES/population (toe per capita)	4.61	4.55	4.50	4.74	5.03	4.33	4.36	4.42
Net oil imports/GDP (toe per thousand 2010 USD)	0.12	0.09	0.06	0.06	0.06	0.05	0.05	0.05
Oil supply/GDP (toe per thousand 2010 USD)	0.09	0.07	0.05	0.04	0.04	0.03	0.03	0.03
Oil supply/population (toe per capita)	2.27	2.04	1.71	1.76	1.90	1.69	1.64	1.69
Share of renewables in TPES	-	0.00	0.01	0.02	0.04	0.05	0.05	0.05
Share of renewables in electricity generation	-	0.02	0.01	0.03	0.09	0.11	0.12	0.13
TFC/GDP (toe per thousand 2010 USD)	0.14	0.13	0.10	0.08	0.08	0.07	0.07	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.15	0.14	0.12	0.09	0.09	0.08	0.07	..
TFC/population (toe per capita)	3.55	3.84	3.65	3.77	3.97	3.37	3.34	..
Elect. cons./GDP (kWh per 2010 USD)	0.14	0.15	0.15	0.14	0.14	0.13	0.13	0.13
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.16	0.16	0.17	0.16	0.16	0.15	0.15	0.15
Elect. cons./population (kWh per capita)	3613	4365	5185	6509	7008	6714	6707	6727
Industry cons. <sup>3</sup> /industrial production (2010=100)	124.0	134.0	117.3	103.3	100.0	95.4	94.2	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	110.9	135.4	95.2	82.1	100.0	97.3	91.4	..

1. Electricity consumption equals domestic supply less losses.

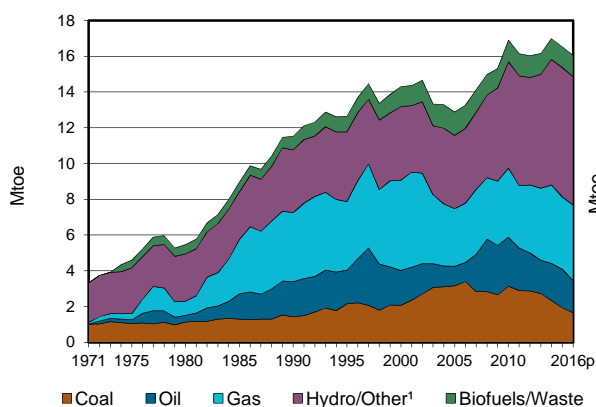
2. Production divided by TPES.

3. Includes non-energy use.

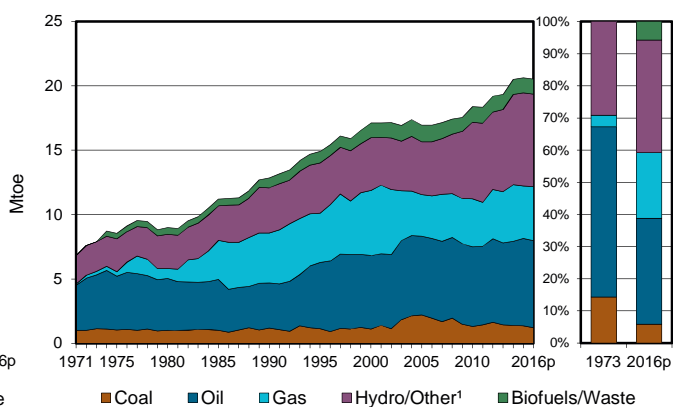


## New Zealand

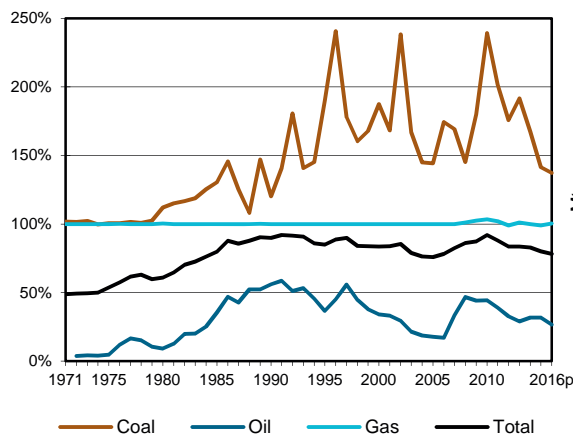
**Figure 1. Energy production**



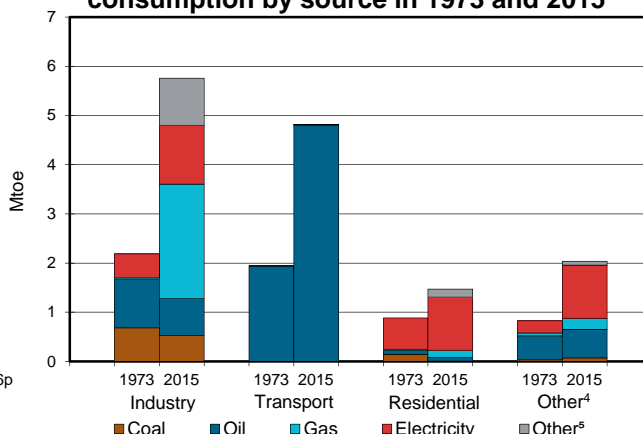
**Figure 2. Total primary energy supply<sup>2</sup>**



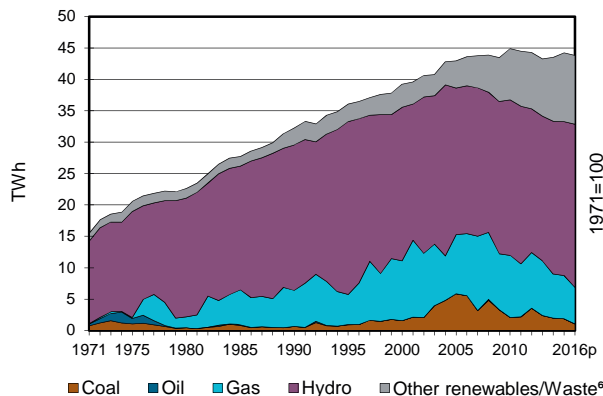
**Figure 3. Energy self-sufficiency**



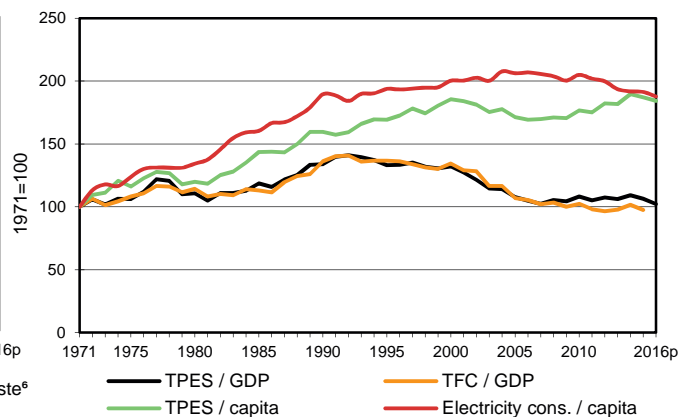
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## New Zealand

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.94	2.16	-	4.04	-	2.11	5.12	1.18	-	-	16.54
Imports	0.22	5.45	2.18	-	-	-	-	-	-	-	7.85
Exports	-0.98	-1.80	-0.20	-	-	-	-	-	-	-	-2.98
Intl. marine bunkers	-	-	-0.34	-	-	-	-	-	-	-	-0.34
Intl. aviation bunkers	-	-	-0.84	-	-	-	-	-	-	-	-0.84
Stock changes	0.19	0.15	0.01	0.05	-	-	-	-	-	-	0.39
<b>TPES</b>	<b>1.37</b>	<b>5.95</b>	<b>0.82</b>	<b>4.09</b>	-	<b>2.11</b>	<b>5.12</b>	<b>1.18</b>	-	-	<b>20.63</b>
Transfers	-	-0.22	0.22	-	-	-	-	-	-	-	0.01
Statistical differences	-0.06	0.07	-0.31	0.04	-	-	-0.00	-	-0.02	-	-0.27
Electricity plants	-0.27	-	-	-0.89	-	-2.11	-4.86	-0.05	3.58	-0.03	-4.62
CHP plants	-0.19	-	-	-0.33	-	-	-0.08	-0.11	0.22	0.03	-0.45
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.18	-	-	-	-	-	-	-	-	-	-0.18
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	0.01	-	-	-	-	-	-	-	-	-	0.01
Oil refineries	-	-5.81	5.85	-	-	-	-	-	-	-	0.04
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.07	-	-0.37	-0.21	-	-	-	-	-0.18	-	-0.82
Losses	-0.01	-	-	-0.02	-	-	-	-	-0.24	-	-0.27
<b>TFC</b>	<b>0.61</b>	-	<b>6.21</b>	<b>2.69</b>	-	-	<b>0.18</b>	<b>1.02</b>	<b>3.37</b>	-	<b>14.08</b>
<b>INDUSTRY</b>	<b>0.53</b>	-	<b>0.42</b>	<b>1.24</b>	-	-	<b>0.10</b>	<b>0.86</b>	<b>1.19</b>	-	<b>4.34</b>
Iron and steel	0.04	-	-	0.05	-	-	-	-	0.13	-	0.22
Chemical and petrochemical	-	-	-	0.65	-	-	-	-	0.03	-	0.68
Non-ferrous metals	0.00	-	-	-	-	-	-	-	0.43	-	0.43
Non-metallic minerals	0.08	-	-	0.04	-	-	-	-	0.03	-	0.14
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	0.01	-	-	-	-	0.01	-	0.02
Mining and quarrying	-	-	0.07	0.00	-	-	-	-	0.03	-	0.09
Food and tobacco	0.39	-	-	0.37	-	-	-	0.00	0.21	-	0.97
Paper, pulp and printing	-	-	-	0.07	-	-	0.10	-	0.11	-	0.28
Wood and wood products	0.01	-	-	0.03	-	-	-	0.86	0.12	-	1.02
Construction	-	-	0.08	0.01	-	-	-	-	0.03	-	0.12
Textile and leather	0.00	-	-	0.01	-	-	-	-	0.01	-	0.02
Non-specified	0.00	-	0.27	0.00	-	-	-	-	0.05	-	0.33
<b>TRANSPORT</b>	-	-	<b>4.81</b>	<b>0.00</b>	-	-	-	<b>0.00</b>	<b>0.01</b>	-	<b>4.81</b>
Domestic aviation	-	-	0.28	-	-	-	-	-	-	-	0.28
Road	-	-	4.34	0.00	-	-	-	0.00	-	-	4.34
Rail	-	-	0.05	-	-	-	-	-	-	-	0.05
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.14	-	-	-	-	-	-	-	0.14
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.08</b>	-	<b>0.65</b>	<b>0.37</b>	-	-	<b>0.09</b>	<b>0.16</b>	<b>2.17</b>	-	<b>3.51</b>
Residential	0.01	-	0.07	0.15	-	-	0.02	0.15	1.08	-	1.47
Comm. and public services	0.02	-	0.14	0.19	-	-	0.05	0.01	0.82	-	1.23
Agriculture/forestry	0.05	-	0.37	0.04	-	-	0.02	-	0.24	-	0.71
Fishing	-	-	0.07	-	-	-	-	-	0.00	-	0.07
Non-specified	-	-	-	-	-	-	-	-	0.02	-	0.02
<b>NON-ENERGY USE</b>	-	-	<b>0.34</b>	<b>1.08</b>	-	-	-	-	-	-	<b>1.42</b>
in industry/transf./energy	-	-	0.34	1.08	-	-	-	-	-	-	1.42
of which: chem./petrochem.	-	-	-	1.08	-	-	-	-	-	-	1.08
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1.88</b>	-	<b>0.00</b>	<b>6.87</b>	-	<b>24.54</b>	<b>10.30</b>	<b>0.62</b>	-	-	<b>44.21</b>
Electricity plants	1.21	-	0.00	5.53	-	24.54	10.17	0.18	-	-	41.63
CHP plants	0.67	-	-	1.34	-	-	0.13	0.45	-	-	2.58
<b>Heat generated - PJ</b>	-	-	-	<b>0.00</b>	-	-	<b>1.36</b>	-	-	-	<b>1.37</b>
CHP plants	-	-	-	0.00	-	-	1.36	-	-	-	1.37
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## New Zealand

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.66	1.81	-	4.23	-	2.23	4.94	1.18	-	-	16.04
Imports	0.23	5.66	2.58	-	-	-	-	-	-	-	8.47
Exports	-0.86	-1.63	-0.15	-	-	-	-	-	-	-	-2.64
Intl. marine bunkers	-	-	-0.31	-	-	-	-	-	-	-	-0.31
Intl. aviation bunkers	-	-	-1.02	-	-	-	-	-	-	-	-1.02
Stock changes	0.18	-0.02	-0.17	-0.02	-	-	-	-	-	-	-0.04
<b>TPES</b>	<b>1.21</b>	<b>5.81</b>	<b>0.94</b>	<b>4.21</b>	<b>-</b>	<b>2.23</b>	<b>4.94</b>	<b>1.18</b>	<b>-</b>	<b>-</b>	<b>20.52</b>
Electricity and Heat Output											
Elec. generated - TWh	1.06	-	0.01	5.82	-	25.99	10.32	0.63	-	-	43.81
Heat generated - PJ	-	-	-	0.00	-	-	1.36	-	-	-	1.37

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	3.9	5.5	11.5	14.3	16.9	17.0	16.5	16.0
Net imports (Mtoe)	4.5	4.2	2.1	3.4	2.9	4.6	4.9	5.8
Total primary energy supply (Mtoe)	7.9	9.0	12.8	17.1	18.4	20.5	20.6	20.5
Net oil imports (Mtoe)	4.6	4.3	2.4	4.5	4.5	5.6	5.6	6.5
Oil supply (Mtoe)	4.2	4.0	3.5	5.7	6.2	6.5	6.8	6.8
Electricity consumption (TWh) <sup>1</sup>	16.4	19.8	29.9	36.2	41.8	40.7	41.4	41.0
GDP (billion 2010 USD)	66.8	70.0	82.7	111.7	146.6	162.0	167.4	174.0
GDP PPP (billion 2010 USD)	62.0	65.0	76.7	103.7	136.0	150.4	155.4	160.9
Population (millions)	2.97	3.14	3.37	3.87	4.36	4.53	4.62	4.67
Industrial production index (2010=100)	..	64.8	74.6	90.4	100.0	101.7	102.6	103.2
Total self-sufficiency <sup>2</sup>	0.50	0.61	0.90	0.84	0.92	0.83	0.80	0.78
Coal self-sufficiency <sup>2</sup>	1.02 <sup>e</sup>	1.12	1.20	1.87	2.39	1.67	1.41	1.37
Oil self-sufficiency <sup>2</sup>	0.04	0.09	0.56	0.34	0.44	0.32	0.32	0.27
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.00	1.00	1.03	1.00	0.99	1.00
TPES/GDP (toe per thousand 2010 USD)	0.12	0.13	0.16	0.15	0.13	0.13	0.12	0.12
TPES/GDP PPP (toe per thousand 2010 USD)	0.13	0.14	0.17	0.16	0.14	0.14	0.13	0.13
TPES/population (toe per capita)	2.65	2.86	3.81	4.42	4.21	4.52	4.46	4.40
Net oil imports/GDP (toe per thousand 2010 USD)	0.07	0.06	0.03	0.04	0.03	0.03	0.03	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.06	0.06	0.04	0.05	0.04	0.04	0.04	0.04
Oil supply/population (toe per capita)	1.40	1.27	1.04	1.48	1.42	1.44	1.46	1.45
Share of renewables in TPES	0.29	0.35	0.33	0.30	0.39	0.40	0.41	0.41
Share of renewables in electricity generation	0.84	0.90	0.80	0.72	0.73	0.79	0.80	0.84
TFC/GDP (toe per thousand 2010 USD)	0.09	0.10	0.12	0.12	0.09	0.09	0.08	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.09	0.11	0.13	0.13	0.10	0.09	0.09	..
TFC/population (toe per capita)	1.96	2.20	2.88	3.35	2.96	3.13	3.05	..
Elect. cons./GDP (kWh per 2010 USD)	0.25	0.28	0.36	0.32	0.29	0.25	0.25	0.24
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.26	0.30	0.39	0.35	0.31	0.27	0.27	0.26
Elect. cons./population (kWh per capita)	5508	6281	8857	9367	9581	8966	8947	8776
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	80.4	112.2	129.6	100.0	119.0	111.3	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	166.7	105.3	92.9	100.0	99.6	96.3	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Norway

Figure 1. Energy production

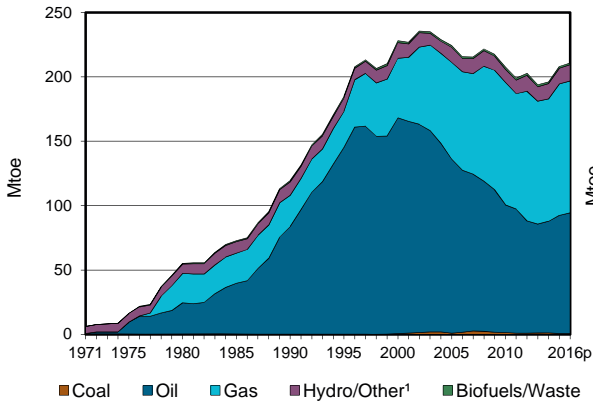


Figure 2. Total primary energy supply<sup>2</sup>

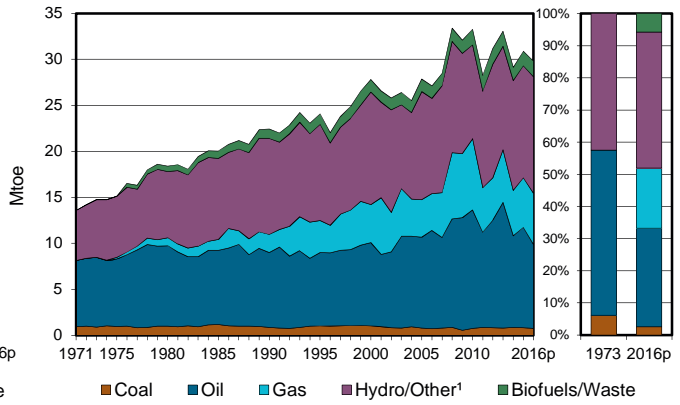


Figure 3. Energy self-sufficiency

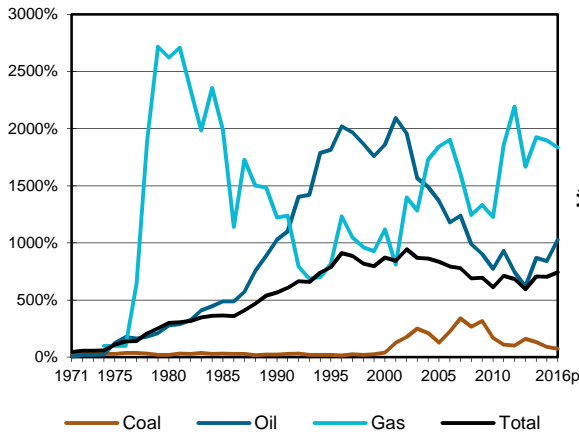


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

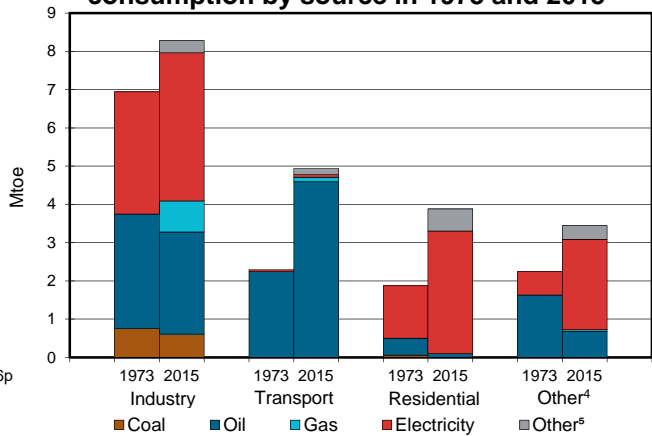


Figure 5. Electricity generation by source

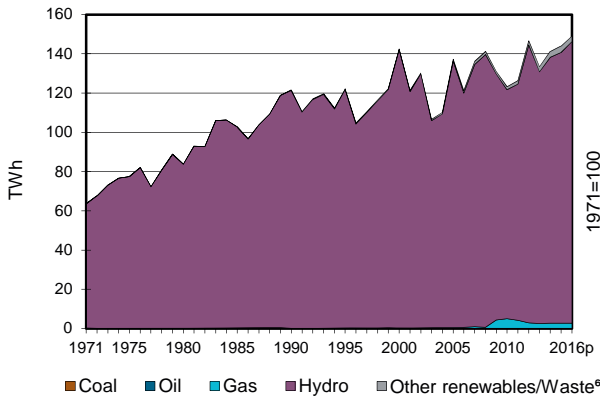
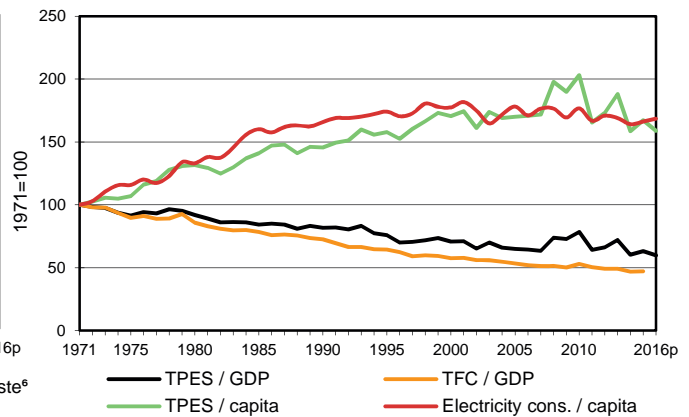


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Norway

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.74	91.66	-	102.10	-	11.86	0.22	1.43	-	0.10	208.11
Imports	0.76	1.20	5.29	0.01	-	-	-	0.17	0.63	-	8.07
Exports	-0.75	-67.65	-18.32	-96.74	-	-	-	-0.02	-1.89	-	-185.38
Intl. marine bunkers	-	-	-0.19	-	-	-	-	-	-	-	-0.19
Intl. aviation bunkers	-	-	-0.50	-	-	-	-	-	-	-	-0.50
Stock changes	0.08	-0.45	-0.15	0.02	-	-	-	-	-	-	-0.50
<b>TPES</b>	<b>0.82</b>	<b>24.76</b>	<b>-13.86</b>	<b>5.39</b>	<b>-</b>	<b>11.86</b>	<b>0.22</b>	<b>1.58</b>	<b>-1.26</b>	<b>0.10</b>	<b>29.62</b>
Transfers	-	-6.81	7.35	-	-	-	-	-	-	-	0.54
Statistical differences	-0.06	-0.41	-1.75	-0.06	-	-	-	0.00	-	-	-2.27
Electricity plants	-0.01	-	-0.00	-0.37	-	-11.86	-0.22	-0.01	12.34	-0.12	-0.26
CHP plants	-0.02	-	-	c	-	-	-	-0.32	0.04	0.23	-0.07
Heat plants	-0.00	-	-0.01	-0.01	-	-	-	-0.28	-0.08	0.32	-0.06
Blast furnaces	-0.12 e	-	-	-	-	-	-	-	-	-	-0.12
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-17.59	17.50	-	-	-	-	-	-	-	-0.09
Petrochemical plants	-	0.05	-0.06	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-1.12	-3.98	-	-	-	-	-0.75	-	-5.86
Losses	-0.00	-	-	-	-	-	-	-0.01	-0.76	-0.09	-0.87
<b>TFC</b>	<b>0.61</b>	<b>-</b>	<b>8.05</b>	<b>0.97</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.96</b>	<b>9.53</b>	<b>0.43</b>	<b>20.55</b>
<b>INDUSTRY</b>	<b>0.55</b>	<b>-</b>	<b>0.79</b>	<b>0.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.27</b>	<b>3.88</b>	<b>0.05</b>	<b>5.80</b>
Iron and steel	0.24 e	-	0.02	0.00	-	-	-	0.00	0.44	0.00	0.70
Chemical and petrochemical	0.24	-	0.36	0.10	-	-	-	0.08	0.67	0.01	1.47
Non-ferrous metals	-	-	0.02	0.03	-	-	-	-	1.75	0.00	1.81
Non-metallic minerals	0.08	-	0.06	0.05	-	-	-	0.03	0.08	0.00	0.29
Transport equipment	-	-	0.01	0.00	-	-	-	0.00	0.03	0.00	0.04
Machinery	-	-	0.01	0.00	-	-	-	0.00	0.10	0.00	0.12
Mining and quarrying	-	-	0.05	0.00	-	-	-	-	0.04	0.00	0.10
Food and tobacco	-	-	0.07	0.06	-	-	-	0.00	0.26	0.02	0.40
Paper, pulp and printing	-	-	0.01	0.01	-	-	-	0.06	0.30	0.01	0.39
Wood and wood products	-	-	0.01	0.00	-	-	-	0.07	0.05	0.01	0.14
Construction	-	-	0.17	0.00	-	-	-	0.00	0.11	-	0.28
Textile and leather	-	-	0.00	0.00	-	-	-	-	0.01	0.00	0.01
Non-specified	-	-	0.01	0.00	-	-	-	0.01	0.04	0.00	0.05
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.60</b>	<b>0.12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>0.07</b>	<b>-</b>	<b>4.93</b>
Domestic aviation	-	-	0.41	-	-	-	-	-	-	-	0.41
Road	-	-	3.55	0.01	-	-	-	0.15	0.02	-	3.73
Rail	-	-	0.01	-	-	-	-	-	0.06	-	0.07
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.61	0.10	-	-	-	-	-	-	0.72
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>0.78</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>5.57</b>	<b>0.38</b>	<b>7.33</b>
Residential	-	-	0.10	0.00	-	-	-	0.48	3.21	0.09	3.88
Comm. and public services	-	-	0.14	0.02	-	-	-	0.05	2.20	0.29	2.70
Agriculture/forestry	-	-	0.13	0.01	-	-	-	0.00	0.15	0.00	0.30
Fishing	-	-	0.35	-	-	-	-	-	0.02	-	0.36
Non-specified	-	-	0.07	0.01	-	-	-	-	-	-	0.08
<b>NON-ENERGY USE</b>	<b>0.06</b>	<b>-</b>	<b>1.88</b>	<b>0.55</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.48</b>
in industry/transf./energy	0.06	-	1.88	0.55	-	-	-	-	-	-	2.48
of which: chem./petrochem.	-	-	1.08	0.55	-	-	-	-	-	-	1.63
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>0.15</b>	<b>-</b>	<b>0.03</b>	<b>2.60</b>	<b>-</b>	<b>137.91</b>	<b>2.52</b>	<b>0.42</b>	<b>-</b>	<b>0.30</b>	<b>143.92</b>
Electricity plants	0.11	-	0.03	2.60	-	137.91	2.52	0.05	-	0.30	143.51
CHP plants	0.04	-	-	c	-	-	-	0.37	-	-	0.41
<b>Heat generated - PJ</b>	<b>0.24</b>	<b>-</b>	<b>0.45</b>	<b>0.36</b>	<b>-</b>	<b>-</b>	<b>0.98</b>	<b>17.70</b>	<b>2.42</b>	<b>5.07</b>	<b>27.23</b>
CHP plants	0.22	-	-	c	-	-	-	9.49	0.03	0.01	9.74
Heat plants	0.02	-	0.45	0.36	-	-	0.98	8.22	2.40	5.07	17.49

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Norway

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.55	93.94	-	102.33	-	12.34	0.18	1.31	-	0.11	210.76
Imports	0.73	0.51	5.45	-	-	-	-	0.40	0.49	-	7.60
Exports	-0.61	-72.12	-17.58	-96.76	-	-	-	-0.02	-1.90	-	-188.99
Intl. marine bunkers	-	-	-0.17	-	-	-	-	-	-	-	-0.17
Intl. aviation bunkers	-	-	-0.45	-	-	-	-	-	-	-	-0.45
Stock changes	0.09	-0.76	0.30	0.01	-	-	-	-	-	-	-0.37
<b>TPES</b>	<b>0.76</b>	<b>21.58</b>	<b>-12.45</b>	<b>5.58</b>	<b>-</b>	<b>12.34</b>	<b>0.18</b>	<b>1.70</b>	<b>-1.41</b>	<b>0.11</b>	<b>28.38</b>
Electricity and Heat Output											
Elec. generated - TWh	0.15	-	0.03	2.60	-	143.43	2.12	0.34	-	0.30	148.96
Heat generated - PJ	0.24	-	0.57	0.50	-	-	0.66	14.64	2.82	5.19	24.62

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	8.1	55.1	119.5	228.0	207.6	196.0	208.1	210.8
Net imports (Mtoe)	6.7	-35.8	-95.7	-200.3	-172.9	-168.1	-177.3	-181.4
Total primary energy supply (Mtoe)	14.3	18.4	21.1	26.2	33.9	27.8	29.6	28.4
Net oil imports (Mtoe)	6.6	-14.7	-72.8	-157.1	-85.8	-76.6	-79.5	-83.7
Oil supply (Mtoe)	7.6	8.7	8.1	9.0	12.9	10.0	10.9	9.1
Electricity consumption (TWh) <sup>1</sup>	61.6	76.5	99.1	112.3	121.7	118.7	121.5	124.2
GDP (billion 2010 USD)	145.6	198.4	255.7	367.1	428.5	457.6	465.0	470.0
GDP PPP (billion 2010 USD)	96.3	131.3	169.2	242.9	283.6	302.8	307.7	310.8
Population (millions)	3.96	4.09	4.24	4.49	4.89	5.14	5.19	5.24
Industrial production index (2010=100)	39.0	55.8	84.2	118.6	100.0	96.1	97.5	96.4
Total self-sufficiency <sup>2</sup>	0.56	3.00	5.67	8.71	6.12	7.05	7.03	7.43
Coal self-sufficiency <sup>2</sup>	0.32	0.20	0.24	0.40	1.70	1.32	0.90	0.73
Oil self-sufficiency <sup>2</sup>	0.20	2.78	10.29	18.59	7.73	8.70	8.41	10.29
Natural gas self-sufficiency <sup>2</sup>	-	26.21	12.22	11.17	12.28	19.23	18.95	18.33
TPES/GDP (toe per thousand 2010 USD)	0.10	0.09	0.08	0.07	0.08	0.06	0.06	0.06
TPES/GDP PPP (toe per thousand 2010 USD)	0.15	0.14	0.12	0.11	0.12	0.09	0.10	0.09
TPES/population (toe per capita)	3.61	4.49	4.97	5.83	6.93	5.41	5.71	5.42
Net oil imports/GDP (toe per thousand 2010 USD)	0.05	-0.07	-0.28	-0.43	-0.20	-0.17	-0.17	-0.18
Oil supply/GDP (toe per thousand 2010 USD)	0.05	0.04	0.03	0.02	0.03	0.02	0.02	0.02
Oil supply/population (toe per capita)	1.91	2.14	1.92	2.01	2.63	1.94	2.10	1.74
Share of renewables in TPES	0.44	0.42	0.54	0.52	0.34	0.47	0.45	0.49
Share of renewables in electricity generation	1.00	1.00	1.00 e	1.00 e	0.96	0.98	0.98	0.98
TFC/GDP (toe per thousand 2010 USD)	0.09	0.08	0.07	0.05	0.05	0.04	0.04	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.14	0.12	0.10	0.08	0.08	0.07	0.07	..
TFC/population (toe per capita)	3.37	3.91	4.11	4.41	4.36	3.93	3.96	..
Elect. cons./GDP (kWh per 2010 USD)	0.42	0.39	0.39	0.31	0.28	0.26	0.26	0.26
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.64	0.58	0.59	0.46	0.43	0.39	0.40	0.40
Elect. cons./population (kWh per capita)	15544	18724	23357	24994	24892	23115	23403	23726
Industry cons. <sup>3</sup> /industrial production (2010=100)	213.9	172.3	112.3	91.4	100.0	101.4	102.1	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	274.8	227.8	117.9	73.5	100.0	96.3	98.3	..

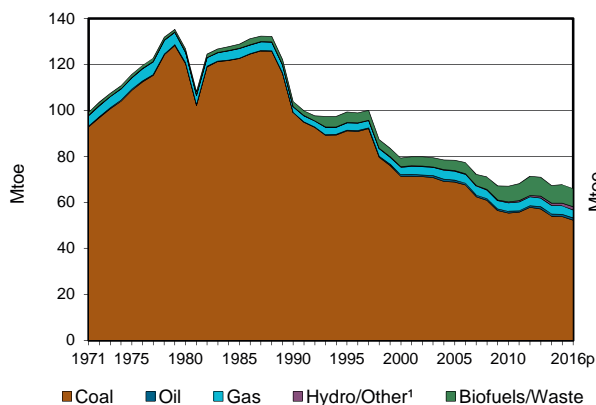
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

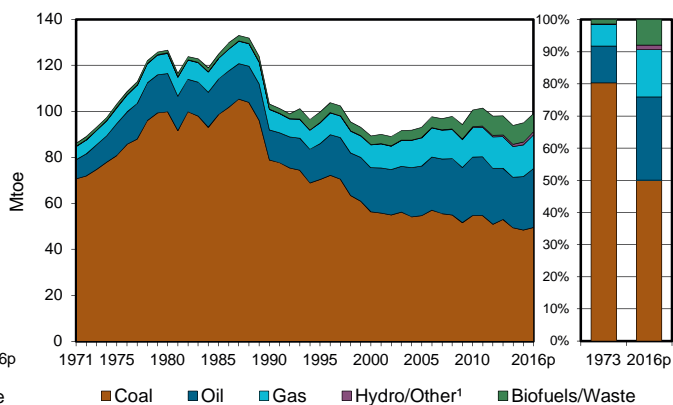
3. Includes non-energy use.

## Poland

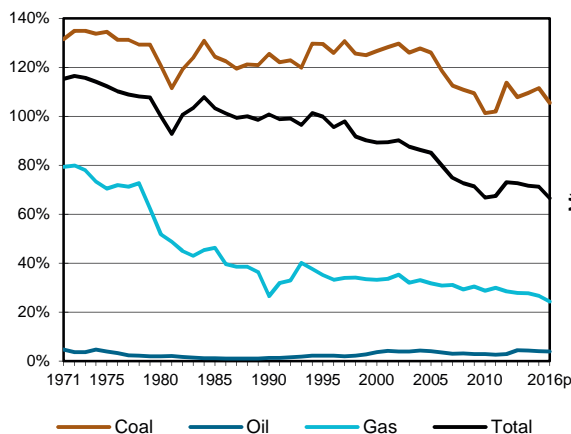
**Figure 1. Energy production**



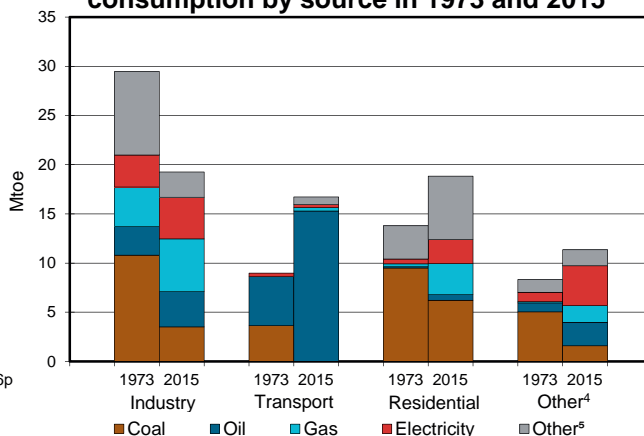
**Figure 2. Total primary energy supply<sup>2</sup>**



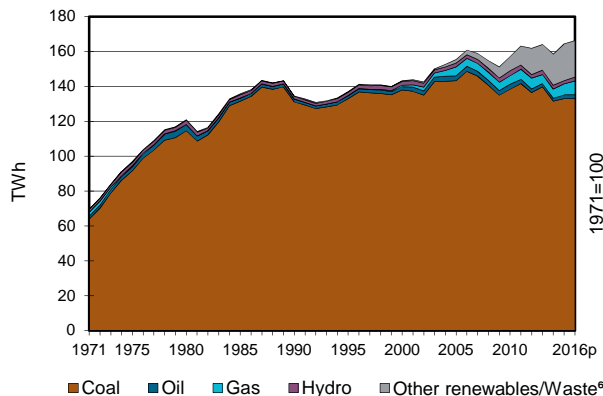
**Figure 3. Energy self-sufficiency**



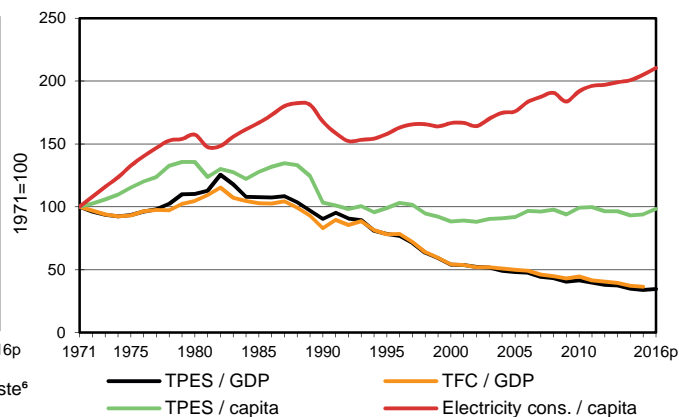
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## Poland

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	53.87	0.95	-	3.68	-	0.16	1.01	7.99	-	0.03	67.68
Imports	5.06	27.02	5.52	9.99	-	-	-	0.89	1.24	-	49.72
Exports	-10.59	-0.26	-8.20	-0.05	-	-	-	-0.53	-1.27	-	-20.89
Intl. marine bunkers	-	-	-0.19	-	-	-	-	-	-	-	-0.19
Intl. aviation bunkers	-	-	-0.65	-	-	-	-	-	-	-	-0.65
Stock changes	-0.00	-1.07	0.19	0.15	-	-	-	-0.01	-	-	-0.75
<b>TPES</b>	<b>48.33</b>	<b>26.63</b>	<b>-3.32</b>	<b>13.77</b>	<b>-</b>	<b>0.16</b>	<b>1.01</b>	<b>8.35</b>	<b>-0.03</b>	<b>0.03</b>	<b>94.93</b>
Transfers	-	0.19	-0.14	-	-	-	-	-	-	-	0.06
Statistical differences	1.02	0.03	-0.07	0.14	-	-	-	-0.00	-	-	1.12
Electricity plants	-0.51	-	-0.00	-	-	-0.16	-0.94	-0.44	1.48	-0.03	-0.59
CHP plants	-32.24	-	-0.40	-1.23	-	-	-	-1.99	12.65	4.43	-18.79
Heat plants	-2.50	-	-0.02	-0.21	-	-	-	-0.04	-	2.26	-0.51
Blast furnaces	-0.92	-	-	-	-	-	-	-	-	-	-0.92
Gas works	0.00	-	-	-	-	-	-	-	-	-	0.00
Coke/pat. fuel/BKB/PB plants	-0.61	-	-0.00	-	-	-	-	-	-	-	-0.61
Oil refineries	-	-28.25	27.60	-	-	-	-	-	-	-	-0.64
Petrochemical plants	-	0.75	-0.76	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-0.15	0.64	-	-0.64	-	-	-	-	-	-	-0.15
Energy industry own use	-1.11	-	-1.07	-1.19	-	-	-	-0.00	-2.21	-0.63	-6.20
Losses	-	-	-	-0.03	-	-	-	-	-0.91	-0.60	-1.54
<b>TFC</b>	<b>11.31</b>	<b>-</b>	<b>21.84</b>	<b>10.61</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>5.87</b>	<b>10.99</b>	<b>5.46</b>	<b>66.15</b>
<b>INDUSTRY</b>	<b>3.44</b>	<b>-</b>	<b>0.62</b>	<b>3.23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.89</b>	<b>4.26</b>	<b>0.66</b>	<b>14.09</b>
Iron and steel	0.68	-	0.00	0.40	-	-	-	0.00	0.54	0.09	1.71
Chemical and petrochemical	1.11	-	0.25	0.35	-	-	-	0.02	0.72	0.09	2.55
Non-ferrous metals	0.04	-	0.01	0.17	-	-	-	-	0.18	0.03	0.43
Non-metallic minerals	0.62	-	0.05	0.97	-	-	-	0.51	0.40	0.03	2.58
Transport equipment	0.01	-	0.01	0.09	-	-	-	0.00	0.22	0.05	0.39
Machinery	0.05	-	0.04	0.21	-	-	-	0.00	0.39	0.06	0.75
Mining and quarrying	0.01	-	0.07	0.02	-	-	-	0.00	0.22	0.07	0.39
Food and tobacco	0.54	-	0.07	0.62	-	-	-	0.04	0.54	0.05	1.86
Paper, pulp and printing	0.26	-	0.04	0.17	-	-	-	0.65	0.37	0.08	1.57
Wood and wood products	0.03	-	0.01	0.04	-	-	-	0.55	0.18	0.06	0.88
Construction	0.01	-	0.03	0.03	-	-	-	0.00	0.07	0.01	0.16
Textile and leather	0.01	-	0.01	0.04	-	-	-	0.00	0.05	0.01	0.12
Non-specified	0.05	-	0.02	0.12	-	-	-	0.12	0.38	0.03	0.71
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>15.18</b>	<b>0.36</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.78</b>	<b>0.27</b>	<b>-</b>	<b>16.59</b>
Domestic aviation	-	-	0.02	-	-	-	-	-	-	-	0.02
Road	-	-	15.07	0.02	-	-	-	0.78	0.00	-	15.87
Rail	-	-	0.08	-	-	-	-	-	0.24	-	0.32
Pipeline transport	-	-	0.00	0.34	-	-	-	-	0.02	-	0.37
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>7.78</b>	<b>-</b>	<b>2.72</b>	<b>4.90</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>3.20</b>	<b>6.47</b>	<b>4.80</b>	<b>29.93</b>
Residential	6.21	-	0.58	3.16	-	-	0.06	2.52	2.43	3.88	18.84
Comm. and public services	0.65	-	0.41	1.71	-	-	0.01	0.22	3.91	0.90	7.81
Agriculture/forestry	0.92	-	1.73	0.03	-	-	-	0.47	0.13	0.02	3.29
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.09</b>	<b>-</b>	<b>3.33</b>	<b>2.12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.54</b>
in industry/transf./energy	0.06	-	2.98	2.12	-	-	-	-	-	-	5.16
of which: chem./petrochem.	-	-	1.88	2.12	-	-	-	-	-	-	4.00
in transport	-	-	0.13	-	-	-	-	-	-	-	0.13
in other	0.03	-	0.22	-	-	-	-	-	-	-	0.25
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>132.96</b>	<b>-</b>	<b>2.12</b>	<b>6.39</b>	<b>-</b>	<b>1.83</b>	<b>10.92</b>	<b>10.01</b>	<b>-</b>	<b>0.11</b>	<b>164.34</b>
Electricity plants	2.39	-	0.01	-	-	1.83	10.92	1.96	-	-	17.10
CHP plants	130.58	-	2.11	6.39	-	-	0.01	8.05	-	0.11	147.25
<b>Heat generated - PJ</b>	<b>242.95</b>	<b>-</b>	<b>3.41</b>	<b>20.17</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>13.59</b>	<b>-</b>	<b>1.19</b>	<b>281.40</b>
CHP plants	157.22	-	2.86	13.07	-	-	0.10	12.19	-	1.19	186.63
Heat plants	85.72	-	0.55	7.10	-	-	-	1.40	-	0.00	94.77

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Poland

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	52.24	1.02	-	3.55	-	0.18	1.17	7.84	-	0.01	66.02
Imports	5.02	25.14	7.44	12.18	-	-	-	1.06	1.21	-	52.04
Exports	-10.84	-0.23	-7.16	-0.72	-	-	-	-1.03	-1.03	-	-21.01
Intl. marine bunkers	-	-	-0.18	-	-	-	-	-	-	-	-0.18
Intl. aviation bunkers	-	-	-0.69	-	-	-	-	-	-	-	-0.69
Stock changes	3.14	0.43	-0.14	-0.39	-	-	-	-0.01	-	-	3.04
<b>TPES</b>	<b>49.55</b>	<b>26.36</b>	<b>-0.73</b>	<b>14.63</b>	<b>-</b>	<b>0.18</b>	<b>1.17</b>	<b>7.86</b>	<b>0.17</b>	<b>0.01</b>	<b>99.21</b>
Electricity and Heat Output											
Elec. generated - TWh	132.92	-	2.22	7.94	-	2.14	12.72	8.17	-	0.07	166.18
Heat generated - PJ	253.98	-	3.94	22.41	-	-	0.10	13.32	-	0.49	294.23

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	107.4	126.6	103.9	79.2	67.1	67.3	67.7	66.0
Net imports (Mtoe)	-13.2	1.5	0.9	9.6	32.1	27.9	28.8	31.0
Total primary energy supply (Mtoe)	92.9	126.6	103.1	88.8	100.4	94.0	94.9	99.2
Net oil imports (Mtoe)	11.8	17.7	14.3	19.8	25.7	21.8	24.1	25.2
Oil supply (Mtoe)	10.7	16.7	13.0	19.2	25.4	22.0	23.3	25.6
Electricity consumption (TWh) <sup>1</sup>	75.6	109.4	124.7	124.6	144.5	151.0	154.1	158.1
GDP (billion 2010 USD)	197.2	228.2	226.7	326.2	479.3	535.6	556.2	571.1
GDP PPP (billion 2010 USD)	330.1	382.0	379.4	546.0	802.3	896.5	931.8	955.6
Population (millions)	33.37	35.58	38.03	38.26	38.52	38.48	38.46	38.43
Industrial production index (2010=100)	..	..	34.9	56.9	100.0	114.4	119.9	123.3
Total self-sufficiency <sup>2</sup>	1.16	1.00	1.01	0.89	0.67	0.72	0.71	0.67
Coal self-sufficiency <sup>2</sup>	1.35	1.21	1.25	1.27	1.01	1.10	1.11	1.05
Oil self-sufficiency <sup>2</sup>	0.04	0.02	0.01	0.04	0.03	0.04	0.04	0.04
Natural gas self-sufficiency <sup>2</sup>	0.78	0.52	0.27	0.33	0.29	0.28	0.27	0.24
TPES/GDP (toe per thousand 2010 USD)	0.47	0.55	0.45	0.27	0.21	0.18	0.17	0.17
TPES/GDP PPP (toe per thousand 2010 USD)	0.28	0.33	0.27	0.16	0.13	0.10	0.10	0.10
TPES/population (toe per capita)	2.78	3.56	2.71	2.32	2.61	2.44	2.47	2.58
Net oil imports/GDP (toe per thousand 2010 USD)	0.06	0.08	0.06	0.06	0.05	0.04	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.05	0.07	0.06	0.06	0.05	0.04	0.04	0.04
Oil supply/population (toe per capita)	0.32	0.47	0.34	0.50	0.66	0.57	0.61	0.67
Share of renewables in TPES	0.01	0.01	0.02	0.04	0.07	0.09	0.10	0.09
Share of renewables in electricity generation	0.02	0.02	0.01	0.02	0.07	0.13	0.14	0.14
TFC/GDP (toe per thousand 2010 USD)	0.31	0.34	0.27	0.18	0.15	0.12	0.12	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.18	0.20	0.16	0.11	0.09	0.07	0.07	..
TFC/population (toe per capita)	1.81	2.19	1.62	1.51	1.82	1.70	1.72	..
Elect. cons./GDP (kWh per 2010 USD)	0.38	0.48	0.55	0.38	0.30	0.28	0.28	0.28
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.23	0.29	0.33	0.23	0.18	0.17	0.17	0.17
Elect. cons./population (kWh per capita)	2264	3076	3279	3256	3750	3923	4007	4115
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	426.2	202.5	100.0	91.5	88.0	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	206.0	163.5	100.0	74.5	72.3	..

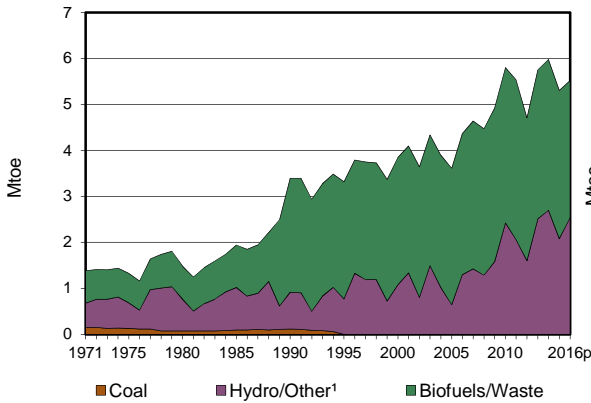
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

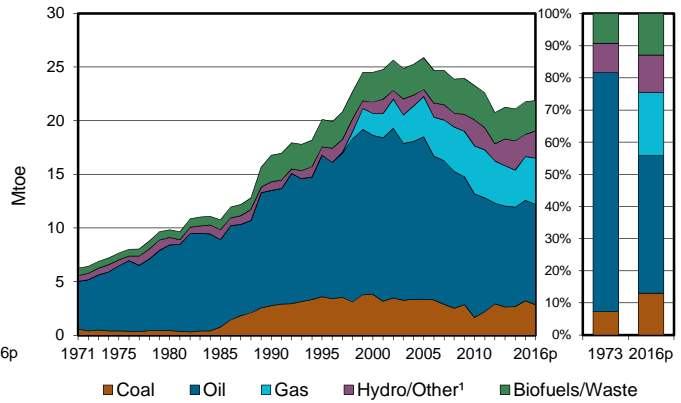
3. Includes non-energy use.

## Portugal

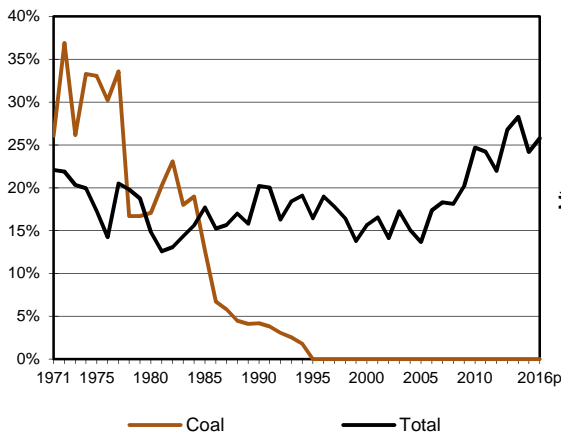
**Figure 1. Energy production**



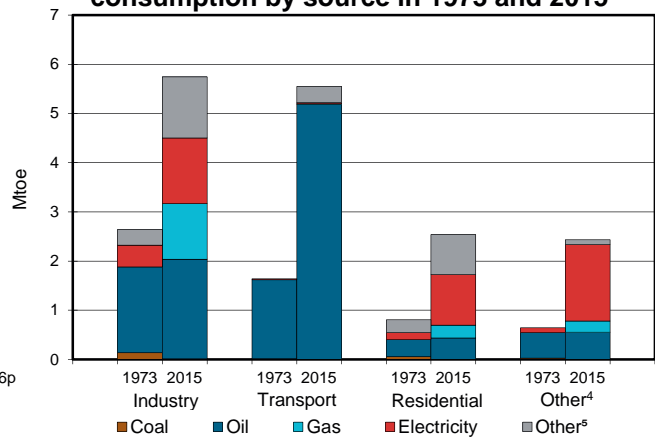
**Figure 2. Total primary energy supply<sup>2</sup>**



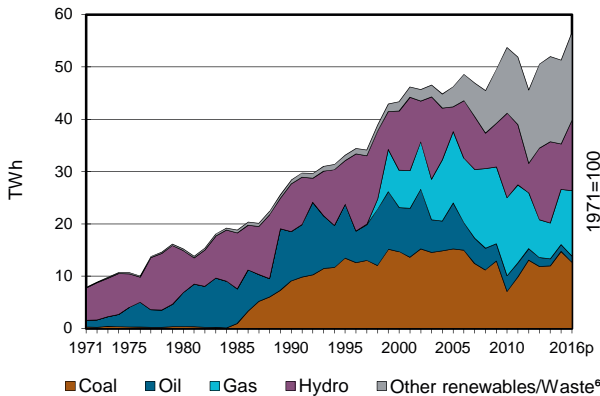
**Figure 3. Energy self-sufficiency**



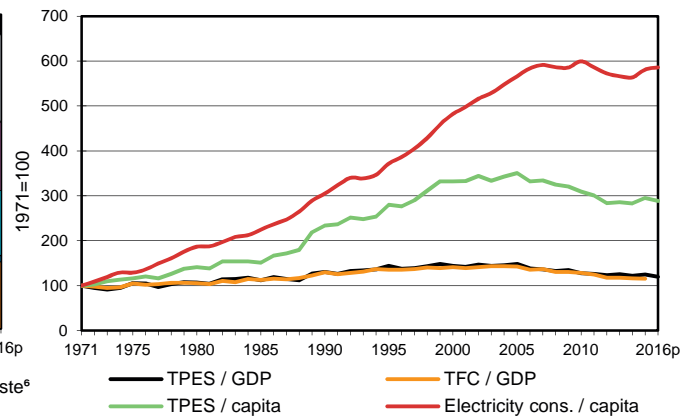
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Portugal

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.74	1.33	3.22	-	0.00	5.31
Imports	3.21	15.57	2.53	4.06	-	-	-	0.18	0.69	-	26.24
Exports	-	-0.15	-6.72	-	-	-	-	-0.35	-0.50	-	-7.73
Intl. marine bunkers	-	-	-0.64	-	-	-	-	-	-	-	-0.64
Intl. aviation bunkers	-	-	-1.05	-	-	-	-	-	-	-	-1.05
Stock changes	-	-0.25	0.08	0.01	-	-	-	-0.01	-	-	-0.17
<b>TPES</b>	<b>3.21</b>	<b>15.17</b>	<b>-5.80</b>	<b>4.07</b>	<b>-</b>	<b>0.74</b>	<b>1.33</b>	<b>3.04</b>	<b>0.19</b>	<b>0.00</b>	<b>21.97</b>
Transfers	-	0.08	-0.08	-	-	-	-	-	-	-	0.01
Statistical differences	0.05	-	-0.01	0.04	-	-	-	0.00	-	-	0.08
Electricity plants	-3.25	-	-0.17	-0.90	-	-0.74	-1.25	-0.57	3.79	-0.00	-3.09
CHP plants	-	-	-0.09	-1.19	-	-	-	-0.31	0.62	0.47	-0.52
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-15.62	15.28	-	-	-	-	-	-	-	-0.34
Petrochemical plants	-	0.17	-0.18	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.20	-	-0.24	-	-	-	-0.01	-	-	-0.05
Energy industry own use	-	-	-0.77	-0.12	-	-	-	-	-0.24	-0.22	-1.36
Losses	-	-	-	-0.01	-	-	-	-	-0.42	-	-0.43
<b>TFC</b>	<b>0.01</b>	<b>-</b>	<b>8.19</b>	<b>1.64</b>	<b>-</b>	<b>-</b>	<b>0.08</b>	<b>2.16</b>	<b>3.94</b>	<b>0.24</b>	<b>16.27</b>
<b>INDUSTRY</b>	<b>0.01</b>	<b>-</b>	<b>0.72</b>	<b>1.14</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.03</b>	<b>1.33</b>	<b>0.22</b>	<b>4.45</b>
Iron and steel	0.00	-	0.00	0.05	-	-	-	-	0.12	-	0.18
Chemical and petrochemical	0.00	-	0.01	0.15	-	-	-	0.00	0.18	0.03	0.38
Non-ferrous metals	-	-	0.00	0.02	-	-	-	-	0.01	-	0.03
Non-metallic minerals	0.00	-	0.38	0.44	-	-	-	0.12	0.17	0.01	1.12
Transport equipment	-	-	0.01	0.02	-	-	-	-	0.03	-	0.05
Machinery	-	-	0.02	0.04	-	-	-	0.00	0.11	0.00	0.17
Mining and quarrying	-	-	0.03	0.00	-	-	-	0.00	0.05	0.01	0.10
Food and tobacco	-	-	0.08	0.15	-	-	-	0.03	0.16	0.03	0.45
Paper, pulp and printing	-	-	0.06	0.11	-	-	-	0.82	0.26	0.09	1.35
Wood and wood products	-	-	0.01	0.01	-	-	-	0.04	0.04	0.00	0.11
Construction	-	-	0.10	0.01	-	-	-	0.01	0.03	-	0.15
Textile and leather	-	-	0.01	0.13	-	-	-	0.00	0.11	0.04	0.30
Non-specified	-	-	0.00	0.01	-	-	-	0.00	0.04	0.01	0.06
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.15</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.33</b>	<b>0.03</b>	<b>-</b>	<b>5.52</b>
Domestic aviation	-	-	0.13	-	-	-	-	-	-	-	0.13
Road	-	-	4.92	0.01	-	-	-	0.32	0.00	-	5.26
Rail	-	-	0.01	-	-	-	-	-	0.03	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	0.00	-	0.00
Domestic navigation	-	-	0.10	-	-	-	-	0.00	-	-	0.10
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>0.98</b>	<b>0.49</b>	<b>-</b>	<b>-</b>	<b>0.08</b>	<b>0.81</b>	<b>2.58</b>	<b>0.03</b>	<b>4.97</b>
Residential	-	-	0.43	0.26	-	-	0.05	0.76	1.03	0.00	2.54
Comm. and public services	-	-	0.16	0.23	-	-	0.03	0.03	1.48	0.02	1.96
Agriculture/forestry	-	-	0.26	0.00	-	-	-	0.00	0.07	-	0.34
Fishing	-	-	0.09	0.00	-	-	-	0.00	0.00	-	0.09
Non-specified	-	-	0.03	-	-	-	-	0.00	-	-	0.03
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.33</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.33</b>
in industry/transf./energy	-	-	1.30	-	-	-	-	-	-	-	1.30
of which: chem./petrochem.	-	-	1.10	-	-	-	-	-	-	-	1.10
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>14.73</b>	<b>-</b>	<b>1.31</b>	<b>10.56</b>	<b>-</b>	<b>8.66</b>	<b>12.61</b>	<b>3.40</b>	<b>-</b>	<b>0.01</b>	<b>51.28</b>
Electricity plants	14.73	-	0.85	5.61	-	8.66	12.61	1.66	-	-	44.10
CHP plants	-	-	0.47	4.96	-	-	-	1.75	-	0.01	7.18
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.44</b>	<b>19.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>19.61</b>
CHP plants	-	-	0.44	19.09	-	-	-	-	-	0.09	19.61
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Portugal

### Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.15	1.38	2.99	-	0.00	5.52
Imports	2.91	14.95	2.64	4.26	-	-	-	0.17	0.40	-	25.34
Exports	-	-0.02	-6.76	-	-	-	-	-0.34	-0.83	-	-7.95
Intl. marine bunkers	-	-	-0.67	-	-	-	-	-	-	-	-0.67
Intl. aviation bunkers	-	-	-1.15	-	-	-	-	-	-	-	-1.15
Stock changes	-0.07	0.18	0.17	0.04	-	-	-	0.01	-	-	0.34
<b>TPES</b>	<b>2.85</b>	<b>15.12</b>	<b>-5.76</b>	<b>4.30</b>	<b>-</b>	<b>1.15</b>	<b>1.38</b>	<b>2.83</b>	<b>-0.44</b>	<b>0.00</b>	<b>21.43</b>
Electricity and Heat Output											
Elec. generated - TWh	12.67	-	1.20	12.49	-	13.43	13.46	3.33	-	0.01	56.59
Heat generated - PJ	-	-	0.25	18.93	-	-	-	-	-	0.09	19.27

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

### Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	1.4	1.5	3.4	3.9	5.8	6.0	5.3	5.5
Net imports (Mtoe)	6.5	9.9	14.9	22.1	18.7	16.4	18.5	17.4
Total primary energy supply (Mtoe)	6.9	10.0	16.8	24.6	23.5	21.2	22.0	21.4
Net oil imports (Mtoe)	6.2	9.4	11.9	16.0	12.5	10.5	11.2	10.8
Oil supply (Mtoe)	5.1	8.0	10.7	14.8	11.5	9.3	9.4	9.4
Electricity consumption (TWh) <sup>1</sup>	8.6	15.2	25.2	41.1	52.4	48.5	49.8	50.1
GDP (billion 2010 USD)	97.5	121.0	166.6	221.4	238.3	224.0	227.5	230.7
GDP PPP (billion 2010 USD)	118.4	146.9	202.2	268.7	289.3	271.9	276.2	280.1
Population (millions)	8.72	9.86	10.00	10.29	10.57	10.40	10.36	10.33
Industrial production index (2010=100)	46.1	63.6	101.3	116.2	100.0	94.9	96.6	97.5
Total self-sufficiency <sup>2</sup>	0.20	0.15	0.20	0.16	0.25	0.28	0.24	0.26
Coal self-sufficiency <sup>2</sup>	0.26	0.17	0.04	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.07	0.08	0.10	0.11	0.10	0.09	0.10	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.06	0.07	0.08	0.09	0.08	0.08	0.08	0.08
TPES/population (toe per capita)	0.79	1.01	1.68	2.39	2.22	2.04	2.12	2.07
Net oil imports/GDP (toe per thousand 2010 USD)	0.06	0.08	0.07	0.07	0.05	0.05	0.05	0.05
Oil supply/GDP (toe per thousand 2010 USD)	0.05	0.07	0.06	0.07	0.05	0.04	0.04	0.04
Oil supply/population (toe per capita)	0.59	0.81	1.07	1.44	1.09	0.89	0.90	0.91
Share of renewables in TPES	0.18	0.14	0.20	0.15	0.23	0.26	0.23	0.24
Share of renewables in electricity generation	0.77	0.55	0.35	0.30 <sup>e</sup>	0.53	0.61	0.48	0.53
TFC/GDP (toe per thousand 2010 USD)	0.06	0.07	0.08	0.09	0.08	0.07	0.07	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.05	0.05	0.07	0.07	0.07	0.06	0.06	..
TFC/population (toe per capita)	0.66	0.80	1.34	1.88	1.79	1.56	1.57	..
Elect. cons./GDP (kWh per 2010 USD)	0.09	0.13	0.15	0.19	0.22	0.22	0.22	0.22
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.07	0.10	0.13	0.15	0.18	0.18	0.18	0.18
Elect. cons./population (kWh per capita)	985	1543	2522	3989	4959	4663	4807	4847
Industry cons. <sup>3</sup> /industrial production (2010=100)	80.3	83.0	92.0	101.4	100.0	85.8	83.4	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	139.9	147.7	138.9	144.8	100.0	81.8	77.5	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Slovak Republic

Figure 1. Energy production

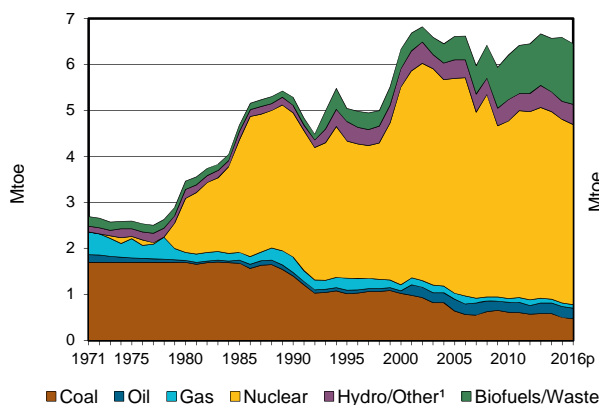


Figure 2. Total primary energy supply<sup>2</sup>

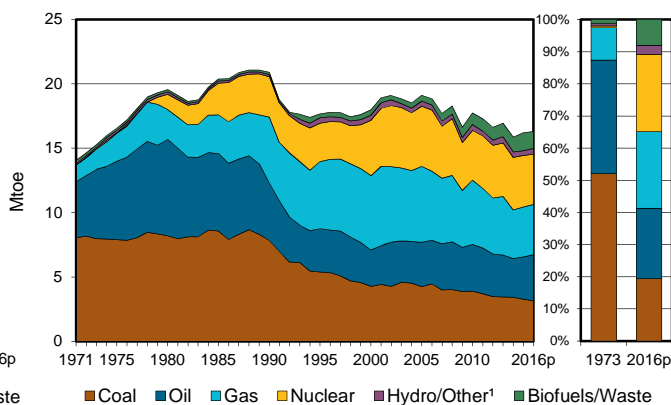


Figure 3. Energy self-sufficiency

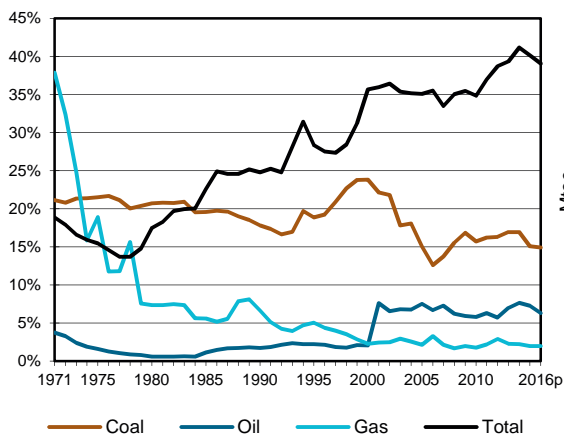


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

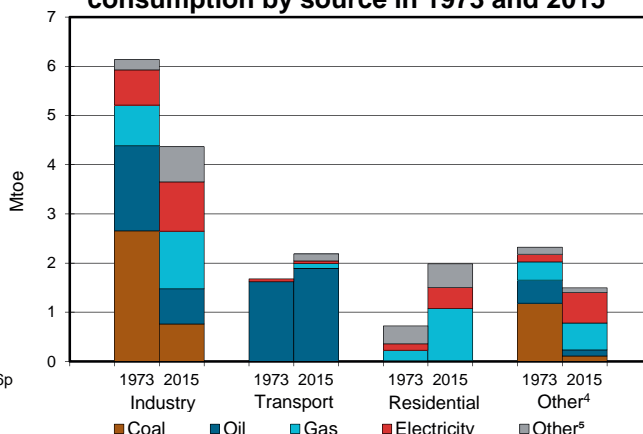


Figure 5. Electricity generation by source

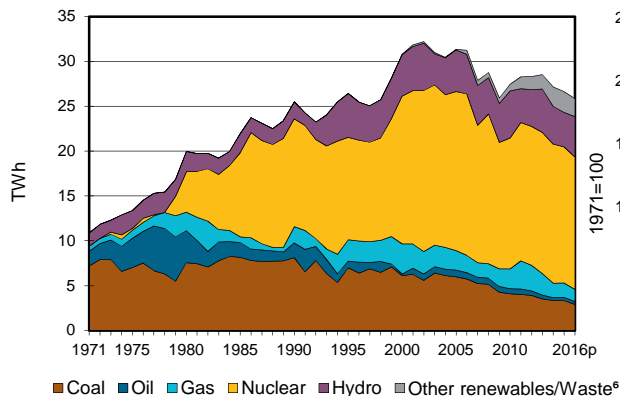
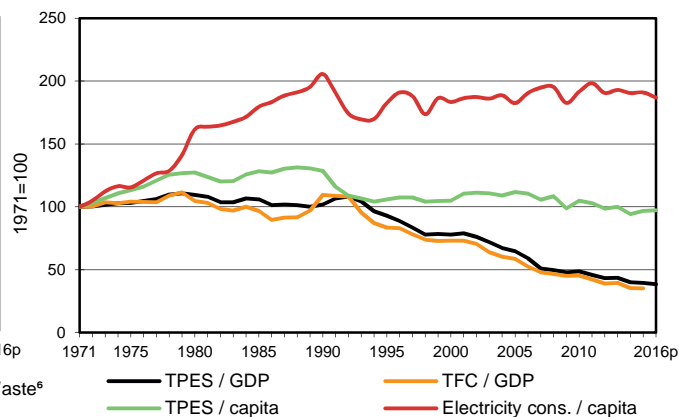


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Slovak Republic

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.50	0.24	-	0.08	3.99	0.33	0.06	1.39	-	0.00	6.59
Imports	2.82	5.92	1.64	3.69	-	-	-	0.10	1.29	0.00	15.46
Exports	-0.05	-0.01	-4.45	-	-	-	-	-0.12	-1.08	-	-5.71
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.04	-	-	-	-	-	-	-	-0.04
Stock changes	0.01	0.03	-0.06	0.11	-	-	-	-0.00	-	-	0.10
<b>TPES</b>	<b>3.28</b>	<b>6.18</b>	<b>-2.91</b>	<b>3.88</b>	<b>3.99</b>	<b>0.33</b>	<b>0.06</b>	<b>1.38</b>	<b>0.21</b>	<b>0.00</b>	<b>16.39</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.04	0.00	-	-	-	-	-	-	-	-	-0.04
Electricity plants	-	-	-	-0.07	-1.11	-0.33	-0.04	-0.03	0.79	-	-0.80
CHP plants	-1.01	-	-0.21	-0.34	-2.89	-	-	-0.48	1.50	0.59	-2.85
Heat plants	-0.00	-	-	-0.26	-	-	-0.01	-0.06	-0.00	0.29	-0.04
Blast furnaces	-0.87 e	-	-	-	-	-	-	-	-	-	-0.87
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.07	-	-	-	-	-	-	-	-	-	-0.07
Oil refineries	-	-6.51	6.67	-	-	-	-	-	-	-	0.16
Petrochemical plants	-	0.18	-0.19	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.15	-	-0.18	-	-	-	-	-	-	-0.03
Energy industry own use	-0.37	-	-0.62	-0.08	-	-	-	-0.00	-0.28	-0.11	-1.46
Losses	-0.03	-	-0.00	-0.08	-	-	-	-0.00	-0.12	-0.14	-0.36
<b>TFC</b>	<b>0.89</b>	<b>-</b>	<b>2.74</b>	<b>2.87</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.80</b>	<b>2.10</b>	<b>0.63</b>	<b>10.03</b>
<b>INDUSTRY</b>	<b>0.72</b>	<b>-</b>	<b>0.15</b>	<b>0.79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.57</b>	<b>1.00</b>	<b>0.15</b>	<b>3.38</b>
Iron and steel	0.65 e	-	-	0.15	-	-	-	0.00	0.20	-	1.00
Chemical and petrochemical	-	-	0.09	0.10	-	-	-	0.02	0.11	0.06	0.39
Non-ferrous metals	0.00	-	-	0.03	-	-	-	-	0.22	-	0.26
Non-metallic minerals	0.05	-	0.04	0.14	-	-	-	0.14	0.05	0.01	0.43
Transport equipment	0.00	-	0.00	0.07	-	-	-	0.00	0.08	0.01	0.16
Machinery	0.00	-	0.00	0.09	-	-	-	0.01	0.11	-	0.21
Mining and quarrying	0.00	-	0.00	0.00	-	-	-	0.00	0.00	-	0.01
Food and tobacco	0.01	-	-	0.07	-	-	-	0.00	0.05	0.00	0.13
Paper, pulp and printing	-	-	0.00	0.05	-	-	-	0.35	0.06	0.07	0.53
Wood and wood products	-	-	-	0.00	-	-	-	0.04	0.01	0.00	0.06
Construction	-	-	0.01	0.01	-	-	-	0.00	0.01	0.00	0.03
Textile and leather	-	-	-	0.02	-	-	-	0.00	0.01	0.00	0.03
Non-specified	-	-	0.00	0.05	-	-	-	0.01	0.08	-	0.14
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1.90</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.14</b>	<b>0.05</b>	<b>-</b>	<b>2.18</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1.86	-	-	-	-	0.14	0.00	-	2.01
Rail	-	-	-	-	-	-	-	-	0.04	-	0.04
Pipeline transport	-	-	-	0.08	-	-	-	-	-	-	0.08
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.04	0.01	-	-	-	-	0.01	-	0.05
<b>OTHER</b>	<b>0.13</b>	<b>-</b>	<b>0.09</b>	<b>1.60</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.09</b>	<b>1.05</b>	<b>0.48</b>	<b>3.44</b>
Residential	0.02	-	0.00	1.05	-	-	0.00	0.02	0.43	0.45	1.99
Comm. and public services	0.11	-	0.01	0.53	-	-	0.00	0.03	0.59	0.03	1.30
Agriculture/forestry	0.00	-	0.07	0.02	-	-	0.00	0.04	0.02	0.00	0.15
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.04</b>	<b>-</b>	<b>0.61</b>	<b>0.39</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.04</b>
in industry/transf./energy	0.04	-	0.56	0.39	-	-	-	-	-	-	0.99
of which: chem./petrochem.	-	-	0.39	0.39	-	-	-	-	-	-	0.78
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.04	-	-	-	-	-	-	-	0.04
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>3.33</b>	<b>-</b>	<b>0.38</b>	<b>1.60</b>	<b>15.15</b>	<b>3.87</b>	<b>0.61</b>	<b>1.69</b>	<b>-</b>	<b>-</b>	<b>26.63</b>
Electricity plants	-	-	0.00	0.35	4.24	3.87	0.59	0.12	-	-	9.16
CHP plants	3.33	-	0.38	1.26	10.91	-	0.02	1.57	-	-	17.47
<b>Heat generated - PJ</b>	<b>6.84</b>	<b>-</b>	<b>4.58</b>	<b>17.62</b>	<b>1.97</b>	<b>-</b>	<b>0.13</b>	<b>5.47</b>	<b>0.05</b>	<b>0.01</b>	<b>36.66</b>
CHP plants	6.74	-	4.58	7.72	1.97	-	-	3.64	0.05	-	24.69
Heat plants	0.10	-	0.00	9.90	-	-	0.13	1.83	0.00	0.01	11.97

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Slovak Republic

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.47	0.23	-	0.08	3.92	0.39	0.05	1.32	-	-	6.45
Imports	2.69	5.85	1.88	3.62	-	-	-	0.08	1.14	0.00	15.26
Exports	-0.05	-0.01	-4.25	-	-	-	-	-0.09	-0.91	-	-5.31
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Stock changes	0.04	-0.05	-0.02	0.20	-	-	-	0.00	-	-	0.17
<b>TPES</b>	<b>3.16</b>	<b>6.01</b>	<b>-2.44</b>	<b>3.89</b>	<b>3.92</b>	<b>0.39</b>	<b>0.05</b>	<b>1.31</b>	<b>0.23</b>	<b>0.00</b>	<b>16.52</b>
Electricity and Heat Output											
Elec. generated - TWh	2.93	-	0.31	1.35	14.77	4.48	0.59	1.43	-	-	25.86
Heat generated - PJ	6.19	-	4.12	15.96	2.96	-	-	4.62	-	-	33.85

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	2.6	3.5	5.3	6.3	6.2	6.6	6.6	6.5
Net imports (Mtoe)	13.0	16.2	16.4	11.5	11.4	9.8	9.8	10.0
Total primary energy supply (Mtoe)	15.5	19.8	21.3	17.7	17.8	16.0	16.4	16.5
Net oil imports (Mtoe)	5.3	7.5	4.5	2.6	3.4	2.9	3.1	3.5
Oil supply (Mtoe)	5.4	7.5	4.5	2.8	3.6	3.0	3.3	3.6
Electricity consumption (TWh) <sup>1</sup>	14.1	21.7	29.4 e	26.7 e	28.0	27.8	27.9	27.4
GDP (billion 2010 USD)	37.2	44.1	51.1	55.5	89.5	97.4	101.1	104.4
GDP PPP (billion 2010 USD)	56.0	66.5	77.0	83.6	134.8	146.7	152.3	157.4
Population (millions)	4.64	4.98	5.30	5.40	5.43	5.42	5.42	5.44
Industrial production index (2010=100)	..	..	69.3	61.8	100.0	128.2	137.2	141.8
Total self-sufficiency <sup>2</sup>	0.17	0.17	0.25	0.36	0.35	0.41	0.40	0.39
Coal self-sufficiency <sup>2</sup>	0.21	0.21	0.18	0.24	0.16	0.17	0.15	0.15
Oil self-sufficiency <sup>2</sup>	0.02	0.01	0.02	0.02	0.06	0.08	0.07	0.06
Natural gas self-sufficiency <sup>2</sup>	0.25	0.07	0.07	0.02	0.02	0.02	0.02	0.02
TPES/GDP (toe per thousand 2010 USD)	0.42	0.45	0.42	0.32	0.20	0.16	0.16	0.16
TPES/GDP PPP (toe per thousand 2010 USD)	0.28	0.30	0.28	0.21	0.13	0.11	0.11	0.11
TPES/population (toe per capita)	3.34	3.98	4.03	3.29	3.28	2.94	3.02	3.04
Net oil imports/GDP (toe per thousand 2010 USD)	0.14	0.17	0.09	0.05	0.04	0.03	0.03	0.03
Oil supply/GDP (toe per thousand 2010 USD)	0.14	0.17	0.09	0.05	0.04	0.03	0.03	0.03
Oil supply/population (toe per capita)	1.16	1.51	0.85	0.52	0.67	0.55	0.60	0.66
Share of renewables in TPES	0.02	0.02	0.02	0.03	0.07	0.09	0.10	0.10
Share of renewables in electricity generation	0.11	0.11	0.07	0.15	0.22	0.23	0.23	0.25
TFC/GDP (toe per thousand 2010 USD)	0.29	0.30	0.31	0.21	0.13	0.10	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.19	0.20	0.21	0.14	0.09	0.07	0.07	..
TFC/population (toe per capita)	2.34	2.62	2.97	2.12	2.11	1.80	1.85	..
Elect. cons./GDP (kWh per 2010 USD)	0.38	0.49	0.57 e	0.48 e	0.31	0.29	0.28	0.26
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.25	0.33	0.38 e	0.32 e	0.21	0.19	0.18	0.17
Elect. cons./population (kWh per capita)	3027	4359	5543 e	4945 e	5165	5137	5151	5039
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	258.6	187.1	100.0	76.4	74.7	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	471.6	270.7	100.0	53.9	58.8	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.



## Slovenia

Figure 1. Energy production

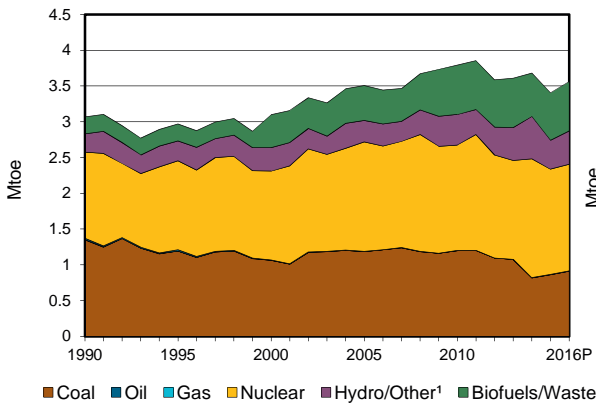


Figure 2. Total primary energy supply<sup>2</sup>

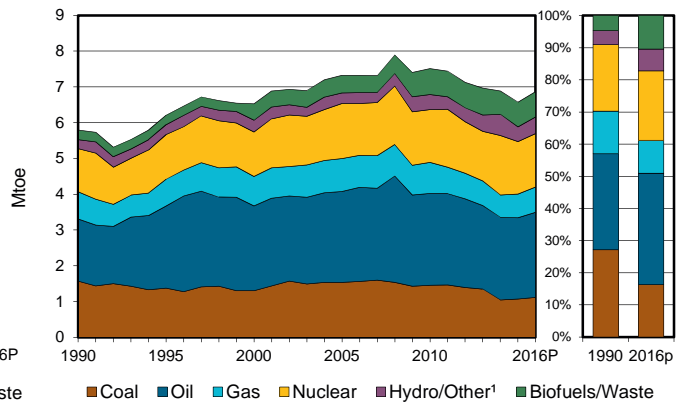


Figure 3. Energy self-sufficiency

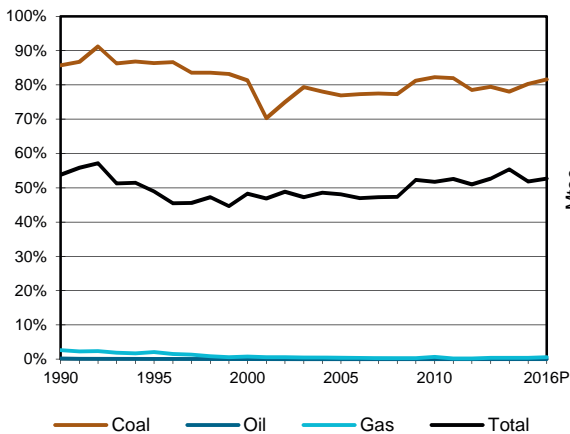


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

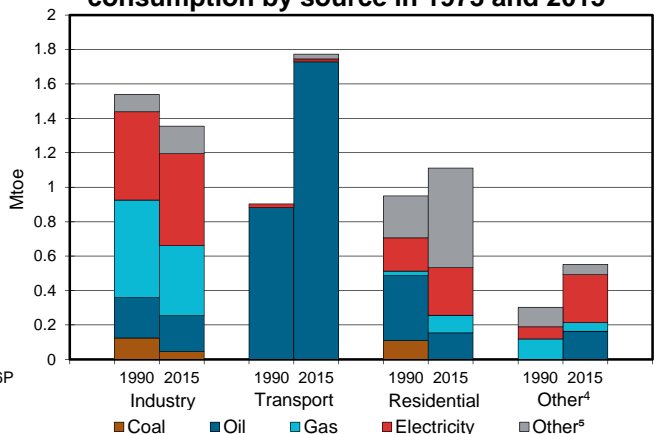


Figure 5. Electricity generation by source

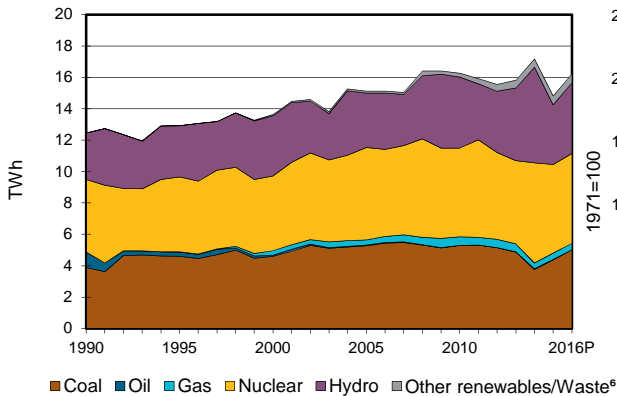
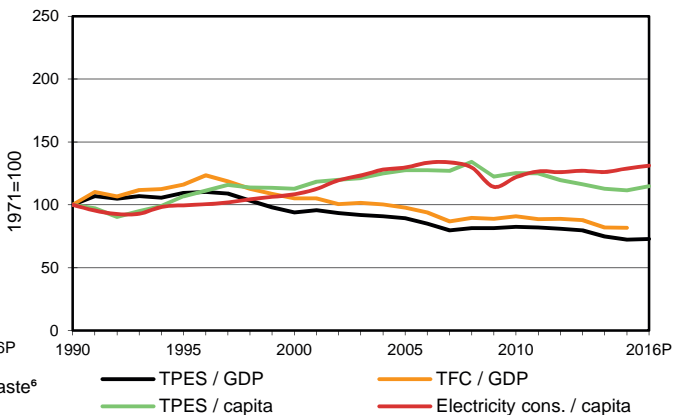


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Slovenia

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.86	-	-	0.00	1.47	0.33	0.08	0.66	-	-	3.41
Imports	0.20	-	4.08	0.66	-	-	-	0.03	0.78	-	5.76
Exports	-	-	-1.74	-	-	-	-	-	-0.78	-	-2.52
Intl. marine bunkers	-	-	-0.06	-	-	-	-	-	-	-	-0.06
Intl. aviation bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Stock changes	0.01	-	0.01	-	-	-	-	-	-	-	0.02
<b>TPES</b>	<b>1.07</b>	-	<b>2.27</b>	<b>0.66</b>	<b>1.47</b>	<b>0.33</b>	<b>0.08</b>	<b>0.69</b>	<b>-0.00</b>	-	<b>6.57</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.00	-	-	-	-	-	-	-0.00	-	-	-0.01
Electricity plants	-	-	-0.00	-0.00	-1.47	-0.33	-0.02	-0.00	0.84	-	-0.99
CHP plants	-1.02	-	-0.00	-0.07	-	-	-	-0.08	0.44	0.17	-0.57
Heat plants	-0.01	-	-0.00	-0.02	-	-	-0.00	-0.01	-	0.04	-0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-0.00	-	-	-	-	-0.10	-0.01	-0.11
Losses	-	-	-	-	-	-	-	-	-0.07	-0.03	-0.10
<b>TFC</b>	<b>0.05</b>	-	<b>2.26</b>	<b>0.56</b>	-	-	<b>0.05</b>	<b>0.60</b>	<b>1.10</b>	<b>0.17</b>	<b>4.79</b>
<b>INDUSTRY</b>	<b>0.04</b>	-	<b>0.09</b>	<b>0.40</b>	-	-	-	<b>0.11</b>	<b>0.53</b>	<b>0.05</b>	<b>1.23</b>
Iron and steel	0.01	-	0.00	0.07	-	-	-	-	0.07	0.00	0.14
Chemical and petrochemical	-	-	0.00	0.05	-	-	-	0.02	0.06	0.03	0.16
Non-ferrous metals	0.00	-	0.01	0.03	-	-	-	-	0.11	0.00	0.16
Non-metallic minerals	0.01	-	0.03	0.07	-	-	-	0.04	0.04	0.00	0.18
Transport equipment	-	-	0.00	0.01	-	-	-	0.00	0.02	0.00	0.03
Machinery	-	-	0.01	0.03	-	-	-	0.00	0.08	0.01	0.13
Mining and quarrying	-	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Food and tobacco	-	-	0.01	0.03	-	-	-	0.00	0.02	0.00	0.07
Paper, pulp and printing	0.02	-	0.00	0.07	-	-	-	0.01	0.06	0.00	0.17
Wood and wood products	-	-	0.00	0.00	-	-	-	0.03	0.01	0.00	0.05
Construction	-	-	0.02	0.00	-	-	-	0.00	0.00	0.00	0.03
Textile and leather	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.02
Non-specified	-	-	0.00	0.02	-	-	-	0.00	0.04	0.01	0.07
<b>TRANSPORT</b>	-	-	<b>1.73</b>	<b>0.00</b>	-	-	-	<b>0.03</b>	<b>0.01</b>	-	<b>1.77</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	1.72	0.00	-	-	-	0.03	-	-	1.75
Rail	-	-	0.01	-	-	-	-	-	0.01	-	0.02
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>OTHER</b>	-	-	<b>0.32</b>	<b>0.15</b>	-	-	<b>0.05</b>	<b>0.46</b>	<b>0.55</b>	<b>0.12</b>	<b>1.66</b>
Residential	-	-	0.15	0.10	-	-	0.04	0.46	0.28	0.08	1.11
Comm. and public services	-	-	0.07	0.05	-	-	0.01	0.00	0.28	0.04	0.46
Agriculture/forestry	-	-	0.07	-	-	-	0.00	-	-	-	0.08
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>NON-ENERGY USE</b>	<b>0.01</b>	-	<b>0.12</b>	<b>0.01</b>	-	-	-	-	-	-	<b>0.13</b>
in industry/transf./energy	0.01	-	0.12	0.01	-	-	-	-	-	-	0.13
of which: chem./petrochem.	-	-	0.00	0.01	-	-	-	-	-	-	0.01
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>4.39</b>	-	<b>0.02</b>	<b>0.40</b>	<b>5.65</b>	<b>3.81</b>	<b>0.28</b>	<b>0.28</b>	-	-	<b>14.82</b>
Electricity plants	-	-	0.00	0.01	5.65	3.81	0.28	0.00	-	-	9.75
CHP plants	4.39	-	0.01	0.40	-	-	-	0.27	-	-	5.07
<b>Heat generated - PJ</b>	<b>4.95</b>	-	<b>0.13</b>	<b>2.02</b>	-	-	<b>0.02</b>	<b>1.56</b>	-	-	<b>8.69</b>
CHP plants	4.71	-	-	1.18	-	-	-	1.21	-	-	7.10
Heat plants	0.24	-	0.13	0.84	-	-	0.02	0.35	-	-	1.59

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Slovenia

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.91	-	-	0.00	1.49	0.39	0.08	0.69	-	-	3.56
Imports	0.20	-	4.58	0.70	-	-	-	0.02	0.72	-	6.22
Exports	-	-	-2.07	-	-	-	-	-	-0.82	-	-2.89
Intl. marine bunkers	-	-	-0.12	-	-	-	-	-	-	-	-0.12
Intl. aviation bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Stock changes	0.01	-	0.00	-	-	-	-	-	-	-	0.01
<b>TPES</b>	<b>1.12</b>	<b>-</b>	<b>2.38</b>	<b>0.70</b>	<b>1.49</b>	<b>0.39</b>	<b>0.08</b>	<b>0.71</b>	<b>-0.10</b>	<b>-</b>	<b>6.77</b>
Electricity and Heat Output											
Elec. generated - TWh	5.01	-	0.01	0.41	5.72	4.50	0.27	0.29	-	-	16.21
Heat generated - PJ	5.20	-	0.14	2.16	-	-	0.02	1.60	-	-	9.12

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	..	..	3.1	3.1	3.8	3.7	3.4	3.6
Net imports (Mtoe)	..	..	2.6	3.4	3.6	3.0	3.2	3.3
Total primary energy supply (Mtoe)	..	..	5.7	6.4	7.3	6.7	6.6	6.8
Net oil imports (Mtoe)	..	..	1.8	2.4	2.6	2.3	2.3	2.5
Oil supply (Mtoe)	..	..	1.7	2.4	2.6	2.3	2.3	2.4
Electricity consumption (TWh) <sup>1</sup>	..	..	10.7	11.5	13.3	13.9	14.2	14.5
GDP (billion 2010 USD)	..	..	30.9	36.9	48.0	48.0	49.1	50.3
GDP PPP (billion 2010 USD)	..	..	36.6	43.8	56.9	56.9	58.2	59.6
Population (millions)	..	..	2.00	1.99	2.05	2.06	2.06	2.07
Industrial production index (2010=100)	..	..	..	83.9	100.0	101.4	107.1	113.5
Total self-sufficiency <sup>2</sup>	..	..	0.54	0.48	0.52	0.55	0.52	0.53
Coal self-sufficiency <sup>2</sup>	..	..	0.86	0.81	0.82	0.78	0.80	0.82
Oil self-sufficiency <sup>2</sup>	..	..	0.00	0.00	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	..	..	0.03	0.01	0.01	0.00	0.00	0.01
TPES/GDP (toe per thousand 2010 USD)	..	..	0.19	0.17	0.15	0.14	0.13	0.13
TPES/GDP PPP (toe per thousand 2010 USD)	..	..	0.16	0.15	0.13	0.12	0.11	0.11
TPES/population (toe per capita)	..	..	2.86	3.22	3.58	3.23	3.19	3.28
Net oil imports/GDP (toe per thousand 2010 USD)	..	..	0.06	0.07	0.05	0.05	0.05	0.05
Oil supply/GDP (toe per thousand 2010 USD)	..	..	0.06	0.06	0.05	0.05	0.05	0.05
Oil supply/population (toe per capita)	..	..	0.87	1.19	1.26	1.12	1.10	1.15
Share of renewables in TPES	..	..	0.09	0.12	0.15	0.18	0.16	0.17
Share of renewables in electricity generation	..	..	0.24	0.29	0.29	0.39	0.29	0.31
TFC/GDP (toe per thousand 2010 USD)	..	..	0.12	0.13	0.11	0.10	0.10	..
TFC/GDP PPP (toe per thousand 2010 USD)	..	..	0.10	0.11	0.09	0.08	0.08	..
TFC/population (toe per capita)	..	..	1.85	2.34	2.55	2.29	2.32	..
Elect. cons./GDP (kWh per 2010 USD)	..	..	0.35	0.31	0.28	0.29	0.29	0.29
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	..	..	0.29	0.26	0.23	0.24	0.24	0.24
Elect. cons./population (kWh per capita)	..	..	5335	5778	6510	6728	6877	6996
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	135.0	100.0	92.5	86.2	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	196.2	100.0	102.4	82.4	..

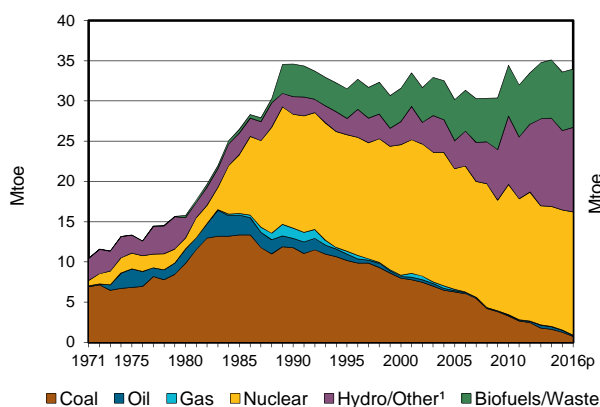
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

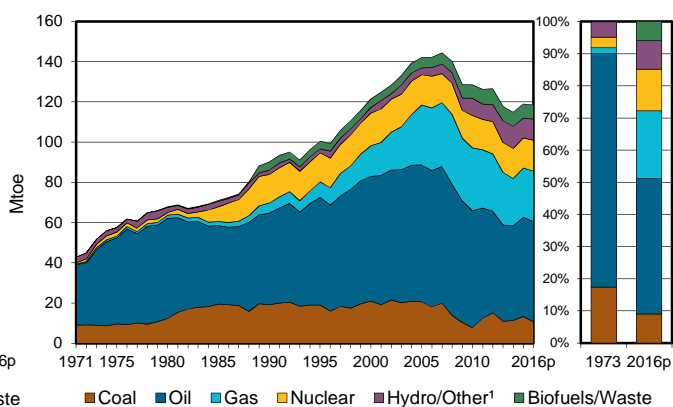
3. Includes non-energy use.

## Spain

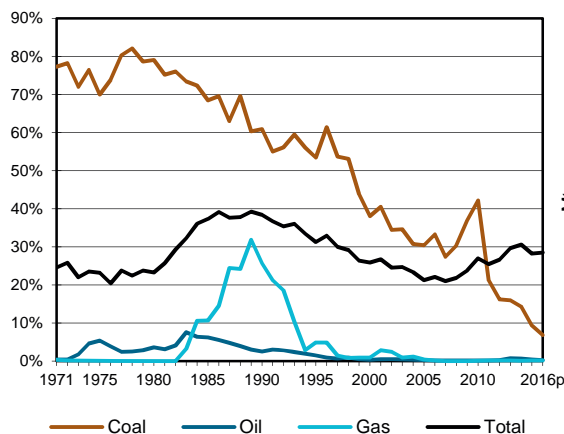
**Figure 1. Energy production**



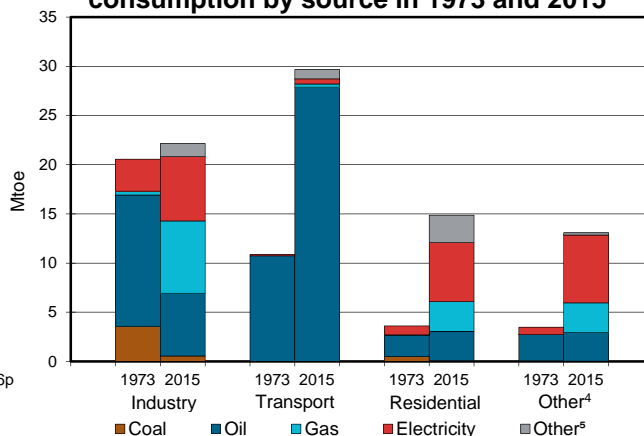
**Figure 2. Total primary energy supply<sup>2</sup>**



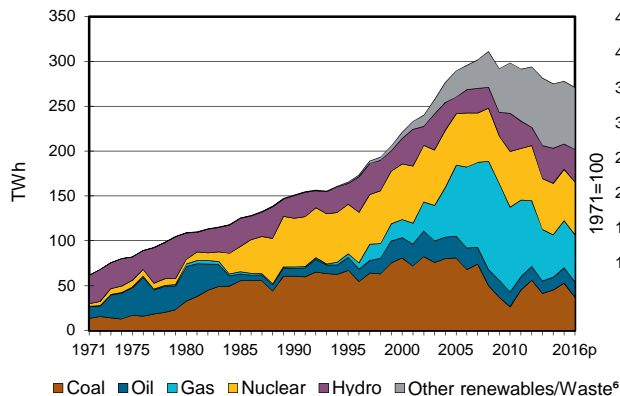
**Figure 3. Energy self-sufficiency**



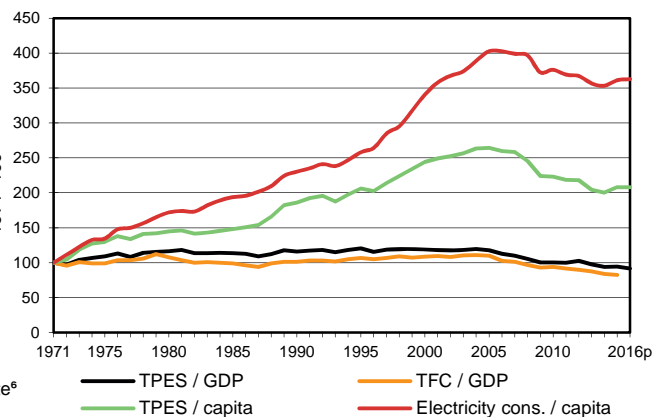
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Spain

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1.25	0.24	-	0.05	14.93	2.42	7.45	7.26	-	-	33.60
Imports	10.95	68.86	15.68	28.17	-	-	-	0.52	1.29	-	125.46
Exports	-0.72	-2.72	-20.03	-4.41	-	-	-	-0.91	-1.30	-	-30.08
Intl. marine bunkers	-	-	-7.41	-	-	-	-	-	-	-	-7.41
Intl. aviation bunkers	-	-	-3.86	-	-	-	-	-	-	-	-3.86
Stock changes	1.86	0.14	-1.64	0.71	-	-	-	0.14	-	-	1.21
<b>TPES</b>	<b>13.34</b>	<b>66.52</b>	<b>-17.25</b>	<b>24.53</b>	<b>14.93</b>	<b>2.42</b>	<b>7.45</b>	<b>7.00</b>	<b>-0.01</b>	-	<b>118.92</b>
Transfers	-	0.33	-0.21	-	-	-	-	0.00	-	-	0.12
Statistical differences	0.49	-	0.78	0.01	-	-	-	0.00	-0.00	-	1.28
Electricity plants	-11.82	-	-2.93	-5.22	-14.93	-2.42	-7.15	-1.62	21.35	-	-24.75
CHP plants	-0.06	-	-0.60	-3.04	-	-	-	-0.28	2.54	-	-1.44
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.84	-	-	-	-	-	-	-	-	-	-0.84
Gas works	0.00	-	-	-	-	-	-	-	-	-	0.00
Coke/pat. fuel/BKB/PB plants	-0.07	-	-	-	-	-	-	-	-	-	-0.07
Oil refineries	-	-66.91	65.51	-	-	-	-	-	-	-	-1.40
Petrochemical plants	-	0.07	-0.07	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.11	-	-	-0.11
Energy industry own use	-0.16	-	-5.04	-2.52	-	-	-0.00	-0.00	-1.64	-	-9.36
Losses	-0.19	-	-	-0.10	-	-	-	-	-2.28	-	-2.57
<b>TFC</b>	<b>0.67</b>	-	<b>40.20</b>	<b>13.65</b>	-	-	<b>0.30</b>	<b>5.00</b>	<b>19.96</b>	-	<b>79.77</b>
<b>INDUSTRY</b>	<b>0.56</b>	-	<b>2.71</b>	<b>6.90</b>	-	-	<b>0.00</b>	<b>1.34</b>	<b>6.54</b>	-	<b>18.05</b>
Iron and steel	0.31	-	0.07	0.70	-	-	-	0.00	1.08	-	2.17
Chemical and petrochemical	0.18	-	0.14	1.68	-	-	0.00	0.01	0.82	-	2.82
Non-ferrous metals	0.03	-	0.05	0.17	-	-	0.00	0.00	0.82	-	1.07
Non-metallic minerals	0.01	-	1.28	1.27	-	-	0.00	0.21	0.51	-	3.27
Transport equipment	-	-	0.04	0.11	-	-	0.00	0.00	0.31	-	0.46
Machinery	-	-	0.12	0.40	-	-	0.00	0.00	0.41	-	0.93
Mining and quarrying	-	-	0.16	0.12	-	-	0.00	0.00	0.12	-	0.40
Food and tobacco	0.03	-	0.29	0.81	-	-	0.00	0.20	0.94	-	2.28
Paper, pulp and printing	-	-	0.09	0.57	-	-	0.00	0.52	0.51	-	1.68
Wood and wood products	-	-	0.02	0.02	-	-	-	0.31	0.10	-	0.45
Construction	-	-	0.37	0.34	-	-	0.00	0.02	0.18	-	0.91
Textile and leather	-	-	0.03	0.14	-	-	0.00	0.00	0.15	-	0.32
Non-specified	-	-	0.04	0.58	-	-	0.00	0.06	0.59	-	1.27
<b>TRANSPORT</b>	-	-	<b>27.70</b>	<b>0.31</b>	-	-	<b>0.00</b>	<b>0.96</b>	<b>0.52</b>	-	<b>29.50</b>
Domestic aviation	-	-	1.78	-	-	-	-	-	-	-	1.78
Road	-	-	25.33	0.29	-	-	-	0.96	0.11	-	26.68
Rail	-	-	0.09	-	-	-	-	-	0.24	-	0.33
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.44	-	-	-	-	-	-	-	0.44
Non-specified	-	-	0.06	0.02	-	-	0.00	0.00	0.18	-	0.27
<b>OTHER</b>	<b>0.12</b>	-	<b>5.91</b>	<b>6.01</b>	-	-	<b>0.29</b>	<b>2.69</b>	<b>12.89</b>	-	<b>27.92</b>
Residential	0.09	-	2.98	3.02	-	-	0.23	2.52	6.02	-	14.86
Comm. and public services	0.00	-	1.04	2.64	-	-	0.06	0.10	6.19	-	10.03
Agriculture/forestry	-	-	1.61	0.07	-	-	0.01	0.07	0.50	-	2.25
Fishing	-	-	0.22	-	-	-	0.00	0.00	-	-	0.23
Non-specified	0.03	-	0.06	0.28	-	-	-	0.00	0.18	-	0.55
<b>NON-ENERGY USE</b>	-	-	<b>3.87</b>	<b>0.44</b>	-	-	-	-	-	-	<b>4.31</b>
in industry/transf./energy	-	-	3.67	0.44	-	-	-	-	-	-	4.11
of which: chem./petrochem.	-	-	2.48	0.44	-	-	-	-	-	-	2.91
in transport	-	-	0.18	-	-	-	-	-	-	-	0.18
in other	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>52.68</b>	-	<b>17.24</b>	<b>52.50</b>	<b>57.31</b>	<b>28.14</b>	<b>63.40</b>	<b>6.53</b>	-	-	<b>277.79</b>
Electricity plants	52.28	-	13.78	28.19	57.31	28.14	63.37	5.21	-	-	248.28
CHP plants	0.40	-	3.46	24.31	-	-	0.03	1.32	-	-	29.52
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Spain

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.73	0.14	-	0.05	15.28	3.13	7.37	7.27	-	-	33.97
Imports	8.12	68.44	17.62	28.19	-	-	-	0.73	1.88	-	124.97
Exports	-0.35	-3.47	-20.68	-3.47	-	-	-	-1.14	-1.22	-	-30.34
Intl. marine bunkers	-	-	-7.44	-	-	-	-	-	-	-	-7.44
Intl. aviation bunkers	-	-	-5.04	-	-	-	-	-	-	-	-5.04
Stock changes	2.15	0.49	-0.15	0.27	-	-	-	0.15	-	-	2.91
<b>TPES</b>	<b>10.65</b>	<b>65.60</b>	<b>-15.69</b>	<b>25.03</b>	<b>15.28</b>	<b>3.13</b>	<b>7.37</b>	<b>7.01</b>	<b>0.66</b>	<b>-</b>	<b>119.04</b>
Electricity and Heat Output											
Elec. generated - TWh	37.38	-	16.76	52.83	58.62	36.38	62.78	6.40	-	-	271.16
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	11.4	15.8	34.6	31.6	34.4	35.1	33.6	34.0
Net imports (Mtoe)	43.9	55.3	60.4	100.2	106.8	91.9	95.4	94.6
Total primary energy supply (Mtoe)	51.6	67.7	90.1	121.9	127.8	114.6	118.9	119.0
Net oil imports (Mtoe)	41.0	49.9	49.7	71.5	69.5	59.2	61.8	61.9
Oil supply (Mtoe)	37.6	49.8	45.5	62.1	58.2	46.9	49.3	49.9
Electricity consumption (TWh) <sup>1</sup>	65.6	99.1	137.5	209.7	265.8	249.0	254.4	255.8
GDP (billion 2010 USD)	558.7	653.9	873.2	1149.5	1431.6	1370.9	1414.9	1460.6
GDP PPP (billion 2010 USD)	581.4	680.4	908.6	1196.2	1489.7	1426.6	1472.3	1520.0
Population (millions)	35.25	37.98	39.34	40.55	46.56	46.46	46.41	46.47
Industrial production index (2010=100)	66.3	78.2	94.3	116.5	100.0	91.6	94.6	96.1
Total self-sufficiency <sup>2</sup>	0.22	0.23	0.38	0.26	0.27	0.31	0.28	0.29
Coal self-sufficiency <sup>2</sup>	0.72	0.79	0.61	0.38	0.42	0.14	0.09	0.07
Oil self-sufficiency <sup>2</sup>	0.02	0.04	0.03	0.00	0.00	0.01	0.00	0.00
Natural gas self-sufficiency <sup>2</sup>	0.00	-	0.26	0.01	0.00	0.00	0.00	0.00
TPES/GDP (toe per thousand 2010 USD)	0.09	0.10	0.10	0.11	0.09	0.08	0.08	0.08
TPES/GDP PPP (toe per thousand 2010 USD)	0.09	0.10	0.10	0.10	0.09	0.08	0.08	0.08
TPES/population (toe per capita)	1.46	1.78	2.29	3.00	2.74	2.47	2.56	2.56
Net oil imports/GDP (toe per thousand 2010 USD)	0.07	0.08	0.06	0.06	0.05	0.04	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.07	0.08	0.05	0.05	0.04	0.03	0.03	0.03
Oil supply/population (toe per capita)	1.07	1.31	1.16	1.53	1.25	1.01	1.06	1.07
Share of renewables in TPES	0.05	0.04	0.07	0.06 e	0.12	0.16	0.14	0.15
Share of renewables in electricity generation	0.38	0.27	0.17 e	0.16 e	0.33	0.40	0.35	0.39
TFC/GDP (toe per thousand 2010 USD)	0.07	0.07	0.07	0.07	0.06	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.07	0.07	0.07	0.06	0.06	0.05	..
TFC/population (toe per capita)	1.09	1.27	1.54	2.11	1.98	1.69	1.72	..
Elect. cons./GDP (kWh per 2010 USD)	0.12	0.15	0.16	0.18	0.19	0.18	0.18	0.18
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.11	0.15	0.15	0.18	0.18	0.18	0.17	0.17
Elect. cons./population (kWh per capita)	1860	2610	3494	5170	5708	5359	5482	5505
Industry cons. <sup>3</sup> /industrial production (2010=100)	112.0	108.2	95.0	104.5	100.0	91.3	84.6	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	179.0	180.4	103.3	109.4	100.0	58.1	60.1	..

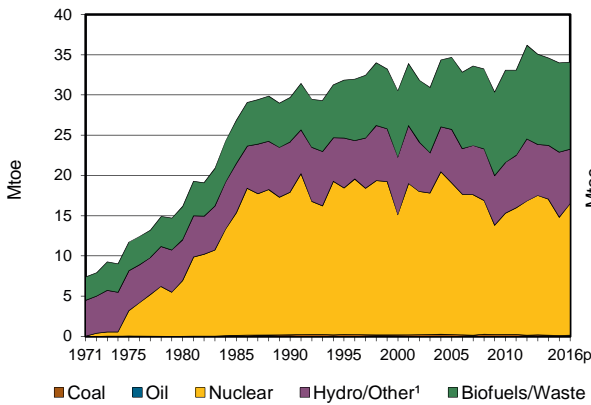
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

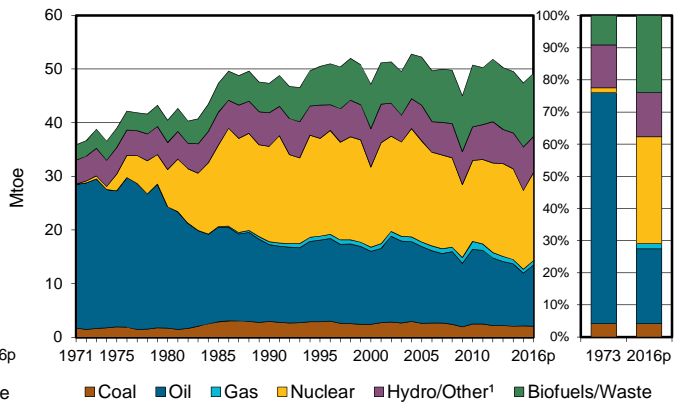
3. Includes non-energy use.

## Sweden

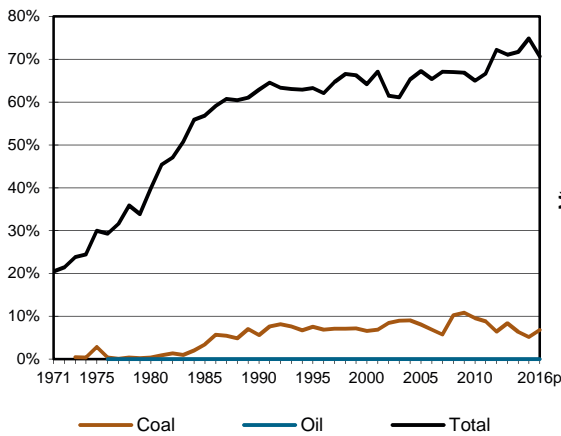
**Figure 1. Energy production**



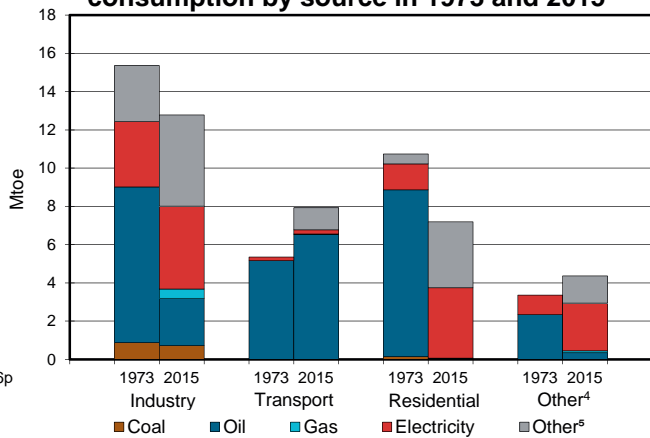
**Figure 2. Total primary energy supply<sup>2</sup>**



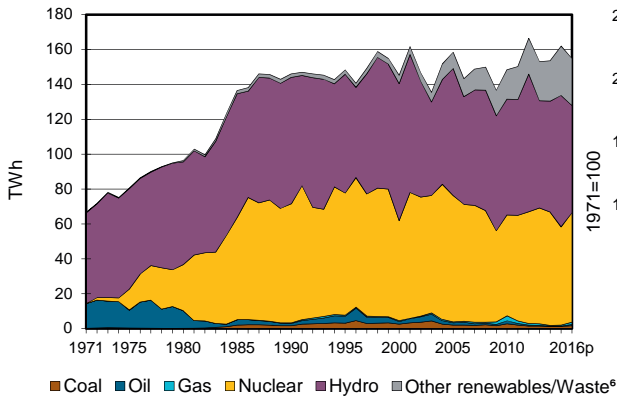
**Figure 3. Energy self-sufficiency**



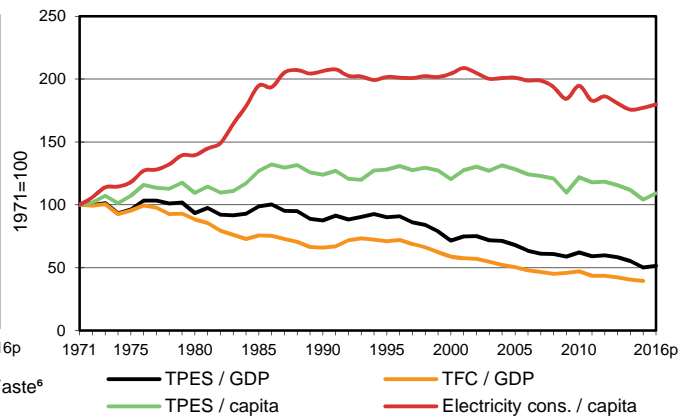
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Sweden

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.11	-	-	-	14.68	6.48	1.42	11.10	-	0.20	34.00
Imports	2.01	20.62	7.73	0.72	-	-	-	0.91	0.80	-	32.79
Exports	-0.05	-1.22	-14.09	-	-	-	-	-0.08	-2.74	-	-18.19
Intl. marine bunkers	-	-	-1.81	-	-	-	-	-	-	-	-1.81
Intl. aviation bunkers	-	-	-0.74	-	-	-	-	-	-	-	-0.74
Stock changes	0.05	-0.13	-0.52	-	-	-	-	-0.01	-	-	-0.60
<b>TPES</b>	<b>2.12</b>	<b>19.28</b>	<b>-9.43</b>	<b>0.72</b>	<b>14.68</b>	<b>6.48</b>	<b>1.42</b>	<b>11.92</b>	<b>-1.94</b>	<b>0.20</b>	<b>45.45</b>
Transfers	-	1.91	-1.72	-	-	-	-	-	-	-	0.18
Statistical differences	-0.13	0.24	0.63	0.14	-	-	-	0.01	-	-	0.89
Electricity plants	-	-	-0.01	-	-14.68	-6.48	-1.41	-	12.73	-	-9.84
CHP plants	-0.46	-	-0.06	-0.17	-	-	-	-4.41	1.19	3.04	-0.88
Heat plants	-0.03	-	-0.03	-0.01	-	-	-	-0.94	-0.19	1.14	-0.05
Blast furnaces	-0.48 e	-	-	-	-	-	-	-	-	-	-0.48
Gas works	0.01	-	-	-0.01	-	-	-	-	-	-	-0.00
Coke/pat. fuel/BKB/PB plants	-0.15	-	-	-	-	-	-	-	-	-	-0.15
Oil refineries	-	-21.42	20.95	-	-	-	-	-	-	-	-0.47
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.10	-	-0.98	-0.00	-	-	-	-0.02	-0.52	-	-1.63
Losses	-0.03	-	-	-	-	-	-	-	-0.54	-0.19	-0.75
<b>TFC</b>	<b>0.74</b>	<b>-</b>	<b>9.36</b>	<b>0.67</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>6.56</b>	<b>10.74</b>	<b>4.19</b>	<b>32.27</b>
<b>INDUSTRY</b>	<b>0.72</b>	<b>-</b>	<b>0.82</b>	<b>0.40</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.28</b>	<b>4.32</b>	<b>0.48</b>	<b>11.04</b>
Iron and steel	0.41 e	-	0.19	0.08	-	-	-	-	0.38	-	1.06
Chemical and petrochemical	0.00	-	0.11	0.16	-	-	-	0.01	0.38	-	0.66
Non-ferrous metals	0.03	-	0.03	0.01	-	-	-	-	0.25	-	0.32
Non-metallic minerals	0.17	-	0.05	0.05	-	-	-	-	0.08	-	0.35
Transport equipment	c	-	0.02	0.00	-	-	-	-	0.17	-	0.19
Machinery	-	-	0.04	0.01	-	-	-	-	0.29	-	0.35
Mining and quarrying	0.10	-	0.10	0.00	-	-	-	-	0.30	-	0.51
Food and tobacco	c	-	0.06	0.07	-	-	-	0.02	0.21	-	0.36
Paper, pulp and printing	0.01	-	0.16	0.02	-	-	-	3.87	1.76	-	5.82
Wood and wood products	-	-	0.03	0.00	-	-	-	0.36	0.16	-	0.55
Construction	-	-	-	-	-	-	-	-	0.10	-	0.10
Textile and leather	-	-	0.00	0.00	-	-	-	-	0.02	-	0.02
Non-specified	0.00	-	0.01	0.00	-	-	-	0.02	0.23	0.48	0.74
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>6.49</b>	<b>0.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.15</b>	<b>0.22</b>	<b>-</b>	<b>7.90</b>
Domestic aviation	-	-	0.13	-	-	-	-	-	-	-	0.13
Road	-	-	6.29	0.03	-	-	-	1.15 e	-	-	7.47
Rail	-	-	0.00	-	-	-	-	-	0.22	-	0.23
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.07	-	-	-	-	-	-	-	0.07
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>0.38</b>	<b>0.13</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.13</b>	<b>6.19</b>	<b>3.71</b>	<b>11.56</b>
Residential	0.00	-	0.03	0.03	-	-	0.01	0.96	3.70	2.47	7.20
Comm. and public services	0.00	-	0.24	0.09	-	-	-	0.04	2.39	1.23	4.00
Agriculture/forestry	-	-	0.09	0.01	-	-	-	0.14	0.11	0.01	0.35
Fishing	-	-	0.02	-	-	-	-	-	-	-	0.02
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>-</b>	<b>1.66</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.77</b>
in industry/transf./energy	0.01	-	1.63	0.10	-	-	-	-	-	-	1.74
of which: chem./petrochem.	-	-	1.19	0.10	-	-	-	-	-	-	1.29
in transport	-	-	0.04	-	-	-	-	-	-	-	0.04
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1.26</b>	<b>-</b>	<b>0.25</b>	<b>0.43</b>	<b>56.35</b>	<b>75.31</b>	<b>16.37</b>	<b>11.97</b>	<b>-</b>	<b>-</b>	<b>161.93</b>
Electricity plants	-	-	0.02	-	56.35	75.31	16.37	-	-	-	148.05
CHP plants	1.26	-	0.23	0.43	-	-	-	11.97	-	-	13.88
<b>Heat generated - PJ</b>	<b>12.97</b>	<b>-</b>	<b>2.55</b>	<b>5.75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>143.78</b>	<b>0.71</b>	<b>17.69</b>	<b>183.46</b>
CHP plants	11.63	-	1.45	5.39	-	-	-	108.65	0.25	4.73	132.10
Heat plants	1.34	-	1.10	0.36	-	-	-	35.13	0.46	12.96	51.35

1. Includes peat.

2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Sweden

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal <sup>1</sup>	Crude oil <sup>2</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	0.14	-	-	-	16.33	5.31	1.35	10.80	-	0.13	34.06
Imports	2.24	20.18	9.49	0.82	-	-	-	1.08	1.23	-	35.04
Exports	-0.02	-1.28	-14.59	-	-	-	-	-0.12	-2.24	-	-18.25
Intl. marine bunkers	-	-	-1.98	-	-	-	-	-	-	-	-1.98
Intl. aviation bunkers	-	-	-0.74	-	-	-	-	-	-	-	-0.74
Stock changes	-0.30	0.06	0.31	-	-	-	-	-	-	-	0.07
<b>TPES</b>	<b>2.06</b>	<b>18.96</b>	<b>-7.52</b>	<b>0.82</b>	<b>16.33</b>	<b>5.31</b>	<b>1.35</b>	<b>11.77</b>	<b>-1.01</b>	<b>0.13</b>	<b>48.20</b>
Electricity and Heat Output											
Elec. generated - TWh	1.61	-	0.73	1.23	62.66	61.73	15.57	11.31	-	-	154.84
Heat generated - PJ	9.54	-	4.65	5.67	-	-	-	142.79	0.86	9.23	172.74

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes peat.
2. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

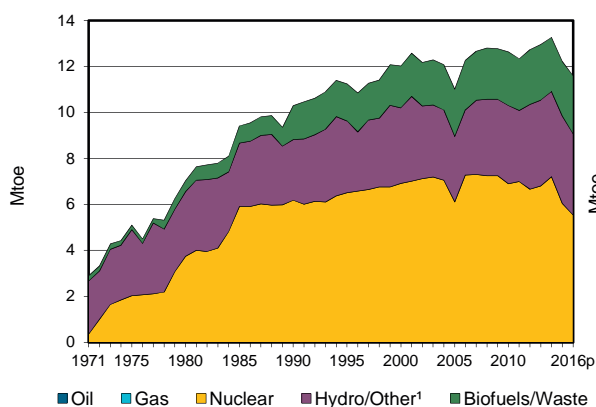
## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	9.3	16.1	29.7	30.5	33.1	34.6	34.0	34.1
Net imports (Mtoe)	30.3	27.6	18.3	19.3	19.7	16.3	14.6	16.8
Total primary energy supply (Mtoe)	38.8	40.5	47.2	47.6	50.9	48.2	45.5	48.2
Net oil imports (Mtoe)	28.6	25.9	15.3	15.7	15.5	14.3	13.0	13.8
Oil supply (Mtoe)	27.9	22.6	14.3	13.6	13.9	11.6	9.9	11.4
Electricity consumption (TWh) <sup>1</sup>	71.2	89.0	135.5	139.1	140.1	130.7	133.2	136.9
GDP (billion 2010 USD)	228.5	258.4	321.1	396.5	488.4	519.3	540.6	557.7
GDP PPP (billion 2010 USD)	182.8	206.8	256.9	317.3	390.8	415.5	432.5	446.8
Population (millions)	8.14	8.31	8.56	8.87	9.38	9.70	9.80	9.92
Industrial production index (2010=100)	56.7	56.4	68.4	98.6	100.0	94.0	97.5	98.9
Total self-sufficiency <sup>2</sup>	0.24	0.40	0.63	0.64	0.65	0.72	0.75	0.71
Coal self-sufficiency <sup>2</sup>	0.00	0.00	0.06	0.07	0.10	0.06	0.05	0.07
Oil self-sufficiency <sup>2</sup>	-	0.00	0.00	-	-	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.17	0.16	0.15	0.12	0.10	0.09	0.08	0.09
TPES/GDP PPP (toe per thousand 2010 USD)	0.21	0.20	0.18	0.15	0.13	0.12	0.11	0.11
TPES/population (toe per capita)	4.77	4.87	5.51	5.36	5.43	4.97	4.64	4.86
Net oil imports/GDP (toe per thousand 2010 USD)	0.13	0.10	0.05	0.04	0.03	0.03	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.12	0.09	0.04	0.03	0.03	0.02	0.02	0.02
Oil supply/population (toe per capita)	3.43	2.72	1.67	1.53	1.48	1.20	1.01	1.15
Share of renewables in TPES	0.22	0.23	0.24	0.31	0.33	0.36	0.42	0.37
Share of renewables in electricity generation	0.77	0.62	0.51	0.57	0.55	0.56	0.63	0.57
TFC/GDP (toe per thousand 2010 USD)	0.15	0.13	0.10	0.09	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.19	0.17	0.13	0.11	0.09	0.08	0.08	..
TFC/population (toe per capita)	4.28	4.16	3.75	3.98	3.72	3.29	3.29	..
Elect. cons./GDP (kWh per 2010 USD)	0.31	0.34	0.42	0.35	0.29	0.25	0.25	0.25
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.39	0.43	0.53	0.44	0.36	0.32	0.31	0.31
Elect. cons./population (kWh per capita)	8745	10704	15836	15682	14935	13480	13594	13792
Industry cons. <sup>3</sup> /industrial production (2010=100)	197.5	173.5	146.1	112.6	100.0	98.3	95.5	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	463.4	348.5	187.7	151.1	100.0	89.9	81.3	..

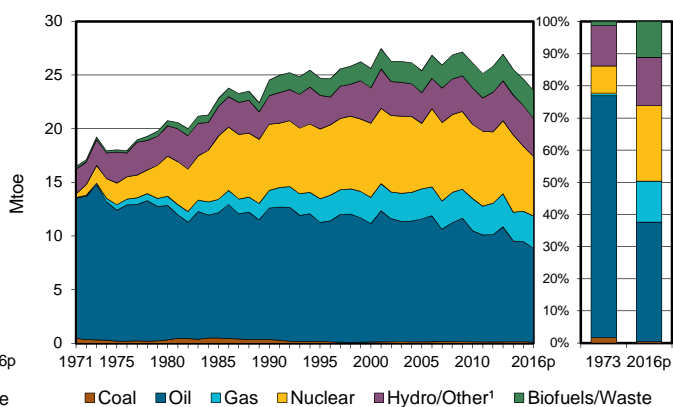
1. Electricity consumption equals domestic supply less losses.
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.
3. Includes non-energy use.

## Switzerland

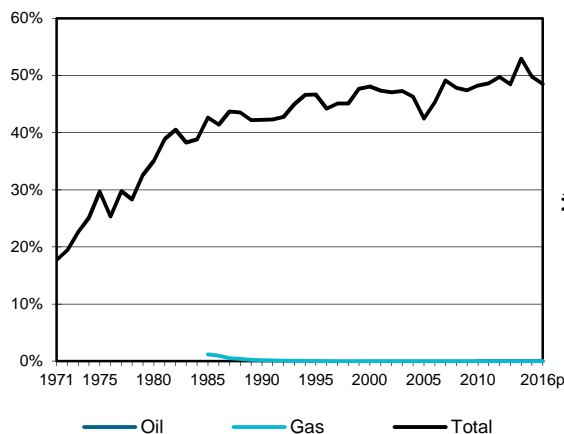
**Figure 1. Energy production**



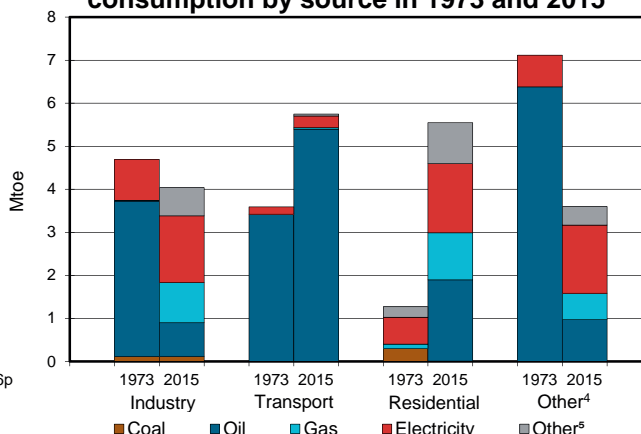
**Figure 2. Total primary energy supply<sup>2</sup>**



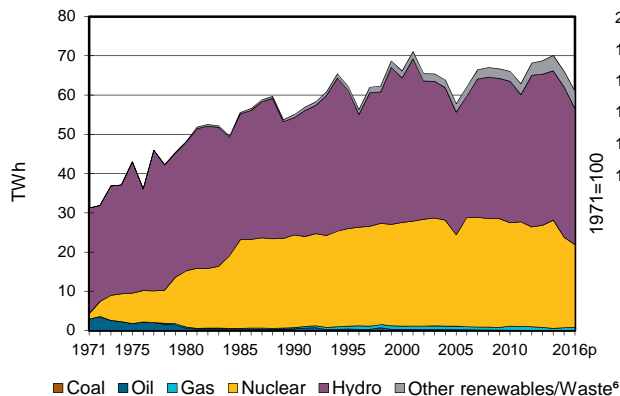
**Figure 3. Energy self-sufficiency**



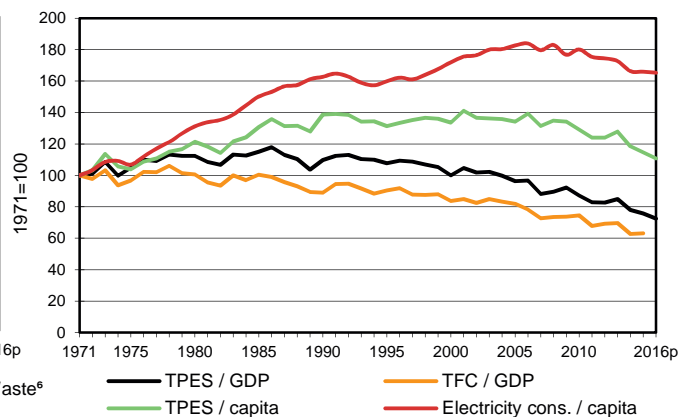
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Switzerland

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	-	-	-	6.04	3.29	0.51	2.38	-	0.00	12.22
Imports	0.13	2.95	8.07	2.85	-	-	-	0.09	2.93	-	17.01
Exports	-	-	-0.42	-	-	-	-	-0.00	-3.02	-	-3.44
Intl. marine bunkers	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Intl. aviation bunkers	-	-	-1.62	-	-	-	-	-	-	-	-1.62
Stock changes	-0.00	0.02	0.35	-	-	-	-	0.00	-	-	0.37
<b>TPES</b>	<b>0.13</b>	<b>2.97</b>	<b>6.37</b>	<b>2.85</b>	<b>6.04</b>	<b>3.29</b>	<b>0.51</b>	<b>2.46</b>	<b>-0.09</b>	<b>0.00</b>	<b>24.53</b>
Transfers	-	-	0.00	-	-	-	-	-	-	-	0.00
Statistical differences	-	-	-0.06	-	-	-	-	-	-	-	-0.06
Electricity plants	-	-	-0.00	-	-6.02	-3.29	-0.11	-0.00	5.38	-	-4.03
CHP plants	-	-	-0.01	-0.10	-0.03	-	-	-1.21	0.30	0.40	-0.64
Heat plants	-	-	-0.00	-0.09	-	-	-	-	-0.00	0.08	-0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	0.02	-	-	-	-0.02	-	-	-0.00
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-2.97	2.91	-	-	-	-	-	-	-	-0.05
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-0.00	-	-	-	-	-	-	-	-0.00
Energy industry own use	-	-	-0.17	-0.00	-	-	-	-	-0.19	-	-0.36
Losses	-	-	-	-0.01	-	-	-	-	-0.39	-0.04	-0.44
<b>TFC</b>	<b>0.13</b>	<b>-</b>	<b>9.04</b>	<b>2.67</b>	<b>-</b>	<b>-</b>	<b>0.40</b>	<b>1.23</b>	<b>5.01</b>	<b>0.44</b>	<b>18.94</b>
<b>INDUSTRY</b>	<b>0.12</b>	<b>-</b>	<b>0.33</b>	<b>0.93</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.46</b>	<b>1.55</b>	<b>0.17</b>	<b>3.58</b>
Iron and steel	0.01	-	0.01	0.08	-	-	-	0.00	0.12	-	0.21
Chemical and petrochemical	-	-	0.03	0.28	-	-	-	0.09	0.27	0.03	0.70
Non-ferrous metals	-	-	0.00	0.04	-	-	-	-	0.04	0.00	0.08
Non-metallic minerals	0.11	-	0.04	0.10	-	-	-	0.11	0.10	-	0.45
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.08	0.10	-	-	-	0.00	0.35	0.01	0.55
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	0.00	-	0.06	0.20	-	-	-	0.00	0.22	0.01	0.49
Paper, pulp and printing	-	-	0.01	0.07	-	-	-	0.05	0.16	0.05	0.34
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.06	0.01	-	-	-	0.07	0.04	0.00	0.19
Textile and leather	-	-	0.01	0.02	-	-	-	0.00	0.02	0.00	0.05
Non-specified	-	-	0.04	0.03	-	-	0.03	0.13	0.22	0.08	0.52
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.37</b>	<b>0.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>0.27</b>	<b>-</b>	<b>5.72</b>
Domestic aviation	-	-	0.06	-	-	-	-	-	-	-	0.06
Road	-	-	5.29	0.01	-	-	-	0.05	-	-	5.35
Rail	-	-	0.01	-	-	-	-	-	0.27	-	0.28
Pipeline transport	-	-	-	0.02	-	-	-	-	-	-	0.02
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>2.86</b>	<b>1.71</b>	<b>-</b>	<b>-</b>	<b>0.37</b>	<b>0.73</b>	<b>3.19</b>	<b>0.27</b>	<b>9.15</b>
Residential	0.01	-	1.89	1.10	-	-	0.32	0.44	1.61	0.18	5.55
Comm. and public services	-	-	0.80	0.60	-	-	0.05	0.27	1.49	0.10	3.32
Agriculture/forestry	-	-	-	0.01	-	-	0.00	0.02	0.08	-	0.11
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.17	-	-	-	-	-	-	-	0.17
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.49</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.49</b>
in industry/transf./energy	-	-	0.45	-	-	-	-	-	-	-	0.45
of which: chem./petrochem.	-	-	0.11	-	-	-	-	-	-	-	0.11
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>0.66</b>	<b>23.09</b>	<b>38.26</b>	<b>1.23</b>	<b>2.81</b>	<b>-</b>	<b>-</b>	<b>66.10</b>
Electricity plants	-	-	0.01	-	23.09	38.26	1.23	0.00	-	-	62.59
CHP plants	-	-	0.03	0.66	-	-	-	2.81	-	-	3.51
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.19</b>	<b>4.03</b>	<b>1.10</b>	<b>-</b>	<b>-</b>	<b>14.98</b>	<b>-</b>	<b>0.09</b>	<b>20.39</b>
CHP plants	-	-	0.07	0.76	1.10	-	-	14.98	-	-	16.91
Heat plants	-	-	0.13	3.26	-	-	-	-	-	0.09	3.48

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Switzerland

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	5.54	2.98	0.56	2.52	-	0.00	11.60
Imports	0.11	3.10	7.88	3.00	-	-	-	0.12	2.93	-	17.14
Exports	-	-0.02	-0.45	-	-	-	-	-0.01	-2.59	-	-3.07
Intl. marine bunkers	-	-	-0.00	-	-	-	-	-	-	-	-0.00
Intl. aviation bunkers	-	-	-1.70	-	-	-	-	-	-	-	-1.70
Stock changes	-	0.01	-0.08	-	-	-	-	-0.00	-	-	-0.07
<b>TPES</b>	<b>0.11</b>	<b>3.10</b>	<b>5.65</b>	<b>3.00</b>	<b>5.54</b>	<b>2.98</b>	<b>0.56</b>	<b>2.62</b>	<b>0.34</b>	<b>0.00</b>	<b>23.90</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.05	0.72	21.15	34.62	1.41	3.06	-	-	61.01
Heat generated - PJ	-	-	0.20	4.20	1.33	-	-	15.61	-	0.10	21.44

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	4.3	7.0	10.3	12.0	12.6	13.3	12.2	11.6
Net imports (Mtoe)	15.1	14.1	15.0	14.1	14.9	13.4	13.6	14.1
Total primary energy supply (Mtoe)	18.9	20.0	24.4	25.0	26.2	25.1	24.5	23.9
Net oil imports (Mtoe)	15.0	13.4	13.2	12.1	11.7	11.0	10.6	10.5
Oil supply (Mtoe)	14.5	12.5	12.3	11.0	10.4	9.4	9.3	8.8
Electricity consumption (TWh) <sup>1</sup>	31.6	37.9	50.0	56.4	64.0	61.6	62.1	62.4
GDP (billion 2010 USD)	336.8	344.4	429.0	483.4	581.2	620.7	625.9	634.0
GDP PPP (billion 2010 USD)	240.0	245.4	305.7	344.5	414.2	442.4	446.1	453.4
Population (millions)	6.44	6.39	6.80	7.25	7.86	8.19	8.28	8.35
Industrial production index (2010=100)	53.0	53.5	65.2	82.4	100.0	108.6	105.9	105.6
Total self-sufficiency <sup>2</sup>	0.23	0.35	0.42	0.48	0.48	0.53	0.50	0.49
Coal self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	-
Oil self-sufficiency <sup>2</sup>	-	-	-	-	0.00	-	-	-
Natural gas self-sufficiency <sup>2</sup>	-	-	0.00	-	-	-	-	-
TPES/GDP (toe per thousand 2010 USD)	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04
TPES/GDP PPP (toe per thousand 2010 USD)	0.08	0.08	0.08	0.07	0.06	0.06	0.06	0.05
TPES/population (toe per capita)	2.94	3.14	3.58	3.45	3.33	3.06	2.96	2.86
Net oil imports/GDP (toe per thousand 2010 USD)	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01
Oil supply/population (toe per capita)	2.24	1.96	1.80	1.52	1.32	1.15	1.13	1.05
Share of renewables in TPES	0.14	0.16	0.15	0.18	0.19	0.21	0.22	0.22
Share of renewables in electricity generation	0.76	0.69	0.55	0.57	0.57	0.58	0.62	0.62
TFC/GDP (toe per thousand 2010 USD)	0.05	0.05	0.04	0.04	0.04	0.03	0.03	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.07	0.06	0.06	0.05	0.04	0.04	..
TFC/population (toe per capita)	2.59	2.60	2.70	2.67	2.65	2.28	2.29	..
Elect. cons./GDP (kWh per 2010 USD)	0.09	0.11	0.12	0.12	0.11	0.10	0.10	0.10
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.13	0.15	0.16	0.16	0.15	0.14	0.14	0.14
Elect. cons./population (kWh per capita)	4906	5931	7357	7776	8142	7520	7499	7472
Industry cons. <sup>3</sup> /industrial production (2010=100)	202.4	190.6	139.6	119.2	100.0	85.2	87.2	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	640.2	475.2	215.4	148.7	100.0	67.6	69.5	..

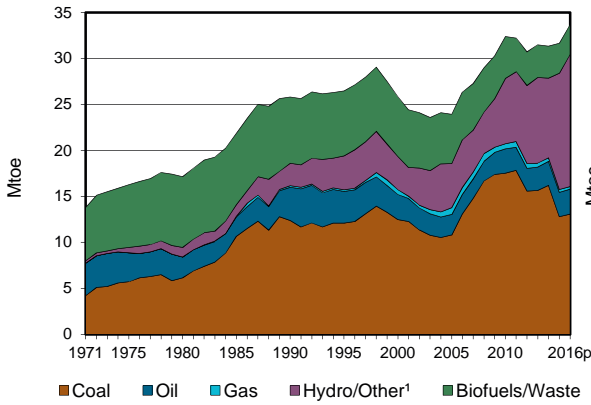
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

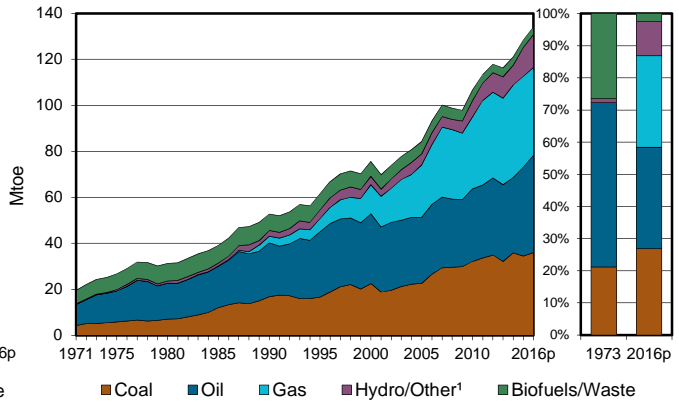
3. Includes non-energy use.

## Turkey

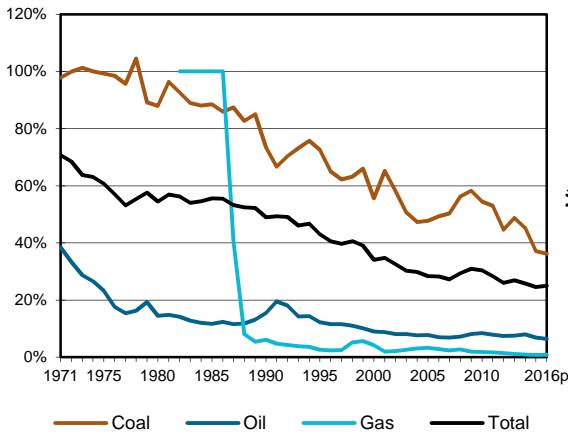
**Figure 1. Energy production**



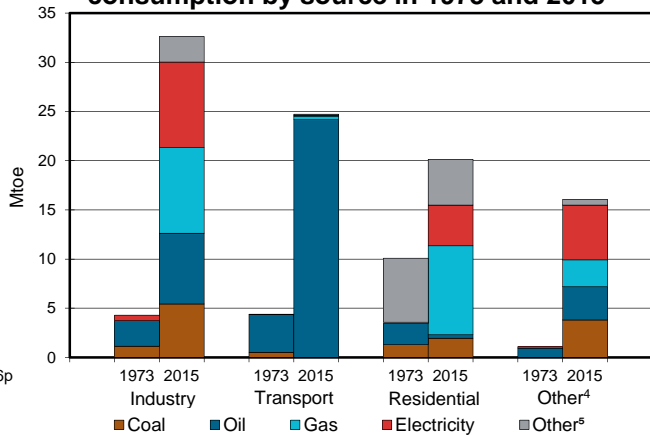
**Figure 2. Total primary energy supply<sup>2</sup>**



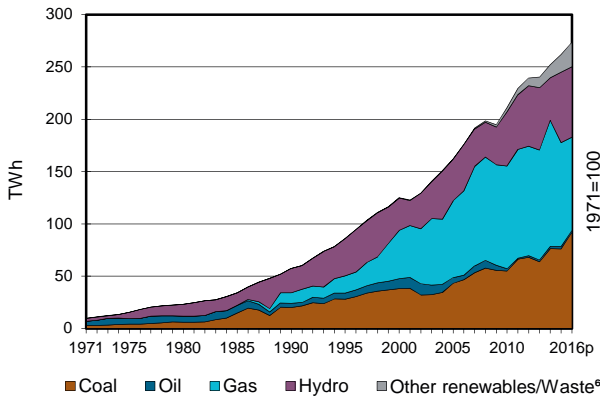
**Figure 3. Energy self-sufficiency**



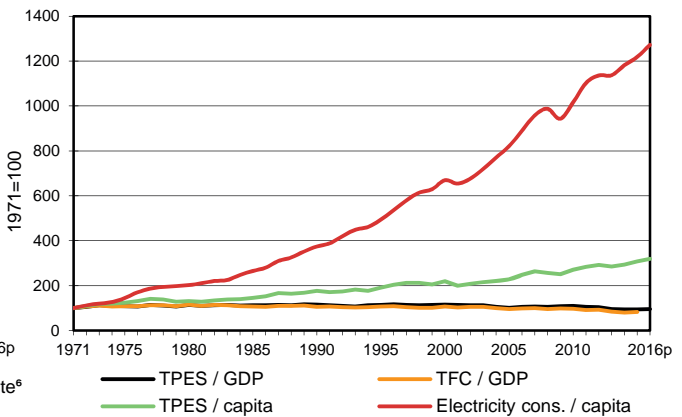
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Turkey

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	12.80	2.66	-	0.31	-	5.77	6.83	3.28	-	-	31.65
Imports	22.03	26.61	23.08	39.86	-	-	-	-	0.61	-	112.20
Exports	-0.17	-0.42	-7.20	-0.51	-	-	-	-	-0.27	-	-8.58
Intl. marine bunkers	-	-	-0.84	-	-	-	-	-	-	-	-0.84
Intl. aviation bunkers	-	-	-3.56	-	-	-	-	-	-	-	-3.56
Stock changes	-0.15	-1.04	-0.58	-0.29	-	-	-	-	-	-	-2.07
<b>TPES</b>	<b>34.51</b>	<b>27.80</b>	<b>10.91</b>	<b>39.37</b>	-	<b>5.77</b>	<b>6.83</b>	<b>3.28</b>	<b>0.34</b>	-	<b>128.81</b>
Transfers	-	1.69	-1.65	-	-	-	-	-	-	-	0.04
Statistical differences	-1.08	-0.59	0.26	0.19	-	-	-	-	-	-	-1.22
Electricity plants	-17.76	-	-0.36	-14.67	-	-5.77	-4.00	-0.20	21.80	-	-20.96
CHP plants	-0.84	-	-0.31	-2.33	-	-	-	-0.17	0.71	2.31	-0.63
Heat plants	-	-	-	-	-	-	-0.12	-	-	0.12	-
Blast furnaces	-2.03 e	-	-	-	-	-	-	-	-	-	-2.03
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.63	-	-	-	-	-	-	-	-	-	-0.63
Oil refineries	-	-30.93	29.67	-	-	-	-	-	-	-	-1.26
Petrochemical plants	-	1.61	-1.67	-	-	-	-	-	-	-	-0.06
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.42	-	-0.34	-	-	-	-	-	-0.12	-0.04
Energy industry own use	-0.96	-	-1.78	-1.37	-	-	-	-	-1.24	-	-5.35
Losses	-	-	-	-0.00	-	-	-	-	-3.14	-	-3.14
<b>TFC</b>	<b>11.21</b>	-	<b>35.08</b>	<b>20.84</b>	-	-	<b>2.72</b>	<b>2.91</b>	<b>18.47</b>	<b>2.31</b>	<b>93.54</b>
<b>INDUSTRY</b>	<b>5.44</b>	-	<b>0.99</b>	<b>8.44</b>	-	-	<b>0.28</b>	-	<b>8.69</b>	<b>2.31</b>	<b>26.16</b>
Iron and steel	0.84 e	-	0.05	1.14	-	-	-	-	1.78	-	3.81
Chemical and petrochemical	0.39	-	0.13	1.77	-	-	-	-	0.41	-	2.70
Non-ferrous metals	0.01	-	0.01	0.44	-	-	-	-	0.26	-	0.71
Non-metallic minerals	2.80	-	0.04	1.55	-	-	-	-	1.13	-	5.53
Transport equipment	0.00	-	0.03	0.15	-	-	-	-	-	-	0.18
Machinery	0.04	-	0.01	0.17	-	-	-	-	0.55	-	0.76
Mining and quarrying	0.05	-	0.38	0.11	-	-	-	-	0.12	-	0.66
Food and tobacco	0.50	-	0.06	0.81	-	-	-	-	0.61	-	1.99
Paper, pulp and printing	0.11	-	0.01	0.18	-	-	-	-	0.28	-	0.59
Wood and wood products	0.02	-	0.02	0.17	-	-	-	-	0.25	-	0.45
Construction	0.00	-	0.15	0.30	-	-	-	-	0.25	-	0.69
Textile and leather	0.68	-	0.02	0.99	-	-	-	-	1.33	-	3.02
Non-specified	0.00	-	0.08	0.68	-	-	0.28	-	1.72	2.31	5.07
<b>TRANSPORT</b>	-	-	<b>23.78</b>	<b>0.35</b>	-	-	-	<b>0.11</b>	<b>0.09</b>	-	<b>24.33</b>
Domestic aviation	-	-	1.22	-	-	-	-	-	-	-	1.22
Road	-	-	22.15	0.07	-	-	-	0.11	-	-	22.33
Rail	-	-	0.14	-	-	-	-	-	0.07	-	0.21
Pipeline transport	-	-	-	0.28	-	-	-	-	0.02	-	0.30
Domestic navigation	-	-	0.28	-	-	-	-	-	-	-	0.28
Non-specified	-	-	-	0.00	-	-	-	-	-	-	0.00
<b>OTHER</b>	<b>5.77</b>	-	<b>3.73</b>	<b>11.77</b>	-	-	<b>2.43</b>	<b>2.80</b>	<b>9.69</b>	-	<b>36.20</b>
Residential	1.97	-	0.34	9.05	-	-	1.85	2.80	4.12	-	20.13
Comm. and public services	3.80	-	0.63	2.60	-	-	-	-	5.15	-	12.19
Agriculture/forestry	-	-	2.69	0.06	-	-	0.58	-	0.41	-	3.75
Fishing	-	-	0.08	0.05	-	-	-	-	0.01	-	0.14
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>6.57</b>	<b>0.28</b>	-	-	-	-	-	-	<b>6.85</b>
in industry/transf./energy	-	-	6.18	0.28	-	-	-	-	-	-	6.46
of which: chem./petrochem.	-	-	0.67	0.28	-	-	-	-	-	-	0.96
in transport	-	-	0.39	-	-	-	-	-	-	-	0.39
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>76.17</b>	-	<b>2.22</b>	<b>99.22</b>	-	<b>67.15</b>	<b>15.68</b>	<b>1.35</b>	-	-	<b>261.78</b>
Electricity plants	75.43	-	1.80	92.58	-	67.15	15.68	0.85	-	-	253.48
CHP plants	0.74	-	0.42	6.64	-	-	-	0.50	-	-	8.30
<b>Heat generated - PJ</b>	<b>24.40</b>	-	<b>10.51</b>	<b>58.31</b>	-	-	<b>4.85</b>	<b>3.60</b>	-	-	<b>101.66</b>
CHP plants	24.40	-	10.51	58.31	-	-	-	3.60	-	-	96.81
Heat plants	-	-	-	-	-	-	4.85	-	-	-	4.85

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Turkey

## Provisional energy supply for 2016

SUPPLY	Million tonnes of oil equivalent										Total
	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	
Production	13.06	2.72	-	0.30	-	5.79	8.56	3.25	-	-	33.67
Imports	23.39	26.50	24.45	38.14	-	-	-	-	0.55	-	113.04
Exports	-0.16	-0.66	-5.77	-0.56	-	-	-	-	-0.12	-	-7.27
Intl. marine bunkers	-	-	-0.84	-	-	-	-	-	-	-	-0.84
Intl. aviation bunkers	-	-	-3.54	-	-	-	-	-	-	-	-3.54
Stock changes	-0.26	-0.24	-0.35	0.35	-	-	-	-	-	-	-0.50
<b>TPES</b>	<b>36.04</b>	<b>28.32</b>	<b>13.96</b>	<b>38.24</b>	<b>-</b>	<b>5.79</b>	<b>8.56</b>	<b>3.25</b>	<b>0.43</b>	<b>-</b>	<b>134.57</b>
Electricity and Heat Output											
Elec. generated - TWh	91.84	-	1.92	88.97	-	67.27	21.82	1.57	-	-	273.39
Heat generated - PJ	2.60	-	3.02	33.50	-	-	10.97	3.86	-	-	53.94

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	15.5	17.1	25.8	25.9	32.4	31.4	31.7	33.7
Net imports (Mtoe)	8.9	14.4	28.1	50.9	75.1	93.7	103.6	105.8
Total primary energy supply (Mtoe)	24.4	31.5	52.7	75.9	106.7	121.5	128.8	134.6
Net oil imports (Mtoe)	8.8	13.7	21.2	29.3	30.6	33.9	42.1	44.5
Oil supply (Mtoe)	12.5	15.6	23.4	30.4	31.5	32.8	38.7	42.3
Electricity consumption (TWh) <sup>1</sup>	11.1	21.8	50.1	104.5	180.2	219.9	229.2	241.8
GDP (billion 2010 USD)	172.2	219.0	364.0	520.9	771.9	1025.4	1087.6	1118.8
GDP PPP (billion 2010 USD)	281.7	358.3	595.4	852.3	1262.8	1677.6	1779.2	1831.4
Population (millions)	38.07	44.44	55.12	64.25	73.00	76.62	77.45	78.25
Industrial production index (2010=100)	..	..	48.3	68.5	100.0	120.5	124.3	126.6
Total self-sufficiency <sup>2</sup>	0.64	0.54	0.49	0.34	0.30	0.26	0.25	0.25
Coal self-sufficiency <sup>2</sup>	1.01	0.88	0.73	0.56	0.54	0.45	0.37	0.36
Oil self-sufficiency <sup>2</sup>	0.29	0.15	0.15	0.09	0.08	0.08	0.07	0.06
Natural gas self-sufficiency <sup>2</sup>	-	-	0.06	0.04	0.02	0.01	0.01	0.01
TPES/GDP (toe per thousand 2010 USD)	0.14	0.14	0.14	0.15	0.14	0.12	0.12	0.12
TPES/GDP PPP (toe per thousand 2010 USD)	0.09	0.09	0.09	0.09	0.08	0.07	0.07	0.07
TPES/population (toe per capita)	0.64	0.71	0.96	1.18	1.46	1.59	1.66	1.72
Net oil imports/GDP (toe per thousand 2010 USD)	0.05	0.06	0.06	0.06	0.04	0.03	0.04	0.04
Oil supply/GDP (toe per thousand 2010 USD)	0.07	0.07	0.06	0.06	0.04	0.03	0.04	0.04
Oil supply/population (toe per capita)	0.33	0.35	0.42	0.47	0.43	0.43	0.50	0.54
Share of renewables in TPES	0.28	0.28	0.18	0.13	0.11	0.10	0.12	0.13
Share of renewables in electricity generation	0.23	0.49	0.40	0.25	0.26	0.21	0.32	0.33
TFC/GDP (toe per thousand 2010 USD)	0.12	0.12	0.11	0.11	0.10	0.08	0.09	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.07	0.07	0.07	0.06	0.05	0.05	..
TFC/population (toe per capita)	0.52	0.59	0.73	0.90	1.07	1.12	1.21	..
Elect. cons./GDP (kWh per 2010 USD)	0.06	0.10	0.14	0.20	0.23	0.21	0.21	0.22
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.04	0.06	0.08	0.12	0.14	0.13	0.13	0.13
Elect. cons./population (kWh per capita)	293	490	910	1627	2469	2870	2959	3090
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	96.5	114.6	100.0	85.1	89.4	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	168.5	156.3	100.0	60.2	77.6	..

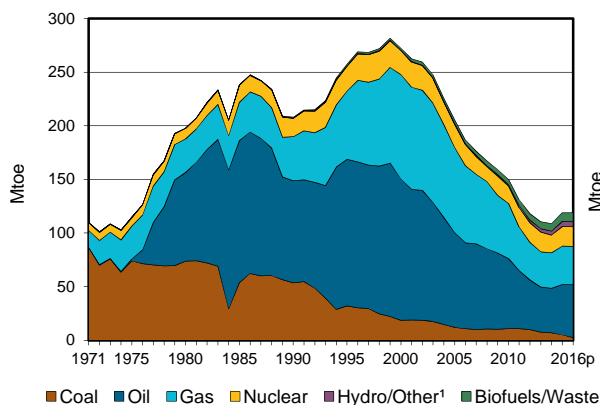
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

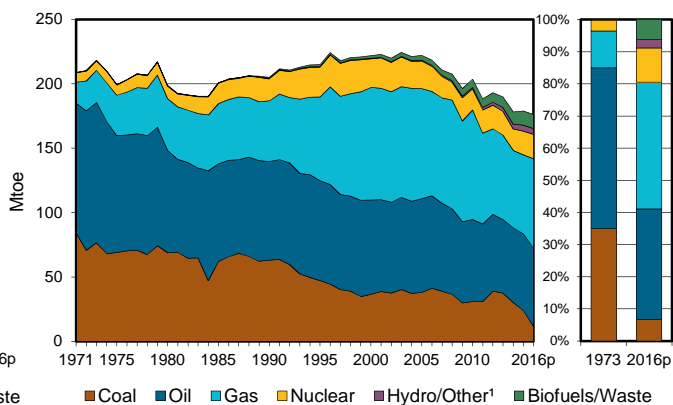
3. Includes non-energy use.

## United Kingdom

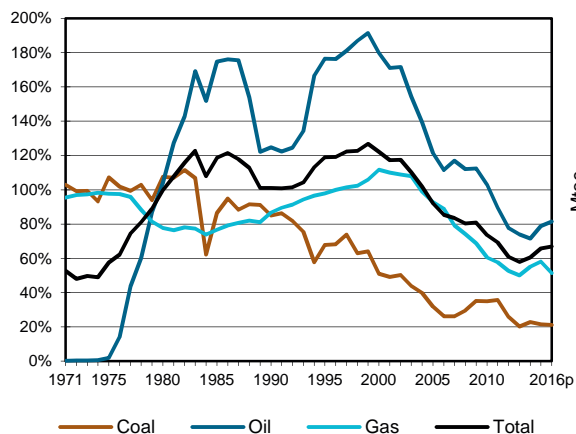
**Figure 1. Energy production**



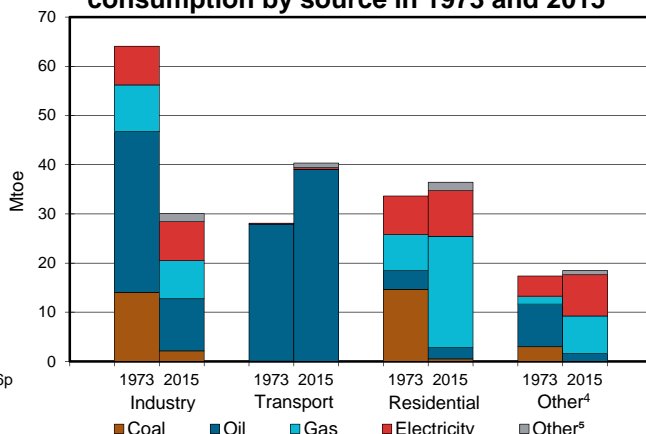
**Figure 2. Total primary energy supply<sup>2</sup>**



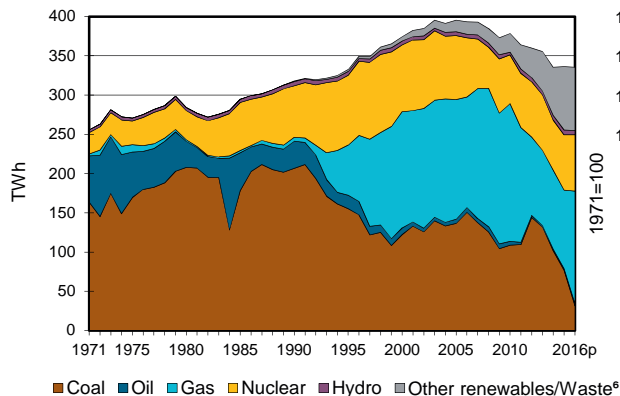
**Figure 3. Energy self-sufficiency**



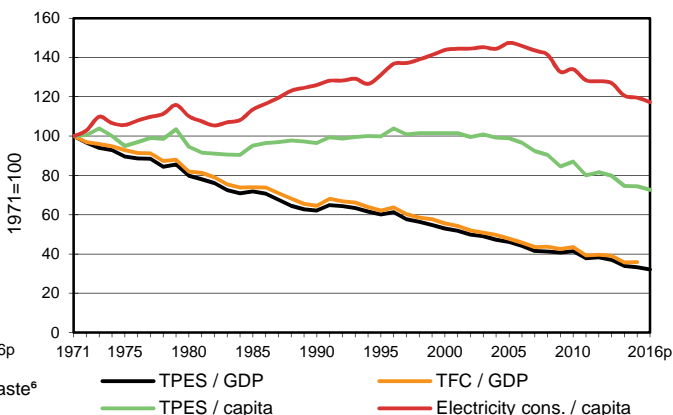
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## United Kingdom

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	5.11	47.03	-	35.65	18.33	0.54	4.17	8.17	-	-	119.00
Imports	15.96	52.32	32.24	37.61	-	-	-	3.21	1.95	-	143.30
Exports	-0.35	-34.93	-23.22	-12.02	-	-	-	-0.31	-0.15	-	-70.99
Intl. marine bunkers	-	-	-2.42	-	-	-	-	-	-	-	-2.42
Intl. aviation bunkers	-	-	-10.87	-	-	-	-	-	-	-	-10.87
Stock changes	3.14	0.21	-0.65	0.02	-	-	-	0.01	-	-	2.73
<b>TPES</b>	<b>23.86</b>	<b>64.63</b>	<b>-4.91</b>	<b>61.26</b>	<b>18.33</b>	<b>0.54</b>	<b>4.17</b>	<b>11.07</b>	<b>1.80</b>	-	<b>180.75</b>
Transfers	-	-1.29	1.41	-	-	-	-	-	-	-	0.12
Statistical differences	-0.75	0.14	-0.36	0.11	-	-	-	-0.00	-0.00	-	-0.85
Electricity plants	-17.39	-	-0.22	-14.10	-18.33	-0.54	-4.12	-6.63	27.27	-	-34.06
CHP plants	-0.03	-	-0.37	-2.38	-	-	-	-0.53	1.66	-	-1.66
Heat plants	-0.17	-	-0.06	-1.97	-	-	-	-0.05	-	1.42	-0.83
Blast furnaces	-1.82 e	-	-	-	-	-	-	-	-	-	-1.82
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-0.10	-	-0.06	-0.03	-	-	-	-	-	-	-0.20
Oil refineries	-	-63.90	62.45	-	-	-	-	-	-	-	-1.45
Petrochemical plants	-	0.41	-0.46	-	-	-	-	-	-	-	-0.05
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	0.03	-	-	-	-	-	-	-	-	-	0.03
Energy industry own use	-0.68	-	-3.88	-4.46	-	-	-	-	-2.18	-0.27	-11.47
Losses	-0.22	-	-	-0.50	-	-	-	-	-2.51	-	-3.23
<b>TFC</b>	<b>2.72</b>	-	<b>53.54</b>	<b>37.93</b>	-	-	<b>0.05</b>	<b>3.85</b>	<b>26.05</b>	<b>1.15</b>	<b>125.29</b>
<b>INDUSTRY</b>	<b>2.05</b>	-	<b>3.67</b>	<b>7.31</b>	-	-	-	<b>0.93</b>	<b>7.95</b>	<b>0.69</b>	<b>22.60</b>
Iron and steel	0.79 e	-	0.01	0.42	-	-	-	-	0.32	-	1.53
Chemical and petrochemical	0.05	-	0.11	1.17	-	-	-	-	1.34	0.26	2.93
Non-ferrous metals	0.01	-	-	0.15	-	-	-	-	0.38	-	0.54
Non-metallic minerals	0.64	-	0.17	1.22	-	-	-	-	0.52	-	2.55
Transport equipment	0.04	-	0.19	0.36	-	-	-	-	0.41	-	1.00
Machinery	0.01	-	-	0.64	-	-	-	-	1.06	-	1.70
Mining and quarrying	-	-	-	-	-	-	-	-	0.01	-	0.01
Food and tobacco	0.03	-	0.10	1.59	-	-	-	-	0.92	-	2.64
Paper, pulp and printing	0.08	-	0.03	0.61	-	-	-	-	0.91	-	1.62
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0.00	-	0.16	0.32	-	-	-	-	0.12	-	0.61
Textile and leather	0.04	-	0.04	0.39	-	-	-	-	0.23	-	0.71
Non-specified	0.35	-	2.86	0.44	-	-	-	0.93	1.73	0.43	6.76
<b>TRANSPORT</b>	<b>0.01</b>	-	<b>38.92</b>	-	-	-	-	<b>0.93</b>	<b>0.38</b>	-	<b>40.25</b>
Domestic aviation	-	-	0.82	-	-	-	-	-	-	-	0.82
Road	-	-	36.86	-	-	-	-	0.93	0.01	-	37.80
Rail	0.01	-	0.62	-	-	-	-	-	0.38	-	1.01
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.62	-	-	-	-	-	-	-	0.62
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.57</b>	-	<b>3.82</b>	<b>30.22</b>	-	-	<b>0.05</b>	<b>1.99</b>	<b>17.71</b>	<b>0.46</b>	<b>54.81</b>
Residential	0.55	-	2.29	22.62	-	-	-	1.61	9.30	0.05	36.43
Comm. and public services	0.01	-	0.94	6.74	-	-	0.00	0.12	8.06	0.41	16.27
Agriculture/forestry	-	-	0.34	0.07	-	-	-	0.26	0.35	-	1.02
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.01	-	0.25	0.78	-	-	0.05	-	-	-	1.09
<b>NON-ENERGY USE</b>	<b>0.09</b>	-	<b>7.13</b>	<b>0.41</b>	-	-	-	-	-	-	<b>7.63</b>
in industry/transf./energy	0.09	-	6.96	0.41	-	-	-	-	-	-	7.46
of which: chem./petrochem.	-	-	4.65	0.41	-	-	-	-	-	-	5.06
in transport	-	-	0.09	-	-	-	-	-	-	-	0.09
in other	-	-	0.09	-	-	-	-	-	-	-	0.09
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>76.71</b>	-	<b>2.13</b>	<b>100.03</b>	<b>70.35</b>	<b>6.29</b>	<b>47.87</b>	<b>32.97</b>	-	-	<b>336.36</b>
Electricity plants	76.57	-	0.76	84.46	70.35	6.29	47.87	30.81	-	-	317.10
CHP plants	0.14	-	1.38	15.57	-	-	-	2.16	-	-	19.26
<b>Heat generated - PJ</b>	<b>4.58</b>	-	<b>1.56</b>	<b>51.97</b>	-	-	-	<b>1.45</b>	-	-	<b>59.55</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	4.58	-	1.56	51.97	-	-	-	1.45	-	-	59.55

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## United Kingdom

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	2.49	49.27	-	35.77	18.69	0.46	4.16	8.00	-	-	118.84
Imports	6.22	50.58	35.23	41.14	-	-	-	3.23	1.69	-	138.09
Exports	-0.33	-36.37	-24.70	-8.84	-	-	-	-0.31	-0.19	-	-70.75
Intl. marine bunkers	-	-	-2.49	-	-	-	-	-	-	-	-2.49
Intl. aviation bunkers	-	-	-11.11	-	-	-	-	-	-	-	-11.11
Stock changes	3.42	-0.05	0.19	1.51	-	-	-	0.03	-	-	5.10
<b>TPES</b>	<b>11.80</b>	<b>63.43</b>	<b>-2.89</b>	<b>69.58</b>	<b>18.69</b>	<b>0.46</b>	<b>4.16</b>	<b>10.94</b>	<b>1.51</b>	<b>-</b>	<b>177.68</b>
Electricity and Heat Output											
Elec. generated - TWh	31.48	-	2.80	143.42	71.73	5.37	47.80	33.03	-	-	335.63
Heat generated - PJ	4.58	-	1.56	51.97	-	-	-	1.45	-	-	59.55

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016 <sup>p</sup>
Energy production (Mtoe)	108.5	197.9	208.0	272.5	150.1	108.9	119.0	118.8
Net imports (Mtoe)	115.8	12.3	4.7	-40.4	60.9	87.8	72.3	67.3
Total primary energy supply (Mtoe)	218.1	198.4	205.9	223.0	203.8	179.9	180.8	177.7
Net oil imports (Mtoe)	116.0	1.9	-11.0	-46.7	10.9	30.0	26.4	24.7
Oil supply (Mtoe)	108.9	79.3	76.4	73.2	63.7	58.0	59.7	60.5
Electricity consumption (TWh) <sup>1</sup>	262.5	263.8	306.7	360.1	357.7	331.3	330.9	327.0
GDP (billion 2010 USD)	1144.1	1227.4	1638.9	2076.0	2429.7	2624.7	2682.3	2730.7
GDP PPP (billion 2010 USD)	1056.4	1133.3	1513.2	1916.8	2243.3	2423.4	2476.5	2521.9
Population (millions)	56.22	56.33	57.24	58.89	62.76	64.60	65.11	65.57
Industrial production index (2010=100)	82.6	81.3	97.0	111.9	100.0	97.5	98.7	99.8
Total self-sufficiency <sup>2</sup>	0.50	1.00	1.01	1.22	0.74	0.61	0.66	0.67
Coal self-sufficiency <sup>2</sup>	0.99	1.08	0.85	0.51	0.35	0.23	0.21	0.21
Oil self-sufficiency <sup>2</sup>	0.01	1.04	1.25	1.80	1.03	0.72	0.79	0.81
Natural gas self-sufficiency <sup>2</sup>	0.97	0.78	0.87	1.12	0.61	0.55	0.58	0.51
TPES/GDP (toe per thousand 2010 USD)	0.19	0.16	0.13	0.11	0.08	0.07	0.07	0.07
TPES/GDP PPP (toe per thousand 2010 USD)	0.21	0.18	0.14	0.12	0.09	0.07	0.07	0.07
TPES/population (toe per capita)	3.88	3.52	3.60	3.79	3.25	2.78	2.78	2.71
Net oil imports/GDP (toe per thousand 2010 USD)	0.10	0.00	-0.01	-0.02	0.00	0.01	0.01	0.01
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.06	0.05	0.04	0.03	0.02	0.02	0.02
Oil supply/population (toe per capita)	1.94	1.41	1.33	1.24	1.01	0.90	0.92	0.92
Share of renewables in TPES	0.00	0.00	0.01	0.01	0.04	0.07	0.08	0.08
Share of renewables in electricity generation	0.01	0.01	0.02	0.03	0.07	0.19	0.25	0.25
TFC/GDP (toe per thousand 2010 USD)	0.13	0.11	0.08	0.07	0.06	0.05	0.05	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.14	0.12	0.09	0.08	0.06	0.05	0.05	..
TFC/population (toe per capita)	2.55	2.33	2.41	2.56	2.20	1.90	1.92	..
Elect. cons./GDP (kWh per 2010 USD)	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.12
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.25	0.23	0.20	0.19	0.16	0.14	0.13	0.13
Elect. cons./population (kWh per capita)	4669	4683	5358	6115	5699	5128	5082	4987
Industry cons. <sup>3</sup> /industrial production (2010=100)	237.0	172.7	134.2	123.0	100.0	91.5	93.0	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	331.1	193.7	131.1	118.6	100.0	82.7	89.9	..

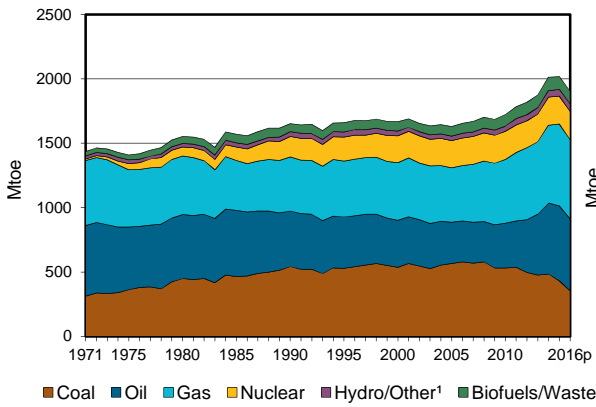
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

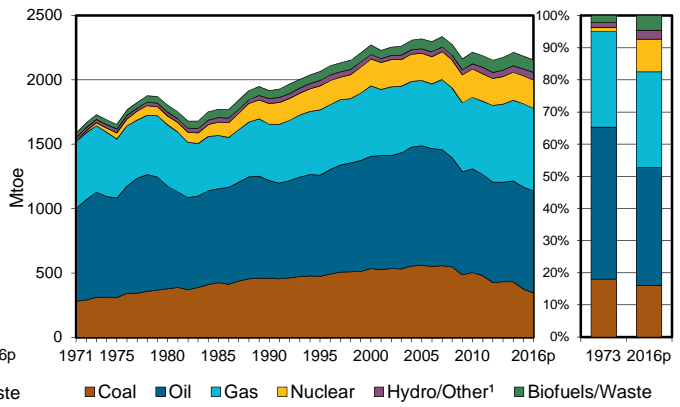
3. Includes non-energy use.

## United States

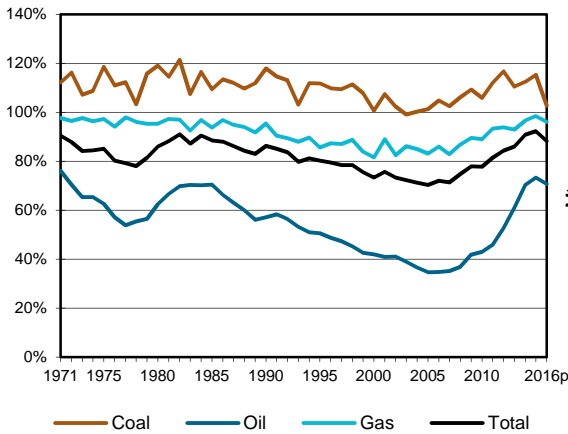
**Figure 1. Energy production**



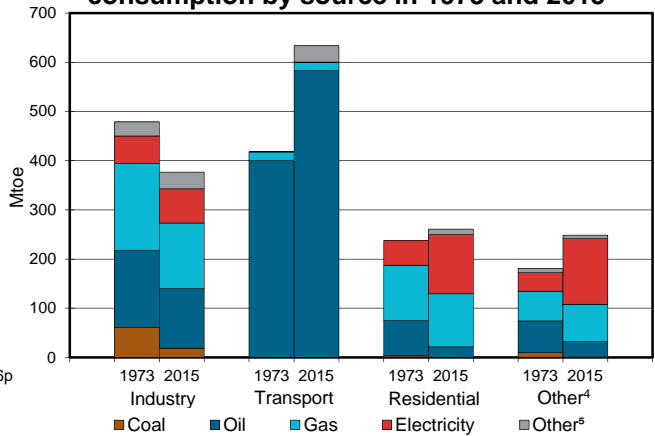
**Figure 2. Total primary energy supply<sup>2</sup>**



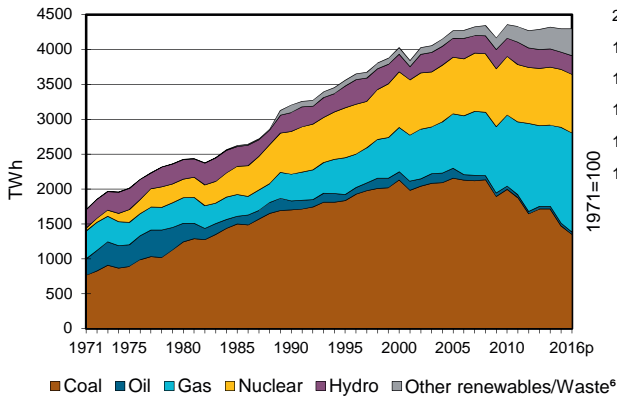
**Figure 3. Energy self-sufficiency**



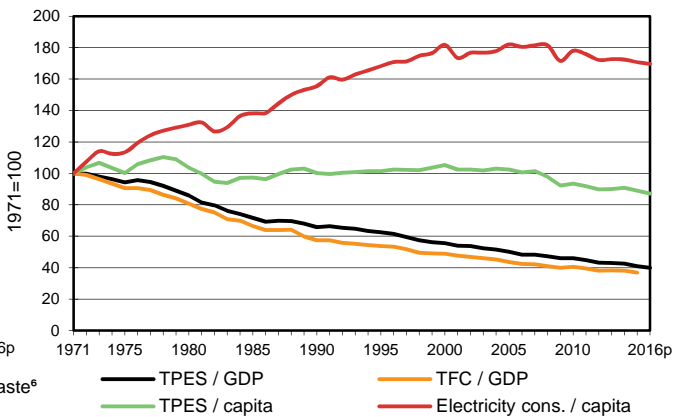
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## United States

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	431.28	582.08	-	636.49	216.38	21.59	31.36 e	99.36	-	-	2018.53
Imports	6.05	407.35	75.54	62.88	-	-	-	2.29	6.52	-	560.62
Exports	-43.97	-43.85	-171.66	-40.43	-	-	-	-2.20	-0.78	-	-302.88
Intl. marine bunkers	-	-	-12.94	-	-	-	-	-0.17	-	-	-13.11
Intl. aviation bunkers	-	-	-23.58	-	-	-	-	-	-	-	-23.58
Stock changes	-19.24	-12.05	-6.94	-12.55	-	-	-	-0.52	-	-	-51.30
<b>TPES</b>	<b>374.12</b>	<b>933.53</b>	<b>-139.58</b>	<b>646.39</b>	<b>216.38</b>	<b>21.59</b>	<b>31.36 e</b>	<b>98.76</b>	<b>5.73</b>	-	<b>2188.28</b>
Transfers	-	-89.08	91.08	-	-	-	-	-	-	-	2.01
Statistical differences	-2.67	-0.98	3.45	-10.53	-	-	-	-0.02	-	-	-10.75
Electricity plants	-332.59	-	-6.19	-198.94	-216.38	-21.59	-28.80 e	-14.78	342.10	-	-477.16
CHP plants	-8.20	-	-2.71	-42.80	-	-	-	-7.44	27.44	9.99	-23.72
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-4.11 e	-	-	-	-	-	-	-	-	-	-4.11
Gas works	-1.99	-	-	1.08	-	-	-	-	-	-	-0.92
Coke/pat. fuel/BKB/PB plants	-3.72	-	-	-	-	-	-	-	-	-	-3.72
Oil refineries	-	-844.08	841.94	-	-	-	-	-	-	-	-2.13
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	4.81	-	-4.25	-	-	-	-	-	-	0.56
Energy industry own use	-1.32	-	-34.32	-57.78	-	-	-	-0.10	-28.17	-3.33 e	-125.02
Losses	-	-	-	-	-	-	-	-	-21.96	-1.20 e	-23.16
<b>TFC</b>	<b>19.51</b>	<b>4.21</b>	<b>753.68</b>	<b>333.16</b>	-	-	<b>2.56</b>	<b>76.42</b>	<b>325.15</b>	<b>5.46</b>	<b>1520.14</b>
<b>INDUSTRY</b>	<b>18.84</b>	-	<b>21.54</b>	<b>117.87</b>	-	-	-	<b>29.67</b>	<b>69.34</b>	<b>4.31</b>	<b>261.58</b>
Iron and steel	2.91 e	-	0.25	8.57	-	-	-	0.00	4.14	0.16 e	16.03
Chemical and petrochemical	3.20	-	3.14	39.09	-	-	-	0.22	9.81	2.64 e	58.10
Non-ferrous metals	-	-	0.04	3.84	-	-	-	-	6.28	0.08 e	10.25
Non-metallic minerals	5.69	-	1.30	7.96	-	-	-	0.44	3.08	0.00 e	18.47
Transport equipment	0.01	-	0.25	4.24	-	-	-	0.00	4.20	0.10 e	8.81
Machinery	0.08	-	1.03	8.85	-	-	-	0.01	8.70	0.08 e	18.75
Mining and quarrying	-	-	2.91	2.47	-	-	-	0.04	3.37	-	8.79
Food and tobacco	3.21	-	0.55	16.43	-	-	-	0.61	6.66	0.48 e	27.94
Paper, pulp and printing	2.29	-	0.57	9.62	-	-	-	26.72	6.08	0.40 e	45.68
Wood and wood products	0.01	-	0.59	1.13	-	-	-	1.32	1.49	0.22 e	4.76
Construction	-	-	8.22	0.37	-	-	-	0.10	5.23	-	13.92
Textile and leather	0.06	-	-	1.04	-	-	-	-	1.56	0.13 e	2.80
Non-specified	1.37	-	2.68	14.28	-	-	-	0.21	8.73	0.02 e	27.28
<b>TRANSPORT</b>	-	-	<b>578.53</b>	<b>16.59</b>	-	-	-	<b>33.11</b>	<b>0.76</b>	-	<b>628.99</b>
Domestic aviation	-	-	52.98	-	-	-	-	-	-	-	52.98
Road	-	-	504.75	0.93	-	-	-	32.88	0.18	-	538.73
Rail	-	-	11.89	-	-	-	-	0.18	0.59	-	12.65
Pipeline transport	-	-	-	15.66	-	-	-	-	-	-	15.66
Domestic navigation	-	-	8.90	-	-	-	-	0.05	-	-	8.96
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.67</b>	-	<b>49.89</b>	<b>183.32</b>	-	-	<b>2.56</b>	<b>13.64</b>	<b>255.05</b>	<b>1.15</b>	<b>506.28</b>
Residential	-	-	21.20	108.39	-	-	0.49	10.55	120.54	-	261.17
Comm. and public services	0.67	-	12.38	73.49	-	-	2.07	1.97	116.92	1.15 e	208.64
Agriculture/forestry	-	-	16.31	1.45	-	-	-	1.11	3.28	-	22.15
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	14.32 e	-	14.32
<b>NON-ENERGY USE</b>	-	<b>4.21</b>	<b>103.72</b>	<b>15.37</b>	-	-	-	-	-	-	<b>123.30</b>
in industry/transf./energy	-	4.21	95.55	15.37	-	-	-	-	-	-	115.12
of which: chem./petrochem.	-	4.21	63.40	15.37	-	-	-	-	-	-	82.98
in transport	-	-	4.72	-	-	-	-	-	-	-	4.72
in other	-	-	3.46	-	-	-	-	-	-	-	3.46
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1471.00</b>	-	<b>38.84</b>	<b>1372.57</b>	<b>830.29</b>	<b>251.02</b>	<b>252.87 e</b>	<b>80.47</b>	-	-	<b>4297.05</b>
Electricity plants	1434.67	-	25.54	1145.02	830.29	251.02	249.00 e	42.42	-	-	3977.96
CHP plants	36.32	-	13.29	227.55	-	-	3.87	38.05	-	-	319.09
<b>Heat generated - PJ</b>	<b>40.17</b>	-	<b>25.44</b>	<b>308.74</b>	-	-	-	<b>43.84</b>	-	-	<b>418.19</b>
CHP plants	40.17	-	25.44	308.74	-	-	-	43.84	-	-	418.19
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## United States

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	354.98	559.01	-	616.14	218.79	23.03	36.63	96.95	-	-	1905.53
Imports	5.26	436.60	77.32	69.39	-	-	-	3.42	6.94	-	598.93
Exports	-36.28	-46.95	-187.92	-52.98	-	-	-	-2.73	-0.83	-	-327.69
Intl. marine bunkers	-	-	-18.67	-	-	-	-	-	-	-	-18.67
Intl. aviation bunkers	-	-	-24.44	-	-	-	-	-	-	-	-24.44
Stock changes	21.48	-4.38	0.11	8.60	-	-	-	-0.48	-	-	25.34
<b>TPES</b>	<b>345.44</b>	<b>944.28</b>	<b>-153.59</b>	<b>641.16</b>	<b>218.79</b>	<b>23.03</b>	<b>36.63</b>	<b>97.15</b>	<b>6.10</b>	<b>-</b>	<b>2158.99</b>
Electricity and Heat Output											
Elec. generated - TWh	1349.99	-	34.05	1419.38	839.53	267.81	309.59	76.93	-	-	4297.28
Heat generated - PJ	33.37	-	22.25	309.97	-	-	-	44.94	-	-	410.53

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	1456.2	1553.3	1652.5	1667.3	1723.2	2013.0	2018.5	1905.5
Net imports (Mtoe)	296.4	307.0	341.9	606.4	533.4	258.1	257.7	271.2
Total primary energy supply (Mtoe)	1729.9	1804.7	1915.1	2273.3	2215.2	2216.8	2188.3	2159.0
Net oil imports (Mtoe)	303.4	340.1	374.4	549.5	508.2	277.7	267.4	279.1
Oil supply (Mtoe)	817.5	796.9	756.8	871.2	805.6	782.3	794.0	790.7
Electricity consumption (TWh) <sup>1</sup>	1816.7	2241.0	2923.9	3857.5 e	4143.4	4137.1	4128.5	4135.4
GDP (billion 2010 USD)	5490.3	6529.2	9064.4	12713.1	14964.4	16177.5	16597.5	16865.6
GDP PPP (billion 2010 USD)	5490.3	6529.2	9064.4	12713.1	14964.4	16177.5	16597.5	16851.8
Population (millions)	211.94	227.73	250.18	282.40	309.81	319.23	321.70	324.24
Industrial production index (2010=100)	49.3	55.0	68.3	101.7	100.0	111.0	111.3	110.3
Total self-sufficiency <sup>2</sup>	0.84	0.86	0.86	0.73	0.78	0.91	0.92	0.88
Coal self-sufficiency <sup>2</sup>	1.07	1.19	1.18	1.01	1.06	1.12	1.15	1.03
Oil self-sufficiency <sup>2</sup>	0.65	0.63	0.57	0.42	0.43	0.70	0.73	0.71
Natural gas self-sufficiency <sup>2</sup>	0.98	0.95	0.95	0.82	0.89	0.97	0.98	0.96
TPES/GDP (toe per thousand 2010 USD)	0.32	0.28	0.21	0.18	0.15	0.14	0.13	0.13
TPES/GDP PPP (toe per thousand 2010 USD)	0.32	0.28	0.21	0.18	0.15	0.14	0.13	0.13
TPES/population (toe per capita)	8.16	7.92	7.65	8.05	7.15	6.94	6.80	6.66
Net oil imports/GDP (toe per thousand 2010 USD)	0.06	0.05	0.04	0.04	0.03	0.02	0.02	0.02
Oil supply/GDP (toe per thousand 2010 USD)	0.15	0.12	0.08	0.07	0.05	0.05	0.05	0.05
Oil supply/population (toe per capita)	3.86	3.50	3.03	3.08	2.60	2.45	2.47	2.44
Share of renewables in TPES	0.04	0.05	0.05	0.05 e	0.06 e	0.07 e	0.07 e	0.07
Share of renewables in electricity generation	0.14	0.12	0.12 e	0.08 e	0.10 e	0.13 e	0.13 e	0.15
TFC/GDP (toe per thousand 2010 USD)	0.24	0.20	0.14	0.12	0.10	0.10	0.09	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.24	0.20	0.14	0.12	0.10	0.10	0.09	..
TFC/population (toe per capita)	6.21	5.76	5.17	5.48	4.88	4.80	4.73	..
Elect. cons./GDP (kWh per 2010 USD)	0.33	0.34	0.32	0.30 e	0.28	0.26	0.25	0.25
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.33	0.34	0.32	0.30 e	0.28	0.26	0.25	0.25
Elect. cons./population (kWh per capita)	8572	9841	11687	13660 e	13374	12960	12833	12754
Industry cons. <sup>3</sup> /industrial production (2010=100)	239.4	217.6	143.6	116.5	100.0	86.1	83.5	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	207.4	221.8	137.7	100.1	100.0	73.9	70.9	..

1. Electricity consumption equals domestic supply less losses.

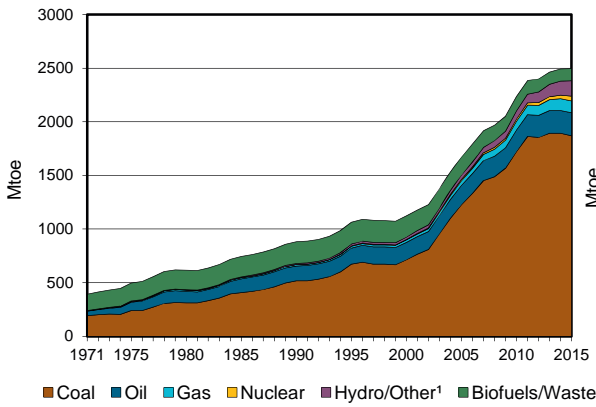
2. Production divided by TPES. Coal self-sufficiency also includes peat, when applicable.

3. Includes non-energy use.

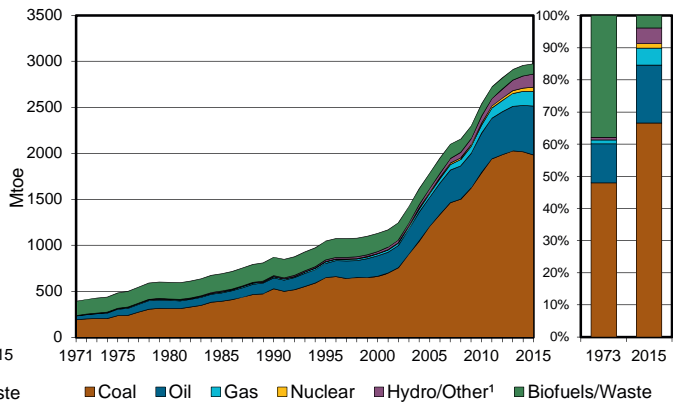
# ASSOCIATION COUNTRIES

## People's Republic of China

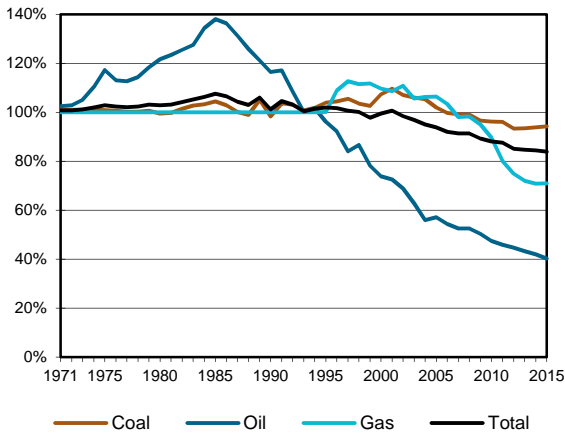
**Figure 1. Energy production**



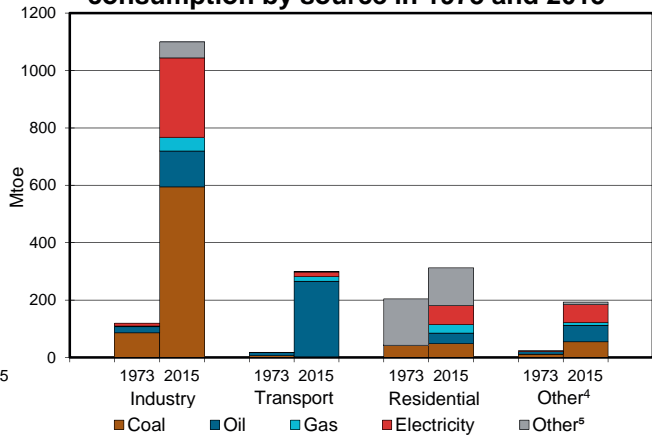
**Figure 2. Total primary energy supply<sup>2</sup>**



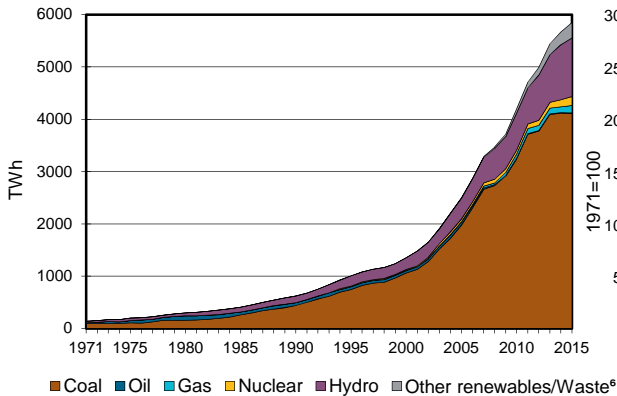
**Figure 3. Energy self-sufficiency**



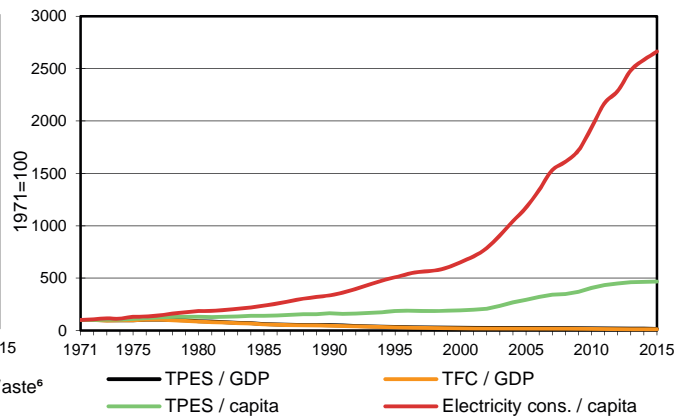
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## People's Republic of China

2015

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1868.16	214.76	-	112.62	44.51	95.84	46.24	113.51	-	-	2495.63
Imports	108.75	335.48	53.57	48.64	-	-	-	-	0.53	-	546.98
Exports	-9.60	-2.87	-41.22	-2.71	-	-	-	-	-1.60	-	-58.01
Intl. marine bunkers	-	-	-9.23	-	-	-	-	-	-	-	-9.23
Intl. aviation bunkers	-	-	-7.80	-	-	-	-	-	-	-	-7.80
Stock changes	14.64	-6.24	-2.73	-	-	-	-	-	-	-	5.67
<b>TPES</b>	<b>1981.95</b>	<b>541.14</b>	<b>-7.41</b>	<b>158.54</b>	<b>44.51</b>	<b>95.84</b>	<b>46.24</b>	<b>113.51</b>	<b>-1.07</b>	<b>-</b>	<b>2973.25</b>
Transfers	-0.97	-1.09	2.49	-	-	-	-	-	-	-	0.43
Statistical differences	-9.24	-0.05	2.20	0.69	-	-	0.00	0.02	-0.01	-	-6.41
Electricity plants	-920.05	-0.13	-2.25	-26.07	-44.51	-95.84	-19.98	-21.92	502.60	-	-628.15
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-121.45	-0.07	-4.63	-5.26	-	-	-	-1.47	-	95.90	-36.98
Blast furnaces	-103.84	-	-	-	-	-	-	-	-	-	-103.84
Gas works	-4.78	-	-	1.08	-	-	-	-	-	-	-3.70
Coke/pat. fuel/BKB/PB plants	-61.14	-	-	-	-	-	-	-	-	-	-61.14
Oil refineries	-	-533.29	517.38	-	-	-	-	-	-	-	-15.91
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-3.64	2.19	-	-	-	-	-	-	-	-	-1.46
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-56.07	-4.40	-30.77	-21.72	-	-	-	-	-56.42	-11.47	-180.86
Losses	-	-0.87	-0.00	-1.84	-	-	-	-	-25.70	-1.15	-29.56
<b>TFC</b>	<b>700.75</b>	<b>3.42</b>	<b>477.01</b>	<b>105.42</b>	<b>-</b>	<b>-</b>	<b>26.26</b>	<b>90.14</b>	<b>419.40</b>	<b>83.28</b>	<b>1905.68</b>
<b>INDUSTRY</b>	<b>538.62</b>	<b>2.07</b>	<b>54.76</b>	<b>38.51</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>-</b>	<b>276.25</b>	<b>55.72</b>	<b>966.13</b>
Iron and steel	191.78	-	0.96	3.59	-	-	-	-	45.86	5.66	247.85
Chemical and petrochemical	90.58	-	12.45	11.51	-	-	-	-	46.71	26.89	188.14
Non-ferrous metals	16.57	-	1.04	3.33	-	-	-	-	47.35	3.50	71.79
Non-metallic minerals	161.98	-	6.13	6.66	-	-	-	-	26.71	0.26	201.73
Transport equipment	2.90	-	0.75	2.54	-	-	-	-	8.19	1.10	15.48
Machinery	12.78	-	2.09	3.82	-	-	-	-	35.38	1.05	55.13
Mining and quarrying	7.17	-	2.87	0.87	-	-	-	-	8.90	0.89	20.69
Food and tobacco	23.48	-	0.89	1.89	-	-	-	-	9.42	3.62	39.31
Paper, pulp and printing	8.76	-	0.33	0.85	-	-	-	-	6.42	4.88	21.25
Wood and wood products	2.76	-	0.27	0.18	-	-	-	-	2.99	0.16	6.35
Construction	4.51	-	7.25	0.18	-	-	-	-	6.01	0.22	18.16
Textile and leather	9.89	-	0.49	0.66	-	-	-	-	16.66	6.89	34.59
Non-specified	5.45	2.07	19.24	2.42	-	-	0.21	-	15.66	0.60	45.65
<b>TRANSPORT</b>	<b>2.44</b>	<b>-</b>	<b>262.06</b>	<b>16.60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.05</b>	<b>15.45</b>	<b>-</b>	<b>298.60</b>
Domestic aviation	-	-	18.00	-	-	-	-	-	-	-	18.00
Road	-	-	218.03	16.29	-	-	-	2.05	10.10	-	246.47
Rail	2.44	-	3.23	-	-	-	-	-	5.35	-	11.01
Pipeline transport	-	-	0.00	0.31	-	-	-	-	-	-	0.31
Domestic navigation	-	-	20.94	-	-	-	-	-	-	-	20.94
Non-specified	0.00	-	1.86	-	-	-	-	-	-	-	1.87
<b>OTHER</b>	<b>104.10</b>	<b>-</b>	<b>69.39</b>	<b>40.33</b>	<b>-</b>	<b>-</b>	<b>26.05</b>	<b>88.09</b>	<b>127.71</b>	<b>27.56</b>	<b>483.22</b>
Residential	49.18	-	35.94	30.10	-	-	21.81	88.09	65.06	22.41	312.60
Comm. and public services	20.18	-	15.73	10.15	-	-	3.56	-	26.20	2.16	78.00
Agriculture/forestry	13.64	-	17.72	0.08	-	-	0.64	-	8.94	0.03	41.04
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	21.09	-	-	-	-	-	0.04	-	27.50	2.96	51.59
<b>NON-ENERGY USE</b>	<b>55.59</b>	<b>1.36</b>	<b>90.80</b>	<b>9.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>157.73</b>
in industry/transf./energy	55.59	1.36	66.74	9.98	-	-	-	-	-	-	133.67
of which: chem./petrochem.	-	1.36	55.38	9.98	-	-	-	-	-	-	66.72
in transport	-	-	1.23	-	-	-	-	-	-	-	1.23
in other	-	-	22.83	-	-	-	-	-	-	-	22.83
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>4108.99</b>	<b>-</b>	<b>9.68</b>	<b>145.35</b>	<b>170.79</b>	<b>1114.47</b>	<b>231.15</b>	<b>63.73</b>	<b>-</b>	<b>-</b>	<b>5844.16</b>
Electricity plants	4108.99	-	9.68	145.35	170.79	1114.47	231.15	63.73	-	-	5844.16
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>3605.29</b>	<b>-</b>	<b>166.98</b>	<b>198.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>45.40</b>	<b>-</b>	<b>-</b>	<b>4016.05</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	3605.29	-	166.98	198.37	-	-	-	45.40	-	-	4016.05

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## People's Republic of China

### Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	1758.46	199.89	..	114.51	..	..	..	..	..	..	..
Imports	136.03	..	..	60.51	..	..	..	..	..	..	..
Exports	-5.55	..	..	-2.87	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	62.33	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>1951.28</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

### Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	431.4	615.5	880.8	1123.6	2235.5	2494.1	2495.6	..
Net imports (Mtoe)	-4.0	-20.6	-35.0	27.9	345.2	509.0	489.0	..
Total primary energy supply (Mtoe)	426.6	598.0	870.7	1129.8	2536.3	2953.5	2973.3	..
Net oil imports (Mtoe)	-1.8	-17.4	-24.2	74.7	252.9	319.9	345.0	..
Oil supply (Mtoe)	51.9	88.6	118.8	220.8	428.0	504.3	533.7	..
Electricity consumption (TWh) <sup>1</sup>	155.2	276.3	579.7	1253.7	3937.7	5357.6	5548.7	..
GDP (billion 2010 USD)	223.8	341.4	829.6	2237.1	6100.6	8333.3	8909.8	..
GDP PPP (billion 2010 USD)	453.3	691.5	1680.5	4531.9	12358.7	16881.7	18049.6	..
Population (millions)	881.94	981.24	1135.19	1262.65	1337.71	1364.27	1371.22	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	1.01	1.03	1.01	0.99	0.88	0.84	0.84	..
Coal self-sufficiency <sup>2</sup>	1.01	0.99	0.98	1.07	0.96	0.94	0.94	0.90
Oil self-sufficiency <sup>2</sup>	1.05	1.22	1.16	0.74	0.47	0.42	0.40	..
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.00	1.10	0.90	0.71	0.71	..
TPES/GDP (toe per thousand 2010 USD)	1.91	1.75	1.05	0.51	0.42	0.35	0.33	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.94	0.86	0.52	0.25	0.21	0.18	0.16	..
TPES/population (toe per capita)	0.48	0.61	0.77	0.89	1.90	2.16	2.17	..
Net oil imports/GDP (toe per thousand 2010 USD)	-0.01	-0.05	-0.03	0.03	0.04	0.04	0.04	..
Oil supply/GDP (toe per thousand 2010 USD)	0.23	0.26	0.14	0.10	0.07	0.06	0.06	..
Oil supply/population (toe per capita)	0.06	0.09	0.10	0.17	0.32	0.37	0.39	..
Share of renewables in TPES	0.39	0.31	0.24	0.20	0.08	0.08	0.08	..
Share of renewables in electricity generation	0.23	0.19	0.20	0.17	0.19	0.23	0.24	..
TFC/GDP (toe per thousand 2010 USD)	1.63	1.43	0.79	0.35	0.26	0.22	0.21	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.80	0.71	0.39	0.17	0.13	0.11	0.11	..
TFC/population (toe per capita)	0.41	0.50	0.58	0.62	1.18	1.37	1.39	..
Elect. cons./GDP (kWh per 2010 USD)	0.69	0.81	0.70	0.56	0.65	0.64	0.62	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.34	0.40	0.35	0.28	0.32	0.32	0.31	..
Elect. cons./population (kWh per capita)	176	282	511	993	2944	3927	4047	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

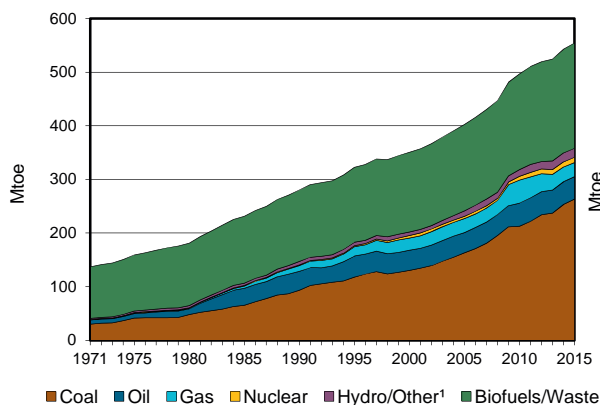
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

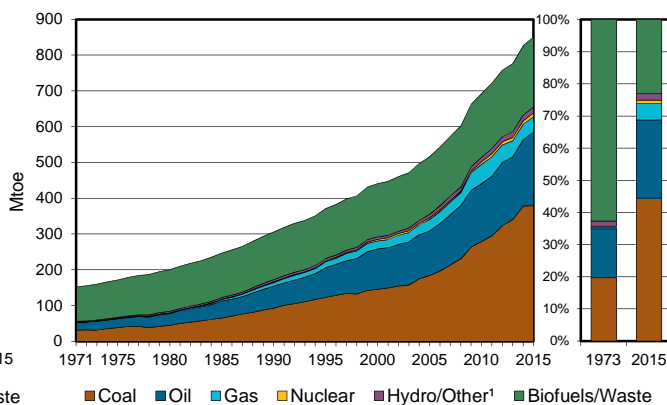
3. Includes non-energy use.

## India

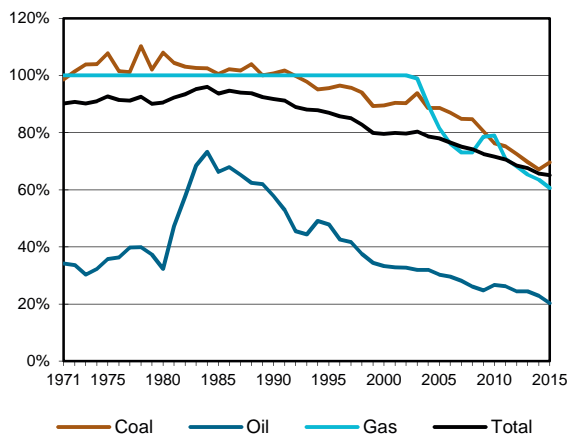
**Figure 1. Energy production**



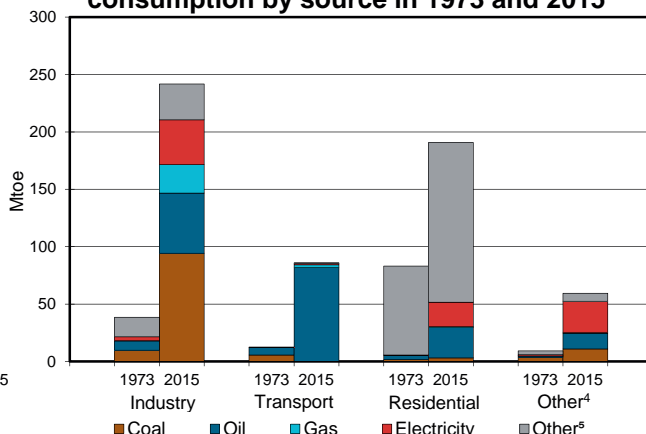
**Figure 2. Total primary energy supply<sup>2</sup>**



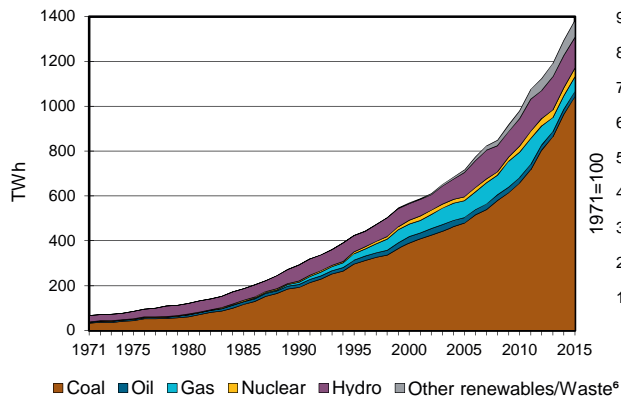
**Figure 3. Energy self-sufficiency**



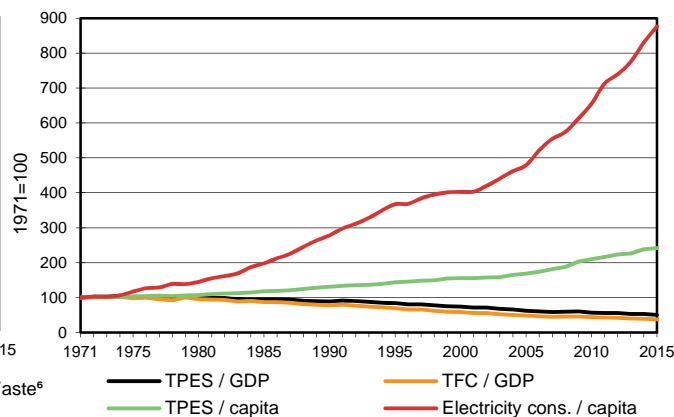
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## India

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	263.52	41.89	-	26.19	9.75	11.87	4.83	196.35	-	-	554.39
Imports	119.25	207.31	27.30	17.02	-	-	-	-	0.45	-	371.34
Exports	-0.72	-	-63.33	-	-	-	-	-	-0.44	-	-64.50
Intl. marine bunkers	-	-	-1.36	-	-	-	-	-	-	-	-1.36
Intl. aviation bunkers	-	-	-4.67	-	-	-	-	-	-	-	-4.67
Stock changes	-3.13	-0.71	-0.24	-	-	-	-	-	-	-	-4.07
<b>TPES</b>	<b>378.91</b>	<b>248.49</b>	<b>-42.30</b>	<b>43.21</b>	<b>9.75</b>	<b>11.87</b>	<b>4.83</b>	<b>196.35</b>	<b>0.01</b>	-	<b>851.13</b>
Transfers	-	3.81	-3.61	-	-	-	-	-	-	-	0.20
Statistical differences	0.00	-6.38	-4.35	-	-	-	-	-	-	-	-10.73
Electricity plants	-254.00	-	-7.84	-13.63	-9.75	-11.87	-4.16	-14.83	118.94	-	-197.14
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-12.02	-	-	-	-	-	-	-	-	-	-12.02
Gas works	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Coke/pat. fuel/BKB/PB plants	-3.20	-	-	-	-	-	-	-	-	-	-3.20
Oil refineries	-	-245.93	245.86	-	-	-	-	-	-	-	-0.07
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-4.38	-	-	-4.38
Energy industry own use	-1.42	-	-13.38	-0.65	-	-	-	-	-8.56	-	-24.00
Losses	-	-	-	-	-	-	-	-	-22.07	-	-22.07
<b>TFC</b>	<b>108.24</b>	-	<b>174.38</b>	<b>28.93</b>	-	-	<b>0.66</b>	<b>177.14</b>	<b>88.32</b>	-	<b>577.68</b>
<b>INDUSTRY</b>	<b>94.21</b>	-	<b>26.27</b>	<b>4.66</b>	-	-	<b>0.04</b>	<b>31.26</b>	<b>38.82</b>	-	<b>195.26</b>
Iron and steel	48.53	-	0.67	-	-	-	-	-	5.96	-	55.17
Chemical and petrochemical	1.46	-	4.66	-	-	-	-	-	3.39	-	9.51
Non-ferrous metals	0.45	-	0.09	-	-	-	-	-	1.58	-	2.12
Non-metallic minerals	16.75	-	15.24	-	-	-	-	-	1.81	-	33.79
Transport equipment	-	-	-	-	-	-	-	-	0.95	-	0.95
Machinery	-	-	0.38	-	-	-	-	-	0.83	-	1.20
Mining and quarrying	-	-	1.36	-	-	-	-	-	0.02	-	1.38
Food and tobacco	-	-	0.00	-	-	-	-	-	1.75	-	1.75
Paper, pulp and printing	0.69	-	-	-	-	-	-	-	0.59	-	1.28
Wood and wood products	-	-	-	-	-	-	-	-	0.09	-	0.09
Construction	-	-	0.32	-	-	-	-	-	-	-	0.32
Textile and leather	0.52	-	0.42	-	-	-	-	-	3.12	-	4.07
Non-specified	25.81	-	3.12	4.66	-	-	0.04	31.26	18.73	-	83.63
<b>TRANSPORT</b>	-	-	<b>81.89</b>	<b>2.31</b>	-	-	-	<b>0.38</b>	<b>1.45</b>	-	<b>86.03</b>
Domestic aviation	-	-	2.00	-	-	-	-	-	-	-	2.00
Road	-	-	76.33	1.96	-	-	-	0.38	-	-	78.66
Rail	-	-	2.82	-	-	-	-	-	1.45	-	4.27
Pipeline transport	-	-	-	0.35	-	-	-	-	-	-	0.35
Domestic navigation	-	-	0.70	-	-	-	-	-	-	-	0.70
Non-specified	-	-	0.04	-	-	-	-	-	-	-	0.04
<b>OTHER</b>	<b>14.03</b>	-	<b>40.14</b>	<b>1.59</b>	-	-	<b>0.62</b>	<b>145.49</b>	<b>48.05</b>	-	<b>249.93</b>
Residential	3.21	-	26.37	0.69	-	-	0.53	138.62	21.24	-	190.66
Comm. and public services	5.21	-	1.72	0.74	-	-	0.06	6.87	8.01	-	22.62
Agriculture/forestry	-	-	9.78	0.16	-	-	-	-	16.12	-	26.06
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	5.61	-	2.28	-	-	-	0.03	-	2.67	-	10.60
<b>NON-ENERGY USE</b>	-	-	<b>26.08</b>	<b>20.37</b>	-	-	-	-	-	-	<b>46.45</b>
in industry/transf./energy	-	-	26.08	20.37	-	-	-	-	-	-	46.45
of which: chem./petrochem.	-	-	12.86	20.37	-	-	-	-	-	-	33.24
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>1041.53</b>	-	<b>22.95</b>	<b>68.09</b>	<b>37.41</b>	<b>138.05</b>	<b>48.43</b>	<b>26.54</b>	-	-	<b>1383.00</b>
Electricity plants	1041.53	-	22.95	68.09	37.41	138.05	48.43	26.54	-	-	1383.00
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## India

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	272.90	40.86	..	25.92	..	..	..	..	..	..	..
Imports	109.03	..	..	21.28	..	..	..	..	..	..	..
Exports	-0.28	..	..	..	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	3.19	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>384.84</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	144.1	181.1	280.5	350.8	496.7	542.7	554.4	..
Net imports (Mtoe)	17.3	23.6	31.6	91.4	204.8	290.3	306.8	..
Total primary energy supply (Mtoe)	159.8	200.0	305.7	440.9	693.2	826.2	851.1	..
Net oil imports (Mtoe)	17.5	23.3	27.4	77.1	123.5	148.1	171.3	..
Oil supply (Mtoe)	24.3	33.2	61.1	112.0	161.6	185.7	206.2	..
Electricity consumption (TWh) <sup>1</sup>	59.9	99.1	237.6	415.9	790.4	1054.2	1126.5	..
GDP (billion 2010 USD)	213.3	274.7	471.6	811.6	1656.6	2127.8	2296.6	..
GDP PPP (billion 2010 USD)	684.1	880.8	1512.5	2602.5	5312.2	6823.4	7364.8	..
Population (millions)	593.45	697.23	870.60	1053.48	1230.99	1295.29	1311.05	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	0.90	0.91	0.92	0.80	0.72	0.66	0.65	..
Coal self-sufficiency <sup>2</sup>	1.04	1.08	1.01	0.90	0.76	0.67	0.70	0.71
Oil self-sufficiency <sup>2</sup>	0.30	0.32	0.58	0.33	0.27	0.23	0.20	..
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.00	1.00	0.79	0.64	0.61	..
TPES/GDP (toe per thousand 2010 USD)	0.75	0.73	0.65	0.54	0.42	0.39	0.37	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.23	0.23	0.20	0.17	0.13	0.12	0.12	..
TPES/population (toe per capita)	0.27	0.29	0.35	0.42	0.56	0.64	0.65	..
Net oil imports/GDP (toe per thousand 2010 USD)	0.08	0.08	0.06	0.10	0.07	0.07	0.07	..
Oil supply/GDP (toe per thousand 2010 USD)	0.11	0.12	0.13	0.14	0.10	0.09	0.09	..
Oil supply/population (toe per capita)	0.04	0.05	0.07	0.11	0.13	0.14	0.16	..
Share of renewables in TPES	0.64	0.60	0.46	0.35	0.28	0.25	0.25	..
Share of renewables in electricity generation	0.40	0.39	0.25	0.14	0.16	0.16	0.15	..
TFC/GDP (toe per thousand 2010 USD)	0.67	0.63	0.52	0.39	0.29	0.26	0.25	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.21	0.20	0.16	0.12	0.09	0.08	0.08	..
TFC/population (toe per capita)	0.24	0.25	0.28	0.30	0.39	0.43	0.44	..
Elect. cons./GDP (kWh per 2010 USD)	0.28	0.36	0.50	0.51	0.48	0.50	0.49	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.09	0.11	0.16	0.16	0.15	0.15	0.15	..
Elect. cons./population (kWh per capita)	101	142	273	395	642	814	859	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

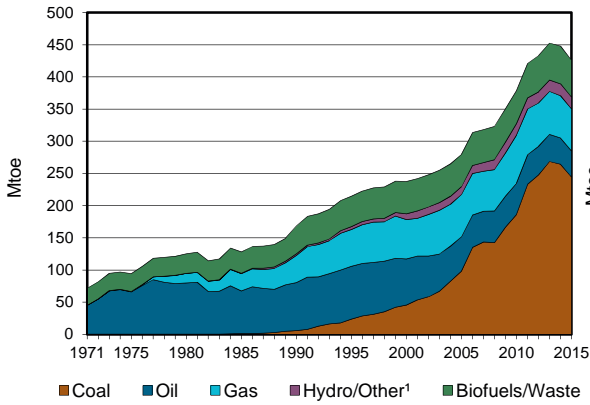
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

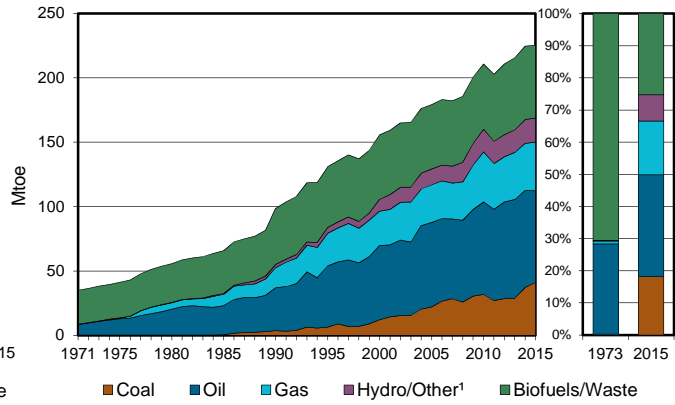
3. Includes non-energy use.

## Indonesia

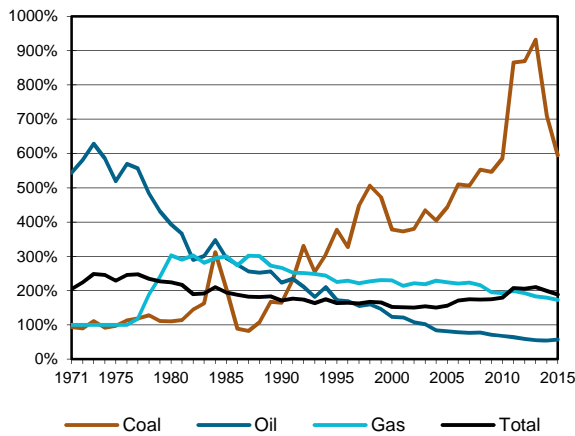
**Figure 1. Energy production**



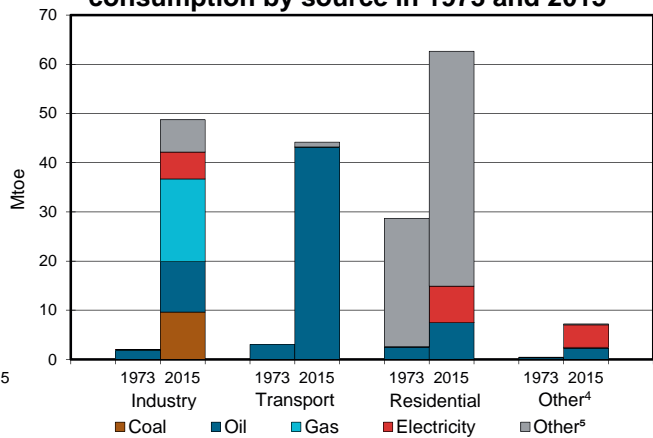
**Figure 2. Total primary energy supply<sup>2</sup>**



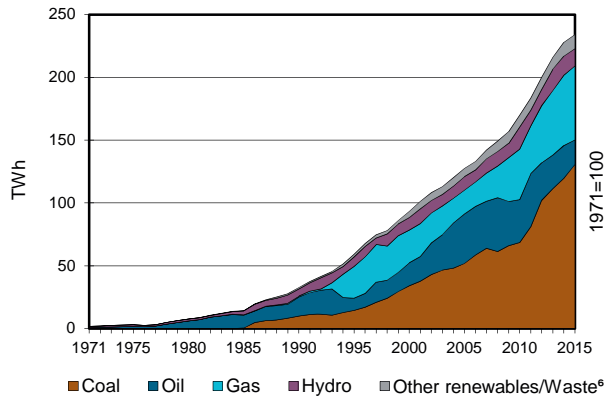
**Figure 3. Energy self-sufficiency**



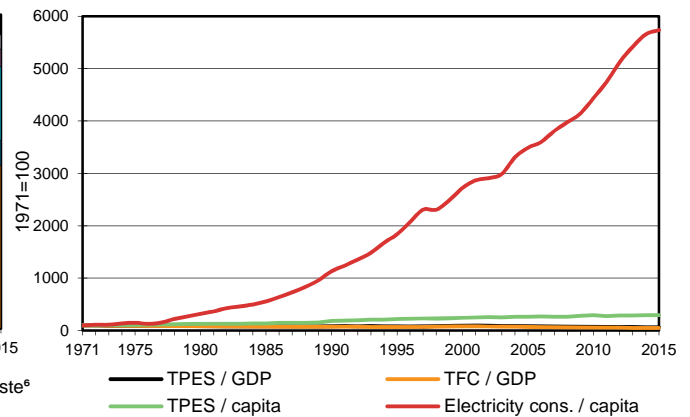
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Indonesia

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	244.23	40.44	-	65.47	-	1.18	17.28	57.25	-	-	425.86
Imports	2.03	25.19	26.46	-	-	-	-	-	0.00	-	53.68
Exports	-205.22	-15.54	-4.17	-27.61	-	-	-	-0.45	-	-	-253.00
Intl. marine bunkers	-	-	-0.23	-	-	-	-	-	-	-	-0.23
Intl. aviation bunkers	-	-	-0.89	-	-	-	-	-	-	-	-0.89
Stock changes	-	-0.14	0.08	-	-	-	-	-	-	-	-0.06
<b>TPES</b>	<b>41.04</b>	<b>49.95</b>	<b>21.26</b>	<b>37.85</b>	-	<b>1.18</b>	<b>17.28</b>	<b>56.80</b>	<b>0.00</b>	-	<b>225.36</b>
Transfers	-	-1.67	1.85	-	-	-	-	-	-	-	0.18
Statistical differences	-0.00	0.84	-0.31	-0.38	-	-	-	-	-0.00	-	0.13
Electricity plants	-31.43	-	-4.78	-12.78	-	-1.18	-17.28	-0.35	20.12	-	-47.68
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	0.00	-	-	-	-	-	-	-	-	-	0.00
Oil refineries	-	-48.03	46.27	-	-	-	-	-	-	-	-1.76
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.94	-	-	-0.94
Energy industry own use	-	-	-2.21	-7.43	-	-	-	-	-0.78	-	-10.42
Losses	-	-	-	-0.22	-	-	-	-	-1.90	-	-2.12
<b>TFC</b>	<b>9.60</b>	<b>1.09</b>	<b>62.08</b>	<b>17.04</b>	-	-	-	<b>55.52</b>	<b>17.44</b>	-	<b>162.77</b>
<b>INDUSTRY</b>	<b>9.60</b>	-	<b>7.21</b>	<b>12.68</b>	-	-	-	<b>6.55</b>	<b>5.51</b>	-	<b>41.55</b>
Iron and steel	0.25	-	0.29	0.09	-	-	-	-	-	-	0.62
Chemical and petrochemical	-	-	0.37	2.54	-	-	-	-	-	-	2.92
Non-ferrous metals	2.03	-	-	-	-	-	-	-	-	-	2.03
Non-metallic minerals	3.22	-	0.52	-	-	-	-	-	-	-	3.74
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.04	-	-	-	-	-	-	-	0.04
Mining and quarrying	-	-	0.63	-	-	-	-	-	-	-	0.63
Food and tobacco	-	-	0.38	-	-	-	-	-	-	-	0.38
Paper, pulp and printing	1.93	-	-	-	-	-	-	-	-	-	1.93
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.22	-	-	-	-	-	-	-	0.22
Textile and leather	-	-	0.71	-	-	-	-	-	-	-	0.71
Non-specified	2.17	-	4.05	10.04	-	-	-	6.55	5.51	-	28.33
<b>TRANSPORT</b>	-	-	<b>43.14</b>	<b>0.03</b>	-	-	-	<b>0.99</b>	-	-	<b>44.17</b>
Domestic aviation	-	-	2.77	-	-	-	-	-	-	-	2.77
Road	-	-	38.05	0.03	-	-	-	0.99	-	-	39.08
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	2.31	-	-	-	-	-	-	-	2.31
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>9.74</b>	<b>0.21</b>	-	-	-	<b>47.97</b>	<b>11.93</b>	-	<b>69.86</b>
Residential	-	-	7.47	0.02	-	-	-	47.78	7.40	-	62.66
Comm. and public services	-	-	0.65	0.20	-	-	-	0.20	4.31	-	5.35
Agriculture/forestry	-	-	1.51	-	-	-	-	-	0.23	-	1.73
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.11	-	-	-	-	-	-	-	0.11
<b>NON-ENERGY USE</b>	-	<b>1.09</b>	<b>1.99</b>	<b>4.12</b>	-	-	-	-	-	-	<b>7.19</b>
in industry/transf./energy	-	1.09	1.99	4.12	-	-	-	-	-	-	7.19
of which: chem./petrochem.	-	1.09	1.39	4.12	-	-	-	-	-	-	6.59
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>130.51</b>	-	<b>19.65</b>	<b>58.89</b>	-	<b>13.74</b>	<b>10.06</b>	<b>1.13</b>	-	-	<b>233.98</b>
Electricity plants	130.51	-	19.65	58.89	-	13.74	10.06	1.13	-	-	233.98
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Indonesia

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	246.91	43.19	..	67.43	..	..	..	..	..	..	..
Imports	1.90	..	..	-	..	..	..	..	..	..	..
Exports	-206.23	..	..	-29.82	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	..	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>42.58</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	94.9	125.0	168.6	237.5	378.3	447.8	425.9	..
Net imports (Mtoe)	-50.8	-68.1	-69.0	-81.3	-166.8	-222.2	-199.3	..
Total primary energy supply (Mtoe)	38.2	55.7	98.7	155.7	210.6	224.5	225.4	..
Net oil imports (Mtoe)	-50.8	-58.1	-40.4	-13.2	24.3	35.4	31.9	..
Oil supply (Mtoe)	10.7	20.2	33.4	57.9	71.8	75.2	71.2	..
Electricity consumption (TWh) <sup>1</sup>	2.0	6.8	29.5	82.6	153.8	206.5	211.9	..
GDP (billion 2010 USD)	109.8	181.5	309.8	453.4	755.1	942.3	987.5	..
GDP PPP (billion 2010 USD)	291.3	481.8	822.2	1203.3	2004.0	2500.9	2620.8	..
Population (millions)	124.24	147.49	181.44	211.54	241.61	254.46	257.56	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	2.49	2.24	1.71	1.53	1.80	1.99	1.89	..
Coal self-sufficiency <sup>2</sup>	1.11	1.10	1.65	3.79	5.85	7.09	5.95	5.80
Oil self-sufficiency <sup>2</sup>	6.28	3.93	2.24	1.24	0.67	0.54	0.57	..
Natural gas self-sufficiency <sup>2</sup>	1.00	3.02	2.66	2.30	1.93	1.79	1.73	..
TPES/GDP (toe per thousand 2010 USD)	0.35	0.31	0.32	0.34	0.28	0.24	0.23	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.13	0.12	0.12	0.13	0.11	0.09	0.09	..
TPES/population (toe per capita)	0.31	0.38	0.54	0.74	0.87	0.88	0.88	..
Net oil imports/GDP (toe per thousand 2010 USD)	-0.46	-0.32	-0.13	-0.03	0.03	0.04	0.03	..
Oil supply/GDP (toe per thousand 2010 USD)	0.10	0.11	0.11	0.13	0.10	0.08	0.07	..
Oil supply/population (toe per capita)	0.09	0.14	0.18	0.27	0.30	0.30	0.28	..
Share of renewables in TPES	0.71	0.55	0.47	0.38	0.32	0.34	0.33	..
Share of renewables in electricity generation	0.44	0.18	0.21	0.16	0.16	0.12	0.11	..
TFC/GDP (toe per thousand 2010 USD)	0.31	0.27	0.26	0.27	0.20	0.17	0.17	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.12	0.10	0.10	0.10	0.07	0.07	0.06	..
TFC/population (toe per capita)	0.28	0.34	0.44	0.57	0.61	0.64	0.63	..
Elect. cons./GDP (kWh per 2010 USD)	0.02	0.04	0.10	0.18	0.20	0.22	0.21	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.01	0.01	0.04	0.07	0.08	0.08	0.08	..
Elect. cons./population (kWh per capita)	16	46	163	390	637	811	823	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Morocco

Figure 1. Energy production

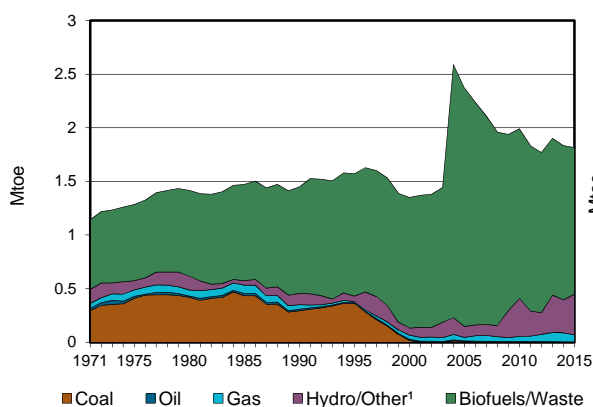


Figure 2. Total primary energy supply<sup>2</sup>

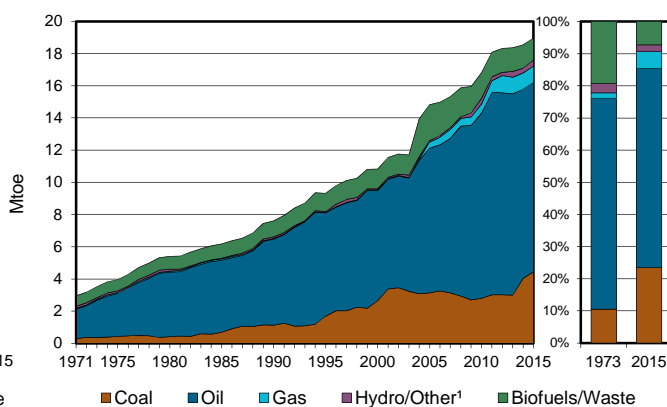


Figure 3. Energy self-sufficiency

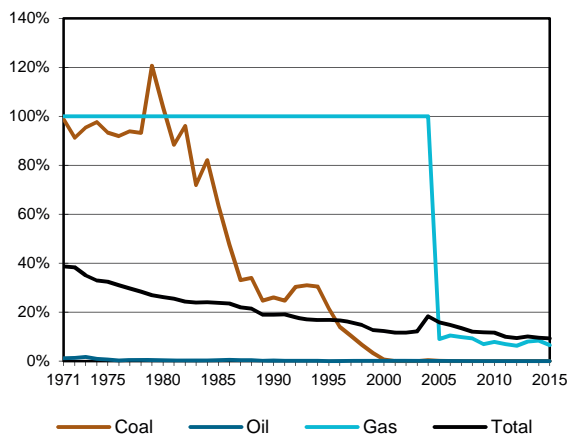


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

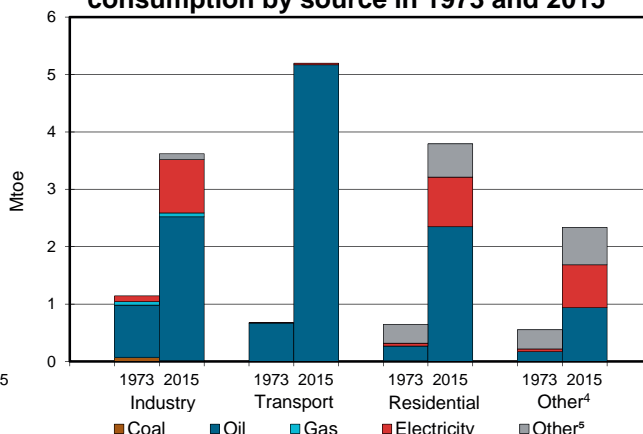


Figure 5. Electricity generation by source

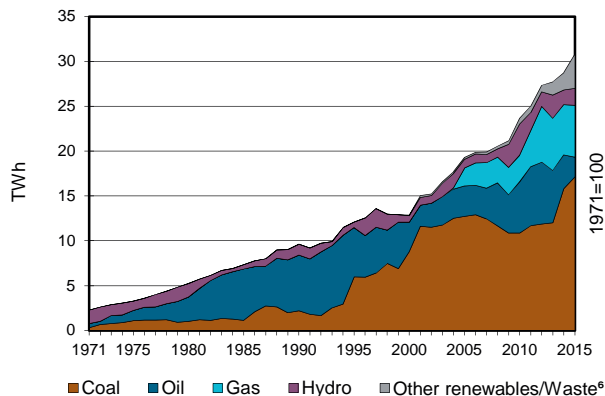
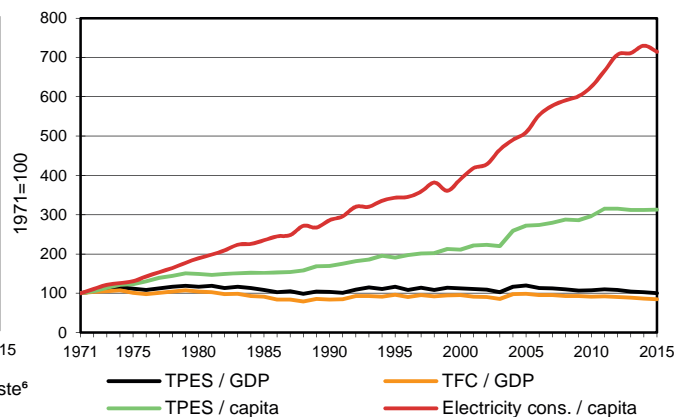


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.



## Morocco

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	0.00	-	0.07	-	0.16	0.22	1.37	-	-	1.82
Imports	4.26	3.09	10.52	0.95	-	-	-	-	0.44	-	19.26
Exports	-	-	-0.46	-	-	-	-	-	-0.01	-	-0.48
Intl. marine bunkers	-	-	-0.13	-	-	-	-	-	-	-	-0.13
Intl. aviation bunkers	-	-	-0.67	-	-	-	-	-	-	-	-0.67
Stock changes	0.18	-0.09	-0.50	-	-	-	-	-	-	-	-0.40
<b>TPES</b>	<b>4.44</b>	<b>3.01</b>	<b>8.75</b>	<b>1.02</b>	-	<b>0.16</b>	<b>0.22</b>	<b>1.37</b>	<b>0.43</b>	-	<b>19.39</b>
Transfers	-	0.24	-0.21	-	-	-	-	-	-	-	0.02
Statistical differences	-	0.03	0.04	-0.00	-	-	-	-	-	-	0.06
Electricity plants	-4.43	-	-0.58	-0.95	-	-0.16	-0.22	-	2.65	-	-3.68
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-3.27	3.19	-	-	-	-	-	-	-	-0.08
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.03	-	-	-0.03
Energy industry own use	-	-	-0.23	-	-	-	-	-	-0.03	-	-0.26
Losses	-	-	-	-	-	-	-	-	-0.47	-	-0.47
<b>TFC</b>	<b>0.02</b>	-	<b>10.95</b>	<b>0.07</b>	-	-	-	<b>1.34</b>	<b>2.57</b>	-	<b>14.95</b>
<b>INDUSTRY</b>	<b>0.02</b>	-	<b>1.98</b>	<b>0.07</b>	-	-	-	<b>0.10</b>	<b>0.93</b>	-	<b>3.10</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	0.06	-	-	-	-	0.01	0.09	-	0.16
Non-ferrous metals	0.01	-	0.06	-	-	-	-	-	0.11	-	0.18
Non-metallic minerals	0.00	-	1.14	-	-	-	-	0.09	0.18	-	1.42
Transport equipment	-	-	0.00	-	-	-	-	-	0.02	-	0.02
Machinery	-	-	0.00	-	-	-	-	-	0.05	-	0.05
Mining and quarrying	0.00	-	0.36	0.02	-	-	-	-	0.22	-	0.60
Food and tobacco	0.00	-	0.20	-	-	-	-	0.00	0.14	-	0.34
Paper, pulp and printing	-	-	0.02	0.05	-	-	-	-	0.02	-	0.09
Wood and wood products	-	-	-	-	-	-	-	0.00	0.00	-	0.00
Construction	-	-	0.05	-	-	-	-	0.00	0.02	-	0.08
Textile and leather	-	-	0.05	-	-	-	-	0.00	0.06	-	0.12
Non-specified	-	-	0.02	-	-	-	-	-	0.02	-	0.04
<b>TRANSPORT</b>	-	-	<b>5.17</b>	-	-	-	-	-	<b>0.03</b>	-	<b>5.20</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	5.13	-	-	-	-	-	-	-	5.13
Rail	-	-	0.01	-	-	-	-	-	0.03	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>3.28</b>	-	-	-	-	<b>1.23</b>	<b>1.61</b>	-	<b>6.13</b>
Residential	-	-	2.35	-	-	-	-	0.58	0.87	-	3.79
Comm. and public services	-	-	0.13	-	-	-	-	0.65	0.44	-	1.22
Agriculture/forestry	-	-	0.80	-	-	-	-	-	0.31	-	1.11
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>0.52</b>	-	-	-	-	-	-	-	<b>0.52</b>
in industry/transf./energy	-	-	0.52	-	-	-	-	-	-	-	0.52
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>17.11</b>	-	<b>2.21</b>	<b>5.78</b>	-	<b>1.89</b>	<b>2.53</b>	-	-	<b>1.30</b>	<b>30.82</b>
Electricity plants	17.11	-	2.21	5.78	-	1.89	2.53	-	-	1.30	30.82
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Morocco

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	..	0.00	..	0.06	..	..	..	..	..	..	..
Imports	4.44	..	..	0.97	..	..	..	..	..	..	..
Exports	..	..	..	..	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	-0.15	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>4.28</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	1.2	1.4	1.5	1.4	2.0	1.8	1.8	..
Net imports (Mtoe)	2.4	4.0	6.5	9.9	16.4	19.5	18.8	..
Total primary energy supply (Mtoe)	3.5	5.4	7.6	11.0	17.2	19.1	19.4	..
Net oil imports (Mtoe)	2.4	4.0	5.7	7.1	12.7	13.8	13.1	..
Oil supply (Mtoe)	2.3	4.0	5.3	6.9	11.5	11.8	11.8	..
Electricity consumption (TWh) <sup>1</sup>	2.6	4.7	8.9	14.1	25.1	30.9	30.7	..
GDP (billion 2010 USD)	18.4	27.2	43.2	57.5	93.2	108.3	113.2	..
GDP PPP (billion 2010 USD)	40.9	60.6	96.2	128.1	207.6	241.3	252.2	..
Population (millions)	17.10	20.07	24.95	28.95	32.11	33.92	34.38	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	0.35	0.26	0.19	0.12	0.12	0.10	0.09	..
Coal self-sufficiency <sup>2</sup>	0.95	1.04	0.26	0.01	-	-	-	-
Oil self-sufficiency <sup>2</sup>	0.02	0.00	0.00	0.00	0.00	0.00	0.00	..
Natural gas self-sufficiency <sup>2</sup>	1.00	1.00	1.00	1.00	0.08	0.08	0.07	..
TPES/GDP (toe per thousand 2010 USD)	0.19	0.20	0.18	0.19	0.18	0.18	0.17	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.09	0.09	0.08	0.09	0.08	0.08	0.08	..
TPES/population (toe per capita)	0.21	0.27	0.31	0.38	0.53	0.56	0.56	..
Net oil imports/GDP (toe per thousand 2010 USD)	0.13	0.15	0.13	0.12	0.14	0.13	0.12	..
Oil supply/GDP (toe per thousand 2010 USD)	0.13	0.15	0.12	0.12	0.12	0.11	0.10	..
Oil supply/population (toe per capita)	0.14	0.20	0.21	0.24	0.36	0.35	0.34	..
Share of renewables in TPES	0.22	0.17	0.14	0.12	0.11	0.09	0.09	..
Share of renewables in electricity generation	0.42	0.29	0.13	0.06	0.17	0.12	0.14	..
TFC/GDP (toe per thousand 2010 USD)	0.17	0.16	0.13	0.15	0.14	0.14	0.13	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.07	0.07	0.06	0.07	0.06	0.06	0.06	..
TFC/population (toe per capita)	0.18	0.22	0.23	0.30	0.41	0.43	0.44	..
Elect. cons./GDP (kWh per 2010 USD)	0.14	0.17	0.21	0.25	0.27	0.29	0.27	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.06	0.08	0.09	0.11	0.12	0.13	0.12	..
Elect. cons./population (kWh per capita)	152	236	357	487	782	912	892	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

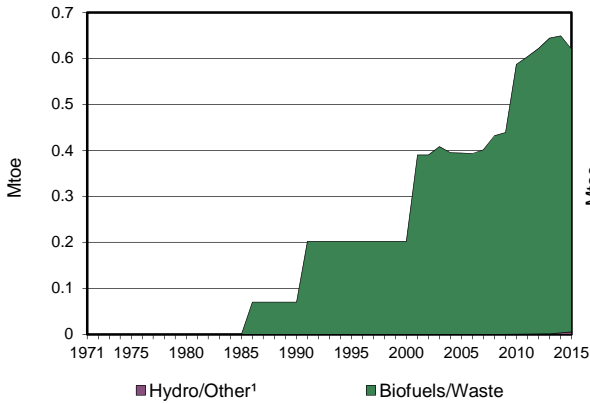
1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

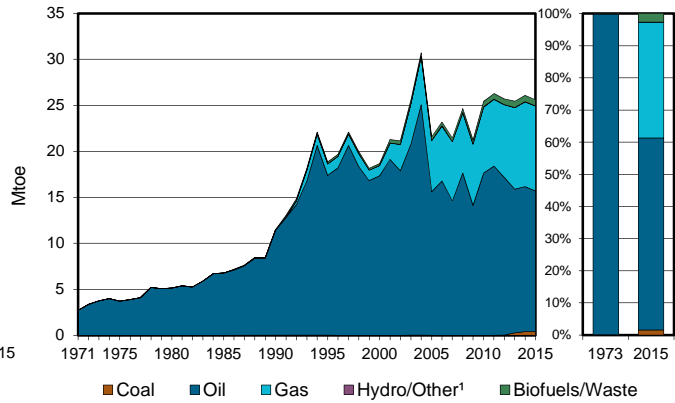
3. Includes non-energy use.

## Singapore

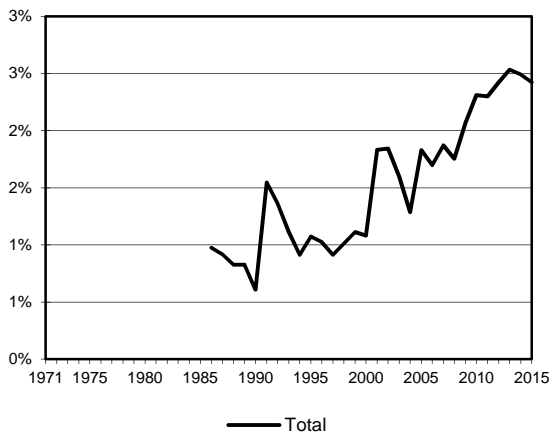
**Figure 1. Energy production**



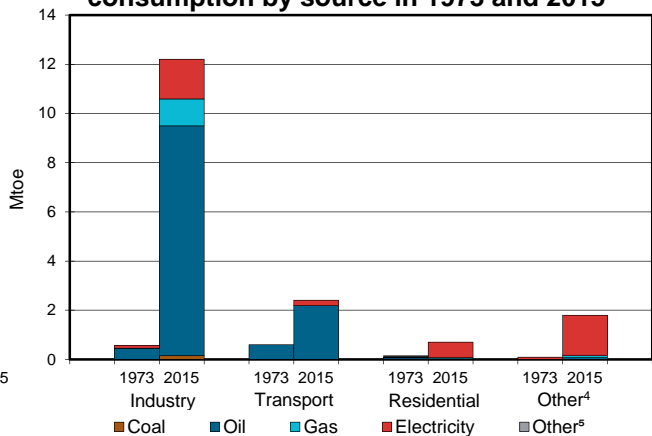
**Figure 2. Total primary energy supply²**



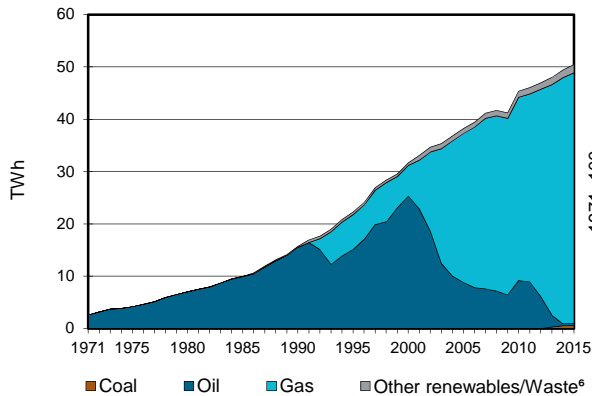
**Figure 3. Energy self-sufficiency**



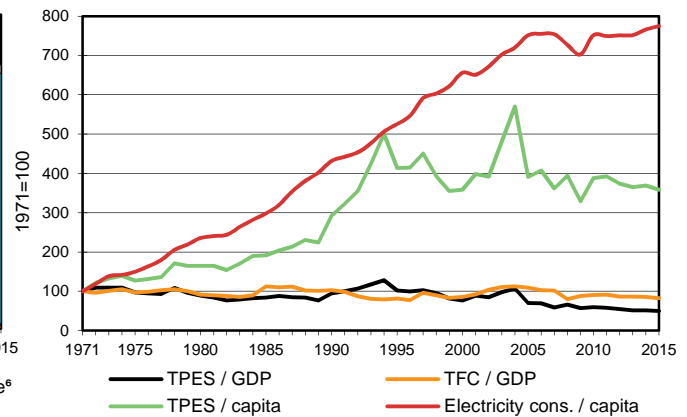
**Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015³**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Singapore

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	0.01	0.61	-	-	0.62
Imports	0.41	39.95	118.58	9.32	-	-	-	0.06	-	-	168.32
Exports	-	-0.75	-90.47	-	-	-	-	-	-	-	-91.22
Intl. marine bunkers	-	-	-43.48	-	-	-	-	-	-	-	-43.48
Intl. aviation bunkers	-	-	-7.38	-	-	-	-	-	-	-	-7.38
Stock changes	-	-0.16	-1.00	-0.09	-	-	-	-	-	-	-1.24
<b>TPES</b>	<b>0.41</b>	<b>39.04</b>	<b>-23.76</b>	<b>9.23</b>	-	-	<b>0.01</b>	<b>0.68</b>	-	-	<b>25.61</b>
Transfers	-	6.95	-7.11	-	-	-	-	-	-	-	-0.17
Statistical differences	-0.00	-	-	0.17	-	-	-	-	-	-	0.17
Electricity plants	-0.26	-	-0.23	-8.16	-	-	-0.01	-0.68	4.34	-	-4.99
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-45.99	44.46	-	-	-	-	-	-	-	-1.53
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-1.72	-0.01	-	-	-	-	-0.17	-	-1.90
Losses	-	-	-	-	-	-	-	-	-0.08	-	-0.08
<b>TFC</b>	<b>0.15</b>	-	<b>11.65</b>	<b>1.24</b>	-	-	-	-	<b>4.09</b>	-	<b>17.12</b>
<b>INDUSTRY</b>	<b>0.15</b>	-	<b>2.72</b>	<b>1.09</b>	-	-	-	-	<b>1.62</b>	-	<b>5.59</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	2.33	-	-	-	-	-	-	-	2.33
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper, pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	0.01	-	-	-	-	0.05	-	0.05
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.15	-	0.39	1.08	-	-	-	-	1.58	-	3.20
<b>TRANSPORT</b>	-	-	<b>2.19</b>	<b>0.01</b>	-	-	-	-	<b>0.21</b>	-	<b>2.41</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2.14	0.01	-	-	-	-	-	-	2.15
Rail	-	-	-	-	-	-	-	-	0.21	-	0.21
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.05	-	-	-	-	-	-	-	0.05
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>0.11</b>	<b>0.14</b>	-	-	-	-	<b>2.25</b>	-	<b>2.50</b>
Residential	-	-	0.03	0.05	-	-	-	-	0.62	-	0.70
Comm. and public services	-	-	0.08	0.08	-	-	-	-	1.61	-	1.77
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	0.00	-	-	-	-	0.02	-	0.03
<b>NON-ENERGY USE</b>	-	-	<b>6.62</b>	-	-	-	-	-	-	-	<b>6.62</b>
in industry/transf./energy	-	-	6.62	-	-	-	-	-	-	-	6.62
of which: chem./petrochem.	-	-	6.10	-	-	-	-	-	-	-	6.10
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>0.60</b>	-	<b>0.35</b>	<b>47.91</b>	-	-	<b>0.06</b>	<b>1.49</b>	-	-	<b>50.42</b>
Electricity plants	0.60	-	0.35	47.91	-	-	0.06	1.49	-	-	50.42
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Singapore

### Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	..	-	..	-	..	..	..	..	..	..	..
Imports	0.43	..	..	9.70	..	..	..	..	..	..	..
Exports	..	..	..	-	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	..	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>0.43</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

### Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	-	-	0.1	0.2	0.6	0.7	0.6	..
Net imports (Mtoe)	12.3	8.0	24.5	40.8	69.4	73.8	77.1	..
Total primary energy supply (Mtoe)	3.8	5.1	11.5	18.7	25.4	26.1	25.6	..
Net oil imports (Mtoe)	12.2	8.0	24.5	39.7	62.2	64.1	67.3	..
Oil supply (Mtoe)	3.8	5.1	11.4	17.4	17.6	15.8	15.3	..
Electricity consumption (TWh) <sup>1</sup>	3.5	6.6	15.2	30.5	44.1	48.4	49.5	..
GDP (billion 2010 USD)	19.1	32.1	67.6	134.5	236.4	281.4	287.0	..
GDP PPP (billion 2010 USD)	28.9	48.7	102.4	203.8	358.2	426.3	434.9	..
Population (millions)	2.19	2.41	3.05	4.03	5.08	5.47	5.54	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	-	-	0.01	0.01	0.02	0.02	0.02	..
Coal self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	..
Oil self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	..
Natural gas self-sufficiency <sup>2</sup>	-	-	-	-	-	-	-	..
TPES/GDP (toe per thousand 2010 USD)	0.20	0.16	0.17	0.14	0.11	0.09	0.09	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.13	0.11	0.11	0.09	0.07	0.06	0.06	..
TPES/population (toe per capita)	1.71	2.13	3.78	4.63	5.01	4.77	4.63	..
Net oil imports/GDP (toe per thousand 2010 USD)	0.64	0.25	0.36	0.30	0.26	0.23	0.23	..
Oil supply/GDP (toe per thousand 2010 USD)	0.20	0.16	0.17	0.13	0.07	0.06	0.05	..
Oil supply/population (toe per capita)	1.71	2.13	3.75	4.31	3.47	2.89	2.76	..
Share of renewables in TPES	0.00	0.00	0.00	0.01	0.01	0.01	0.02	..
Share of renewables in electricity generation	-	-	0.01	0.01	0.01	0.02	0.02	..
TFC/GDP (toe per thousand 2010 USD)	0.07	0.07	0.07	0.06	0.07	0.06	0.06	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.05	0.04	0.05	0.04	0.04	0.04	0.04	..
TFC/population (toe per capita)	0.64	0.88	1.64	2.06	3.04	3.17	3.09	..
Elect. cons./GDP (kWh per 2010 USD)	0.18	0.20	0.22	0.23	0.19	0.17	0.17	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.12	0.14	0.15	0.15	0.12	0.11	0.11	..
Elect. cons./population (kWh per capita)	1599	2718	4983	7575	8680	8844	8949	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

## Thailand

Figure 1. Energy production

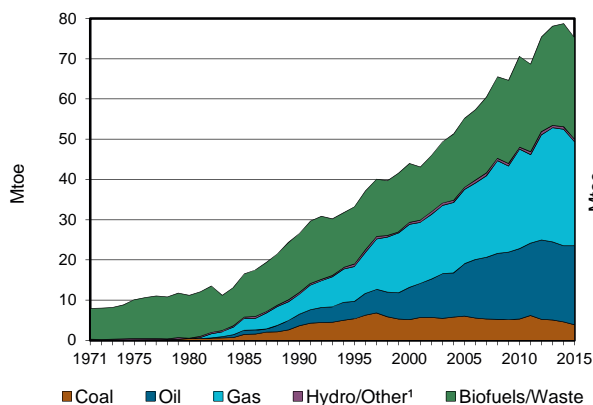


Figure 2. Total primary energy supply<sup>2</sup>

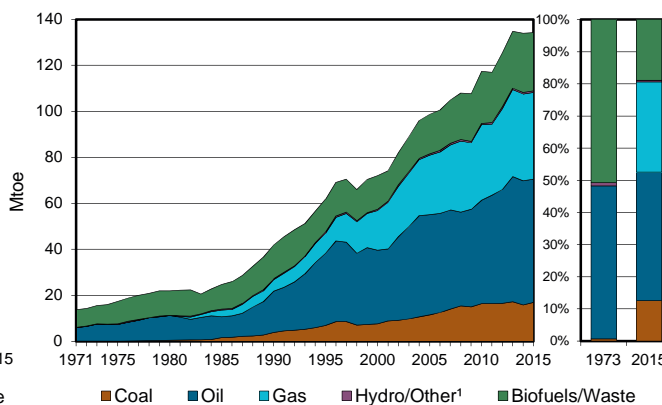


Figure 3. Energy self-sufficiency

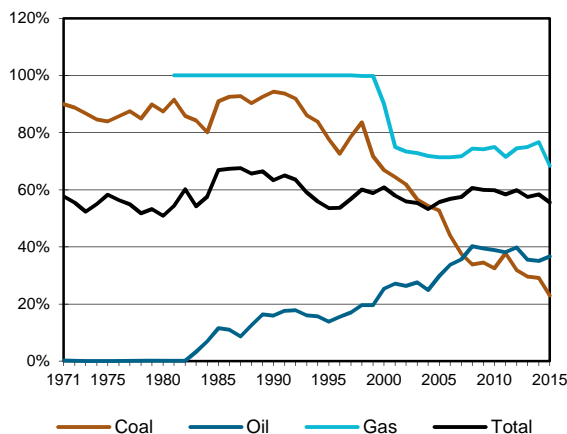


Figure 4. Breakdown of sectoral final consumption by source in 1973 and 2015<sup>3</sup>

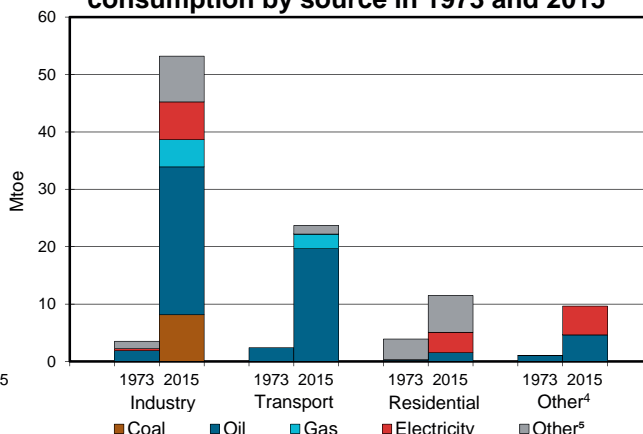


Figure 5. Electricity generation by source

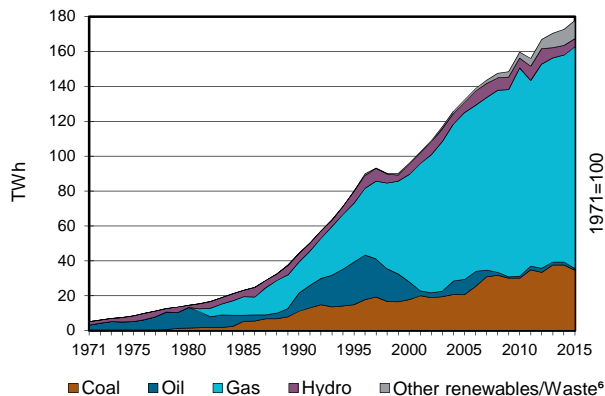
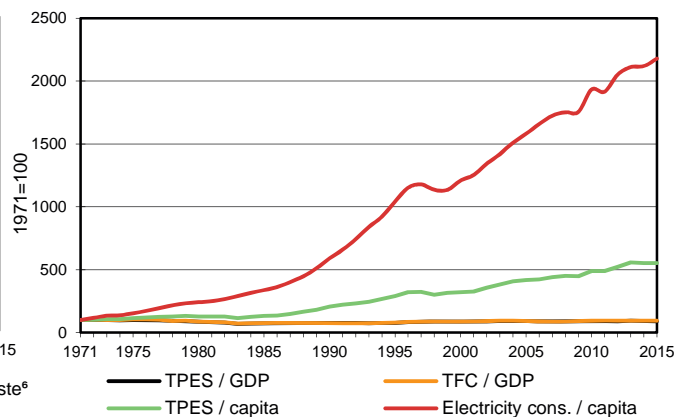


Figure 6. Selected indicators



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Includes non-energy use.
4. Includes commercial and public services, agriculture/forestry, fishing and non-specified.
5. Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.

## Thailand

2015

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	3.88	19.67	-	25.79	-	0.41	0.23	25.22	-	-	75.20
Imports	15.11	44.89	5.91	11.95	-	-	-	0.09	1.24	-	79.20
Exports	-0.01	-0.11	-13.94	-	-	-	-	-0.02	-0.19	-	-14.29
Intl. marine bunkers	-	-	-1.17	-	-	-	-	-	-	-	-1.17
Intl. aviation bunkers	-	-	-4.03	-	-	-	-	-	-	-	-4.03
Stock changes	-2.09	4.88	-2.48	-	-	-	-	-	-	-	0.31
<b>TPES</b>	<b>16.89</b>	<b>69.33</b>	<b>-15.71</b>	<b>37.74</b>	-	<b>0.41</b>	<b>0.23</b>	<b>25.29</b>	<b>1.04</b>	-	<b>135.22</b>
Transfers	-	-6.48	6.69	-	-	-	-	-	-	-	0.21
Statistical differences	0.05	-	0.30	0.00	-	-	-	0.00	0.01	-	0.36
Electricity plants	-8.76	-	-0.23	-23.14	-	-0.41	-0.23	-3.95	15.29	-	-21.44
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-62.07	60.90	-	-	-	-	-	-	-	-1.16
Petrochemical plants	-	0.00	-	-	-	-	-	-	-	-	0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-5.37	-	-	-5.37
Energy industry own use	-	-	-0.83	-7.43	-	-	-	-	-0.29	-	-8.55
Losses	-	-0.20	-	-	-	-	-	-	-1.01	-	-1.21
<b>TFC</b>	<b>8.16</b>	<b>0.58</b>	<b>51.13</b>	<b>7.17</b>	-	-	-	<b>15.96</b>	<b>15.04</b>	-	<b>98.04</b>
<b>INDUSTRY</b>	<b>8.16</b>	-	<b>4.81</b>	<b>3.04</b>	-	-	-	<b>8.02</b>	<b>6.57</b>	-	<b>30.61</b>
Iron and steel	0.06	-	0.39	0.32	-	-	-	-	0.67	-	1.44
Chemical and petrochemical	0.00	-	0.49	0.70	-	-	-	-	1.05	-	2.24
Non-ferrous metals	0.03	-	-	-	-	-	-	-	-	-	0.03
Non-metallic minerals	6.85	-	0.33	0.85	-	-	-	-	0.67	-	8.70
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.36	0.11	-	-	-	-	1.58	-	2.04
Mining and quarrying	-	-	0.02	-	-	-	-	-	-	-	0.02
Food and tobacco	0.41	-	1.13	0.12	-	-	-	3.67	1.32	-	6.66
Paper, pulp and printing	0.03	-	0.17	0.84	-	-	-	-	0.24	-	1.28
Wood and wood products	-	-	0.16	0.01	-	-	-	-	0.17	-	0.35
Construction	-	-	0.12	-	-	-	-	-	-	-	0.12
Textile and leather	0.00	-	0.15	0.03	-	-	-	-	0.67	-	0.85
Non-specified	0.77	-	1.51	0.05	-	-	-	4.34	0.21	-	6.88
<b>TRANSPORT</b>	-	-	<b>19.72</b>	<b>2.46</b>	-	-	-	<b>1.53</b>	<b>0.01</b>	-	<b>23.72</b>
Domestic aviation	-	-	0.79	-	-	-	-	-	-	-	0.79
Road	-	-	18.70	2.46	-	-	-	1.53	-	-	22.69
Rail	-	-	0.08	-	-	-	-	-	0.01	-	0.09
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.15	-	-	-	-	-	-	-	0.15
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>6.24</b>	<b>0.00</b>	-	-	-	<b>6.41</b>	<b>8.45</b>	-	<b>21.10</b>
Residential	-	-	1.58	-	-	-	-	6.41	3.47	-	11.47
Comm. and public services	-	-	0.75	0.00	-	-	-	-	4.48	-	5.24
Agriculture/forestry	-	-	3.90	-	-	-	-	-	0.04	-	3.94
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	0.46	-	0.46
<b>NON-ENERGY USE</b>	-	<b>0.58</b>	<b>20.37</b>	<b>1.67</b>	-	-	-	-	-	-	<b>22.62</b>
in industry/transf./energy	-	0.58	20.37	1.67	-	-	-	-	-	-	22.62
of which: chem./petrochem.	-	0.58	16.41	1.67	-	-	-	-	-	-	18.66
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - TWh</b>	<b>34.58</b>	-	<b>1.01</b>	<b>126.99</b>	-	<b>4.74</b>	<b>2.71</b>	<b>7.73</b>	-	-	<b>177.76</b>
Electricity plants	34.58	-	1.01	126.99	-	4.74	2.71	7.73	-	-	177.76
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Thailand

## Provisional energy supply for 2016

Million tonnes of oil equivalent											
SUPPLY	Coal	Crude oil <sup>1</sup>	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	4.35	20.18	..	24.76	..	..	..	..	..	..	..
Imports	14.27	..	..	12.73	..	..	..	..	..	..	..
Exports	-0.02	..	..	..	..	..	..	..	..	..	..
Intl. marine bunkers	..	..	..	..	..	..	..	..	..	..	..
Intl. aviation bunkers	..	..	..	..	..	..	..	..	..	..	..
Stock changes	-3.12	..	..	..	..	..	..	..	..	..	..
<b>TPES</b>	<b>15.48</b>	..	..	..	..	..	..	..	..	..	..
Electricity and Heat Output											
Elec. generated - TWh	..	..	..	..	..	..	..	..	..	..	..
Heat generated - PJ	..	..	..	..	..	..	..	..	..	..	..

For information on sources for 2016 provisional data, please refer to section 'Country notes and sources'.

1. Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1973	1980	1990	2000	2010	2014	2015	2016p
Energy production (Mtoe)	8.2	11.2	26.6	44.0	70.6	78.7	75.2	..
Net imports (Mtoe)	8.3	12.3	17.9	32.1	51.5	59.6	64.9	..
Total primary energy supply (Mtoe)	15.6	22.0	41.9	72.3	117.8	134.9	135.2	..
Net oil imports (Mtoe)	8.3	12.2	17.6	27.5	32.0	36.3	36.7	..
Oil supply (Mtoe)	7.4	10.7	18.0	31.9	45.0	53.9	53.6	..
Electricity consumption (TWh) <sup>1</sup>	6.5	13.8	40.1	91.2	155.1	172.7	178.1	..
GDP (billion 2010 USD)	41.3	66.5	141.6	217.7	340.9	381.7	392.5	..
GDP PPP (billion 2010 USD)	107.6	173.2	368.7	566.8	887.6	993.7	1021.9	..
Population (millions)	40.17	47.39	56.58	62.69	66.69	67.73	67.96	..
Industrial production index (2010=100)	..	..	..	..	..	..	..	..
Total self-sufficiency <sup>2</sup>	0.52	0.51	0.63	0.61	0.60	0.58	0.56	..
Coal self-sufficiency <sup>2</sup>	0.87	0.87	0.94	0.67	0.33	0.29	0.23	0.28
Oil self-sufficiency <sup>2</sup>	0.00	0.00	0.16	0.25	0.39	0.35	0.37	..
Natural gas self-sufficiency <sup>2</sup>	-	-	1.00	0.90	0.75	0.77	0.68	..
TPES/GDP (toe per thousand 2010 USD)	0.38	0.33	0.30	0.33	0.35	0.35	0.34	..
TPES/GDP PPP (toe per thousand 2010 USD)	0.15	0.13	0.11	0.13	0.13	0.14	0.13	..
TPES/population (toe per capita)	0.39	0.46	0.74	1.15	1.77	1.99	1.99	..
Net oil imports/GDP (toe per thousand 2010 USD)	0.20	0.18	0.12	0.13	0.09	0.10	0.09	..
Oil supply/GDP (toe per thousand 2010 USD)	0.18	0.16	0.13	0.15	0.13	0.14	0.14	..
Oil supply/population (toe per capita)	0.18	0.23	0.32	0.51	0.67	0.80	0.79	..
Share of renewables in TPES	0.52	0.49	0.36	0.21	0.20	0.20	0.19	..
Share of renewables in electricity generation	0.27	0.09	0.11	0.07	0.06	0.09	0.09	..
TFC/GDP (toe per thousand 2010 USD)	0.26	0.23	0.20	0.23	0.25	0.25	0.25	..
TFC/GDP PPP (toe per thousand 2010 USD)	0.10	0.09	0.08	0.09	0.10	0.10	0.10	..
TFC/population (toe per capita)	0.27	0.32	0.51	0.81	1.27	1.43	1.44	..
Elect. cons./GDP (kWh per 2010 USD)	0.16	0.21	0.28	0.42	0.45	0.45	0.45	..
Elect. cons./GDP PPP (kWh per 2010 USD PPP)	0.06	0.08	0.11	0.16	0.18	0.17	0.17	..
Elect. cons./population (kWh per capita)	162	291	709	1454	2325	2550	2621	..
Industry cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..
Industry oil cons. <sup>3</sup> /industrial production (2010=100)	..	..	..	..	..	..	..	..

1. Electricity consumption equals domestic supply less losses.

2. Production divided by TPES.

3. Includes non-energy use.

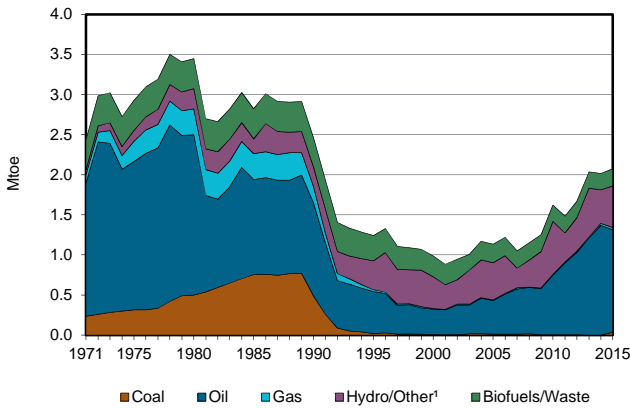




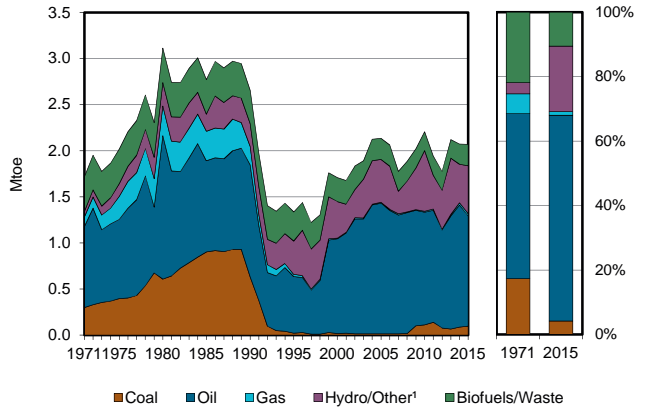
# OTHER NON-OECD COUNTRIES

## Albania

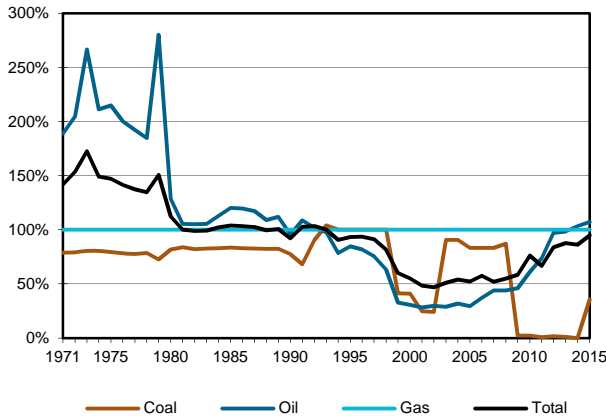
**Figure 1. Energy production**



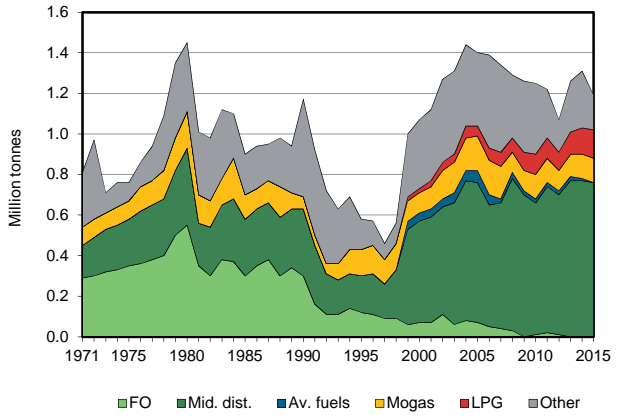
**Figure 2. Total primary energy supply²**



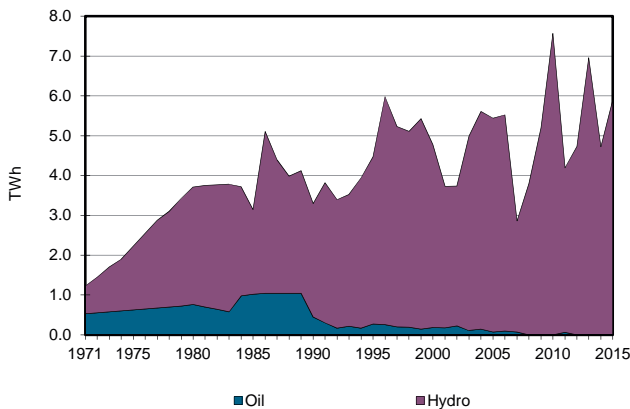
**Figure 3. Energy self-sufficiency³**



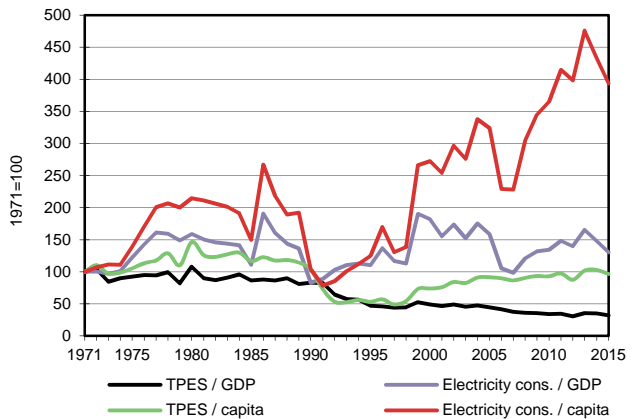
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

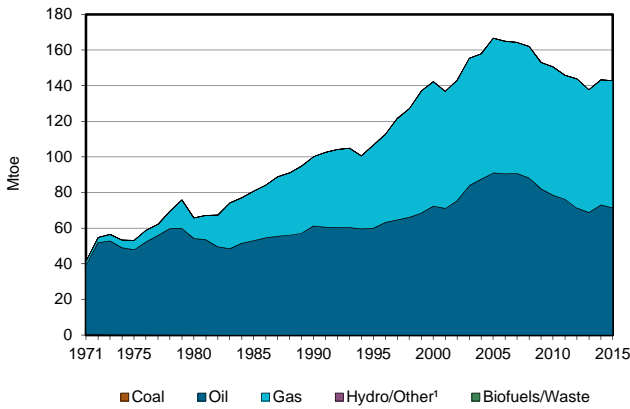
## Albania

2015

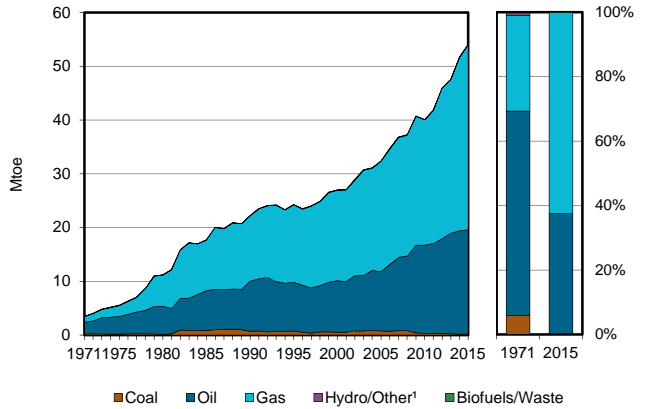
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	34	1279	-	27	-	507	12	214	-	-	2073
Imports	61	-	1220	-	-	-	-	31	203	-	1515
Exports	-	-987	-164	-	-	-	-	-11	-82	-	-1245
Intl. marine bunkers	-	-	-20	-	-	-	-	-	-	-	-20
Intl. aviation bunkers	-	-	-2	-	-	-	-	-	-	-	-2
Stock changes	-	-16	-116	-	-	-	-	-	-	-	-132
<b>TPES</b>	<b>95</b>	<b>276</b>	<b>917</b>	<b>27</b>	<b>-</b>	<b>507</b>	<b>12</b>	<b>234</b>	<b>120</b>	<b>-</b>	<b>2190</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-1	-	-	-	-	-	-	-	-1
Electricity plants	-	-	-	-	-	-507	-	-	507	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-276	264	-	-	-	-	-	-	-	-12
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-14	-16	-	-	-	-	-13	-	-43
Losses	-	-	-	-	-	-	-	-	-108	-	-108
<b>TFC</b>	<b>95</b>	<b>-</b>	<b>1167</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>234</b>	<b>507</b>	<b>-</b>	<b>2027</b>
<b>INDUSTRY</b>	<b>92</b>	<b>-</b>	<b>79</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>10</b>	<b>107</b>	<b>-</b>	<b>300</b>
Iron and steel	-	-	3	-	-	-	-	-	15	-	18
Chemical and petrochemical	-	-	7	-	-	-	-	-	8	-	15
Non-ferrous metals	-	-	-	-	-	-	-	-	8	-	8
Non-metallic minerals	92	-	36	-	-	-	-	-	8	-	136
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	9	-	9
Food and tobacco	-	-	15	8	-	-	1	10	25	-	59
Paper pulp and printing	-	-	1	-	-	-	-	-	10	-	11
Wood and wood products	-	-	-	-	-	-	-	-	1	-	1
Construction	-	-	1	-	-	-	-	-	8	-	9
Textile and leather	-	-	1	-	-	-	-	-	12	-	13
Non-specified	-	-	15	3	-	-	-	-	3	-	21
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>795</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>825</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	759	-	-	-	-	30	-	-	789
Rail	-	-	2	-	-	-	-	-	-	-	2
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	34	-	-	-	-	-	-	-	34
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>3</b>	<b>-</b>	<b>218</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>194</b>	<b>400</b>	<b>-</b>	<b>827</b>
Residential	-	-	89	-	-	-	6	160	274	-	530
Comm. and public services	3	-	46	-	-	-	5	22	118	-	195
Agriculture/forestry	-	-	52	-	-	-	-	12	8	-	72
Fishing	-	-	31	-	-	-	-	-	-	-	31
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>75</b>
in industry/transf./energy	-	-	75	-	-	-	-	-	-	-	75
of which: chem./petrochem.	-	-	1	-	-	-	-	-	-	-	1
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5895</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5895</b>
Electricity plants	-	-	-	-	-	5895	-	-	-	-	5895
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Algeria

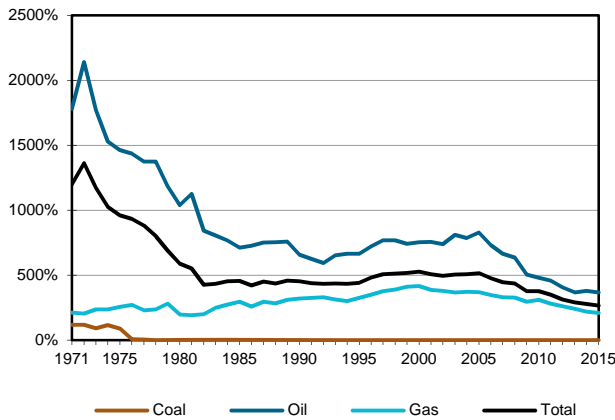
**Figure 1. Energy production**



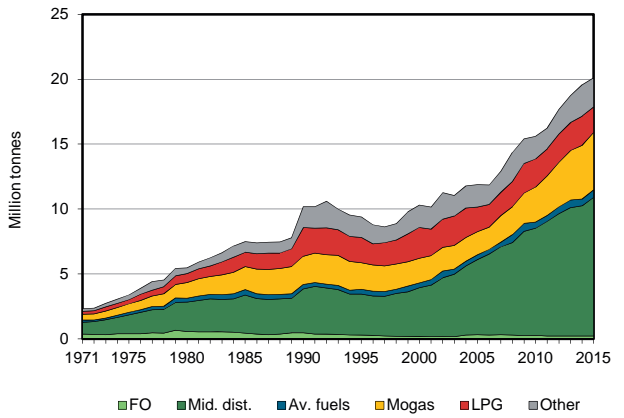
**Figure 2. Total primary energy supply<sup>2</sup>**



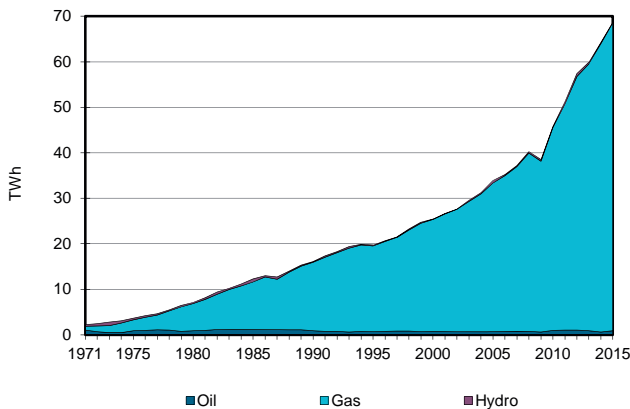
**Figure 3. Energy self-sufficiency<sup>3</sup>**



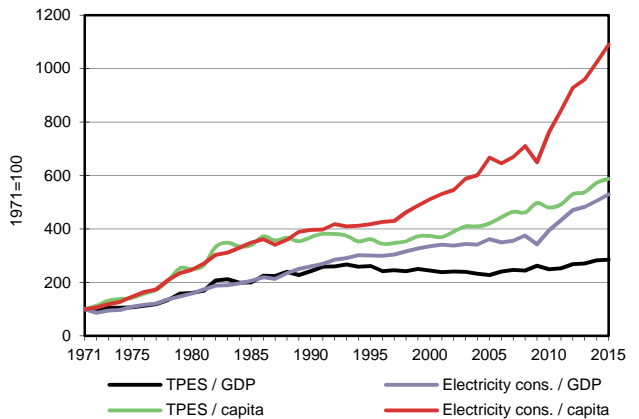
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

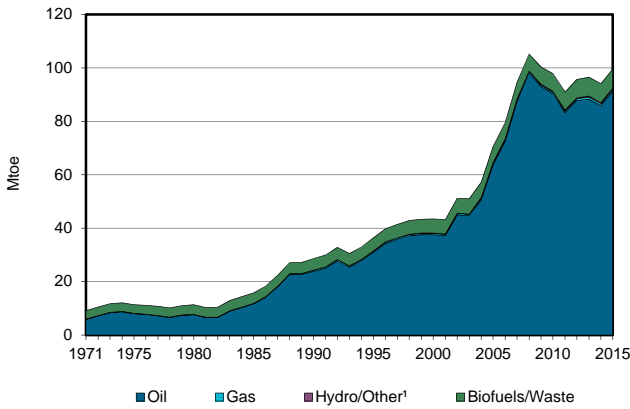
## Algeria

2015

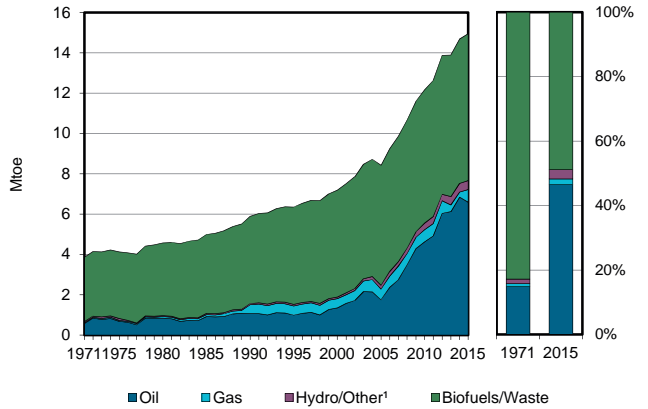
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	71331	-	71402	-	12	7	6	-	-	142758
Imports	142	270	4059	-	-	-	-	-	52	-	4524
Exports	-	-30601	-25690	-36992	-	-	-	-	-55	-	-93339
Intl. marine bunkers	-	-	-270	-	-	-	-	-	-	-	-270
Intl. aviation bunkers	-	-	-484	-	-	-	-	-	-	-	-484
Stock changes	-1	749	76	-	-	-	-	-	-	-	825
<b>TPES</b>	<b>141</b>	<b>41749</b>	<b>-22309</b>	<b>34410</b>	<b>-</b>	<b>12</b>	<b>7</b>	<b>6</b>	<b>-3</b>	<b>-</b>	<b>54014</b>
Transfers	-	-9744	10290	-	-	-	-	-	-	-	546
Statistical differences	3	530	403	95	-	-	-	-	-	-	1032
Electricity plants	-	-	-435	-15081	-	-12	-7	-	5917	-	-9619
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-67	-	-	-	-	-	-	-	-	-	-67
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-7	-	-	-	-	-	-	-	-	-	-7
Oil refineries	-	-31313	30850	-	-	-	-	-	-	-	-464
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-629	-427	-4206	-	-	-	-	-638	-	-5900
Losses	-31	-588	-	-489	-	-	-	-	-963	-	-2071
<b>TFC</b>	<b>39</b>	<b>6</b>	<b>18371</b>	<b>14728</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>4313</b>	<b>-</b>	<b>37464</b>
<b>INDUSTRY</b>	<b>39</b>	<b>-</b>	<b>788</b>	<b>3432</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>1500</b>	<b>-</b>	<b>5763</b>
Iron and steel	39	-	-	199	-	-	-	-	38	-	276
Chemical and petrochemical	-	-	3	44	-	-	-	-	89	-	136
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	1600	-	-	-	-	210	-	1811
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	443	-	-	-	-	150	-	593
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	398	1002	-	-	-	-	130	-	1531
Textile and leather	-	-	-	30	-	-	-	-	29	-	59
Non-specified	-	-	387	113	-	-	-	-	854	-	1358
<b>TRANSPORT</b>	<b>-</b>	<b>6</b>	<b>14892</b>	<b>606</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>84</b>	<b>-</b>	<b>15588</b>
Domestic aviation	-	-	136	-	-	-	-	-	-	-	136
Road	-	-	14643	-	-	-	-	-	-	-	14643
Rail	-	-	112	-	-	-	-	-	65	-	177
Pipeline transport	-	6	-	606	-	-	-	-	19	-	631
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>2112</b>	<b>7579</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2729</b>	<b>-</b>	<b>12422</b>
Residential	-	-	1763	6718	-	-	-	2	1692	-	10175
Comm. and public services	-	-	-	-	-	-	-	-	-	-	-
Agriculture/forestry	-	-	33	40	-	-	-	-	118	-	191
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	316	821	-	-	-	-	919	-	2056
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>580</b>	<b>3111</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3691</b>
in industry/transf./energy	-	-	580	3111	-	-	-	-	-	-	3691
of which: chem./petrochem.	-	-	27	3111	-	-	-	-	-	-	3138
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>908</b>	<b>67668</b>	<b>-</b>	<b>145</b>	<b>77</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>68798</b>
Electricity plants	-	-	908	67668	-	145	77	-	-	-	68798
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Angola

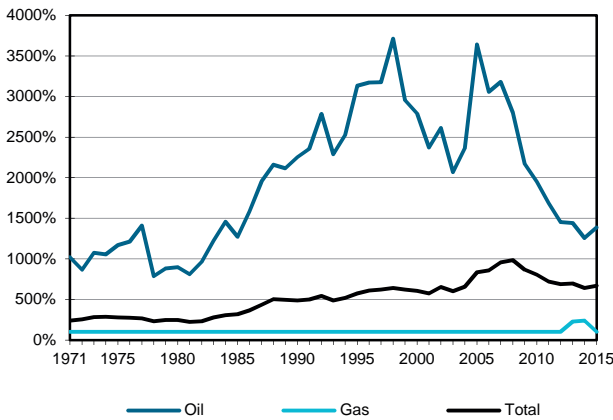
**Figure 1. Energy production**



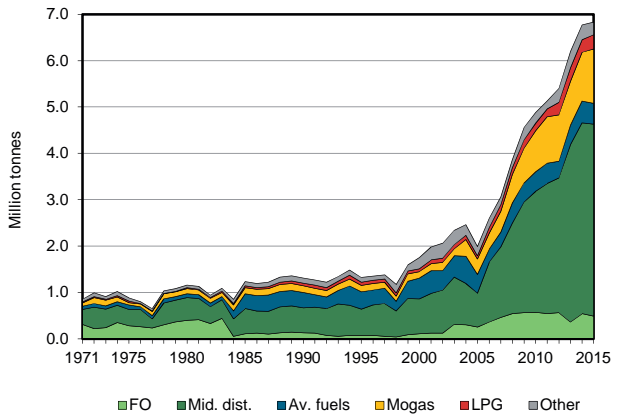
**Figure 2. Total primary energy supply<sup>2</sup>**



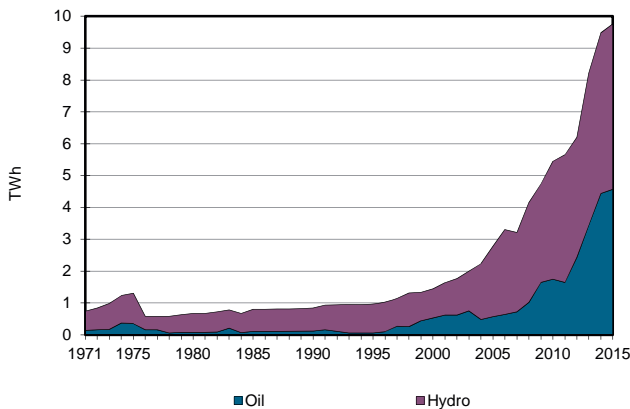
**Figure 3. Energy self-sufficiency<sup>3</sup>**



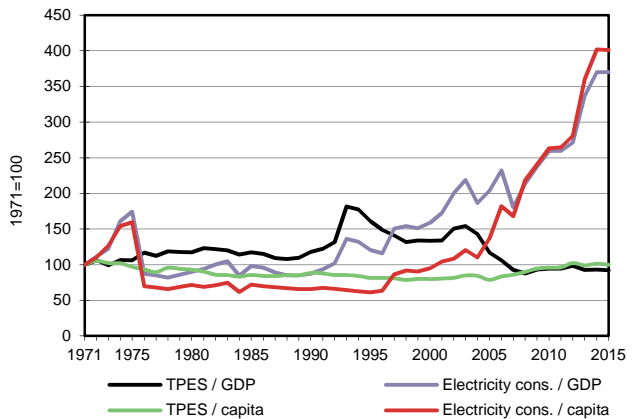
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Angola

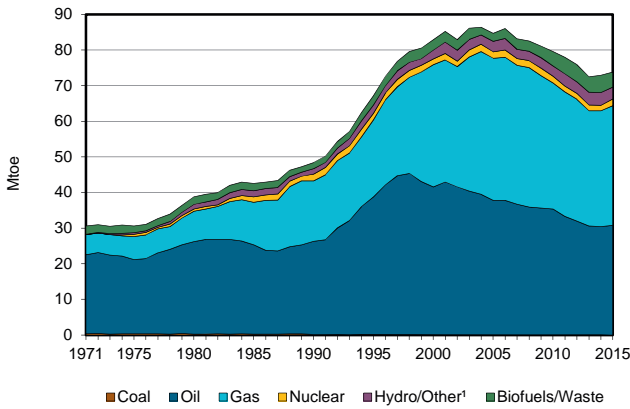
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	91325	-	629	-	447	-	7289	-	-	99689
Imports	-	-	5411	-	-	-	-	-	-	-	5411
Exports	-	-88141	-1351	-	-	-	-	-	-	-	-89493
Intl. marine bunkers	-	-	-395	-	-	-	-	-	-	-	-395
Intl. aviation bunkers	-	-	-227	-	-	-	-	-	-	-	-227
Stock changes	-	-	-34	-	-	-	-	-	-	-	-34
<b>TPES</b>	-	<b>3184</b>	<b>3403</b>	<b>629</b>	-	<b>447</b>	-	<b>7289</b>	-	-	<b>14951</b>
Transfers	-	-481	543	-	-	-	-	-	-	-	62
Statistical differences	-	-	-85	-	-	-	-	-	-	-	-85
Electricity plants	-	-	-1215	-	-	-447	-	-	840	-	-822
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-2703	2614	-	-	-	-	-	-	-	-89
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1852	-	-	-1852
Energy industry own use	-	-	-91	-	-	-	-	-	-21	-	-111
Losses	-	-	-	-	-	-	-	-	-95	-	-95
<b>TFC</b>	-	-	<b>5170</b>	<b>629</b>	-	-	-	<b>5437</b>	<b>724</b>	-	<b>11960</b>
<b>INDUSTRY</b>	-	-	<b>243</b>	<b>629</b>	-	-	-	<b>129</b>	<b>244</b>	-	<b>1244</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	158	-	-	-	-	-	-	-	158
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	85	629	-	-	-	129	244	-	1087
<b>TRANSPORT</b>	-	-	<b>3030</b>	-	-	-	-	-	-	-	<b>3030</b>
Domestic aviation	-	-	250	-	-	-	-	-	-	-	250
Road	-	-	2759	-	-	-	-	-	-	-	2759
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	21	-	-	-	-	-	-	-	21
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1683</b>	-	-	-	-	<b>5308</b>	<b>480</b>	-	<b>7472</b>
Residential	-	-	646	-	-	-	-	5308	480	-	6434
Comm. and public services	-	-	1019	-	-	-	-	-	-	-	1019
Agriculture/forestry	-	-	10	-	-	-	-	-	-	-	10
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	9	-	-	-	-	-	-	-	9
<b>NON-ENERGY USE</b>	-	-	<b>214</b>	-	-	-	-	-	-	-	<b>214</b>
in industry/transf./energy	-	-	214	-	-	-	-	-	-	-	214
of which: chem./petrochem.	-	-	31	-	-	-	-	-	-	-	31
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>4572</b>	-	-	<b>5192</b>	-	-	-	-	<b>9764</b>
Electricity plants	-	-	4572	-	-	5192	-	-	-	-	9764
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

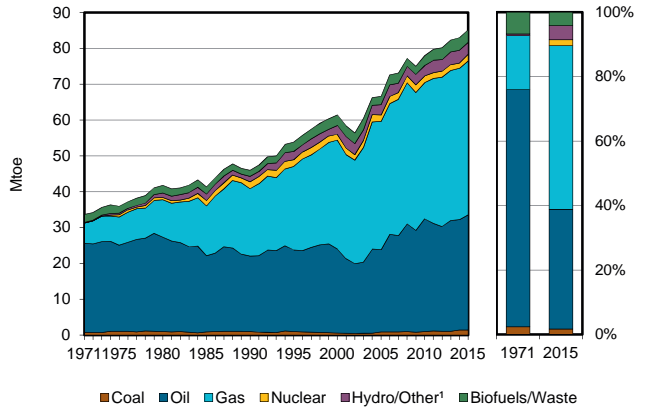


## Argentina

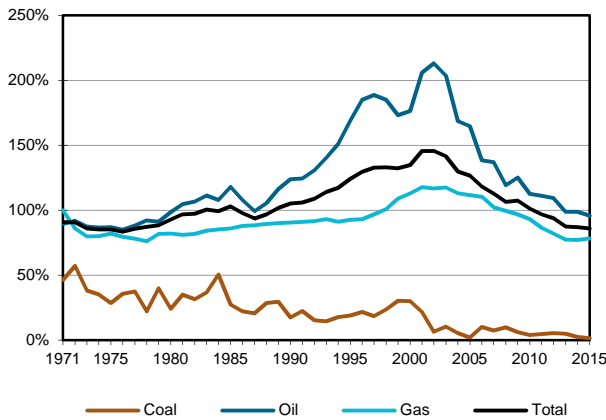
**Figure 1. Energy production**



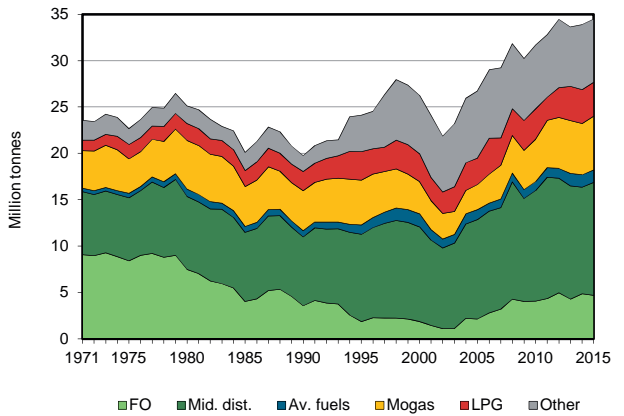
**Figure 2. Total primary energy supply<sup>2</sup>**



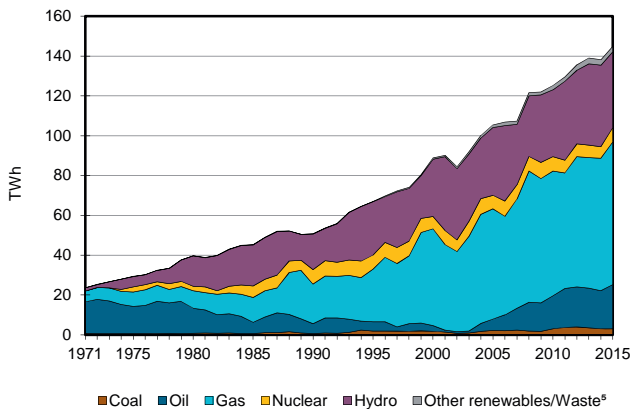
**Figure 3. Energy self-sufficiency<sup>3</sup>**



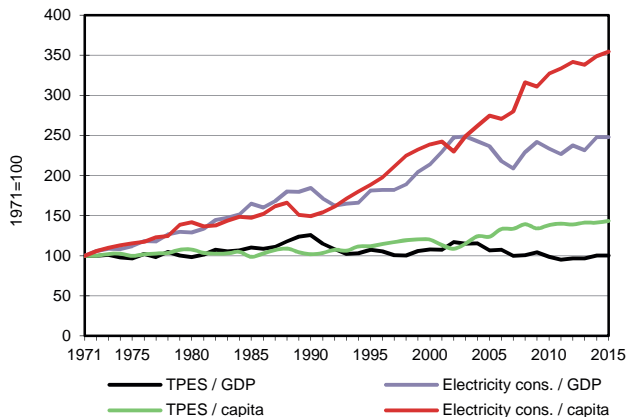
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

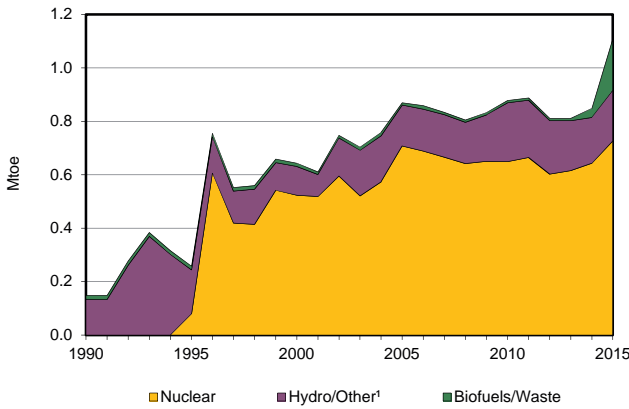
## Argentina

2015

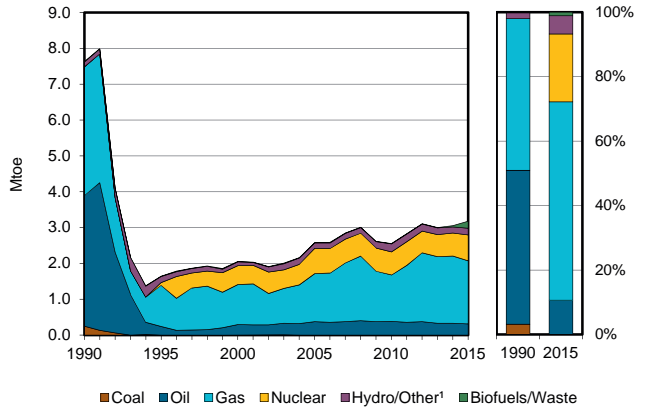
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	20	30801	-	33555	1860	3271	53	4206	-	-	73766
Imports	1314	837	5713	9432	-	-	-	-	776	-	18071
Exports	-44	-1878	-1693	-53	-	-	-	-701	-5	-	-4375
Intl. marine bunkers	-	-	-908	-	-	-	-	-	-	-	-908
Intl. aviation bunkers	-	-	-877	-	-	-	-	-	-	-	-877
Stock changes	95	-230	427	-	-	-	-	-	-	-	292
<b>TPES</b>	<b>1385</b>	<b>29530</b>	<b>2662</b>	<b>42934</b>	<b>1860</b>	<b>3271</b>	<b>53</b>	<b>3504</b>	<b>771</b>	<b>-</b>	<b>85970</b>
Transfers	-	598	-63	-	-	-	-	-	-	-	535
Statistical differences	8	907	-444	544	-	-	-	-4	0	-	1010
Electricity plants	-726	-	-5199	-15090	-1860	-3271	-53	-758	12466	-	-14492
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-234	-	-	-	-	-	-	-	-	-	-234
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-173	-	-662	-	-	-	-	-	-	-	-835
Oil refineries	-	-31488	30860	-	-	-	-	-	-	-	-628
Petrochemical plants	-	545	-	-	-	-	-	-	-	-	545
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-160	-	-	-160
Energy industry own use	-	-91	-1383	-6107	-	-	-	-	-341	-	-7922
Losses	-	-	-	-208	-	-	-	-	-1747	-	-1956
<b>TFC</b>	<b>259</b>	<b>-</b>	<b>25772</b>	<b>22072</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2582</b>	<b>11149</b>	<b>-</b>	<b>61834</b>
<b>INDUSTRY</b>	<b>259</b>	<b>-</b>	<b>4153</b>	<b>7225</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>834</b>	<b>4337</b>	<b>-</b>	<b>16809</b>
Iron and steel	254	-	-	1665	-	-	-	-	-	-	1919
Chemical and petrochemical	-	-	14	-	-	-	-	-	-	-	14
Non-ferrous metals	-	-	-	248	-	-	-	-	-	-	248
Non-metallic minerals	-	-	-	1177	-	-	-	-	-	-	1177
Transport equipment	-	-	-	41	-	-	-	-	-	-	41
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	1744	-	-	-	-	-	-	1744
Paper pulp and printing	-	-	-	301	-	-	-	-	-	-	301
Wood and wood products	-	-	-	15	-	-	-	-	-	-	15
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	108	-	-	-	-	-	-	108
Non-specified	5	-	4140	1927	-	-	-	834	4337	-	11242
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>12780</b>	<b>3541</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1161</b>	<b>52</b>	<b>-</b>	<b>17535</b>
Domestic aviation	-	-	506	-	-	-	-	-	-	-	506
Road	-	-	11928	2494	-	-	-	1161	-	-	15584
Rail	-	-	-	-	-	-	-	-	52	-	52
Pipeline transport	-	-	-	1047	-	-	-	-	-	-	1047
Domestic navigation	-	-	346	-	-	-	-	-	-	-	346
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>5602</b>	<b>9676</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>587</b>	<b>6760</b>	<b>-</b>	<b>22625</b>
Residential	-	-	1363	8559	-	-	-	285	4048	-	14255
Comm. and public services	-	-	400	1116	-	-	-	176	2621	-	4313
Agriculture/forestry	-	-	3838	-	-	-	-	127	92	-	4057
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>3236</b>	<b>1630</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4866</b>
in industry/transf./energy	-	-	3236	1630	-	-	-	-	-	-	4866
of which: chem./petrochem.	-	-	2217	1630	-	-	-	-	-	-	3847
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2942</b>	<b>-</b>	<b>22357</b>	<b>71728</b>	<b>7139</b>	<b>38039</b>	<b>614</b>	<b>2138</b>	<b>-</b>	<b>-</b>	<b>144957</b>
Electricity plants	2942	-	22357	71728	7139	38039	614	2138	-	-	144957
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Armenia

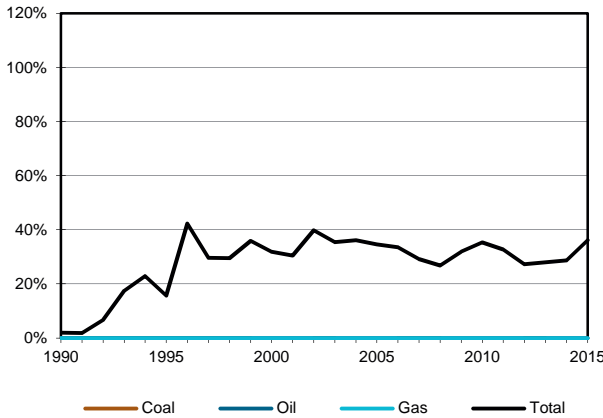
**Figure 1. Energy production**



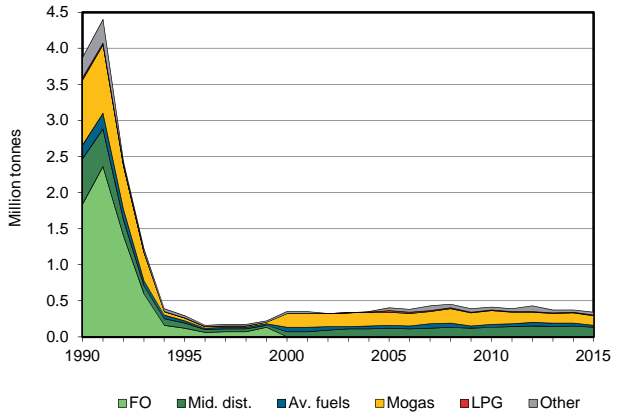
**Figure 2. Total primary energy supply<sup>2</sup>**



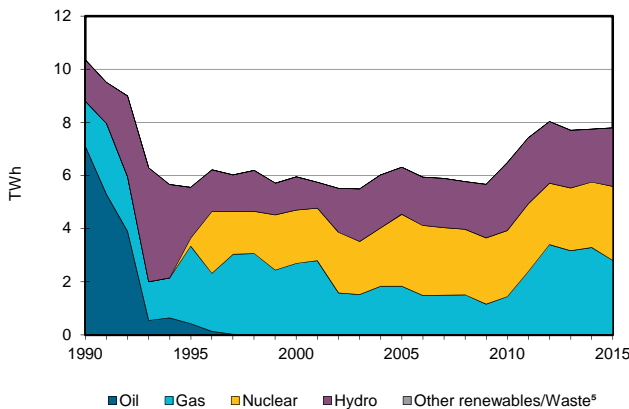
**Figure 3. Energy self-sufficiency<sup>3</sup>**



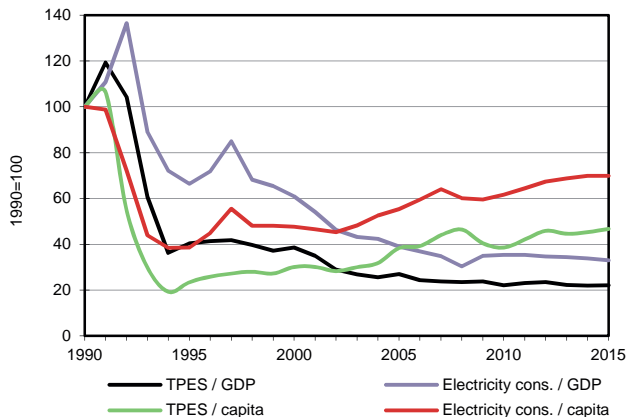
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Armenia

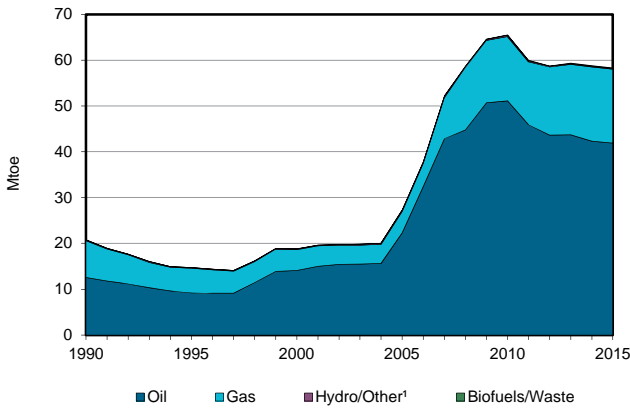
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	727	190	0	190	-	-	1107
Imports	1	-	340	1892	-	-	-	-	15	-	2247
Exports	-0	-	-	-105	-	-	-	-	-122	-	-228
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-32	-	-	-	-	-	-	-	-32
Stock changes	-	-	-	-27	-	-	-	-	-	-	-27
<b>TPES</b>	<b>0</b>	<b>-</b>	<b>308</b>	<b>1760</b>	<b>727</b>	<b>190</b>	<b>0</b>	<b>190</b>	<b>-108</b>	<b>-</b>	<b>3067</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0	-	7	-	-	-	-	-	-	-	7
Electricity plants	-	-	-	-536	-727	-190	-0	-	669	-	-784
CHP plants	-	-	-	-5	-	-	-	-	2	1	-2
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-2	-	-	-	-	-31	-0	-34
Losses	-	-	-	-111	-	-	-	-	-70	-0	-181
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>315</b>	<b>1106</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>190</b>	<b>462</b>	<b>0</b>	<b>2073</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>172</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>136</b>	<b>-</b>	<b>310</b>
Iron and steel	-	-	-	14	-	-	-	0	9	-	23
Chemical and petrochemical	-	-	-	3	-	-	-	-	1	-	5
Non-ferrous metals	-	-	-	13	-	-	-	-	17	-	31
Non-metallic minerals	-	-	-	64	-	-	-	-	11	-	75
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	1	-	-	-	-	2	-	3
Mining and quarrying	-	-	-	5	-	-	-	-	62	-	67
Food and tobacco	-	-	1	61	-	-	-	-	24	-	87
Paper pulp and printing	-	-	-	3	-	-	-	-	2	-	5
Wood and wood products	-	-	-	0	-	-	-	-	0	-	0
Construction	-	-	1	5	-	-	-	-	3	-	8
Textile and leather	-	-	-	0	-	-	-	-	1	-	1
Non-specified	-	-	-	1	-	-	-	-	4	-	5
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>240</b>	<b>322</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>-</b>	<b>571</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	240	318	-	-	-	-	1	-	559
Rail	-	-	-	-	-	-	-	-	6	-	6
Pipeline transport	-	-	-	3	-	-	-	-	-	-	3
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	3	-	3
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>34</b>	<b>612</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>190</b>	<b>317</b>	<b>0</b>	<b>1153</b>
Residential	-	-	7	346	-	-	-	190	161	0	705
Comm. and public services	-	-	1	266	-	-	-	-	86	-	353
Agriculture/forestry	-	-	25	-	-	-	-	-	14	-	39
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	56	-	56
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>
in industry/transf./energy	-	-	40	-	-	-	-	-	-	-	40
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2801</b>	<b>2788</b>	<b>2206</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7799</b>
Electricity plants	-	-	-	2780	2788	2206	4	-	-	-	7778
CHP plants	-	-	-	21	-	-	-	-	-	-	21
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>
CHP plants	-	-	-	28	-	-	-	-	-	-	28
Heat plants	-	-	-	-	-	-	-	-	-	-	-

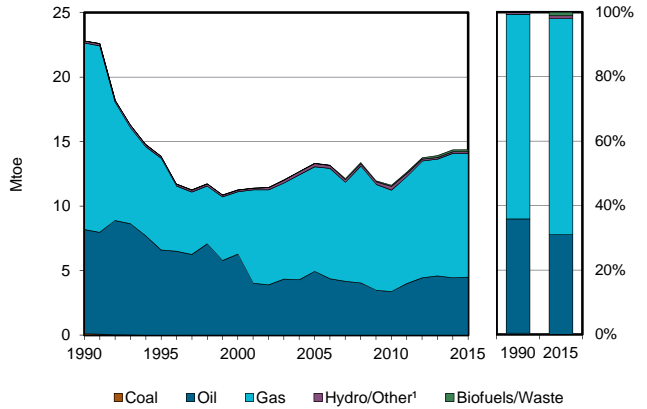
1. Includes peat.

## Azerbaijan

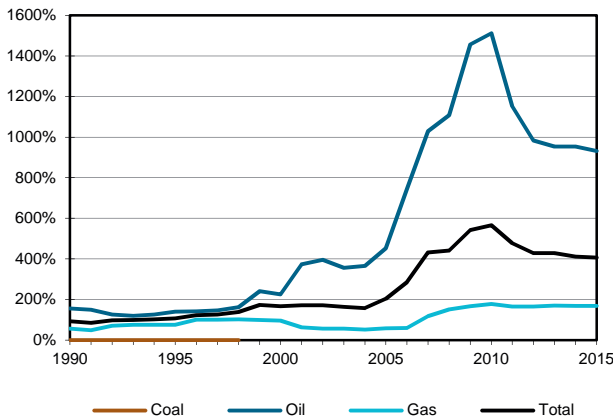
**Figure 1. Energy production**



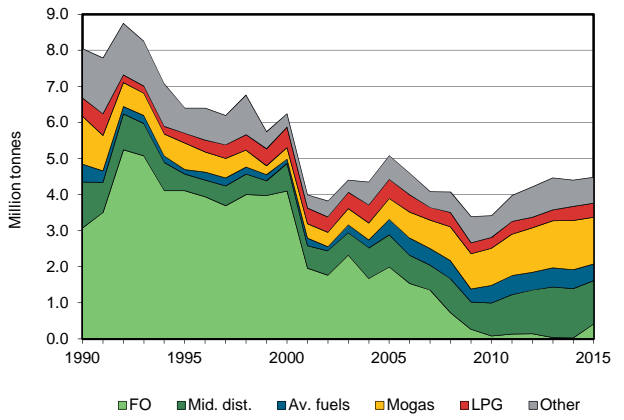
**Figure 2. Total primary energy supply<sup>2</sup>**



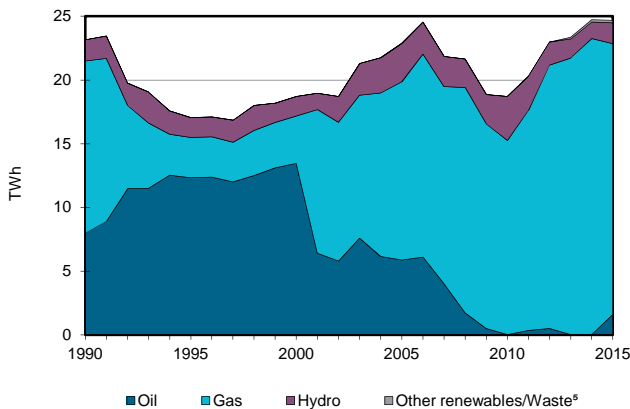
**Figure 3. Energy self-sufficiency<sup>3</sup>**



**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

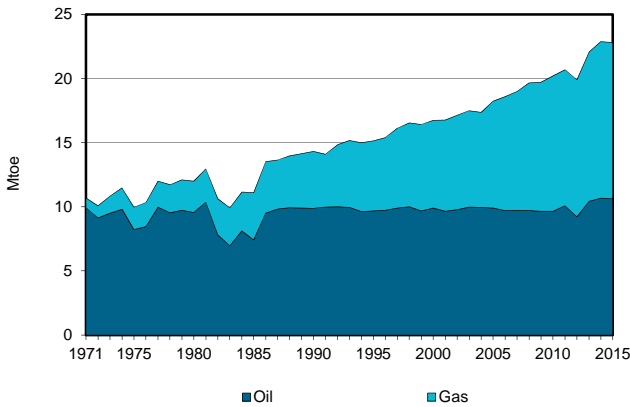
## Azerbaijan

2015

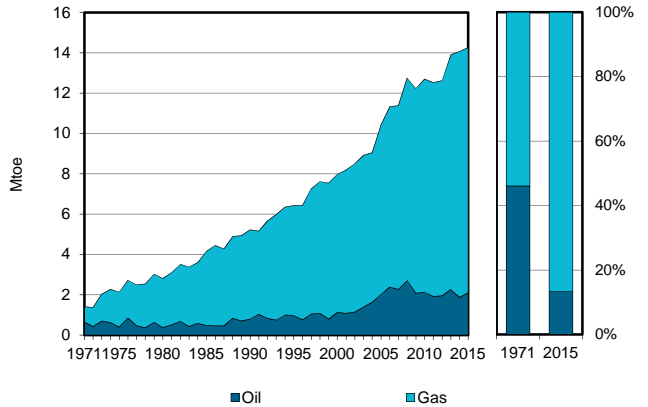
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	41867	-	16147	-	141	1	154	-	-	58309
Imports	-	-	276	-	-	-	-	-	9	-	285
Exports	-	-35276	-2299	-6837	-	-	-	-	-23	-	-44435
Intl. marine bunkers	-	-	-51	-	-	-	-	-	-	-	-51
Intl. aviation bunkers	-	-	-272	-	-	-	-	-	-	-	-272
Stock changes	-	60	187	272	-	-	-	1	-	-	520
<b>TPES</b>	-	<b>6651</b>	<b>-2159</b>	<b>9582</b>	-	<b>141</b>	<b>1</b>	<b>155</b>	<b>-14</b>	-	<b>14356</b>
Transfers	-	-41	44	-	-	-	-	-	-	-	3
Statistical differences	-	-37	-60	-38	-	-	-	-	-9	-	-144
Electricity plants	-	-	-54	-2990	-	-141	-1	-73	1429	-	-1829
CHP plants	-	-	-323	-1582	-	-	-	-	694	26	-1185
Heat plants	-	-	-	-155	-	-	-	-	-	130	-26
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-6572	6441	-	-	-	-	-	-	-	-132
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-5	-	-	-5
Energy industry own use	-	-	-364	-422	-	-	-	-	-338	-15	-1140
Losses	-	-	-	-912	-	-	-	-	-247	-18	-1177
<b>TFC</b>	-	-	<b>3525</b>	<b>3481</b>	-	-	-	<b>77</b>	<b>1515</b>	<b>123</b>	<b>8721</b>
<b>INDUSTRY</b>	-	-	<b>67</b>	<b>907</b>	-	-	-	<b>0</b>	<b>272</b>	-	<b>1246</b>
Iron and steel	-	-	1	39	-	-	-	-	22	-	63
Chemical and petrochemical	-	-	-	224	-	-	-	-	33	-	257
Non-ferrous metals	-	-	-	4	-	-	-	-	71	-	74
Non-metallic minerals	-	-	1	214	-	-	-	-	27	-	242
Transport equipment	-	-	-	8	-	-	-	-	0	-	8
Machinery	-	-	-	24	-	-	-	-	16	-	40
Mining and quarrying	-	-	4	6	-	-	-	-	7	-	17
Food and tobacco	-	-	8	317	-	-	-	0	32	-	356
Paper pulp and printing	-	-	-	2	-	-	-	-	4	-	6
Wood and wood products	-	-	-	2	-	-	-	-	1	-	3
Construction	-	-	53	40	-	-	-	0	46	-	140
Textile and leather	-	-	-	6	-	-	-	-	6	-	11
Non-specified	-	-	-	21	-	-	-	-	7	-	28
<b>TRANSPORT</b>	-	-	<b>2348</b>	<b>4</b>	-	-	-	<b>0</b>	<b>41</b>	-	<b>2393</b>
Domestic aviation	-	-	194	-	-	-	-	-	-	-	194
Road	-	-	2121	3	-	-	-	-	-	-	2125
Rail	-	-	6	-	-	-	-	0	34	-	40
Pipeline transport	-	-	-	0	-	-	-	-	7	-	8
Domestic navigation	-	-	26	-	-	-	-	-	-	-	26
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>359</b>	<b>2540</b>	-	-	-	<b>76</b>	<b>1202</b>	<b>123</b>	<b>4300</b>
Residential	-	-	32	2309	-	-	-	52	683	102	3178
Comm. and public services	-	-	10	185	-	-	-	22	441	21	679
Agriculture/forestry	-	-	317	47	-	-	-	2	78	-	443
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>751</b>	<b>30</b>	-	-	-	-	-	-	<b>781</b>
in industry/transf./energy	-	-	705	30	-	-	-	-	-	-	735
of which: chem./petrochem.	-	-	552	30	-	-	-	-	-	-	582
in transport	-	-	46	-	-	-	-	-	-	-	46
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1607</b>	<b>21252</b>	-	<b>1637</b>	<b>10</b>	<b>182</b>	-	-	<b>24688</b>
Electricity plants	-	-	178	14608	-	1637	10	182	-	-	16615
CHP plants	-	-	1429	6644	-	-	-	-	-	-	8073
<b>Heat generated - TJ</b>	-	-	<b>10</b>	<b>6491</b>	-	-	-	-	-	-	<b>6501</b>
CHP plants	-	-	-	1076	-	-	-	-	-	-	1076
Heat plants	-	-	10	5415	-	-	-	-	-	-	5425

## Bahrain

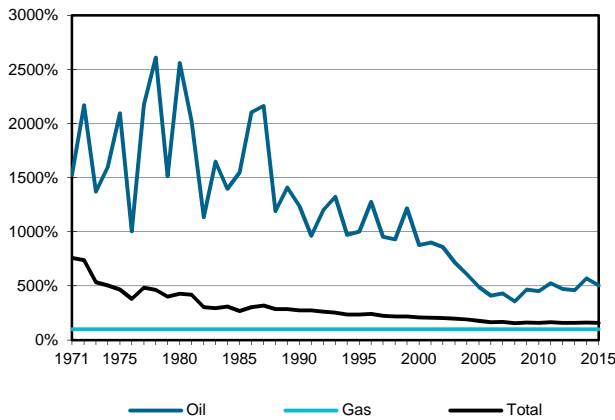
**Figure 1. Energy production**



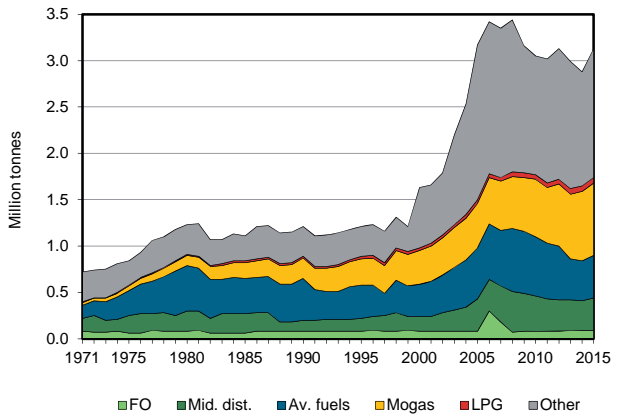
**Figure 2. Total primary energy supply<sup>1</sup>**



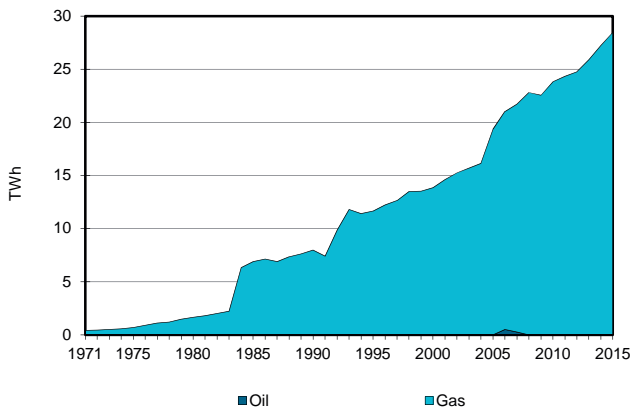
**Figure 3. Energy self-sufficiency<sup>2</sup>**



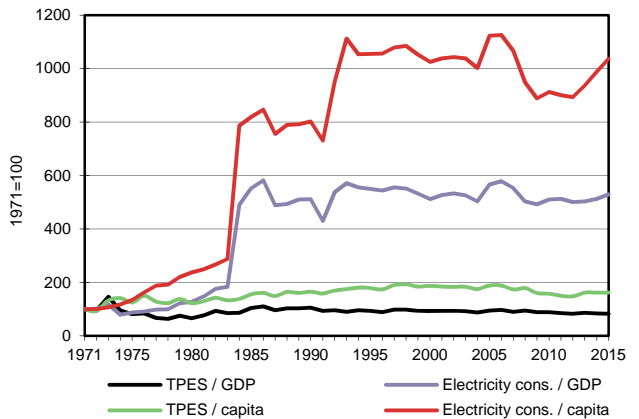
**Figure 4. Oil products demand<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>4</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

## Bahrain

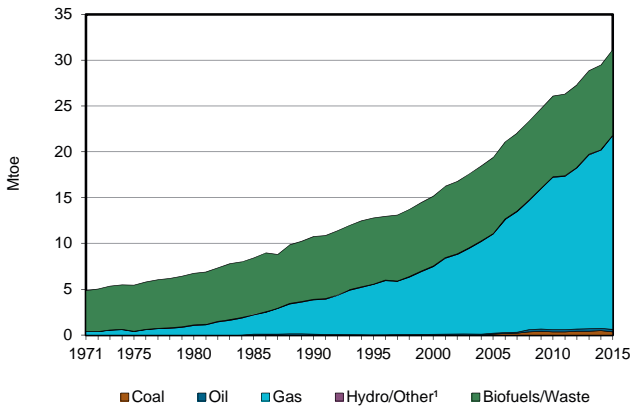
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	10628	-	12160	-	-	-	-	-	-	22788
Imports	-	3374	647	-	-	-	-	-	18	-	4039
Exports	-	-	-12230	-	-	-	-	-	-18	-	-12248
Intl. marine bunkers	-	-	-80	-	-	-	-	-	-	-	-80
Intl. aviation bunkers	-	-	-455	-	-	-	-	-	-	-	-455
Stock changes	-	-	227	0	-	-	-	-	-	-	227
<b>TPES</b>	-	<b>14002</b>	<b>-11891</b>	<b>12160</b>	-	-	-	-	<b>-1</b>	-	<b>14270</b>
Transfers	-	-834	732	-	-	-	-	-	-	-	-102
Statistical differences	-	-1	3	-	-	-	-	-	2	-	4
Electricity plants	-	-	-4	-8696	-	-	-	-	2450	-	-6251
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-13623	13745	-	-	-	-	-	-	-	122
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	456	-573	-	-	-	-	-	-	-	-117
Energy industry own use	-	-	-232	-1344	-	-	-	-	-1	-	-1577
Losses	-	-	-	-	-	-	-	-	-58	-	-58
<b>TFC</b>	-	-	<b>1779</b>	<b>2119</b>	-	-	-	-	<b>2392</b>	-	<b>6290</b>
<b>INDUSTRY</b>	-	-	-	<b>891</b>	-	-	-	-	<b>1203</b>	-	<b>2094</b>
Iron and steel	-	-	-	402	-	-	-	-	-	-	402
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	969	-	969
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	488	-	-	-	-	235	-	723
<b>TRANSPORT</b>	-	-	<b>1197</b>	-	-	-	-	-	-	-	<b>1197</b>
Domestic aviation	-	-	35	-	-	-	-	-	-	-	35
Road	-	-	1162	-	-	-	-	-	-	-	1162
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>99</b>	-	-	-	-	-	<b>1189</b>	-	<b>1288</b>
Residential	-	-	99	-	-	-	-	-	656	-	755
Comm. and public services	-	-	-	-	-	-	-	-	528	-	528
Agriculture/forestry	-	-	-	-	-	-	-	-	5	-	5
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>482</b>	<b>1228</b>	-	-	-	-	-	-	<b>1711</b>
in industry/transf./energy	-	-	482	1228	-	-	-	-	-	-	1711
of which: chem./petrochem.	-	-	42	990	-	-	-	-	-	-	1032
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>9</b>	<b>28475</b>	-	-	-	-	-	-	<b>28484</b>
Electricity plants	-	-	9	28475	-	-	-	-	-	-	28484
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

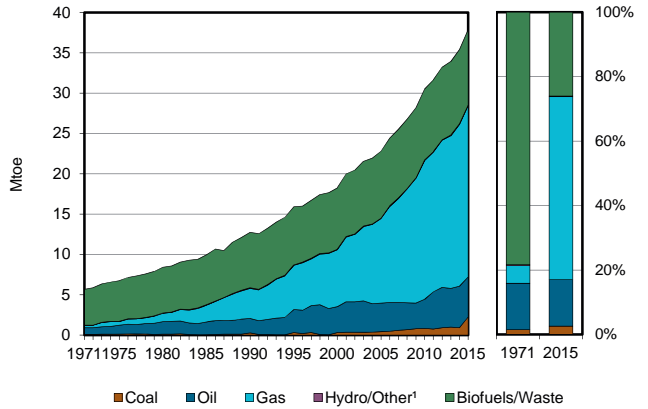


## Bangladesh

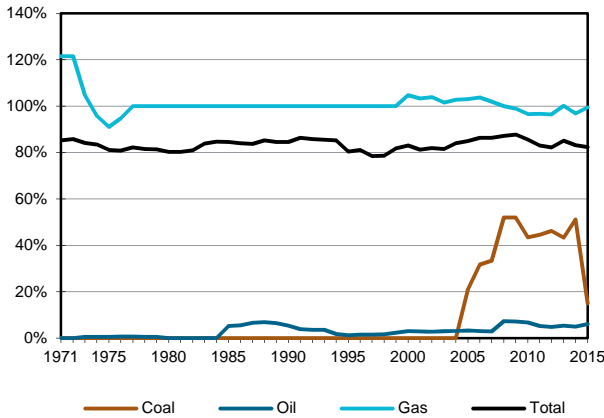
**Figure 1. Energy production**



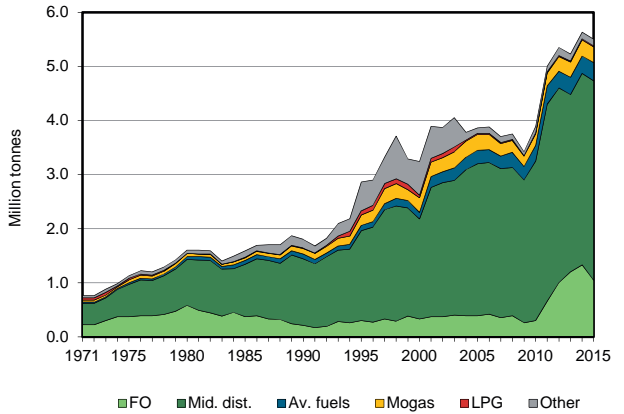
**Figure 2. Total primary energy supply<sup>2</sup>**



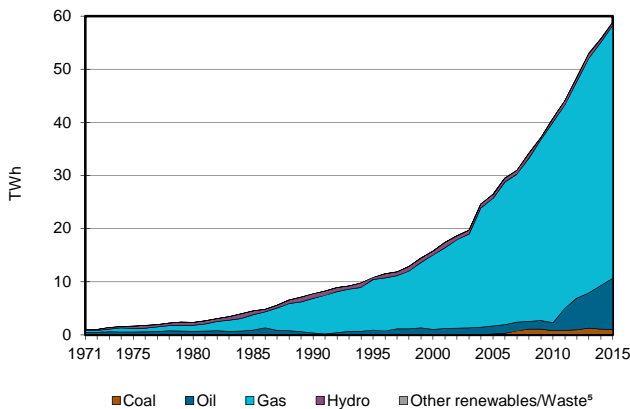
**Figure 3. Energy self-sufficiency<sup>3</sup>**



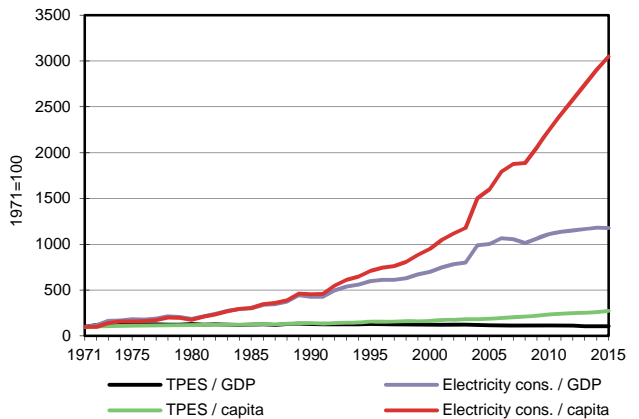
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

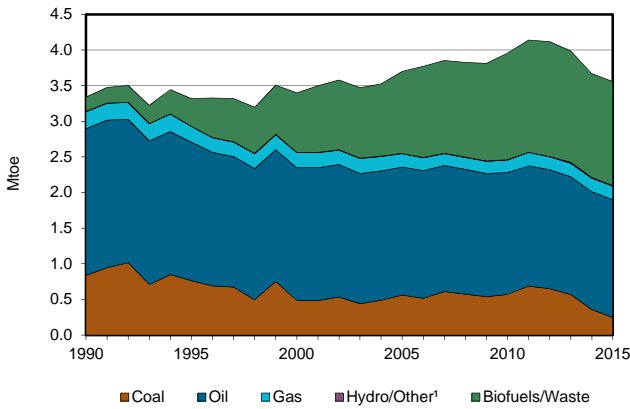
## Bangladesh

2015

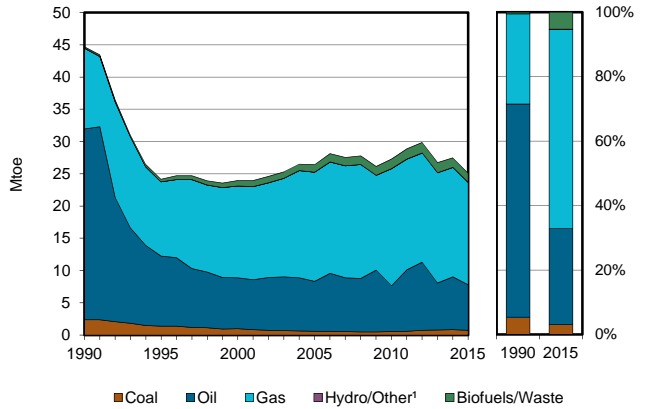
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	338	300	-	21129	-	49	14	9340	-	-	31169
Imports	1834	1101	4138	-	-	-	-	-	-	-	7072
Exports	-	-	-43	-	-	-	-	-	-	-	-43
Intl. marine bunkers	-	-	-103	-	-	-	-	-	-	-	-103
Intl. aviation bunkers	-	-	-361	-	-	-	-	-	-	-	-361
Stock changes	98	117	-188	108	-	-	-	-	-	-	135
<b>TPES</b>	<b>2270</b>	<b>1517</b>	<b>3442</b>	<b>21237</b>	-	<b>49</b>	<b>14</b>	<b>9340</b>	-	-	<b>37869</b>
Transfers	-	-213	221	-	-	-	-	-	-	-	8
Statistical differences	-	-	228	-	-	-	-	-	-52	-	176
Electricity plants	-261	-	-1344	-11965	-	-49	-14	-	5075	-	-8558
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1304	1271	-	-	-	-	-	-	-	-33
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-170	-	-	-170
Energy industry own use	-11	-	-43	-	-	-	-	-	-285	-	-339
Losses	-	-	-	-474	-	-	-	-	-561	-	-1035
<b>TFC</b>	<b>1997</b>	-	<b>3776</b>	<b>8798</b>	-	-	-	<b>9170</b>	<b>4177</b>	-	<b>27917</b>
<b>INDUSTRY</b>	<b>1997</b>	-	<b>221</b>	<b>3494</b>	-	-	-	-	<b>2325</b>	-	<b>8038</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	1988	-	-	-	-	-	-	-	-	-	1988
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	9	-	221	3494	-	-	-	-	2325	-	6050
<b>TRANSPORT</b>	-	-	<b>2234</b>	<b>1018</b>	-	-	-	-	-	-	<b>3252</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1541	1018	-	-	-	-	-	-	2559
Rail	-	-	291	-	-	-	-	-	-	-	291
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	402	-	-	-	-	-	-	-	402
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1221</b>	<b>3005</b>	-	-	-	<b>9170</b>	<b>1852</b>	-	<b>15247</b>
Residential	-	-	302	2770	-	-	-	9170	1410	-	13651
Comm. and public services	-	-	-	216	-	-	-	-	273	-	489
Agriculture/forestry	-	-	919	19	-	-	-	-	124	-	1062
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	45	-	45
<b>NON-ENERGY USE</b>	-	-	<b>99</b>	<b>1281</b>	-	-	-	-	-	-	<b>1380</b>
in industry/transf./energy	-	-	99	1281	-	-	-	-	-	-	1380
of which: chem./petrochem.	-	-	-	1281	-	-	-	-	-	-	1281
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>997</b>	-	<b>9666</b>	<b>47624</b>	-	<b>566</b>	<b>158</b>	-	-	-	<b>59011</b>
Electricity plants	997	-	9666	47624	-	566	158	-	-	-	59011
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Belarus

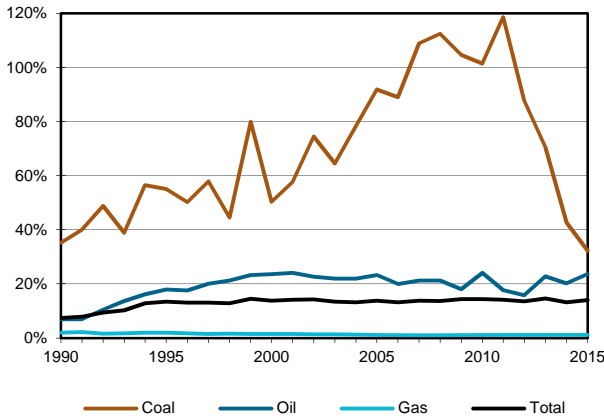
**Figure 1. Energy production**



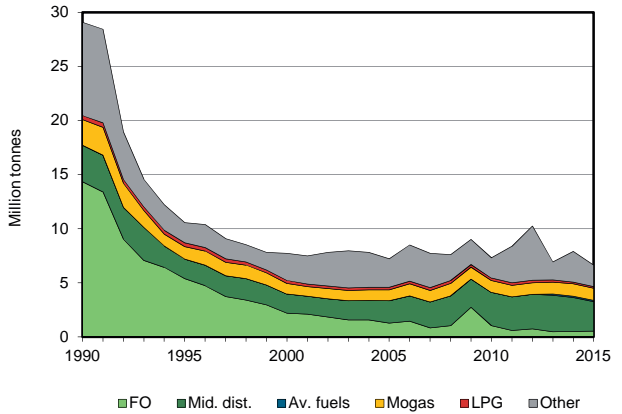
**Figure 2. Total primary energy supply<sup>2</sup>**



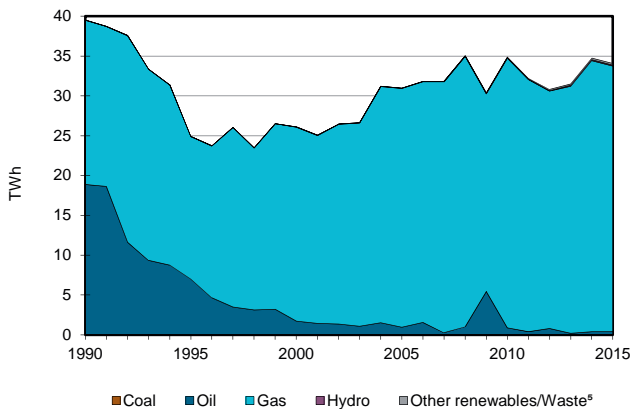
**Figure 3. Energy self-sufficiency<sup>3</sup>**



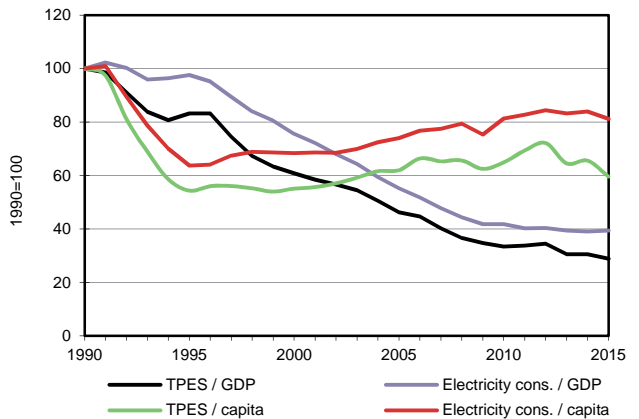
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Belarus

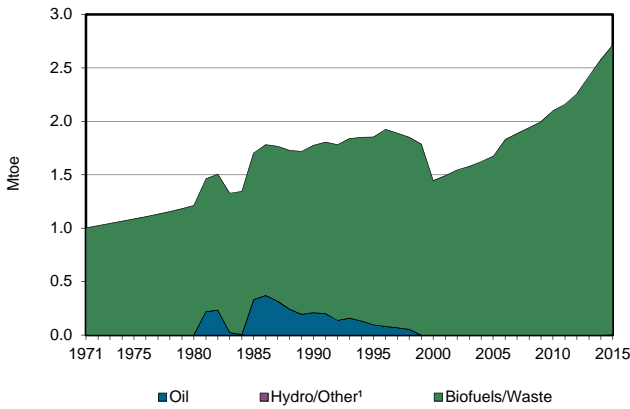
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	245	1653	-	187	-	9	3	1457	-	-	3554
Imports	449	23529	663	15595	-	-	-	0	525	-	40762
Exports	-55	-1623	-17270	-	-	-	-	-65	-299	-	-19312
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-114	-	-	-	-	-	-	-	-114
Stock changes	120	80	88	88	-	-	-	-	-	-	376
<b>TPES</b>	<b>759</b>	<b>23640</b>	<b>-16633</b>	<b>15870</b>	<b>-</b>	<b>9</b>	<b>3</b>	<b>1393</b>	<b>225</b>	<b>-</b>	<b>25267</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	2	9	-	-	-	-	-	-	-	-	11
Electricity plants	-	-	-24	-2594	-	-9	-3	-2	1167	-	-1464
CHP plants	-43	-	-105	-6598	-	-	-	-132	1764	3502	-1612
Heat plants	-58	-	-93	-2009	-	-	-	-593	-	2273	-479
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-8	-	-	-	-	-	-	-1	-	-	-9
Oil refineries	-	-23649	23313	-	-	-	-	-	-	-	-335
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-4	-	-	-4
Energy industry own use	-6	-	-1159	-209	-	-	-	-22	-387	-457	-2241
Losses	-22	-	-1	-66	-	-	-	-	-251	-486	-826
<b>TFC</b>	<b>624</b>	<b>-</b>	<b>5299</b>	<b>4394</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>639</b>	<b>2519</b>	<b>4832</b>	<b>18306</b>
<b>INDUSTRY</b>	<b>450</b>	<b>-</b>	<b>153</b>	<b>930</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>55</b>	<b>1040</b>	<b>1362</b>	<b>3991</b>
Iron and steel	10	-	1	124	-	-	-	0	165	7	307
Chemical and petrochemical	-	-	9	163	-	-	-	0	297	492	961
Non-ferrous metals	-	-	-	7	-	-	-	-	2	0	10
Non-metallic minerals	420	-	6	395	-	-	-	5	103	63	992
Transport equipment	2	-	2	12	-	-	-	1	29	29	76
Machinery	7	-	8	58	-	-	-	5	110	75	263
Mining and quarrying	-	-	3	13	-	-	-	0	19	31	67
Food and tobacco	9	-	13	81	-	-	-	4	132	406	646
Paper pulp and printing	-	-	1	5	-	-	-	0	30	66	102
Wood and wood products	-	-	3	13	-	-	-	32	34	46	128
Construction	1	-	101	17	-	-	-	4	22	-	145
Textile and leather	-	-	4	34	-	-	-	1	42	63	145
Non-specified	-	-	1	7	-	-	-	1	54	85	149
<b>TRANSPORT</b>	<b>6</b>	<b>-</b>	<b>3120</b>	<b>440</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>106</b>	<b>-</b>	<b>3674</b>
Domestic aviation	-	-	22	-	-	-	-	-	-	-	22
Road	-	-	2916	7	-	-	-	3	14	-	2940
Rail	6	-	181	-	-	-	-	-	47	-	234
Pipeline transport	-	-	-	432	-	-	-	-	45	-	477
Domestic navigation	-	-	1	-	-	-	-	-	-	-	1
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>147</b>	<b>-</b>	<b>868</b>	<b>1612</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>581</b>	<b>1373</b>	<b>3469</b>	<b>8051</b>
Residential	113	-	81	1488	-	-	-	332	568	2193	4775
Comm. and public services	33	-	111	44	-	-	-	194	674	1125	2180
Agriculture/forestry	2	-	676	79	-	-	-	55	131	152	1094
Fishing	-	-	-	-	-	-	-	0	1	0	1
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>21</b>	<b>-</b>	<b>1158</b>	<b>1411</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2591</b>
in industry/transf./energy	21	-	1158	1411	-	-	-	-	-	-	2591
of which: chem./petrochem.	-	-	-	1411	-	-	-	-	-	-	1411
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>38</b>	<b>-</b>	<b>362</b>	<b>33355</b>	<b>-</b>	<b>107</b>	<b>34</b>	<b>186</b>	<b>-</b>	<b>-</b>	<b>34082</b>
Electricity plants	-	-	124	13303	-	107	34	3	-	-	13571
CHP plants	38	-	238	20052	-	-	-	183	-	-	20511
<b>Heat generated - TJ</b>	<b>3015</b>	<b>-</b>	<b>5347</b>	<b>212415</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21080</b>	<b>-</b>	<b>-</b>	<b>241857</b>
CHP plants	1292	-	2170	139524	-	-	-	3671	-	-	146657
Heat plants	1723	-	3177	72891	-	-	-	17409	-	-	95200

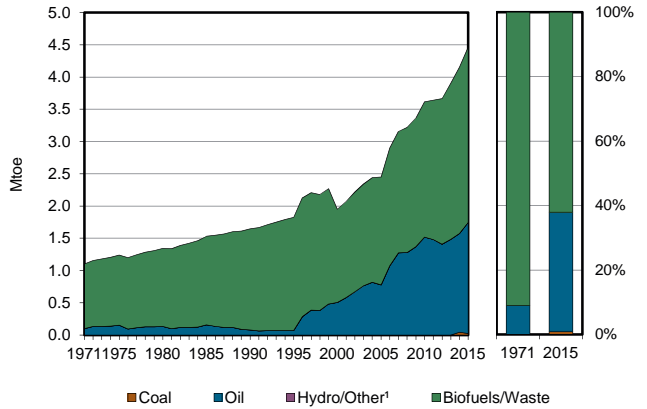
1. Includes peat.

## Benin

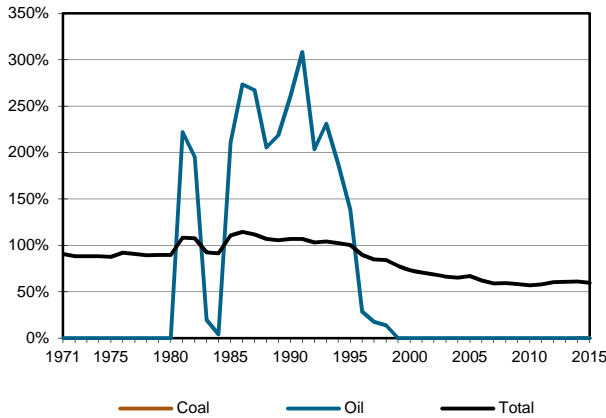
**Figure 1. Energy production**



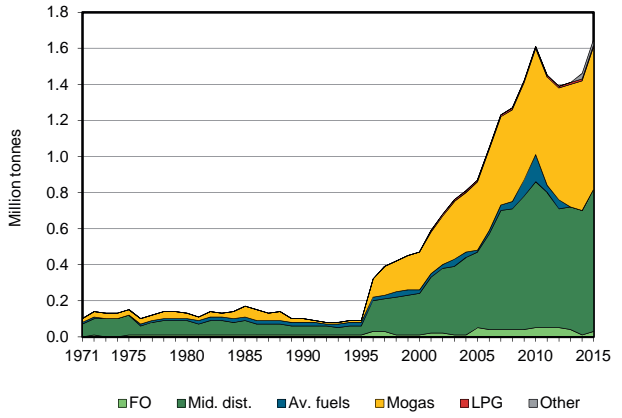
**Figure 2. Total primary energy supply<sup>2</sup>**



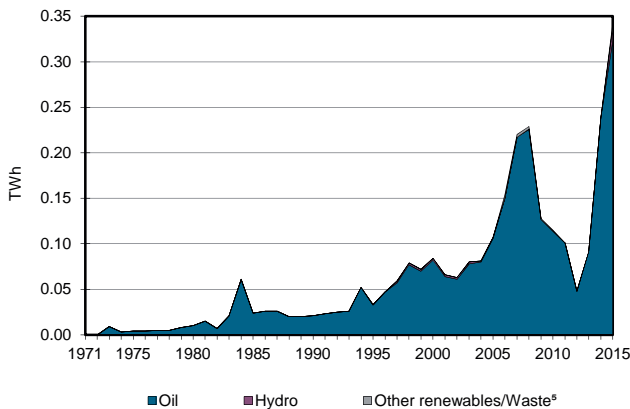
**Figure 3. Energy self-sufficiency<sup>3</sup>**



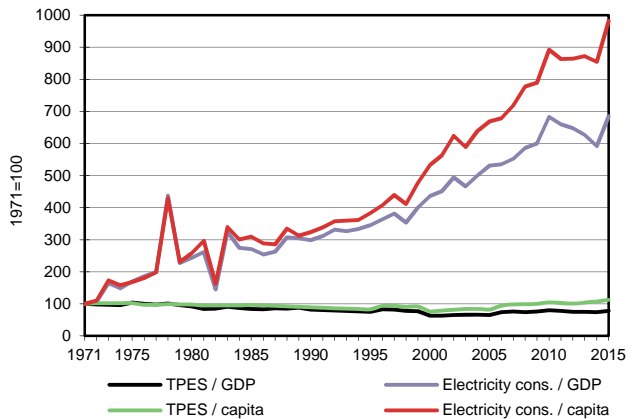
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Benin

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	1	0	2713	-	-	2714
Imports	25	-	1835	-	-	-	-	-	93	-	1953
Exports	-	-	-80	-	-	-	-	-	-	-	-80
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-	-	-	-	-	-	-	-	-
Stock changes	-	-	-33	-	-	-	-	-	-	-	-33
<b>TPES</b>	<b>25</b>	<b>-</b>	<b>1723</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>0</b>	<b>2713</b>	<b>93</b>	<b>-</b>	<b>4555</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	1	-	-	-	-	-	-4	-	-3
Electricity plants	-	-	-74	-	-	-1	-0	-	29	-	-47
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-891	-	-	-891
Energy industry own use	-	-	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-23	-	-23
<b>TFC</b>	<b>25</b>	<b>-</b>	<b>1650</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1821</b>	<b>95</b>	<b>-</b>	<b>3591</b>
<b>INDUSTRY</b>	<b>25</b>	<b>-</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>24</b>	<b>-</b>	<b>151</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	22	-	-	-	-	-	15	-	37
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	2	-	-	-	-	-	2	-	4
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	3	-	3
Non-specified	25	-	69	-	-	-	-	9	5	-	108
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1531</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1531</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1531	-	-	-	-	-	-	-	1531
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1812</b>	<b>71</b>	<b>-</b>	<b>1909</b>
Residential	-	-	23	-	-	-	-	1511	34	-	1568
Comm. and public services	-	-	3	-	-	-	-	301	37	-	342
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>323</b>	<b>-</b>	<b>-</b>	<b>14</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>342</b>
Electricity plants	-	-	323	-	-	14	5	-	-	-	342
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Bolivia

Figure 1. Energy production

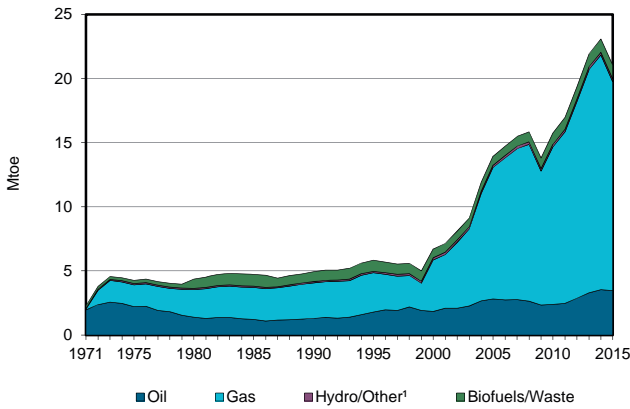


Figure 2. Total primary energy supply<sup>2</sup>

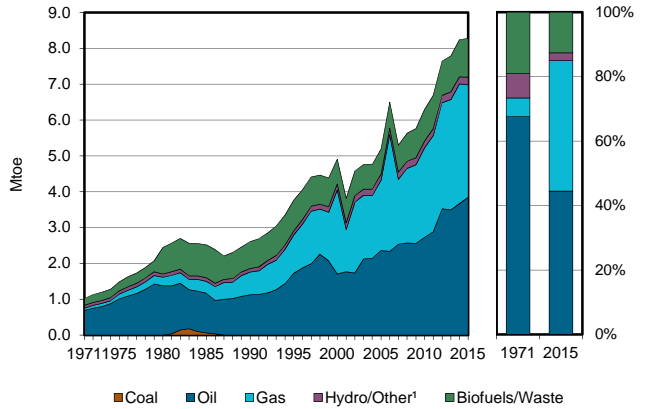


Figure 3. Energy self-sufficiency<sup>3</sup>

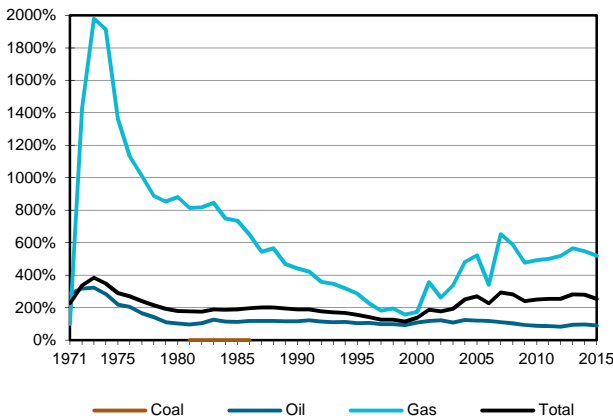


Figure 4. Oil products demand<sup>4</sup>

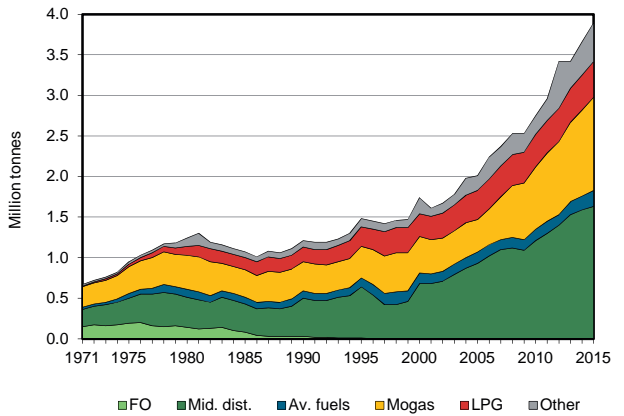


Figure 5. Electricity generation by source

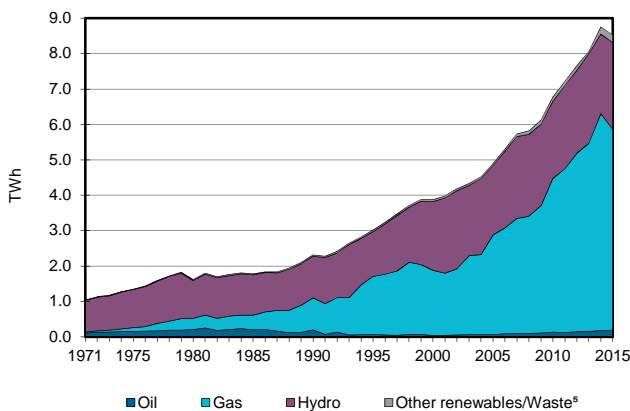
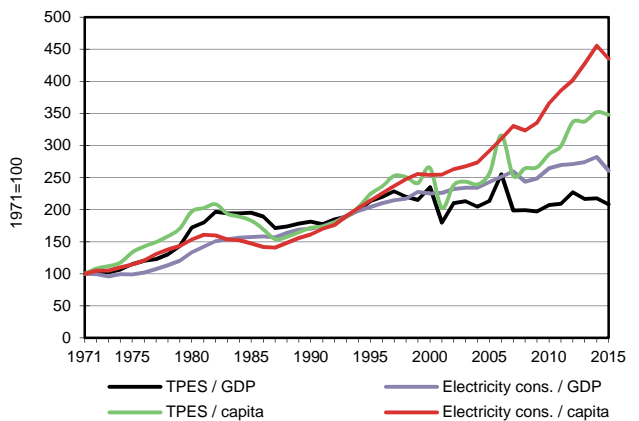


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Bolivia

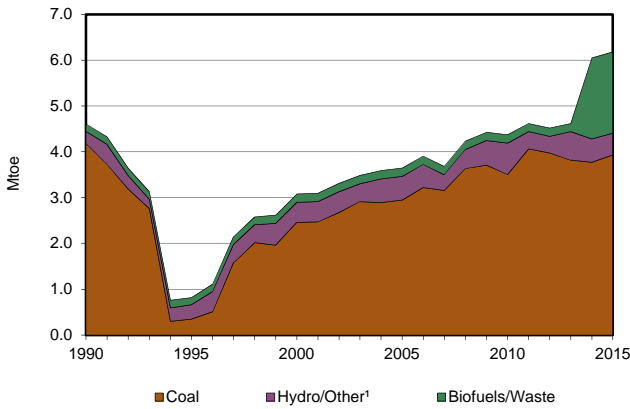
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	3465	-	16275	-	212	2	1080	-	-	21034
Imports	-	-	1014	-	-	-	-	-	-	-	1014
Exports	-	-61	-486	-13138	-	-	-	-	-	-	-13685
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-72	-	-	-	-	-	-	-	-72
Stock changes	-	-4	-8	-	-	-	-	-	-	-	-12
<b>TPES</b>	-	<b>3400</b>	<b>448</b>	<b>3137</b>	-	<b>212</b>	<b>2</b>	<b>1080</b>	-	-	<b>8279</b>
Transfers	-	-289	315	-	-	-	-	-	-	-	26
Statistical differences	-	34	225	-201	-	-	-	-0	32	-	90
Electricity plants	-	-	-59	-1357	-	-212	-2	-110	733	-	-1007
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-3145	3044	-	-	-	-	-	-	-	-102
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-16	-	-	-16
Energy industry own use	-	-	-106	-236	-	-	-	-	-18	-	-360
Losses	-	-	-116	-13	-	-	-	-	-70	-	-199
<b>TFC</b>	-	-	<b>3752</b>	<b>1329</b>	-	-	-	<b>954</b>	<b>677</b>	-	<b>6712</b>
<b>INDUSTRY</b>	-	-	<b>106</b>	<b>682</b>	-	-	-	<b>491</b>	<b>182</b>	-	<b>1461</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	106	682	-	-	-	491	182	-	1461
<b>TRANSPORT</b>	-	-	<b>2173</b>	<b>514</b>	-	-	-	-	-	-	<b>2687</b>
Domestic aviation	-	-	140	-	-	-	-	-	-	-	140
Road	-	-	2034	514	-	-	-	-	-	-	2548
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1413</b>	<b>132</b>	-	-	-	<b>463</b>	<b>496</b>	-	<b>2503</b>
Residential	-	-	464	95	-	-	-	463	257	-	1279
Comm. and public services	-	-	6	38	-	-	-	-	163	-	207
Agriculture/forestry	-	-	626	-	-	-	-	-	75	-	701
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	317	-	-	-	-	-	-	-	317
<b>NON-ENERGY USE</b>	-	-	<b>60</b>	-	-	-	-	-	-	-	<b>60</b>
in industry/transf./energy	-	-	60	-	-	-	-	-	-	-	60
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>192</b>	<b>5658</b>	-	<b>2463</b>	<b>23</b>	<b>192</b>	-	-	<b>8528</b>
Electricity plants	-	-	192	5658	-	2463	23	192	-	-	8528
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

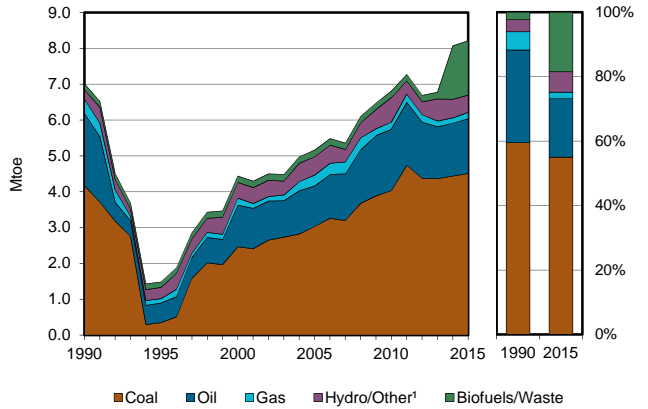


## Bosnia and Herzegovina

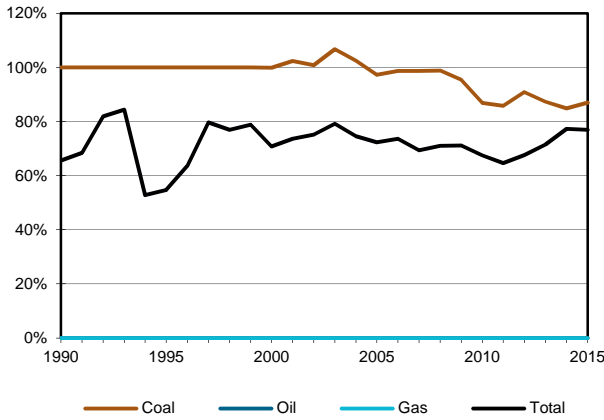
**Figure 1. Energy production**



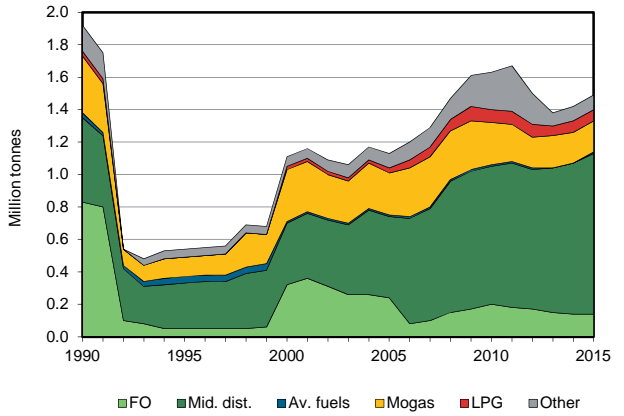
**Figure 2. Total primary energy supply<sup>2</sup>**



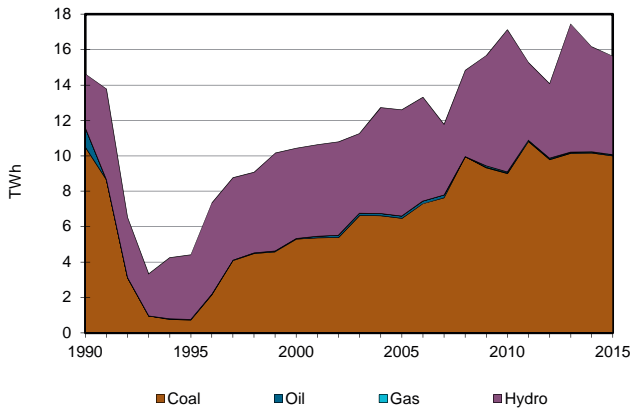
**Figure 3. Energy self-sufficiency<sup>3</sup>**



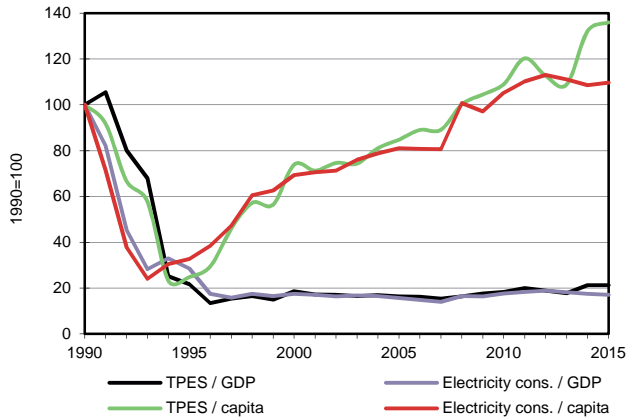
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Bosnia and Herzegovina

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	3928	-	-	-	-	477	-	1775	-	-	6180
Imports	1017	947	895	176	-	-	-	-	333	-	3369
Exports	-347	-	-237	-	-	-	-	-251	-517	-	-1352
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-6	-	-	-	-	-	-	-	-6
Stock changes	-86	-2	-71	-	-	-	-	-	-	-	-159
<b>TPES</b>	<b>4512</b>	<b>945</b>	<b>581</b>	<b>176</b>	<b>-</b>	<b>477</b>	<b>-</b>	<b>1524</b>	<b>-184</b>	<b>-</b>	<b>8032</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-15	-	1	-	-	-	-	-0	-	-	-14
Electricity plants	-3381	-	-13	-9	-	-477	-	-	1324	-	-2556
CHP plants	-88	-	-	-	-	-	-	-	20	38	-30
Heat plants	-97	-	-28	-35	-	-	-	-3	-	96	-66
Blast furnaces	-158	-	-	-	-	-	-	-	-	-	-158
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-162	-	-	-	-	-	-	-	-	-	-162
Oil refineries	-	-945	921	-	-	-	-	-	-	-	-25
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-97	-	-	-97
Energy industry own use	-159	-	-143	-	-	-	-	-	-123	-1	-426
Losses	-	-	-	-0	-	-	-	-	-120	-9	-129
<b>TFC</b>	<b>452</b>	<b>-</b>	<b>1318</b>	<b>132</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1424</b>	<b>918</b>	<b>124</b>	<b>4368</b>
<b>INDUSTRY</b>	<b>253</b>	<b>-</b>	<b>101</b>	<b>73</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>37</b>	<b>344</b>	<b>1</b>	<b>807</b>
Iron and steel	105	-	-	23	-	-	-	-	66	-	195
Chemical and petrochemical	-	-	2	1	-	-	-	-	10	-	13
Non-ferrous metals	70	-	3	40	-	-	-	-	147	-	260
Non-metallic minerals	67	-	12	1	-	-	-	-	14	-	94
Transport equipment	-	-	1	0	-	-	-	-	4	-	5
Machinery	1	-	5	0	-	-	-	-	17	0	24
Mining and quarrying	1	-	18	-	-	-	-	-	7	0	27
Food and tobacco	5	-	26	5	-	-	-	-	20	0	56
Paper pulp and printing	0	-	7	0	-	-	-	-	17	-	25
Wood and wood products	0	-	5	0	-	-	-	-	14	0	20
Construction	-	-	17	-	-	-	-	-	6	0	23
Textile and leather	2	-	2	1	-	-	-	-	10	-	15
Non-specified	0	-	1	0	-	-	-	37	10	-	48
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1018</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>1026</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1018	-	-	-	-	-	-	-	1018
Rail	-	-	-	-	-	-	-	-	8	-	8
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>199</b>	<b>-</b>	<b>131</b>	<b>59</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1387</b>	<b>566</b>	<b>124</b>	<b>2467</b>
Residential	60	-	78	33	-	-	-	1371	406	96	2045
Comm. and public services	-	-	-	-	-	-	-	16	-	-	16
Agriculture/forestry	0	-	11	-	-	-	-	0	5	-	17
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	139	-	42	26	-	-	-	-	155	27	389
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>69</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>69</b>
in industry/transf./energy	-	-	69	-	-	-	-	-	-	-	69
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>9999</b>	<b>-</b>	<b>49</b>	<b>30</b>	<b>-</b>	<b>5551</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15629</b>
Electricity plants	9767	-	49	30	-	5551	-	-	-	-	15397
CHP plants	232	-	-	-	-	-	-	-	-	-	232
<b>Heat generated - TJ</b>	<b>3165</b>	<b>-</b>	<b>1044</b>	<b>1310</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>102</b>	<b>-</b>	<b>-</b>	<b>5621</b>
CHP plants	1583	-	-	-	-	-	-	-	-	-	1583
Heat plants	1582	-	1044	1310	-	-	-	102	-	-	4038

## Botswana

Figure 1. Energy production

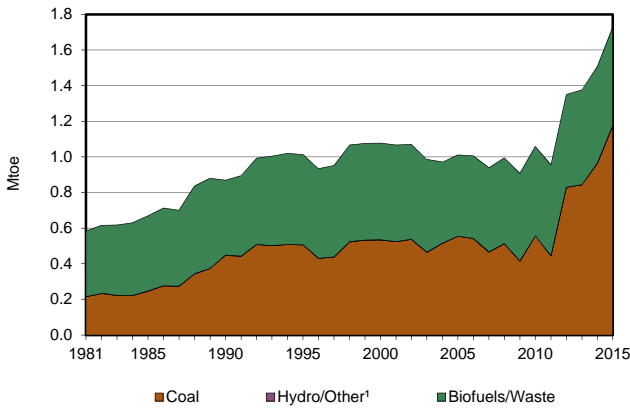


Figure 2. Total primary energy supply²

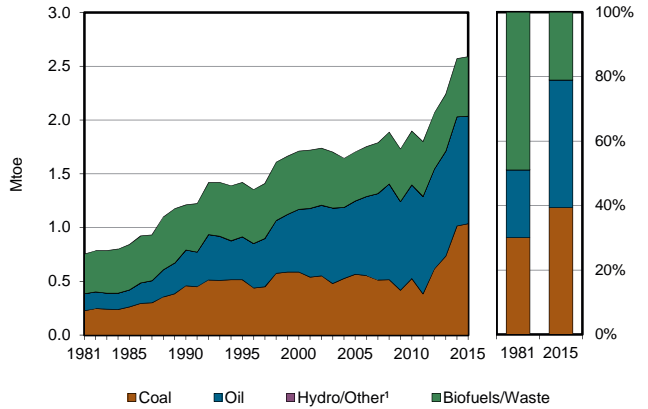


Figure 3. Energy self-sufficiency³

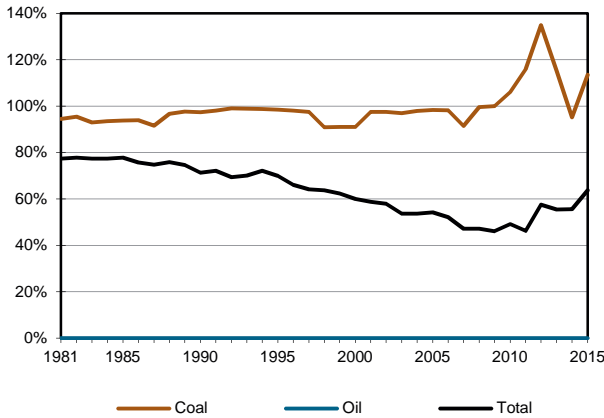


Figure 4. Oil products demand⁴

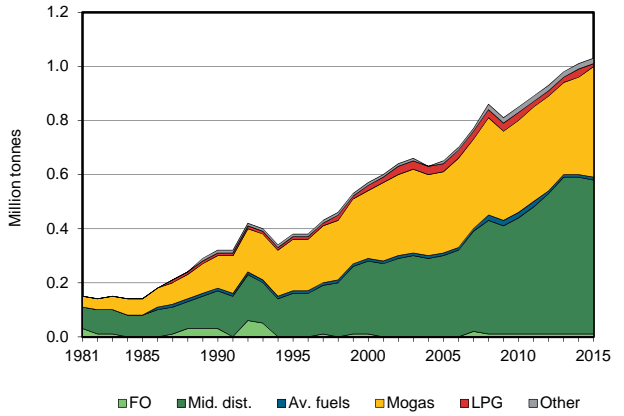


Figure 5. Electricity generation by source

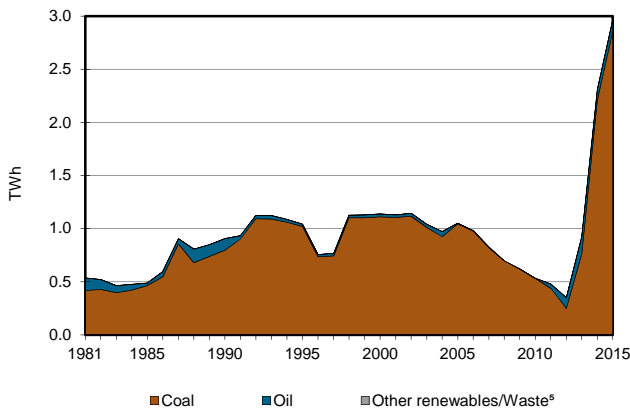
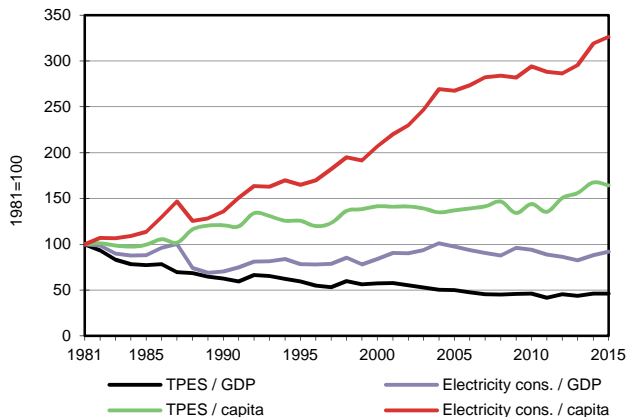


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

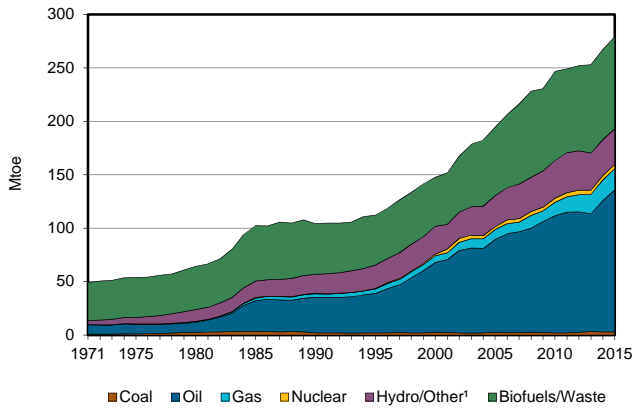
## Botswana

2015

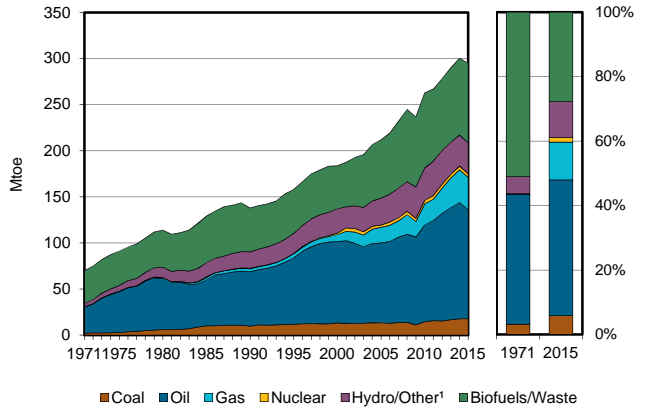
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1175	-	-	-	-	-	0	553	-	-	1728
Imports	-	-	1015	-	-	-	-	-	126	-	1141
Exports	-140	-	-	-	-	-	-	-	-	-	-140
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-14	-	-	-	-	-	-	-	-14
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>1035</b>	-	<b>1001</b>	-	-	-	<b>0</b>	<b>553</b>	<b>126</b>	-	<b>2715</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-55	-	71	-	-	-	-	-	0	-	17
Electricity plants	-934	-	-37	-	-	-	-0	-	255	-	-716
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-35	-	-35
Losses	-	-	-	-	-	-	-	-	-46	-	-46
<b>TFC</b>	<b>46</b>	-	<b>1035</b>	-	-	-	-	<b>553</b>	<b>301</b>	-	<b>1935</b>
<b>INDUSTRY</b>	<b>42</b>	-	<b>177</b>	-	-	-	-	-	<b>126</b>	-	<b>345</b>
Iron and steel	-	-	-	-	-	-	-	-	1	-	1
Chemical and petrochemical	-	-	-	-	-	-	-	-	2	-	2
Non-ferrous metals	-	-	-	-	-	-	-	-	2	-	2
Non-metallic minerals	-	-	-	-	-	-	-	-	2	-	2
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	42	-	131	-	-	-	-	-	103	-	276
Food and tobacco	-	-	4	-	-	-	-	-	8	-	12
Paper pulp and printing	-	-	1	-	-	-	-	-	1	-	2
Wood and wood products	-	-	-	-	-	-	-	-	1	-	1
Construction	-	-	21	-	-	-	-	-	1	-	21
Textile and leather	-	-	1	-	-	-	-	-	2	-	3
Non-specified	-	-	19	-	-	-	-	-	3	-	22
<b>TRANSPORT</b>	-	-	<b>790</b>	-	-	-	-	-	-	-	<b>790</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	780	-	-	-	-	-	-	-	780
Rail	-	-	10	-	-	-	-	-	-	-	10
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>4</b>	-	<b>48</b>	-	-	-	-	<b>553</b>	<b>175</b>	-	<b>779</b>
Residential	-	-	16	-	-	-	-	553	81	-	650
Comm. and public services	1	-	20	-	-	-	-	-	68	-	89
Agriculture/forestry	3	-	10	-	-	-	-	-	15	-	29
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	1	-	-	-	-	-	10	-	12
<b>NON-ENERGY USE</b>	-	-	<b>20</b>	-	-	-	-	-	-	-	<b>20</b>
in industry/transf./energy	-	-	14	-	-	-	-	-	-	-	14
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	6	-	-	-	-	-	-	-	6
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2859</b>	-	<b>107</b>	-	-	-	<b>1</b>	-	-	-	<b>2967</b>
Electricity plants	2859	-	107	-	-	-	1	-	-	-	2967
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Brazil

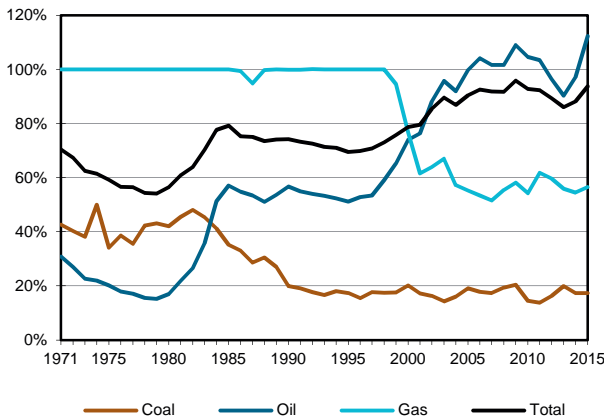
**Figure 1. Energy production**



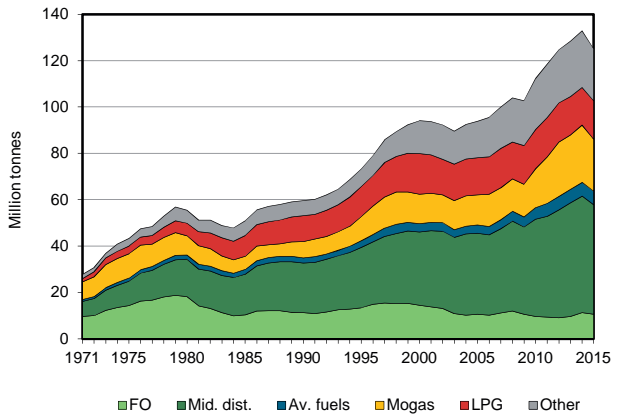
**Figure 2. Total primary energy supply²**



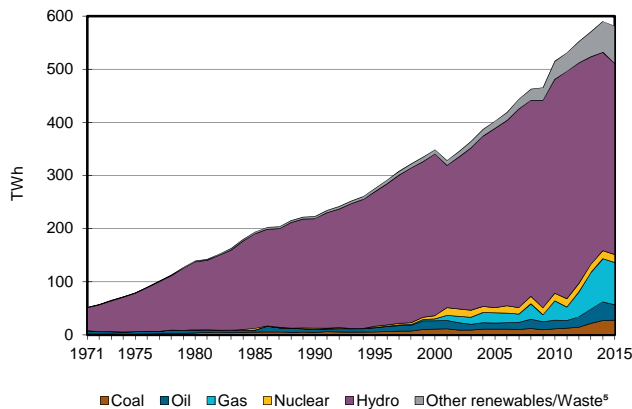
**Figure 3. Energy self-sufficiency³**



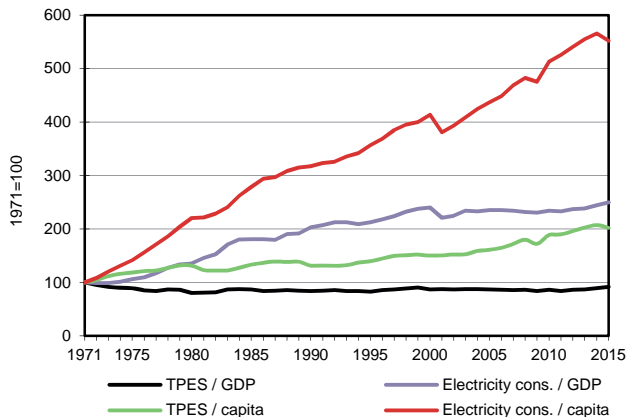
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Brazil

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	3052	132800	-	19871	3840	30938	2560	86227	-	79	279367
Imports	14843	15376	21448	15329	-	-	-	432	2979	-	70407
Exports	-	-38050	-5949	-	-	-	-	-1108	-19	-	-45126
Intl. marine bunkers	-	-	-4122	-	-	-	-	-	-	-	-4122
Intl. aviation bunkers	-	-	-2432	-	-	-	-	-	-	-	-2432
Stock changes	-229	-1165	381	-	-	-	-	900	-	-	-113
<b>TPES</b>	<b>17666</b>	<b>108962</b>	<b>9327</b>	<b>35200</b>	<b>3840</b>	<b>30938</b>	<b>2560</b>	<b>86451</b>	<b>2960</b>	<b>79</b>	<b>297982</b>
Transfers	-	-2208	2429	-	-	-	-	-	-	-	221
Statistical differences	-11	-448	297	-500	-	-	-	-13	-14	-	-689
Electricity plants	-4293	-	-5162	-12969	-3840	-30938	-1865	-253	43560	-79	-15840
CHP plants	-1978	-	-1271	-2563	-	-	-	-8580	6462	-	-7930
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-3427	-	-	-	-	-	-	-51	-	-	-3478
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	365	-	-802	-	-	-	-	-	-	-	-436
Oil refineries	-	-110061	106463	-	-	-	-	-	-	-	-3599
Petrochemical plants	-	2982	-2982	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	774	-	-967	-	-	-	-3468	-	-	-3661
Energy industry own use	-380	-	-5567	-5054	-	-	-	-13152	-2682	-	-26835
Losses	-268	-	-96	-440	-	-	-	-59	-8005	-	-8868
<b>TFC</b>	<b>7674</b>	<b>-</b>	<b>102636</b>	<b>12707</b>	<b>-</b>	<b>-</b>	<b>695</b>	<b>60874</b>	<b>42282</b>	<b>-</b>	<b>226868</b>
<b>INDUSTRY</b>	<b>7541</b>	<b>-</b>	<b>11447</b>	<b>9414</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>32942</b>	<b>16909</b>	<b>-</b>	<b>78252</b>
Iron and steel	5474	-	223	1163	-	-	-	3192	2133	-	12186
Chemical and petrochemical	153	-	2160	2103	-	-	-	66	1940	-	6422
Non-ferrous metals	935	-	1794	561	-	-	-	10	2316	-	5616
Non-metallic minerals	203	-	3975	1264	-	-	-	2678	957	-	9077
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	468	-	1117	622	-	-	-	-	1096	-	3302
Food and tobacco	63	-	668	789	-	-	-	17663	2243	-	21427
Paper pulp and printing	76	-	586	762	-	-	-	8387	1865	-	11676
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	17	-	-	-	-	-	-	-	17
Textile and leather	-	-	58	203	-	-	-	62	560	-	883
Non-specified	170	-	848	1946	-	-	-	883	3799	-	7646
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>63539</b>	<b>2201</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18122</b>	<b>238</b>	<b>-</b>	<b>84100</b>
Domestic aviation	-	-	3660	-	-	-	-	-	-	-	3660
Road	-	-	57943	1469	-	-	-	18122	-	-	77534
Rail	-	-	971	-	-	-	-	-	177	-	1148
Pipeline transport	-	-	-	732	-	-	-	-	61	-	793
Domestic navigation	-	-	965	-	-	-	-	-	-	-	965
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>13582</b>	<b>444</b>	<b>-</b>	<b>-</b>	<b>695</b>	<b>9811</b>	<b>25135</b>	<b>-</b>	<b>49666</b>
Residential	-	-	6543	295	-	-	-	6807	11293	-	24938
Comm. and public services	-	-	696	149	-	-	-	183	11531	-	12559
Agriculture/forestry	-	-	6342	-	-	-	-	2822	2311	-	11475
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	695	-	-	-	695
<b>NON-ENERGY USE</b>	<b>133</b>	<b>-</b>	<b>14068</b>	<b>648</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14850</b>
in industry/transf./energy	-	-	14068	648	-	-	-	-	-	-	14716
of which: chem./petrochem.	-	-	7199	648	-	-	-	-	-	-	7847
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	133	-	-	-	-	-	-	-	-	-	133
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>27468</b>	<b>-</b>	<b>29340</b>	<b>79490</b>	<b>14734</b>	<b>359743</b>	<b>21685</b>	<b>48802</b>	<b>-</b>	<b>390</b>	<b>581652</b>
Electricity plants	17823	-	23106	67983	14734	359743	21685	1046	-	390	506510
CHP plants	9645	-	6234	11507	-	-	-	47756	-	-	75142
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3327</b>	<b>3327</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	3327	3327

## Brunei Darussalam

Figure 1. Energy production

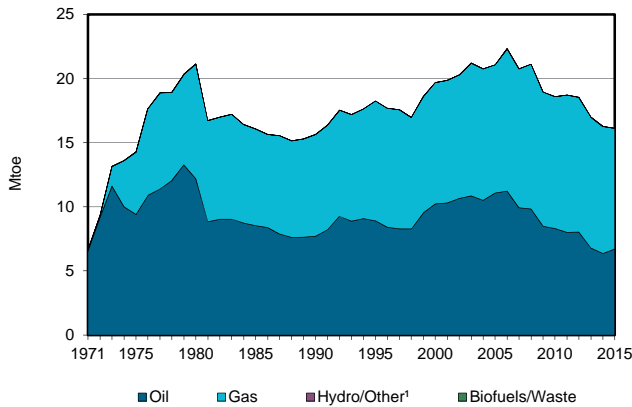


Figure 2. Total primary energy supply<sup>2</sup>

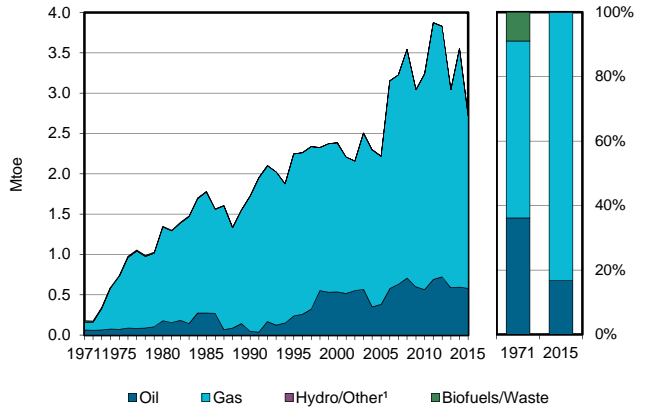


Figure 3. Energy self-sufficiency<sup>3</sup>

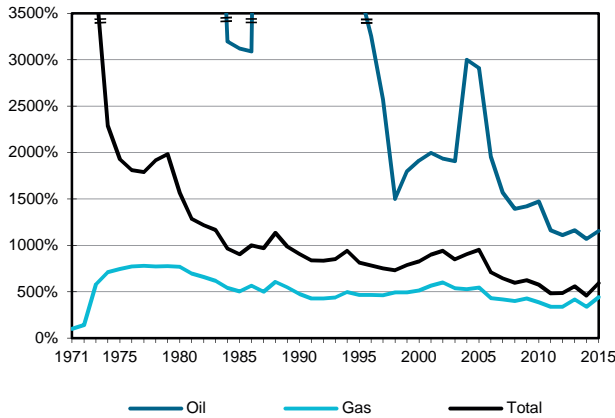


Figure 4. Oil products demand<sup>4</sup>

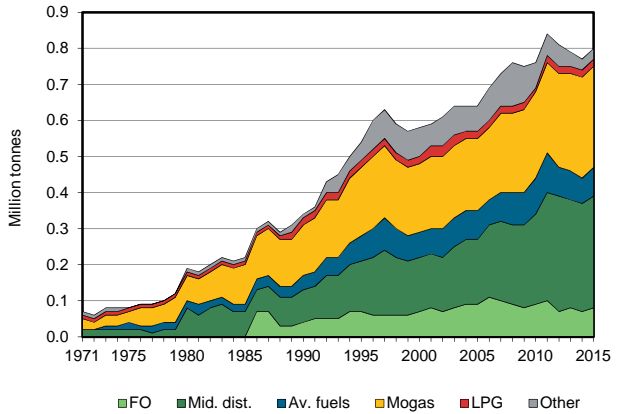


Figure 5. Electricity generation by source

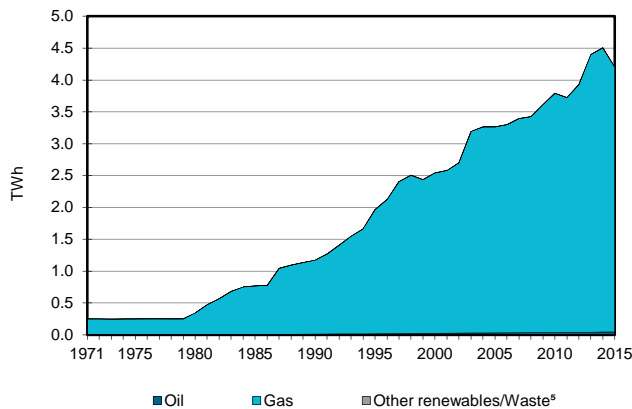
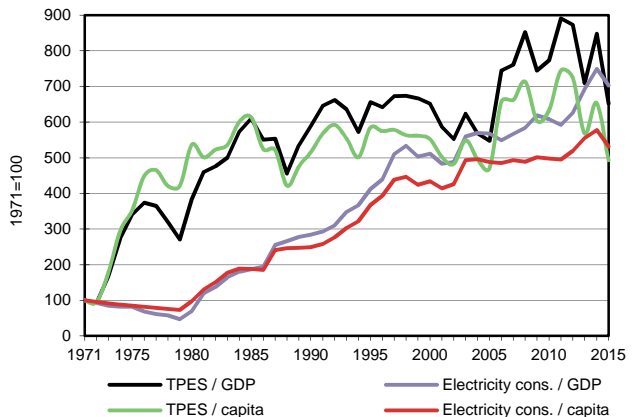


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 3500%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Brunei Darussalam

2015

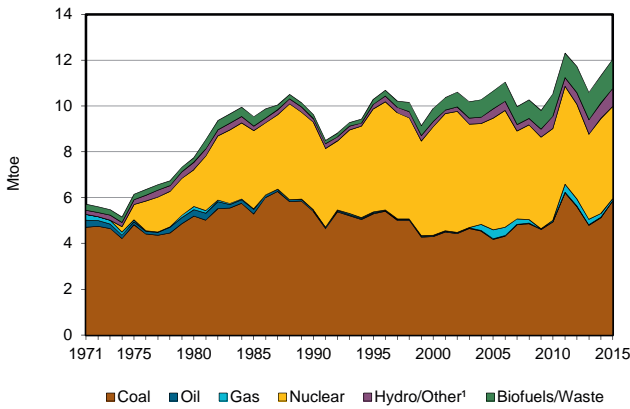
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	6695	-	9411	-	-	0	-	-	-	16106
Imports	-	10	327	-	-	-	-	-	-	-	337
Exports	-	-6365	-	-7185	-	-	-	-	-	-	-13550
Intl. marine bunkers	-	-	-89	-	-	-	-	-	-	-	-89
Intl. aviation bunkers	-	-	-87	-	-	-	-	-	-	-	-87
Stock changes	-	95	-5	-90	-	-	-	-	-	-	0
<b>TPES</b>	-	<b>435</b>	<b>146</b>	<b>2137</b>	-	-	<b>0</b>	-	-	-	<b>2717</b>
Transfers	-	-18	20	-	-	-	-	-	-	-	2
Statistical differences	-	87	4	-	-	-	-	-	19	-	110
Electricity plants	-	-	-11	-875	-	-	-0	-	321	-	-565
CHP plants	-	-	-	-123	-	-	-	-	40	-	-83
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-503	488	-	-	-	-	-	-	-	-16
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-10	-714	-	-	-	-	-66	-	-790
Losses	-	-	-	-370	-	-	-	-	-23	-	-393
<b>TFC</b>	-	-	<b>636</b>	<b>55</b>	-	-	-	-	<b>292</b>	-	<b>982</b>
<b>INDUSTRY</b>	-	-	<b>135</b>	-	-	-	-	-	<b>16</b>	-	<b>151</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	6	-	-	-	-	-	3	-	8
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	129	-	-	-	-	-	14	-	143
<b>TRANSPORT</b>	-	-	<b>457</b>	-	-	-	-	-	-	-	<b>457</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	457	-	-	-	-	-	-	-	457
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>30</b>	<b>16</b>	-	-	-	-	<b>275</b>	-	<b>322</b>
Residential	-	-	18	16	-	-	-	-	118	-	152
Comm. and public services	-	-	-	-	-	-	-	-	158	-	158
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	12	-	-	-	-	-	-	-	12
<b>NON-ENERGY USE</b>	-	-	<b>13</b>	<b>39</b>	-	-	-	-	-	-	<b>52</b>
in industry/transf./energy	-	-	12	39	-	-	-	-	-	-	51
of which: chem./petrochem.	-	-	-	39	-	-	-	-	-	-	39
in transport	-	-	1	-	-	-	-	-	-	-	1
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>42</b>	<b>4156</b>	-	-	<b>2</b>	-	-	-	<b>4200</b>
Electricity plants	-	-	42	3694	-	-	2	-	-	-	3738
CHP plants	-	-	-	462	-	-	-	-	-	-	462
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

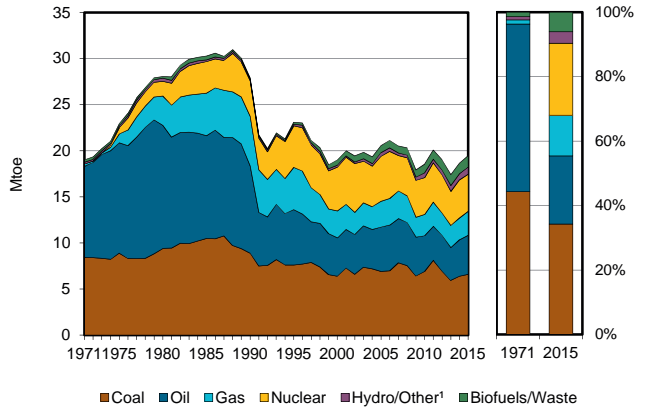


## Bulgaria

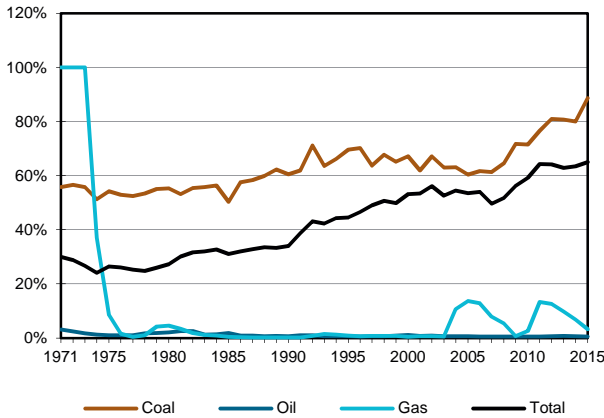
**Figure 1. Energy production**



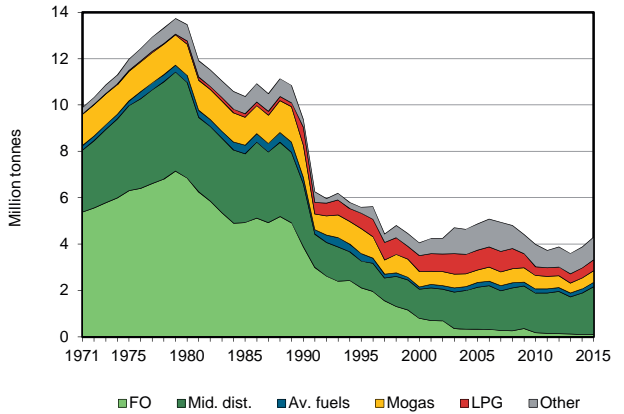
**Figure 2. Total primary energy supply<sup>2</sup>**



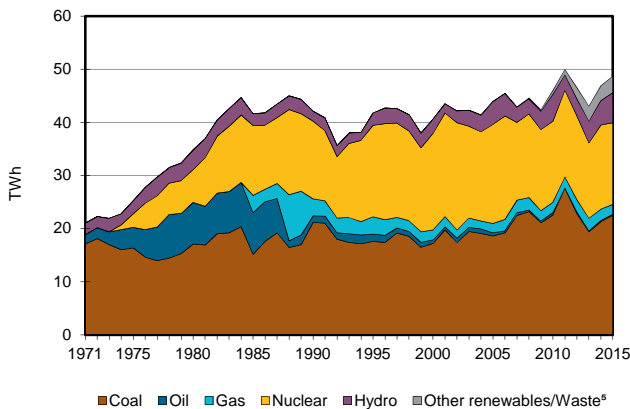
**Figure 3. Energy self-sufficiency<sup>3</sup>**



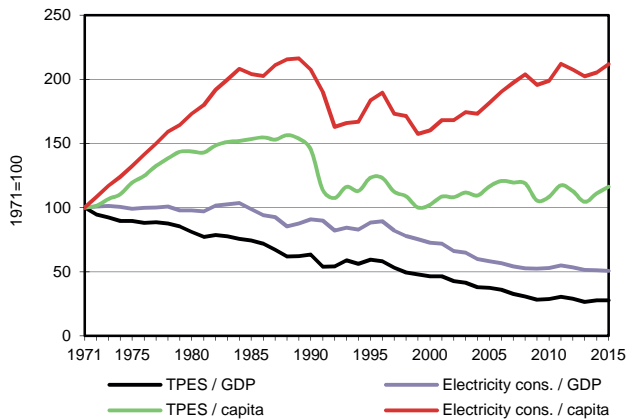
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Bulgaria

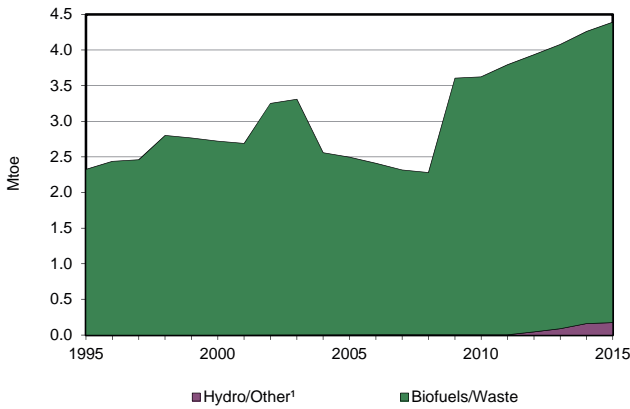
2015

Thousand tonnes of oil equivalent

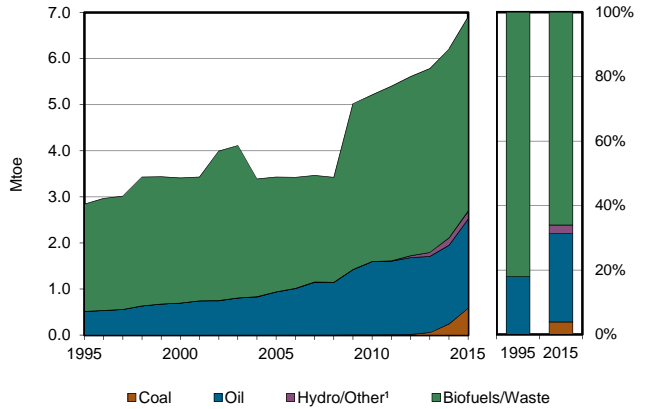
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	5852	24	-	84	4024	487	299	1275	-	39	12085
Imports	756	6817	2260	2518	-	-	-	137	366	-	12854
Exports	-15	-	-4488	-2	-	-	-	-154	-1275	-	-5934
Intl. marine bunkers	-	-	-87	-	-	-	-	-	-	-	-87
Intl. aviation bunkers	-	-	-177	-	-	-	-	-	-	-	-177
Stock changes	7	-40	-70	-7	-	-	-	-25	-	-	-134
<b>TPES</b>	<b>6600</b>	<b>6802</b>	<b>-2562</b>	<b>2594</b>	<b>4024</b>	<b>487</b>	<b>299</b>	<b>1233</b>	<b>-909</b>	<b>39</b>	<b>18607</b>
Transfers	-	166	-161	-	-	-	-	-	-	-	5
Statistical differences	-27	-33	-4	-6	-	-	-	-1	-2	-0	-72
Electricity plants	-5293	-	-10	-1	-4009	-487	-244	-5	3852	-12	-6208
CHP plants	-799	-	-164	-619	-15	-	-	-41	340	959	-340
Heat plants	-3	-	-2	-212	-	-	-	-8	-	204	-21
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-81	-	-	-	-	-	-	-	-	-	-81
Oil refineries	-	-7034	6788	-	-	-	-	-	-	-	-246
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	99	-	-116	-	-	-	-1	-	-	-18
Energy industry own use	-1	-	-385	-42	-	-	-	-	-519	-233	-1180
Losses	-10	-	-1	-13	-	-	-	-	-326	-140	-490
<b>TFC</b>	<b>386</b>	<b>-</b>	<b>3499</b>	<b>1585</b>	<b>-</b>	<b>-</b>	<b>55</b>	<b>1177</b>	<b>2436</b>	<b>818</b>	<b>9957</b>
<b>INDUSTRY</b>	<b>185</b>	<b>-</b>	<b>183</b>	<b>919</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>290</b>	<b>769</b>	<b>370</b>	<b>2716</b>
Iron and steel	-	-	-	50	-	-	-	-	61	-	111
Chemical and petrochemical	105	-	17	319	-	-	-	11	114	310	875
Non-ferrous metals	1	-	13	33	-	-	-	-	74	13	134
Non-metallic minerals	74	-	93	252	-	-	-	42	76	0	537
Transport equipment	-	-	-	7	-	-	-	0	10	0	18
Machinery	1	-	4	38	-	-	-	1	80	1	125
Mining and quarrying	-	-	6	19	-	-	-	0	92	-	116
Food and tobacco	2	-	11	94	-	-	-	28	103	11	249
Paper pulp and printing	1	-	-	46	-	-	-	162	35	0	245
Wood and wood products	1	-	-	4	-	-	-	40	18	-	62
Construction	-	-	35	26	-	-	-	0	22	2	86
Textile and leather	3	-	3	18	-	-	-	3	33	7	67
Non-specified	-	-	1	12	-	-	-	3	51	26	94
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>2824</b>	<b>238</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>143</b>	<b>30</b>	<b>-</b>	<b>3235</b>
Domestic aviation	-	-	13	-	-	-	-	-	-	-	13
Road	-	-	2794	92	-	-	-	143	5	-	3033
Rail	-	-	16	-	-	-	-	-	23	-	40
Pipeline transport	-	-	-	147	-	-	-	-	2	-	149
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>146</b>	<b>-</b>	<b>204</b>	<b>156</b>	<b>-</b>	<b>-</b>	<b>55</b>	<b>745</b>	<b>1636</b>	<b>448</b>	<b>3391</b>
Residential	133	-	34	52	-	-	10	716	915	333	2193
Comm. and public services	6	-	20	89	-	-	46	18	702	112	992
Agriculture/forestry	7	-	131	15	-	-	-	11	19	3	186
Fishing	-	-	-	-	-	-	-	-	0	-	0
Non-specified	-	-	19	-	-	-	-	-	-	-	19
<b>NON-ENERGY USE</b>	<b>55</b>	<b>-</b>	<b>288</b>	<b>272</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>615</b>
in industry/transf./energy	55	-	288	272	-	-	-	-	-	-	615
of which: chem./petrochem.	-	-	38	272	-	-	-	-	-	-	311
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>22522</b>	<b>-</b>	<b>182</b>	<b>1864</b>	<b>15383</b>	<b>5661</b>	<b>2835</b>	<b>272</b>	<b>-</b>	<b>23</b>	<b>48742</b>
Electricity plants	20833	-	12	4	15383	5661	2835	37	-	23	44788
CHP plants	1689	-	170	1860	-	-	-	235	-	-	3954
<b>Heat generated - TJ</b>	<b>19169</b>	<b>-</b>	<b>5346</b>	<b>23068</b>	<b>635</b>	<b>-</b>	<b>-</b>	<b>479</b>	<b>-</b>	<b>1648</b>	<b>50345</b>
CHP plants	19048	-	5261	15002	635	-	-	208	-	-	40154
Heat plants	121	-	85	8066	-	-	-	271	-	1648	10191

## Cambodia

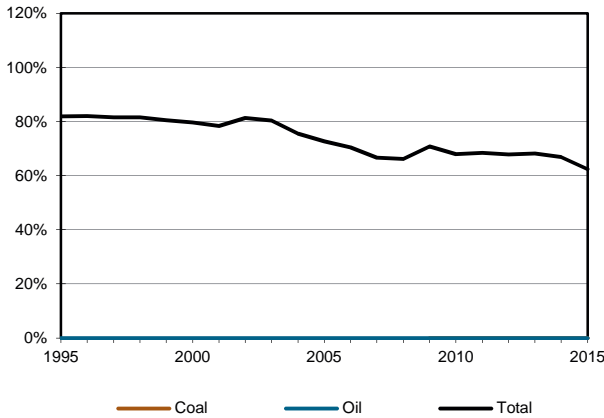
**Figure 1. Energy production**



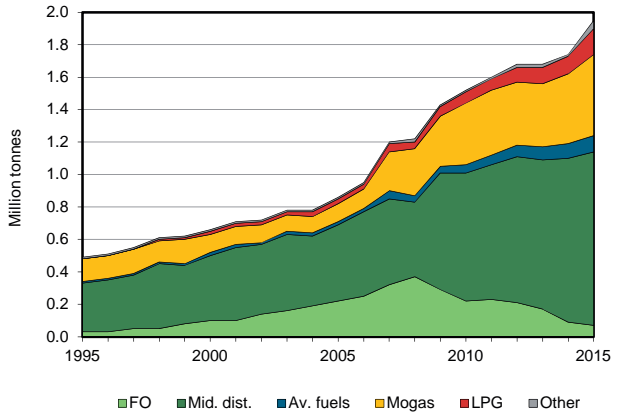
**Figure 2. Total primary energy supply<sup>2</sup>**



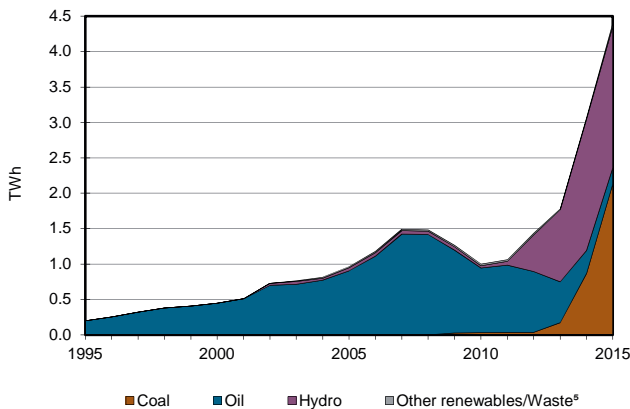
**Figure 3. Energy self-sufficiency<sup>3</sup>**



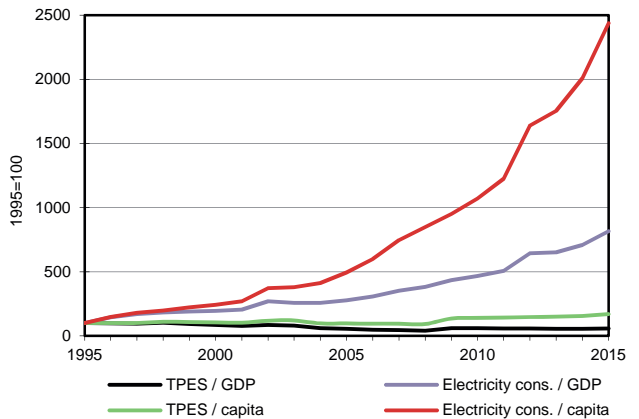
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

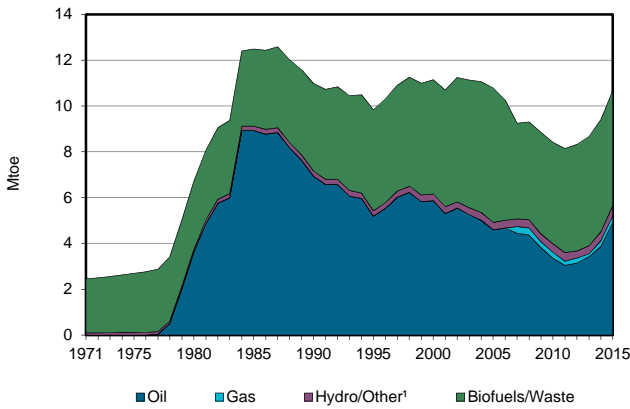
## Cambodia

2015

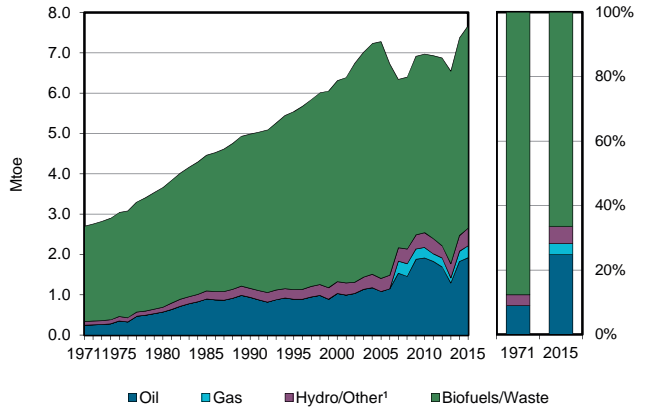
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	172	0	4219	-	-	4391
Imports	587	-	2021	-	-	-	-	-	131	-	2739
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-93	-	-	-	-	-	-	-	-93
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>587</b>	<b>-</b>	<b>1928</b>	<b>-</b>	<b>-</b>	<b>172</b>	<b>0</b>	<b>4219</b>	<b>131</b>	<b>-</b>	<b>7037</b>
Transfers	-	-	-1	-	-	-	-	-	-	-	-1
Statistical differences	-1	-	-	-	-	-	-	-	-	-	-1
Electricity plants	-574	-	-60	-	-	-172	-0	-13	378	-	-441
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-588	-	-	-588
Energy industry own use	-	-	-	-	-	-	-	-	-11	-	-11
Losses	-	-	-	-	-	-	-	-	-70	-	-70
<b>TFC</b>	<b>12</b>	<b>-</b>	<b>1866</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3618</b>	<b>429</b>	<b>-</b>	<b>5925</b>
<b>INDUSTRY</b>	<b>12</b>	<b>-</b>	<b>56</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>886</b>	<b>77</b>	<b>-</b>	<b>1031</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	12	-	-	-	-	-	-	-	-	-	12
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	56	-	-	-	-	886	77	-	1019
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1395</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1395</b>
Domestic aviation	-	-	6	-	-	-	-	-	-	-	6
Road	-	-	1181	-	-	-	-	-	-	-	1181
Rail	-	-	165	-	-	-	-	-	-	-	165
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	43	-	-	-	-	-	-	-	43
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>369</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2732</b>	<b>351</b>	<b>-</b>	<b>3453</b>
Residential	-	-	191	-	-	-	-	2732	216	-	3139
Comm. and public services	-	-	-	-	-	-	-	-	119	-	119
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	178	-	-	-	-	-	17	-	195
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>46</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46</b>
in industry/transf./energy	-	-	8	-	-	-	-	-	-	-	8
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	38	-	-	-	-	-	-	-	38
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2128</b>	<b>-</b>	<b>228</b>	<b>-</b>	<b>-</b>	<b>2000</b>	<b>3</b>	<b>38</b>	<b>-</b>	<b>-</b>	<b>4397</b>
Electricity plants	2128	-	228	-	-	2000	3	38	-	-	4397
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Cameroon

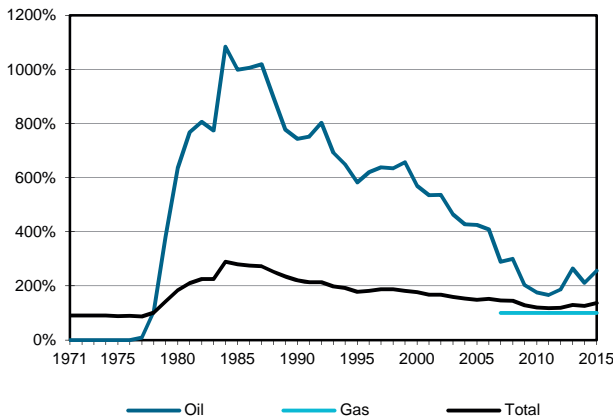
**Figure 1. Energy production**



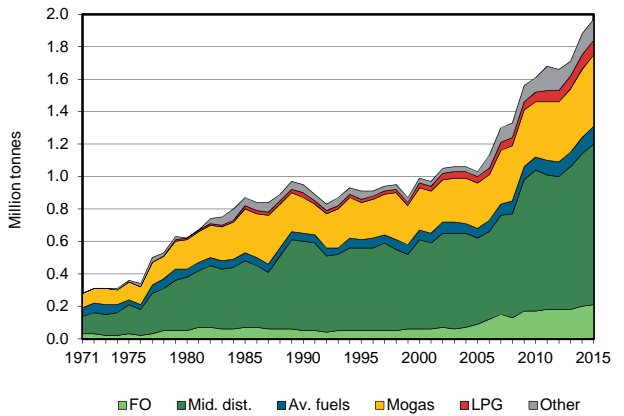
**Figure 2. Total primary energy supply<sup>2</sup>**



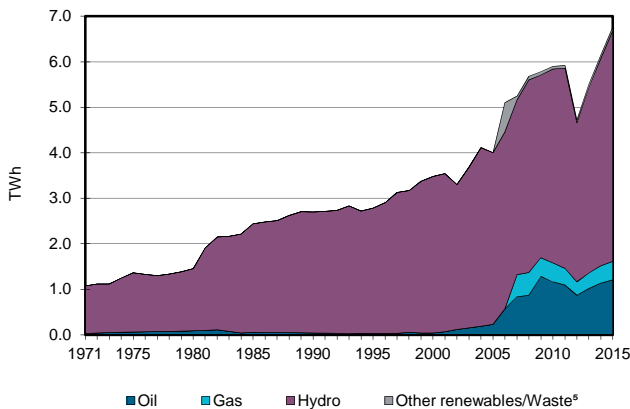
**Figure 3. Energy self-sufficiency<sup>3</sup>**



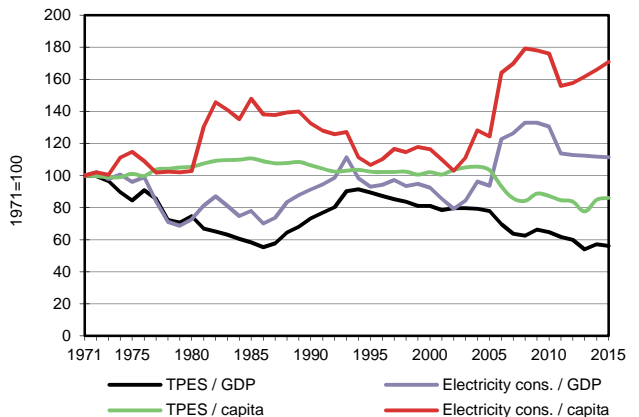
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

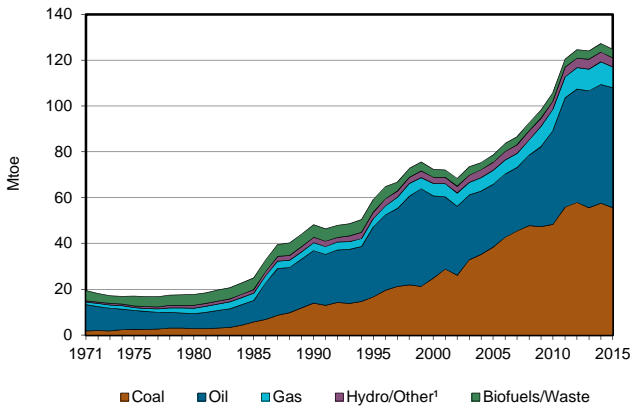
## Cameroon

2015

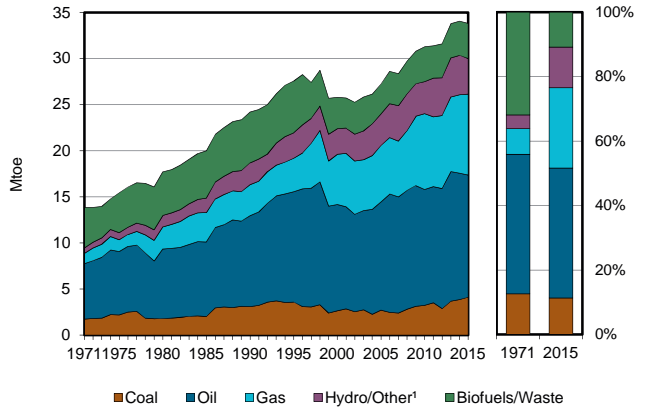
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	4919	-	295	-	436	-	5020	-	-	10670
Imports	-	1850	665	-	-	-	-	-	122	-	2637
Exports	-	-4950	-416	-	-	-	-	-	-	-	-5366
Intl. marine bunkers	-	-	-57	-	-	-	-	-	-	-	-57
Intl. aviation bunkers	-	-	-89	-	-	-	-	-	-	-	-89
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>1818</b>	<b>103</b>	<b>295</b>	-	<b>436</b>	-	<b>5020</b>	<b>122</b>	-	<b>7794</b>
Transfers	-	-	-2	-	-	-	-	-	-	-	-2
Statistical differences	-	-	-30	-	-	-	-	0	-	-	-30
Electricity plants	-	-	-287	-109	-	-436	-	-17	581	-	-268
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1818	1847	-	-	-	-	-	-	-	29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-185	-	-	-185
Energy industry own use	-	-	-47	-127	-	-	-	-	-6	-	-179
Losses	-	-	-51	-59	-	-	-	-	-200	-	-309
<b>TFC</b>	-	-	<b>1534</b>	-	-	-	-	<b>4818</b>	<b>497</b>	-	<b>6849</b>
<b>INDUSTRY</b>	-	-	<b>142</b>	-	-	-	-	-	<b>275</b>	-	<b>417</b>
Iron and steel	-	-	-	-	-	-	-	-	9	-	9
Chemical and petrochemical	-	-	-	-	-	-	-	-	0	-	0
Non-ferrous metals	-	-	7	-	-	-	-	-	122	-	129
Non-metallic minerals	-	-	4	-	-	-	-	-	13	-	17
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	32	-	32
Food and tobacco	-	-	-	-	-	-	-	-	19	-	19
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	2	-	2
Non-specified	-	-	131	-	-	-	-	-	77	-	208
<b>TRANSPORT</b>	-	-	<b>1149</b>	-	-	-	-	-	-	-	<b>1149</b>
Domestic aviation	-	-	25	-	-	-	-	-	-	-	25
Road	-	-	1099	-	-	-	-	-	-	-	1099
Rail	-	-	21	-	-	-	-	-	-	-	21
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	5	-	-	-	-	-	-	-	5
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>184</b>	-	-	-	-	<b>4818</b>	<b>222</b>	-	<b>5224</b>
Residential	-	-	169	-	-	-	-	4379	100	-	4648
Comm. and public services	-	-	15	-	-	-	-	439	115	-	569
Agriculture/forestry	-	-	-	-	-	-	-	-	7	-	7
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>60</b>	-	-	-	-	-	-	-	<b>60</b>
in industry/transf./energy	-	-	5	-	-	-	-	-	-	-	5
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	22	-	-	-	-	-	-	-	22
in other	-	-	33	-	-	-	-	-	-	-	33
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1209</b>	<b>405</b>	-	<b>5068</b>	-	<b>76</b>	-	-	<b>6758</b>
Electricity plants	-	-	1209	405	-	5068	-	76	-	-	6758
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Colombia

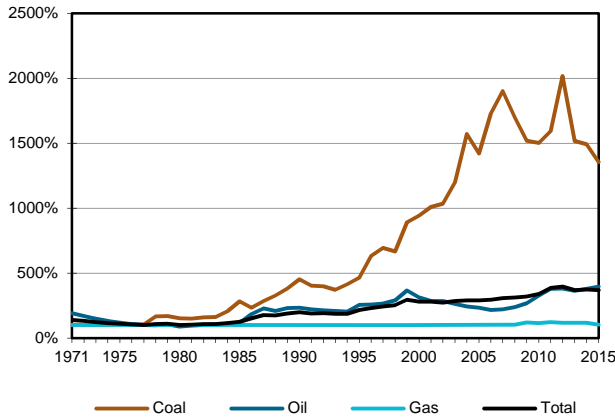
**Figure 1. Energy production**



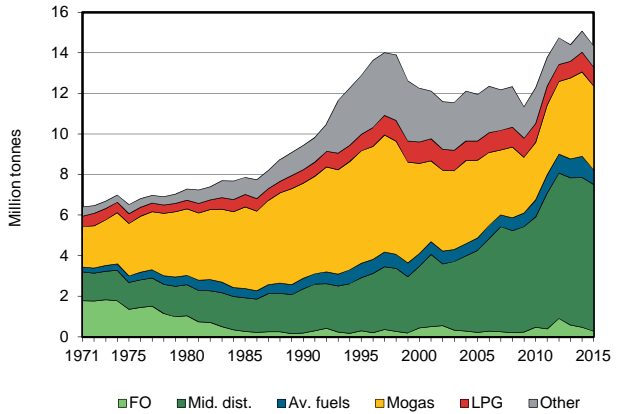
**Figure 2. Total primary energy supply<sup>2</sup>**



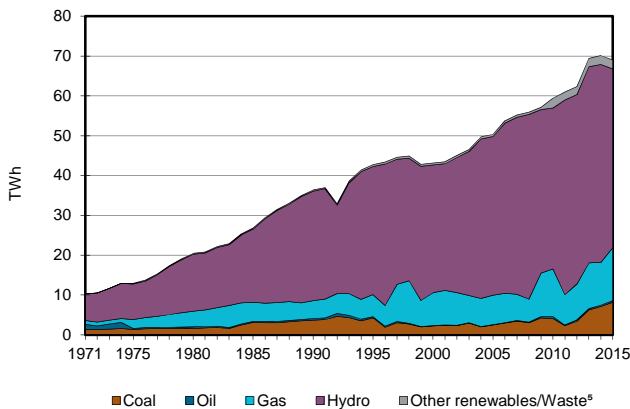
**Figure 3. Energy self-sufficiency<sup>3</sup>**



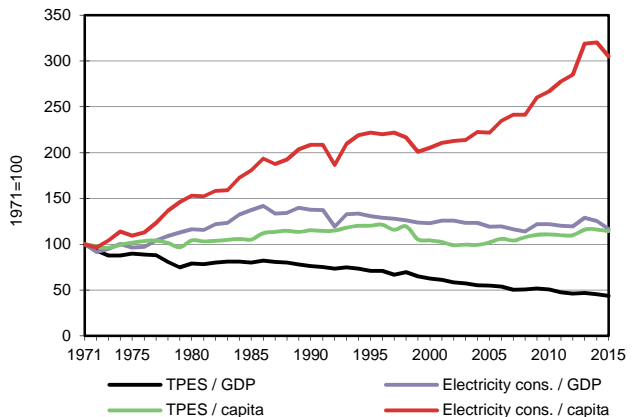
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Colombia

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	55606	52396	-	9058	-	3856	5	3800	-	-	124721
Imports	-	-	2804	-	-	-	-	-	4	-	2808
Exports	-51496	-37778	-3019	-276	-	-	-	-	-40	-	-92610
Intl. marine bunkers	-	-	-827	-	-	-	-	-	-	-	-827
Intl. aviation bunkers	-	-	-737	-	-	-	-	-	-	-	-737
Stock changes	-	-	421	-	-	-	-	-	-	-	421
<b>TPES</b>	<b>4109</b>	<b>14618</b>	<b>-1358</b>	<b>8782</b>	<b>-</b>	<b>3856</b>	<b>5</b>	<b>3800</b>	<b>-36</b>	<b>-</b>	<b>33776</b>
Transfers	-	-223	236	-	-	-	-	-	-	-	12
Statistical differences	-37	-	50	-606	-	-	-	-1	-470	-	-1065
Electricity plants	-1956	-	-112	-2408	-	-3856	-5	-554	5935	-	-2955
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-43	-	-	-	-	-	-	-	-	-	-43
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-300	-	-	-	-	-	-	-	-	-	-300
Oil refineries	-	-14164	14133	-	-	-	-	-	-	-	-31
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-273	-	-	-273
Energy industry own use	-21	-230	-426	-1473	-	-	-	-	-176	-	-2326
Losses	-56	-	-	-	-	-	-	-	-795	-	-851
<b>TFC</b>	<b>1696</b>	<b>-</b>	<b>12522</b>	<b>4295</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2972</b>	<b>4459</b>	<b>-</b>	<b>25944</b>
<b>INDUSTRY</b>	<b>1622</b>	<b>-</b>	<b>838</b>	<b>2439</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>771</b>	<b>1401</b>	<b>-</b>	<b>7071</b>
Iron and steel	859	-	18	68	-	-	-	-	241	-	1185
Chemical and petrochemical	55	-	371	1028	-	-	-	49	187	-	1690
Non-ferrous metals	-	-	-	-	-	-	-	0	-	-	0
Non-metallic minerals	366	-	56	934	-	-	-	3	120	-	1478
Transport equipment	-	-	1	-	-	-	-	-	-	-	1
Machinery	0	-	51	10	-	-	-	0	35	-	97
Mining and quarrying	-	-	89	-	-	-	-	-	344	-	433
Food and tobacco	70	-	89	154	-	-	-	537	203	-	1052
Paper pulp and printing	157	-	13	116	-	-	-	180	127	-	592
Wood and wood products	-	-	3	41	-	-	-	-	6	-	50
Construction	-	-	53	-	-	-	-	-	8	-	61
Textile and leather	116	-	19	25	-	-	-	1	72	-	234
Non-specified	-	-	76	62	-	-	-	1	59	-	198
<b>TRANSPORT</b>	<b>1</b>	<b>-</b>	<b>9395</b>	<b>615</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23</b>	<b>7</b>	<b>-</b>	<b>10040</b>
Domestic aviation	-	-	24	-	-	-	-	-	-	-	24
Road	-	-	9011	615	-	-	-	23	-	-	9649
Rail	1	-	53	-	-	-	-	-	7	-	61
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	306	-	-	-	-	-	-	-	306
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>73</b>	<b>-</b>	<b>1870</b>	<b>1241</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2178</b>	<b>3051</b>	<b>-</b>	<b>8414</b>
Residential	73	-	431	919	-	-	-	1462	1906	-	4792
Comm. and public services	-	-	219	322	-	-	-	-	1096	-	1637
Agriculture/forestry	-	-	1050	-	-	-	-	699	49	-	1798
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	171	-	-	-	-	17	-	-	188
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>418</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>418</b>
in industry/transf./energy	-	-	418	-	-	-	-	-	-	-	418
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>8180</b>	<b>-</b>	<b>392</b>	<b>13350</b>	<b>-</b>	<b>44833</b>	<b>58</b>	<b>2204</b>	<b>-</b>	<b>-</b>	<b>69017</b>
Electricity plants	8180	-	392	13350	-	44833	58	2204	-	-	69017
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-



## Congo

Figure 1. Energy production

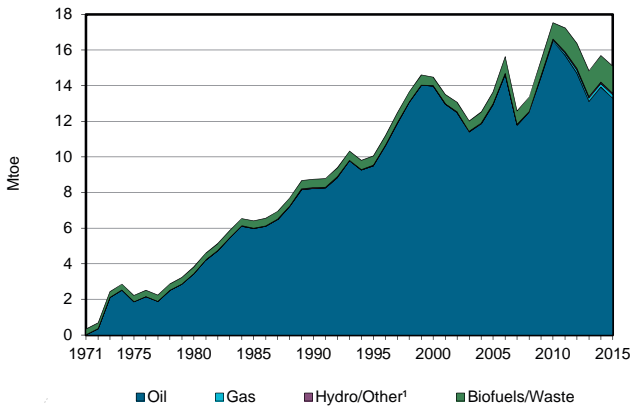


Figure 2. Total primary energy supply<sup>2</sup>

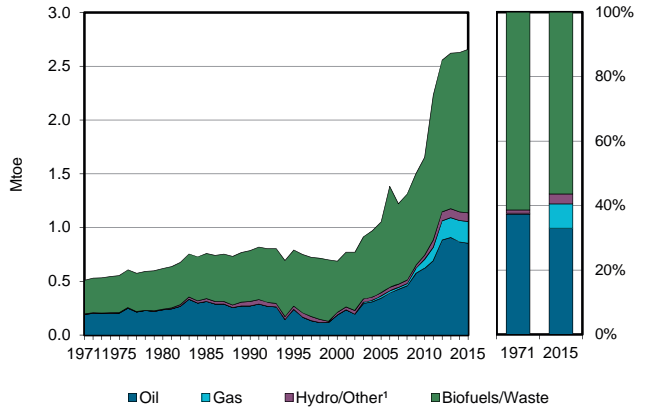


Figure 3. Energy self-sufficiency<sup>3</sup>

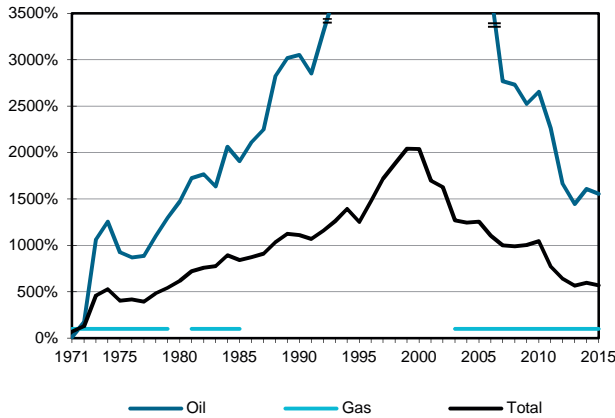


Figure 4. Oil products demand<sup>4</sup>

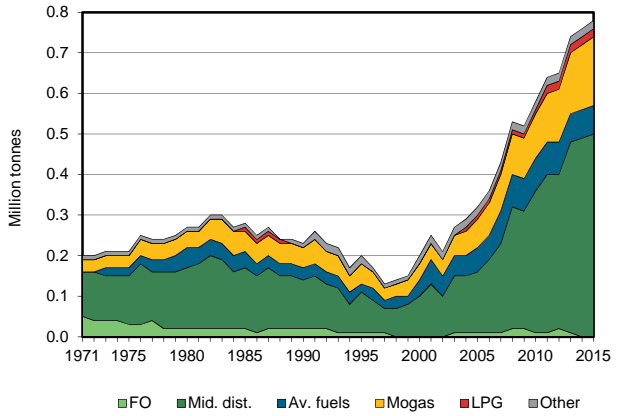


Figure 5. Electricity generation by source

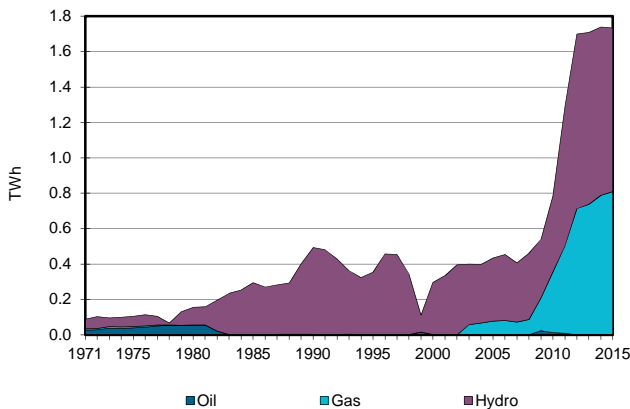
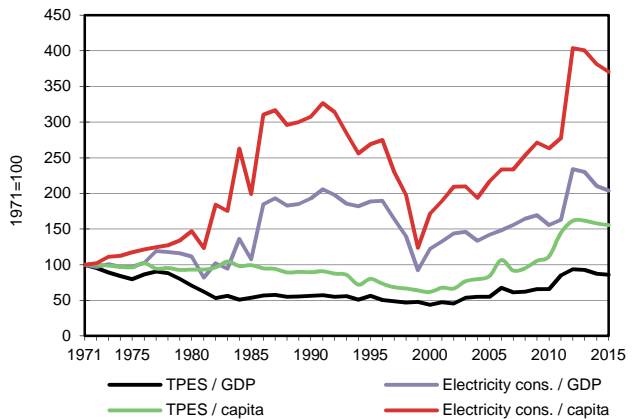


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 3500%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

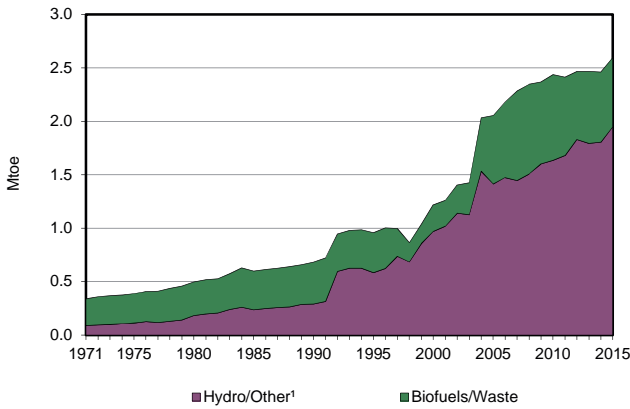
## Congo

2015

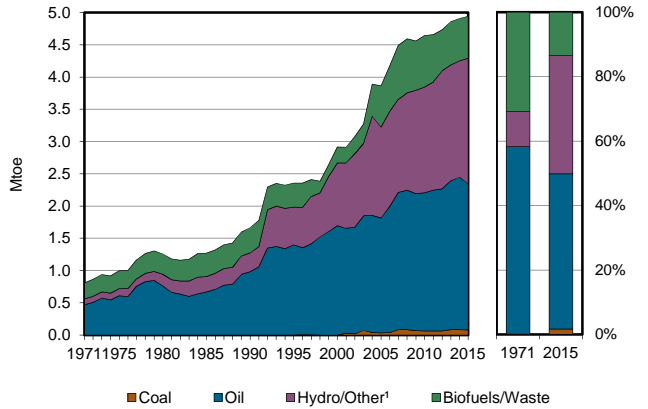
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	13277	-	202	-	80	-	1521	-	-	15079
Imports	-	-	352	-	-	-	-	-	2	-	354
Exports	-	-12427	-303	-	-	-	-	-	-2	-	-12732
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-45	-	-	-	-	-	-	-	-45
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>850</b>	<b>4</b>	<b>202</b>	-	<b>80</b>	-	<b>1521</b>	<b>-0</b>	-	<b>2656</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	3	-	3
Electricity plants	-	-	-	-202	-	-80	-	-	149	-	-133
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-850	761	-	-	-	-	-	-	-	-89
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-288	-	-	-288
Energy industry own use	-	-	-	-	-	-	-	-	-17	-	-17
Losses	-	-	-	-	-	-	-	-	-66	-	-66
<b>TFC</b>	-	-	<b>765</b>	-	-	-	-	<b>1233</b>	<b>68</b>	-	<b>2067</b>
<b>INDUSTRY</b>	-	-	<b>25</b>	-	-	-	-	-	<b>32</b>	-	<b>57</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	25	-	-	-	-	-	-	-	25
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	32	-	32
<b>TRANSPORT</b>	-	-	<b>679</b>	-	-	-	-	-	-	-	<b>679</b>
Domestic aviation	-	-	30	-	-	-	-	-	-	-	30
Road	-	-	551	-	-	-	-	-	-	-	551
Rail	-	-	98	-	-	-	-	-	-	-	98
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>29</b>	-	-	-	-	<b>1233</b>	<b>36</b>	-	<b>1298</b>
Residential	-	-	29	-	-	-	-	1217	36	-	1282
Comm. and public services	-	-	-	-	-	-	-	16	-	-	16
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>32</b>	-	-	-	-	-	-	-	<b>32</b>
in industry/transf./energy	-	-	32	-	-	-	-	-	-	-	32
of which: chem./petrochem.	-	-	11	-	-	-	-	-	-	-	11
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	-	<b>809</b>	-	<b>925</b>	-	-	-	-	<b>1734</b>
Electricity plants	-	-	-	809	-	925	-	-	-	-	1734
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Costa Rica

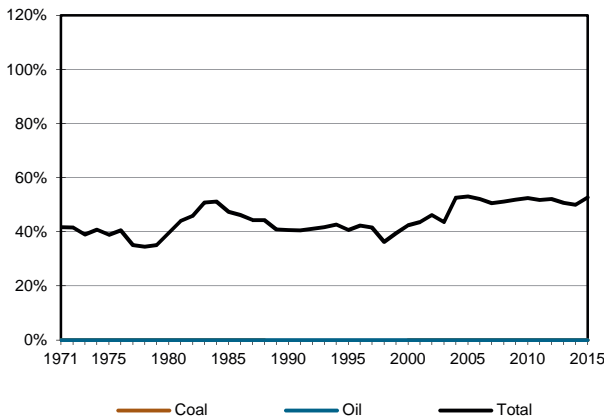
**Figure 1. Energy production**



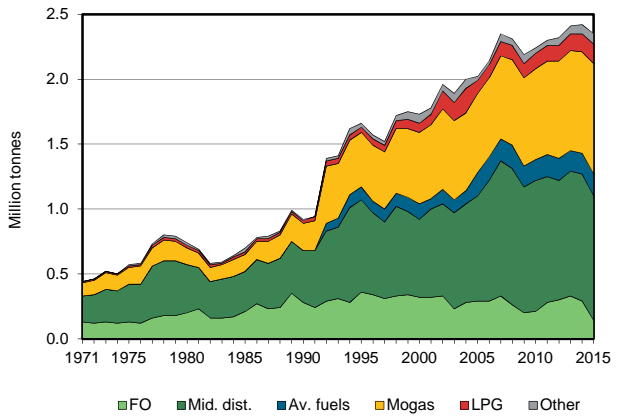
**Figure 2. Total primary energy supply²**



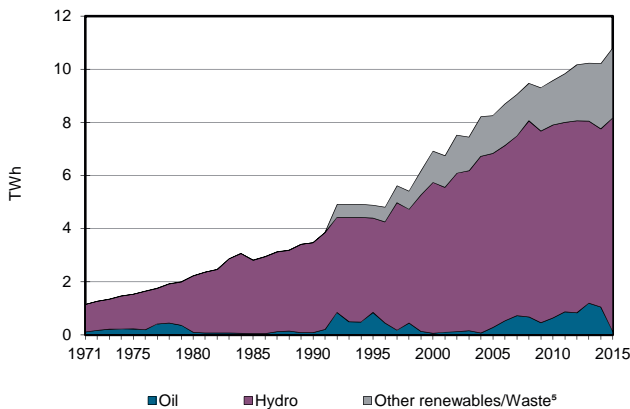
**Figure 3. Energy self-sufficiency³**



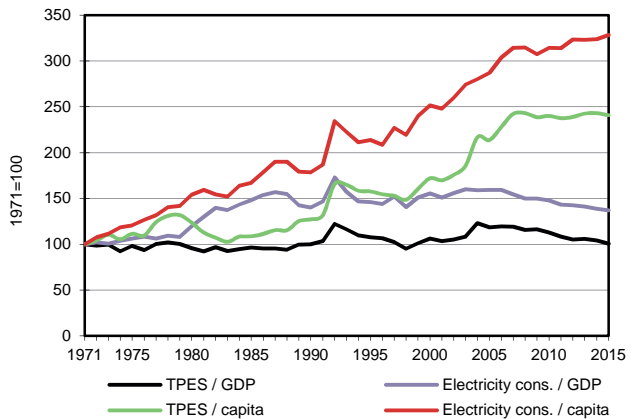
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

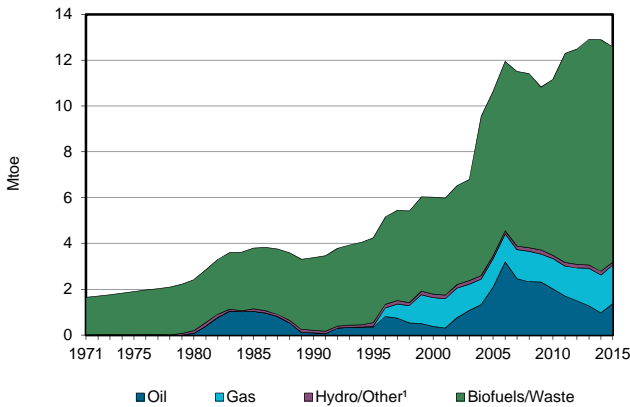
## Costa Rica

2015

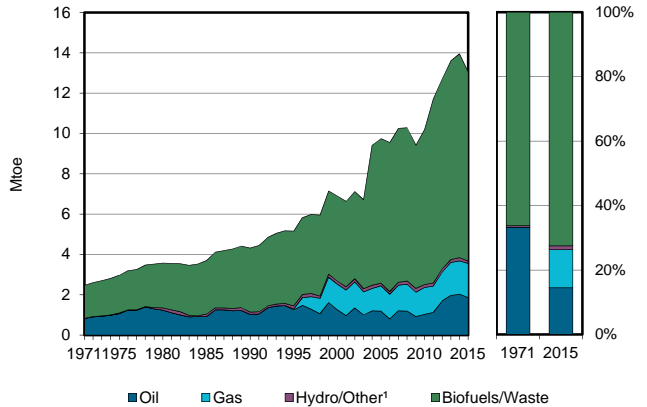
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	694	1255	648	-	-	2597
Imports	77	-	2442	-	-	-	-	-	46	-	2566
Exports	-	-	-	-	-	-	-	-	-55	-	-55
Intl. marine bunkers	-	-	-1	-	-	-	-	-	-	-	-1
Intl. aviation bunkers	-	-	-178	-	-	-	-	-	-	-	-178
Stock changes	-	9	-7	-	-	-	-	-	-	-	2
<b>TPES</b>	<b>77</b>	<b>9</b>	<b>2256</b>	-	-	<b>694</b>	<b>1255</b>	<b>648</b>	<b>-9</b>	-	<b>4931</b>
Transfers	-	-2	2	-	-	-	-	-	-	-	-0
Statistical differences	-	-7	22	-	-	-	-	-12	1	-	4
Electricity plants	-	-	-22	-	-	-694	-1255	-3	915	-	-1058
CHP plants	-	-	-	-	-	-	-	-29	15	-	-14
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-37	-	-	-	-	-	-	-	-	-	-37
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-4	-	-	-4
Energy industry own use	-	-	-10	-	-	-	-	-	-11	-	-20
Losses	-	-	-	-	-	-	-	-	-100	-	-100
<b>TFC</b>	<b>41</b>	-	<b>2249</b>	-	-	-	-	<b>601</b>	<b>811</b>	-	<b>3701</b>
<b>INDUSTRY</b>	<b>41</b>	-	<b>228</b>	-	-	-	-	<b>451</b>	<b>161</b>	-	<b>880</b>
Iron and steel	40	-	-	-	-	-	-	-	-	-	40
Chemical and petrochemical	-	-	12	-	-	-	-	-	32	-	44
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	1	-	-	-	-	-	-	-	-	-	1
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	115	-	-	-	-	349	54	-	518
Paper pulp and printing	-	-	10	-	-	-	-	9	3	-	22
Wood and wood products	-	-	5	-	-	-	-	88	10	-	104
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	14	-	-	-	-	-	6	-	20
Non-specified	-	-	72	-	-	-	-	4	56	-	132
<b>TRANSPORT</b>	-	-	<b>1773</b>	-	-	-	-	-	-	-	<b>1773</b>
Domestic aviation	-	-	4	-	-	-	-	-	-	-	4
Road	-	-	1767	-	-	-	-	-	-	-	1767
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	2	-	-	-	-	-	-	-	2
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>170</b>	-	-	-	-	<b>150</b>	<b>650</b>	-	<b>970</b>
Residential	-	-	62	-	-	-	-	125	310	-	497
Comm. and public services	-	-	35	-	-	-	-	26	306	-	367
Agriculture/forestry	-	-	48	-	-	-	-	-	27	-	75
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	26	-	-	-	-	-	6	-	32
<b>NON-ENERGY USE</b>	-	-	<b>77</b>	-	-	-	-	-	-	-	<b>77</b>
in industry/transf./energy	-	-	77	-	-	-	-	-	-	-	77
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>108</b>	-	-	<b>8067</b>	<b>2458</b>	<b>179</b>	-	-	<b>10812</b>
Electricity plants	-	-	108	-	-	8067	2458	10	-	-	10643
CHP plants	-	-	-	-	-	-	-	169	-	-	169
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Côte d'Ivoire

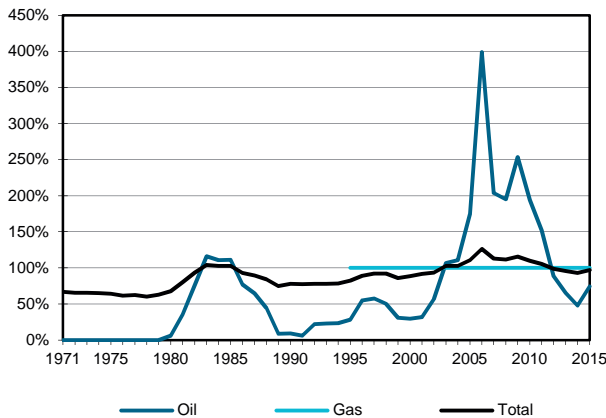
**Figure 1. Energy production**



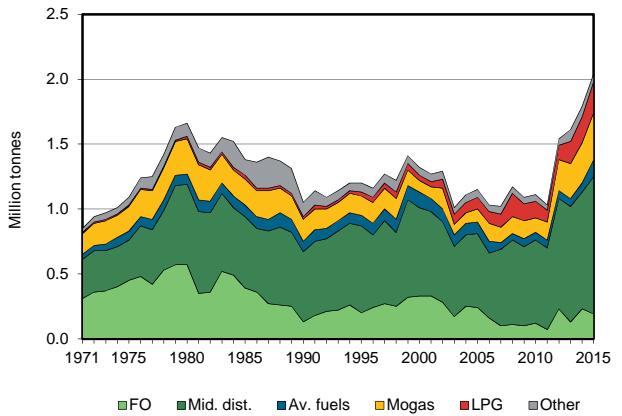
**Figure 2. Total primary energy supply<sup>2</sup>**



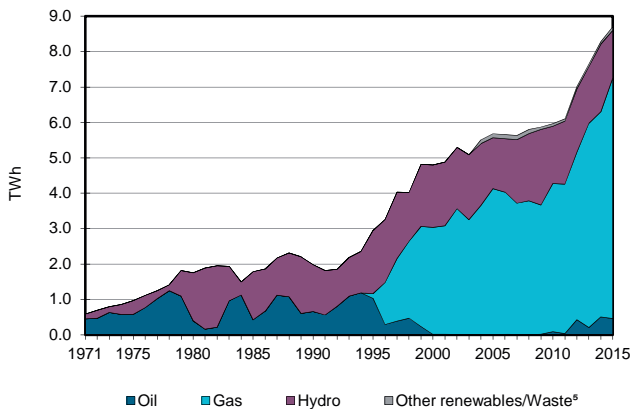
**Figure 3. Energy self-sufficiency<sup>3</sup>**



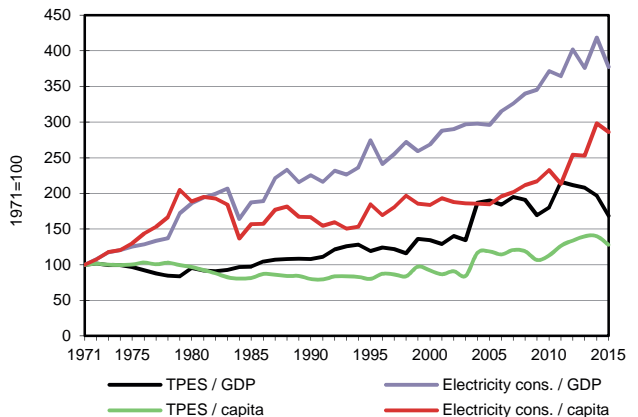
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Côte d'Ivoire

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	1378	-	1686	-	116	-	9395	-	-	12575
Imports	-	3173	263	-	-	-	-	-	2	-	3438
Exports	-	-1362	-1541	-	-	-	-	-	-75	-	-2978
Intl. marine bunkers	-	-	-74	-	-	-	-	-	-	-	-74
Intl. aviation bunkers	-	-	-133	-	-	-	-	-	-	-	-133
Stock changes	-	48	108	-	-	-	-	-	-	-	155
<b>TPES</b>	-	<b>3237</b>	<b>-1377</b>	<b>1686</b>	-	<b>116</b>	-	<b>9395</b>	<b>-73</b>	-	<b>12984</b>
Transfers	-	-5	-4	-	-	-	-	-	-	-	-9
Statistical differences	-	94	9	15	-	-	-	-	29	-	146
Electricity plants	-	-	-118	-1451	-	-116	-	-45	749	-	-982
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-3326	3298	-	-	-	-	-	-	-	-28
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-5050	-	-	-5050
Energy industry own use	-	-	-59	-	-	-	-	-	-37	-	-97
Losses	-	-	-	-	-	-	-	-33	-150	-	-183
<b>TFC</b>	-	-	<b>1748</b>	<b>250</b>	-	-	-	<b>4267</b>	<b>517</b>	-	<b>6782</b>
<b>INDUSTRY</b>	-	-	<b>278</b>	<b>250</b>	-	-	-	-	<b>160</b>	-	<b>688</b>
Iron and steel	-	-	-	-	-	-	-	-	8	-	8
Chemical and petrochemical	-	-	-	-	-	-	-	-	8	-	8
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	25	250	-	-	-	-	59	-	334
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	39	-	39
Construction	-	-	-	-	-	-	-	-	4	-	4
Textile and leather	-	-	-	-	-	-	-	-	11	-	11
Non-specified	-	-	253	-	-	-	-	-	32	-	285
<b>TRANSPORT</b>	-	-	<b>1044</b>	-	-	-	-	-	-	-	<b>1044</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	930	-	-	-	-	-	-	-	930
Rail	-	-	12	-	-	-	-	-	-	-	12
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	97	-	-	-	-	-	-	-	97
Non-specified	-	-	4	-	-	-	-	-	-	-	4
<b>OTHER</b>	-	-	<b>390</b>	-	-	-	-	<b>4267</b>	<b>357</b>	-	<b>5014</b>
Residential	-	-	168	-	-	-	-	3841	164	-	4172
Comm. and public services	-	-	112	-	-	-	-	426	180	-	718
Agriculture/forestry	-	-	111	-	-	-	-	-	13	-	124
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>35</b>	-	-	-	-	-	-	-	<b>35</b>
in industry/transf./energy	-	-	35	-	-	-	-	-	-	-	35
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>455</b>	<b>6799</b>	-	<b>1352</b>	-	<b>105</b>	-	-	<b>8711</b>
Electricity plants	-	-	455	6799	-	1352	-	105	-	-	8711
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Croatia

Figure 1. Energy production

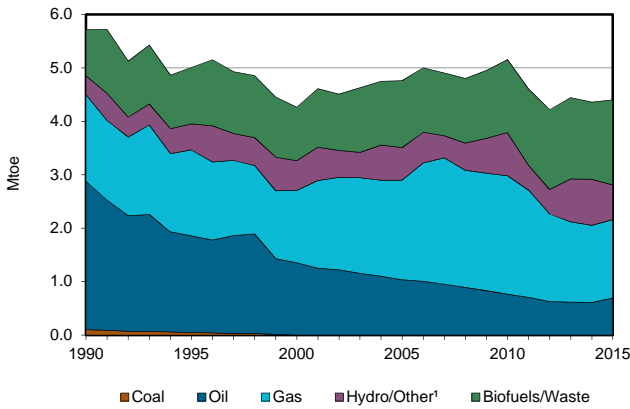


Figure 2. Total primary energy supply²

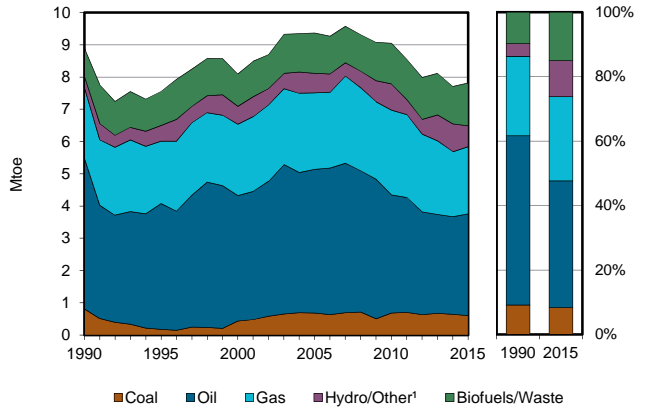


Figure 3. Energy self-sufficiency³

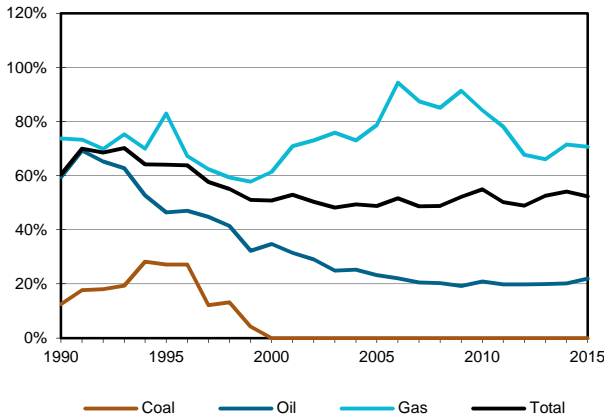


Figure 4. Oil products demand⁴

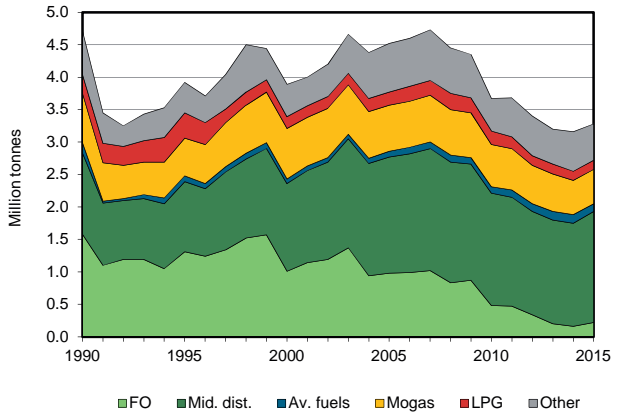


Figure 5. Electricity generation by source

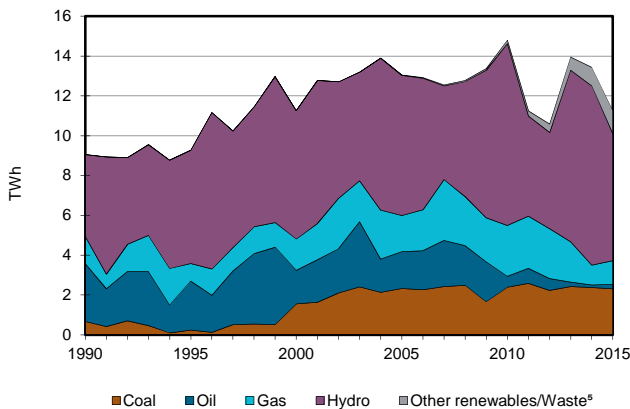
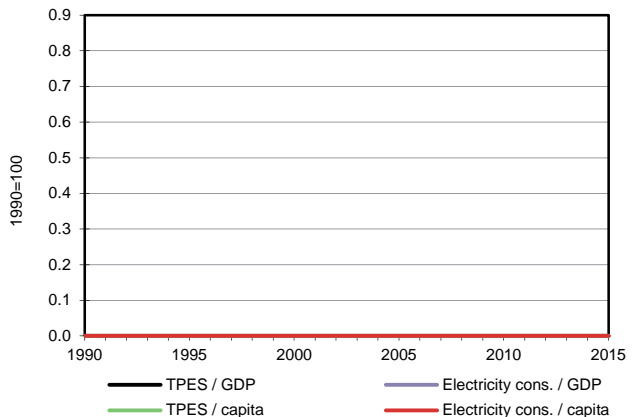


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Croatia

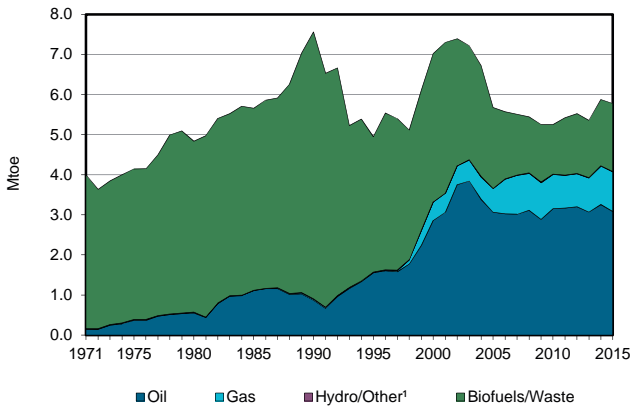
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	691	-	1471	-	550	94	1592	-	-	4399
Imports	624	2812	1742	868	-	-	-	28	1132	-	7205
Exports	-	-	-1885	-304	-	-	-	-299	-548	-	-3035
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-114	-	-	-	-	-	-	-	-114
Stock changes	-18	-86	-4	46	-	-	-	4	-	-	-58
<b>TPES</b>	<b>606</b>	<b>3418</b>	<b>-261</b>	<b>2081</b>	<b>-</b>	<b>550</b>	<b>94</b>	<b>1325</b>	<b>584</b>	<b>-</b>	<b>8397</b>
Transfers	-	-43	43	-	-	-	-	-	-	-	-0
Statistical differences	0	8	-	-	-	-	-	1	-	-	9
Electricity plants	-521	-	-13	-43	-	-550	-73	-6	846	-	-360
CHP plants	-3	-	-47	-324	-	-	-	-81	120	211	-124
Heat plants	-	-	-8	-60	-	-	-	-	-	54	-13
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	0	-	-	-0	-	-	-	-	-	-	-0
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-3453	3431	-	-	-	-	-	-	-	-22
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	70	-	-73	-	-	-	-8	-	-	-11
Energy industry own use	-	-	-385	-168	-	-	-	-1	-76	-15	-644
Losses	-	-	-	-26	-	-	-	-1	-155	-38	-220
<b>TFC</b>	<b>82</b>	<b>-</b>	<b>2761</b>	<b>1386</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>1230</b>	<b>1319</b>	<b>212</b>	<b>7011</b>
<b>INDUSTRY</b>	<b>78</b>	<b>-</b>	<b>285</b>	<b>341</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>295</b>	<b>55</b>	<b>1093</b>
Iron and steel	3	-	1	5	-	-	-	-	15	-	23
Chemical and petrochemical	-	-	4	106	-	-	-	-	26	15	151
Non-ferrous metals	-	-	2	2	-	-	-	0	3	-	7
Non-metallic minerals	63	-	137	68	-	-	-	16	50	-	334
Transport equipment	-	-	2	3	-	-	-	0	7	-	12
Machinery	-	-	6	18	-	-	-	0	37	10	71
Mining and quarrying	-	-	11	0	-	-	-	-	4	-	15
Food and tobacco	13	-	21	92	-	-	-	3	61	13	202
Paper pulp and printing	-	-	6	27	-	-	-	1	24	1	58
Wood and wood products	-	-	-	1	-	-	-	8	23	13	46
Construction	-	-	93	-	-	-	-	-	7	-	99
Textile and leather	-	-	1	12	-	-	-	0	14	1	28
Non-specified	-	-	1	7	-	-	-	11	25	2	46
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1930</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>21</b>	<b>-</b>	<b>1978</b>
Domestic aviation	-	-	10	-	-	-	-	-	-	-	10
Road	-	-	1859	3	-	-	-	24	-	-	1886
Rail	-	-	18	-	-	-	-	-	18	-	37
Pipeline transport	-	-	-	-	-	-	-	-	3	-	3
Domestic navigation	-	-	42	-	-	-	-	-	-	-	42
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>3</b>	<b>-</b>	<b>404</b>	<b>633</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>1167</b>	<b>1004</b>	<b>157</b>	<b>3388</b>
Residential	3	-	143	446	-	-	10	1161	533	120	2417
Comm. and public services	0	-	62	169	-	-	7	5	465	33	741
Agriculture/forestry	-	-	171	18	-	-	4	-	5	4	202
Fishing	-	-	27	-	-	-	-	-	-	-	27
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>143</b>	<b>409</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>552</b>
in industry/transf./energy	-	-	121	409	-	-	-	-	-	-	531
of which: chem./petrochem.	-	-	5	409	-	-	-	-	-	-	414
in transport	-	-	20	-	-	-	-	-	-	-	20
in other	-	-	1	-	-	-	-	-	-	-	1
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2310</b>	<b>-</b>	<b>221</b>	<b>1197</b>	<b>-</b>	<b>6391</b>	<b>853</b>	<b>266</b>	<b>-</b>	<b>-</b>	<b>11238</b>
Electricity plants	2294	-	53	224	-	6391	853	25	-	-	9840
CHP plants	16	-	168	973	-	-	-	241	-	-	1398
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>1070</b>	<b>9195</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>841</b>	<b>-</b>	<b>-</b>	<b>11106</b>
CHP plants	-	-	811	7181	-	-	-	841	-	-	8833
Heat plants	-	-	259	2014	-	-	-	-	-	-	2273

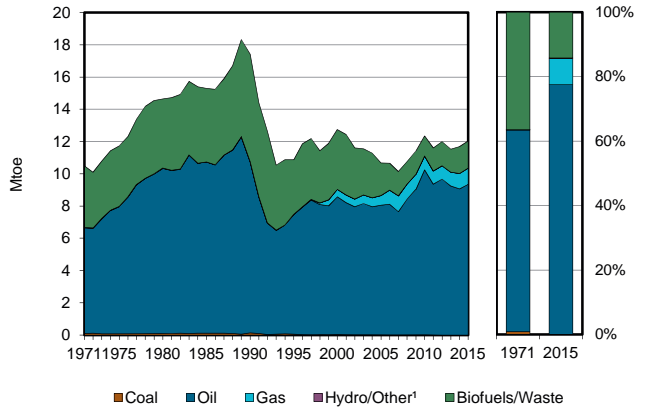


## Cuba

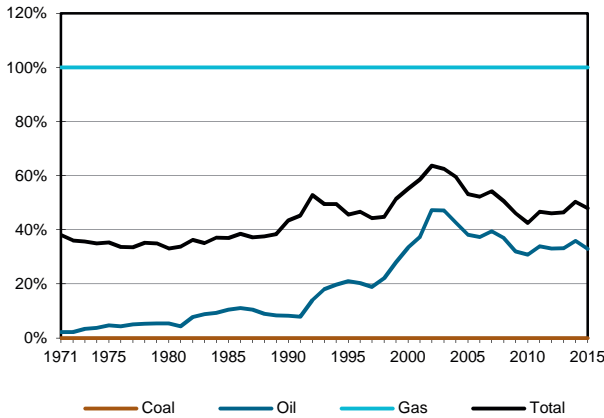
**Figure 1. Energy production**



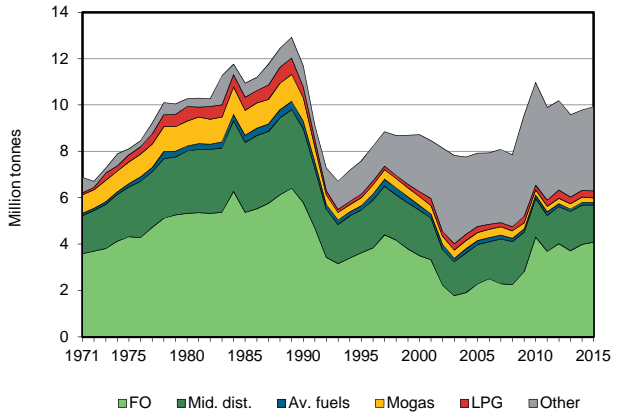
**Figure 2. Total primary energy supply²**



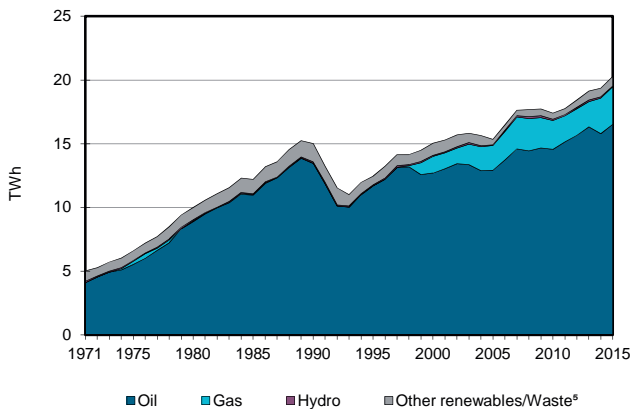
**Figure 3. Energy self-sufficiency³**



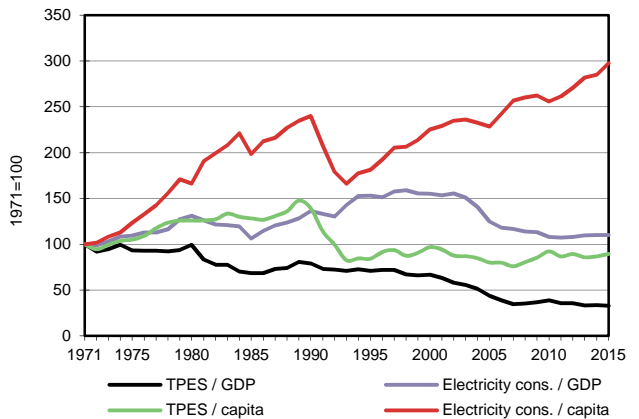
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Cuba

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	3081	-	988	-	4	4	1696	-	-	5774
Imports	3	5712	2689	-	-	-	-	-	-	-	8404
Exports	-	-	-1296	-	-	-	-	-	-	-	-1296
Intl. marine bunkers	-	-	-717	-	-	-	-	-	-	-	-717
Intl. aviation bunkers	-	-	-117	-	-	-	-	-	-	-	-117
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>3</b>	<b>8792</b>	<b>560</b>	<b>988</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>1696</b>	<b>-</b>	<b>-</b>	<b>12048</b>
Transfers	-	-122	133	-	-	-	-	-	-	-	12
Statistical differences	-	-	6	-	-	-	-	-4	-0	-	1
Electricity plants	-	-2480	-2035	-634	-	-4	-4	-312	1745	-	-3725
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0	-	-	-	-	-	-	-	-	-	-0
Gas works	-	-	-16	14	-	-	-	-	-	-	-2
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-5325	5070	-	-	-	-	-	-	-	-255
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-56	-	-	-56
Energy industry own use	-	-	-214	-	-	-	-	-	-85	-	-300
Losses	-	-	-	-	-	-	-	-	-270	-	-270
<b>TFC</b>	<b>2</b>	<b>865</b>	<b>3503</b>	<b>369</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1324</b>	<b>1390</b>	<b>-</b>	<b>7453</b>
<b>INDUSTRY</b>	<b>2</b>	<b>865</b>	<b>1591</b>	<b>317</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1005</b>	<b>326</b>	<b>-</b>	<b>4106</b>
Iron and steel	0	-	-	-	-	-	-	-	-	-	0
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	16	-	-	-	-	-	-	-	16
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	98	-	-	-	-	0	6	-	104
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	2	865	1478	317	-	-	-	1005	320	-	3986
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>457</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>27</b>	<b>-</b>	<b>484</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	440	-	-	-	-	-	-	-	440
Rail	-	-	-	-	-	-	-	-	27	-	27
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	16	-	-	-	-	-	-	-	16
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1154</b>	<b>52</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>319</b>	<b>1037</b>	<b>-</b>	<b>2562</b>
Residential	-	-	161	49	-	-	-	226	728	-	1164
Comm. and public services	-	-	8	-	-	-	-	13	280	-	301
Agriculture/forestry	-	-	134	-	-	-	-	41	28	-	204
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	851	4	-	-	-	39	-	-	894
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>302</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>302</b>
in industry/transf./energy	-	-	266	-	-	-	-	-	-	-	266
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	35	-	-	-	-	-	-	-	35
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>7211</b>	<b>9326</b>	<b>2950</b>	<b>-</b>	<b>48</b>	<b>50</b>	<b>703</b>	<b>-</b>	<b>-</b>	<b>20288</b>
Electricity plants	-	7211	9326	2950	-	48	50	703	-	-	20288
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

Curaçao<sup>1</sup>

Figure 1. Energy production

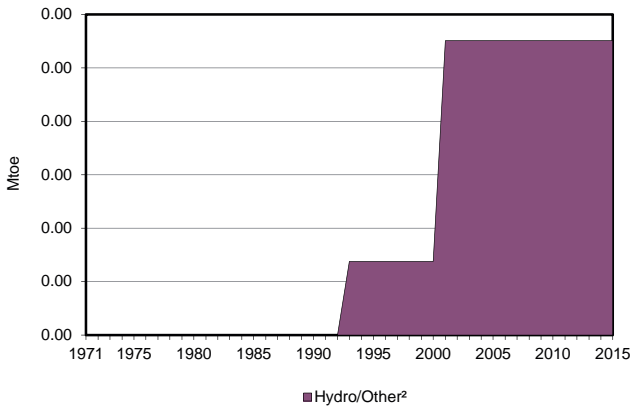


Figure 2. Total primary energy supply<sup>3</sup>

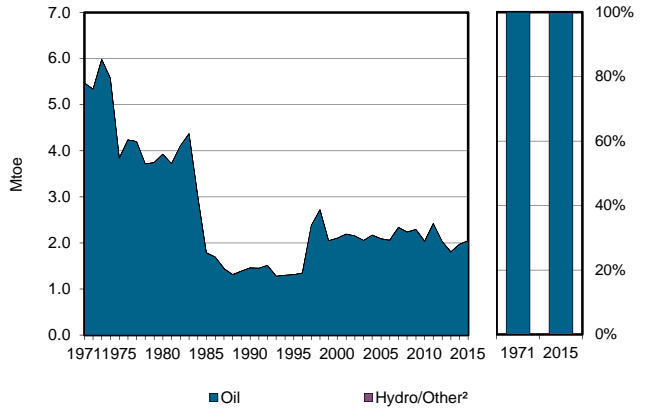


Figure 3. Energy self-sufficiency<sup>4</sup>

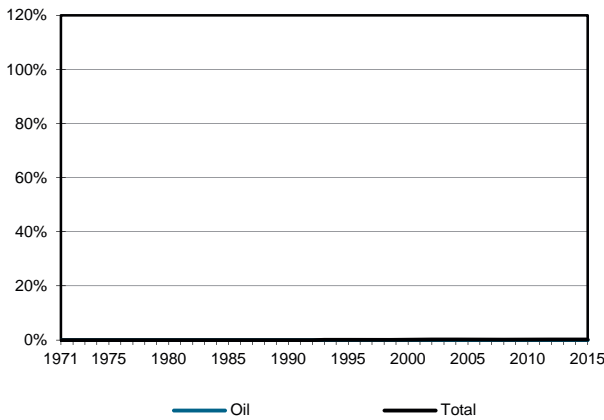


Figure 4. Oil products demand<sup>5</sup>

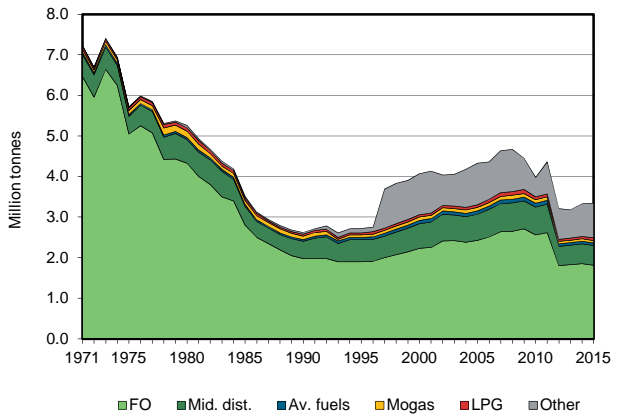


Figure 5. Electricity generation by source

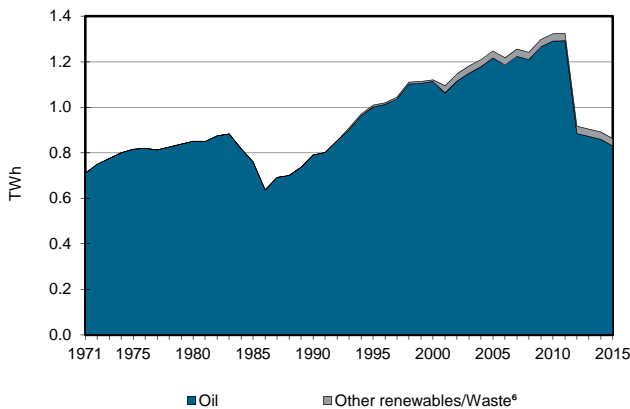
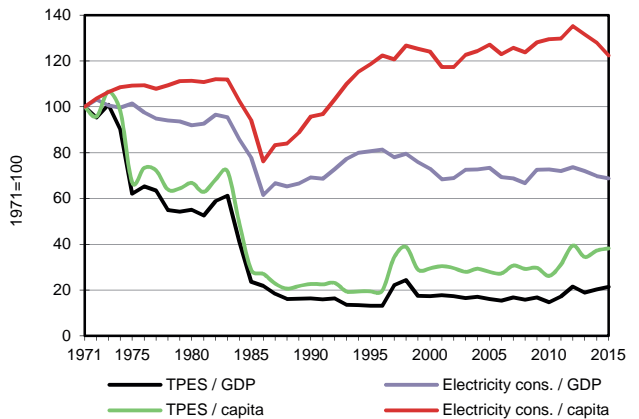


Figure 6. Selected indicators<sup>7</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Please refer to section 'Geographical coverage'.
2. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
3. Excluding electricity trade.
4. Production divided by TPES. 100% represents full self-sufficiency.
5. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
7. GDP in 2010 USD.

Curaçao<sup>1</sup>

2015

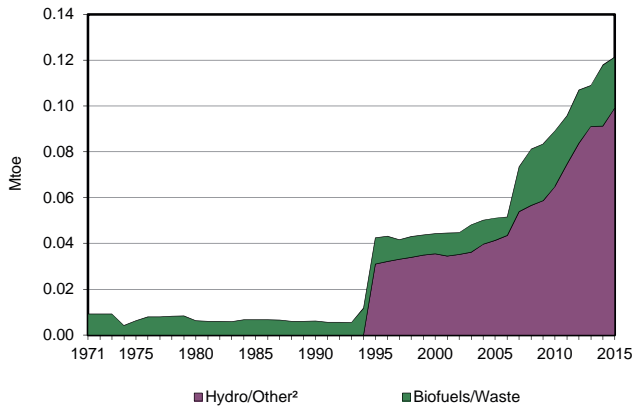
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./ Solar/ etc.	Biofuels/ Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	3	-	-	-	3
Imports	-	9620	2367	-	-	-	-	-	-	-	11987
Exports	-	-	-8322	-	-	-	-	-	-	-	-8322
Intl. marine bunkers	-	-	-1553	-	-	-	-	-	-	-	-1553
Intl. aviation bunkers	-	-	-64	-	-	-	-	-	-	-	-64
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>9620</b>	<b>-7571</b>	-	-	-	<b>3</b>	-	-	-	<b>2052</b>
Transfers	-	-57	63	-	-	-	-	-	-	-	6
Statistical differences	-	-	-1	-	-	-	-	-	-	-	-1
Electricity plants	-	-	-183	-	-	-	-3	-	74	-	-112
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-9563	9171	-	-	-	-	-	-	-	-392
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-843	-	-	-	-	-	-7	-	-850
Losses	-	-	-	-	-	-	-	-	-12	-	-12
<b>TFC</b>	-	-	<b>635</b>	-	-	-	-	-	<b>55</b>	-	<b>690</b>
<b>INDUSTRY</b>	-	-	<b>122</b>	-	-	-	-	-	<b>30</b>	-	<b>152</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	122	-	-	-	-	-	30	-	152
<b>TRANSPORT</b>	-	-	<b>350</b>	-	-	-	-	-	-	-	<b>350</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	350	-	-	-	-	-	-	-	350
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>63</b>	-	-	-	-	-	<b>25</b>	-	<b>88</b>
Residential	-	-	63	-	-	-	-	-	-	-	63
Comm. and public services	-	-	-	-	-	-	-	-	-	-	-
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	25	-	25
<b>NON-ENERGY USE</b>	-	-	<b>100</b>	-	-	-	-	-	-	-	<b>100</b>
in industry/transf./energy	-	-	100	-	-	-	-	-	-	-	100
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>830</b>	-	-	-	<b>32</b>	-	-	-	<b>862</b>
Electricity plants	-	-	830	-	-	-	32	-	-	-	862
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

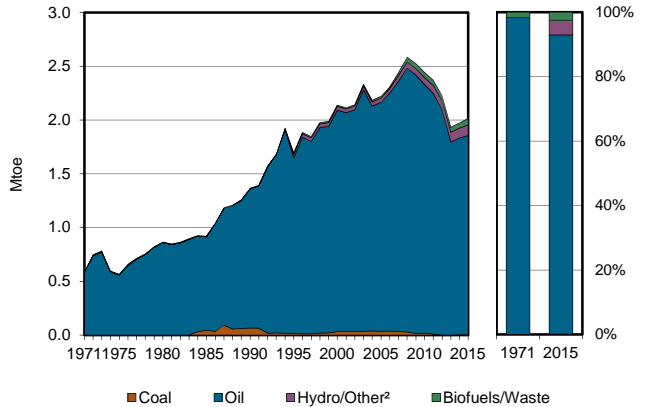
1. Please refer to section 'Geographical coverage'.

## Cyprus<sup>1</sup>

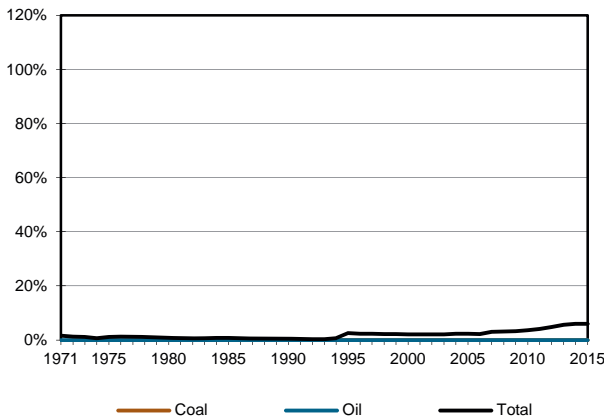
**Figure 1. Energy production**



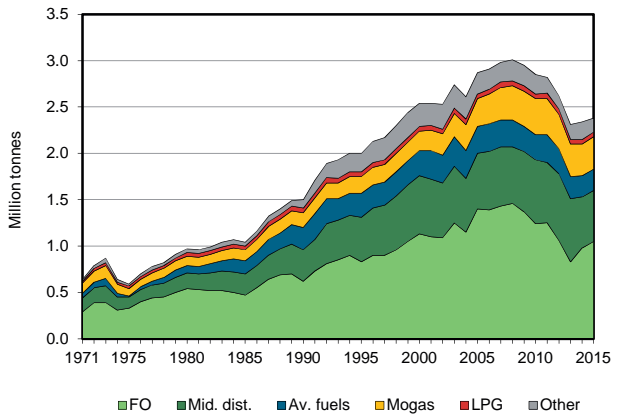
**Figure 2. Total primary energy supply<sup>3</sup>**



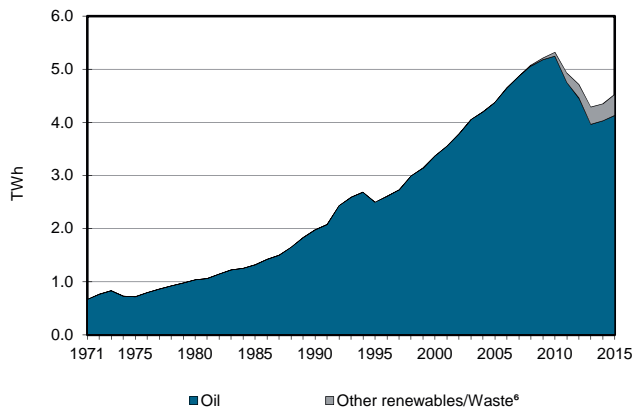
**Figure 3. Energy self-sufficiency<sup>4</sup>**



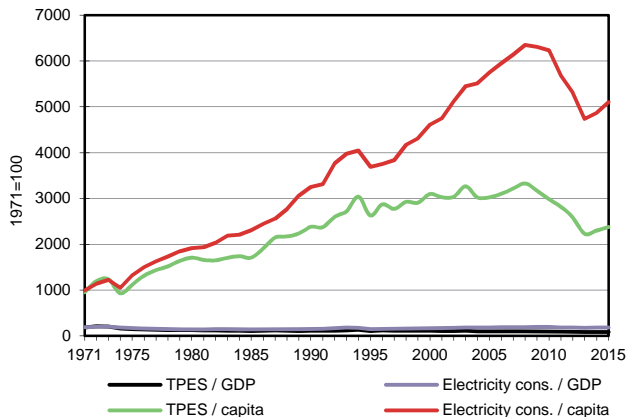
**Figure 4. Oil products demand<sup>5</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>7</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Please refer to section 'Geographical coverage'.
2. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
3. Excluding electricity trade.
4. Production divided by TPES. 100% represents full self-sufficiency.
5. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
6. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
7. GDP in 2010 USD.

Cyprus<sup>1</sup>

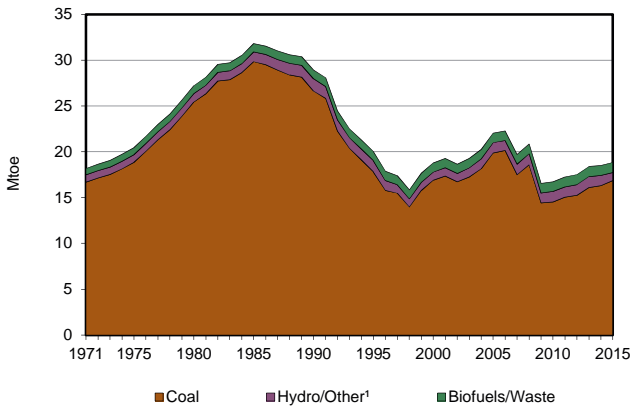
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	99	22	-	-	121
Imports	4	-	2423	-	-	-	-	33	-	-	2460
Exports	-	-	-24	-	-	-	-	-	-	-	-24
Intl. marine bunkers	-	-	-238	-	-	-	-	-	-	-	-238
Intl. aviation bunkers	-	-	-239	-	-	-	-	-	-	-	-239
Stock changes	-	-	-71	-	-	-	-	4	-	-	-67
<b>TPES</b>	<b>4</b>	<b>-</b>	<b>1852</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>99</b>	<b>60</b>	<b>-</b>	<b>-</b>	<b>2014</b>
Transfers	-	-	5	-	-	-	-	-	-	-	5
Statistical differences	-	-	10	-	-	-	-	0	0	-	10
Electricity plants	-	-	-912	-	-	-	-30	-	385	-	-557
CHP plants	-	-	-	-	-	-	-	-7	4	1	-2
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-2	-	-	-2
Energy industry own use	-	-	-	-	-	-	-	-	-20	-	-20
Losses	-	-	-	-	-	-	-	-	-18	-	-18
<b>TFC</b>	<b>4</b>	<b>-</b>	<b>954</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>69</b>	<b>51</b>	<b>352</b>	<b>1</b>	<b>1431</b>
<b>INDUSTRY</b>	<b>4</b>	<b>-</b>	<b>135</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>39</b>	<b>-</b>	<b>201</b>
Iron and steel	-	-	-	-	-	-	-	-	0	-	0
Chemical and petrochemical	-	-	2	-	-	-	-	1	3	-	7
Non-ferrous metals	-	-	1	-	-	-	-	-	-	-	1
Non-metallic minerals	4	-	108	-	-	-	-	22	13	-	146
Transport equipment	-	-	-	-	-	-	-	-	0	-	0
Machinery	-	-	-	-	-	-	-	-	1	-	1
Mining and quarrying	-	-	2	-	-	-	-	-	2	-	4
Food and tobacco	-	-	14	-	-	-	-	0	14	-	28
Paper pulp and printing	-	-	1	-	-	-	-	-	1	-	2
Wood and wood products	-	-	-	-	-	-	-	-	0	-	0
Construction	-	-	5	-	-	-	-	-	0	-	5
Textile and leather	-	-	-	-	-	-	-	-	0	-	0
Non-specified	-	-	2	-	-	-	-	-	3	-	5
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>608</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>617</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	608	-	-	-	-	10	-	-	617
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>188</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>69</b>	<b>17</b>	<b>312</b>	<b>1</b>	<b>588</b>
Residential	-	-	118	-	-	-	59	8	130	-	315
Comm. and public services	-	-	35	-	-	-	10	6	162	-	214
Agriculture/forestry	-	-	25	-	-	-	-	4	12	1	41
Fishing	-	-	2	-	-	-	-	-	0	-	2
Non-specified	-	-	8	-	-	-	-	-	7	-	16
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>
in industry/transf./energy	-	-	23	-	-	-	-	-	-	-	23
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	1	-	-	-	-	-	-	-	1
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>4135</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>347</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>4533</b>
Electricity plants	-	-	4135	-	-	-	347	-	-	-	4482
CHP plants	-	-	-	-	-	-	-	51	-	-	51
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>51</b>
CHP plants	-	-	-	-	-	-	-	51	-	-	51
Heat plants	-	-	-	-	-	-	-	-	-	-	-

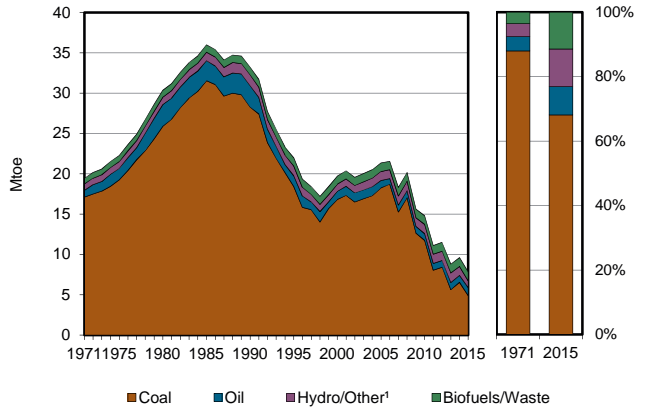
1. Please refer to section 'Geographical coverage'.

## Democratic People's Republic of Korea

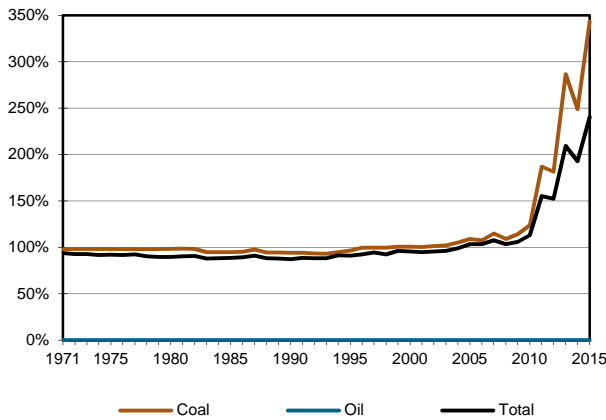
**Figure 1. Energy production**



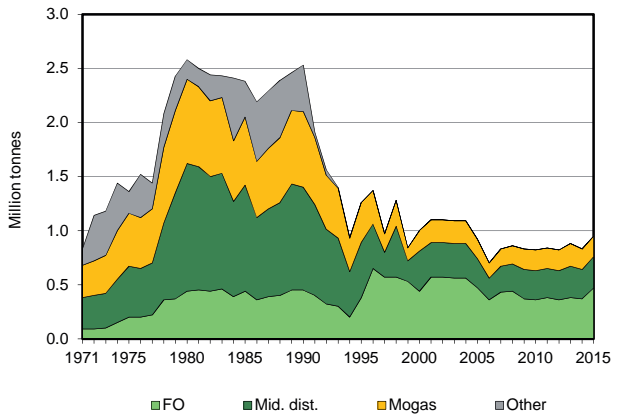
**Figure 2. Total primary energy supply<sup>2</sup>**



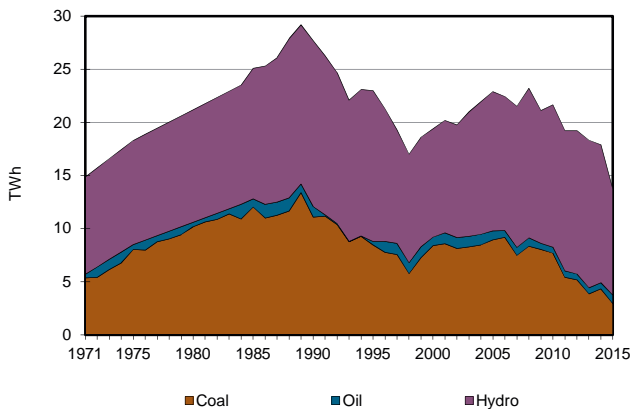
**Figure 3. Energy self-sufficiency<sup>3</sup>**



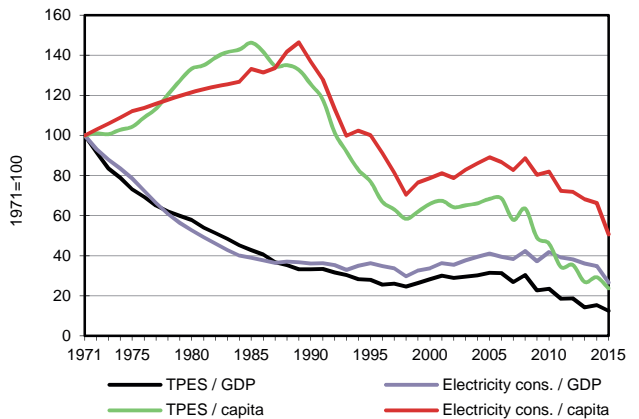
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Democratic People's Republic of Korea

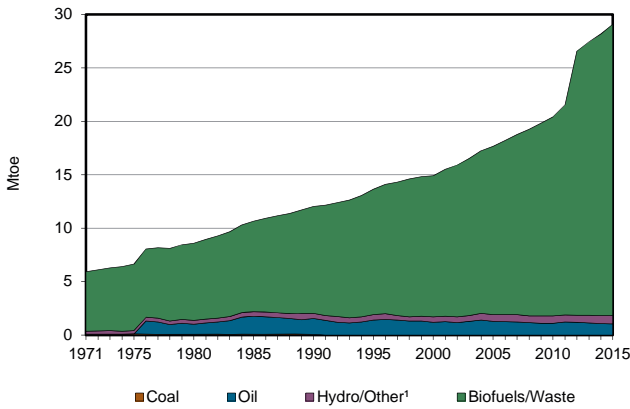
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	16870	-	-	-	-	860	-	1102	-	-	18833
Imports	707	536	430	-	-	-	-	-	-	-	1672
Exports	-12667	-	-	-	-	-	-	-	-	-	-12667
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-	-	-	-	-	-	-	-	-
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>4910</b>	<b>536</b>	<b>430</b>	-	-	<b>860</b>	-	<b>1102</b>	-	-	<b>7838</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-1	-	-	-	-	-	-	-	-	-	-1
Electricity plants	-623	-	-349	-	-	-860	-	-	1181	-	-651
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-61	-	-	-	-	-	-	-	-	-	-61
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-536	531	-	-	-	-	-	-	-	-4
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-223	-	-	-223
Energy industry own use	-	-	-15	-	-	-	-	-	-112	-	-127
Losses	-	-	-	-	-	-	-	-	-187	-	-187
<b>TFC</b>	<b>4225</b>	-	<b>596</b>	-	-	-	-	<b>880</b>	<b>883</b>	-	<b>6583</b>
<b>INDUSTRY</b>	<b>3209</b>	-	<b>89</b>	-	-	-	-	-	<b>441</b>	-	<b>3740</b>
Iron and steel	57	-	-	-	-	-	-	-	-	-	57
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	3152	-	89	-	-	-	-	-	441	-	3682
<b>TRANSPORT</b>	-	-	<b>467</b>	-	-	-	-	-	-	-	<b>467</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	467	-	-	-	-	-	-	-	467
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>1016</b>	-	<b>40</b>	-	-	-	-	<b>880</b>	<b>441</b>	-	<b>2376</b>
Residential	-	-	40	-	-	-	-	120	-	-	160
Comm. and public services	-	-	-	-	-	-	-	-	-	-	-
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1016	-	-	-	-	-	-	760	441	-	2217
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2924</b>	-	<b>813</b>	-	-	<b>10000</b>	-	-	-	-	<b>13737</b>
Electricity plants	2924	-	813	-	-	10000	-	-	-	-	13737
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

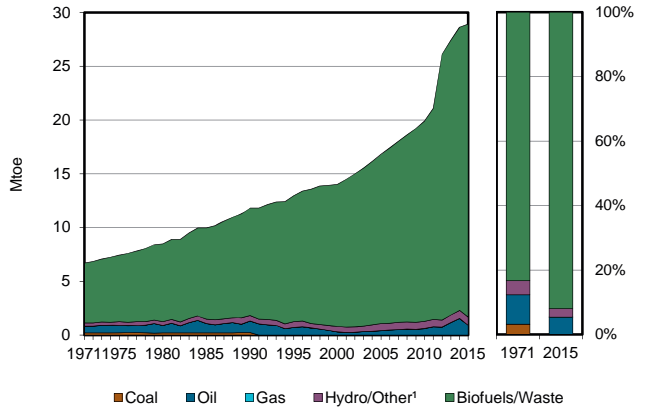


## Democratic Republic of the Congo

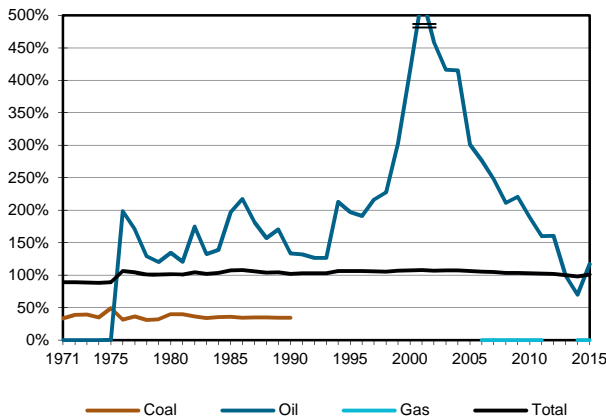
**Figure 1. Energy production**



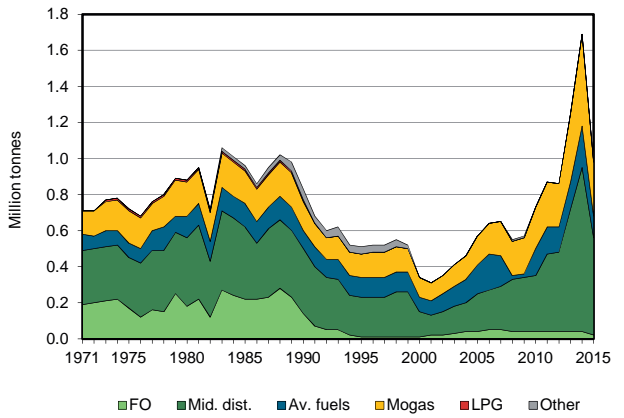
**Figure 2. Total primary energy supply<sup>2</sup>**



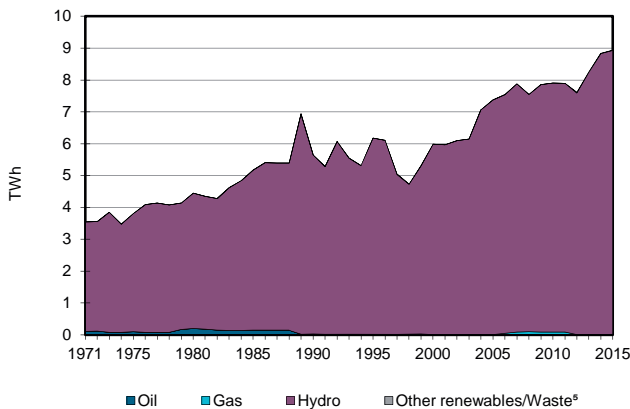
**Figure 3. Energy self-sufficiency<sup>3</sup>**



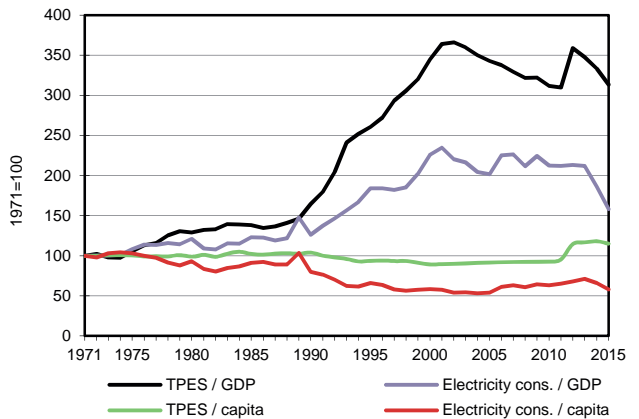
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

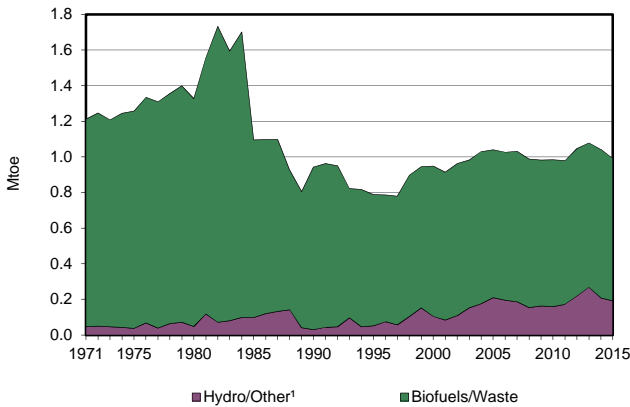
## Democratic Republic of the Congo

2015

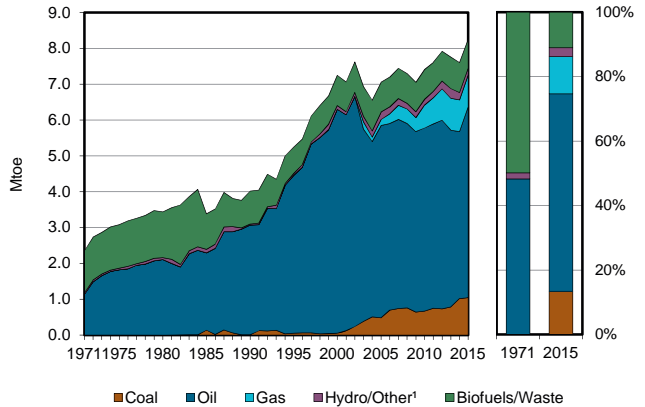
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	1055	-	-	-	767	-	27252	-	-	29074
Imports	-	-	1032	1	-	-	-	-	2	-	1035
Exports	-	-1055	-	-	-	-	-	-	-36	-	-1092
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-130	-	-	-	-	-	-	-	-130
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>902</b>	<b>1</b>	-	<b>767</b>	-	<b>27252</b>	<b>-35</b>	-	<b>28887</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	3	-	-	-	-	-	54	-	58
Electricity plants	-	-	-3	-1	-	-767	-	-72	769	-	-74
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-7203	-	-	-7203
Energy industry own use	-	-	-	-	-	-	-	-	-56	-	-56
Losses	-	-	-	-	-	-	-	-	-108	-	-108
<b>TFC</b>	-	-	<b>902</b>	-	-	-	-	<b>19977</b>	<b>625</b>	-	<b>21504</b>
<b>INDUSTRY</b>	-	-	<b>15</b>	-	-	-	-	<b>3062</b>	<b>343</b>	-	<b>3421</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	15	-	-	-	-	3062	343	-	3421
<b>TRANSPORT</b>	-	-	<b>881</b>	-	-	-	-	-	-	-	<b>881</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	741	-	-	-	-	-	-	-	741
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	140	-	-	-	-	-	-	-	140
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>2</b>	-	-	-	-	<b>16915</b>	<b>281</b>	-	<b>17199</b>
Residential	-	-	2	-	-	-	-	16915	218	-	17135
Comm. and public services	-	-	-	-	-	-	-	-	64	-	64
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>4</b>	-	-	-	-	-	-	-	<b>4</b>
in industry/transf./energy	-	-	4	-	-	-	-	-	-	-	4
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>12</b>	<b>4</b>	-	<b>8916</b>	-	<b>10</b>	-	-	<b>8942</b>
Electricity plants	-	-	12	4	-	8916	-	10	-	-	8942
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Dominican Republic

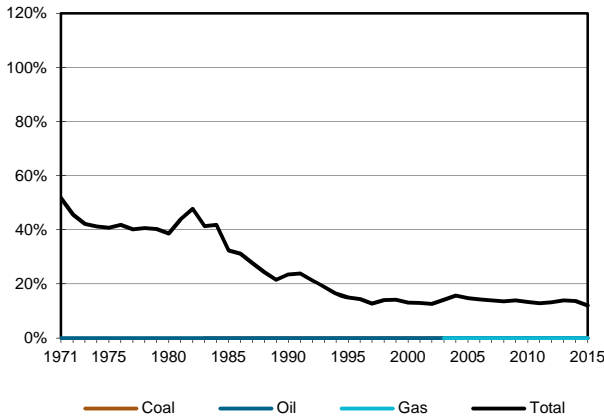
**Figure 1. Energy production**



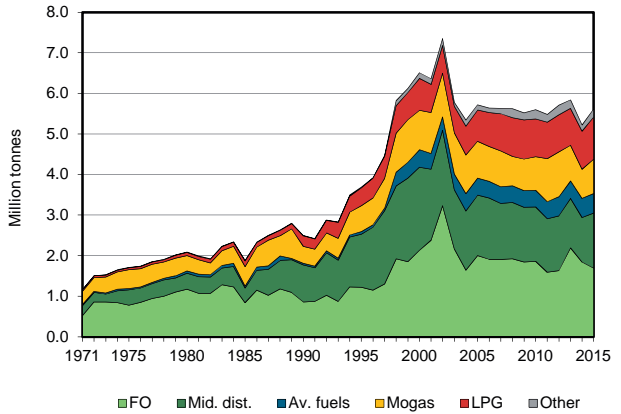
**Figure 2. Total primary energy supply²**



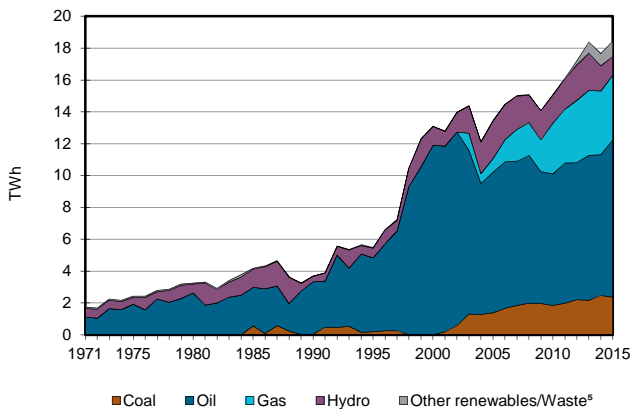
**Figure 3. Energy self-sufficiency³**



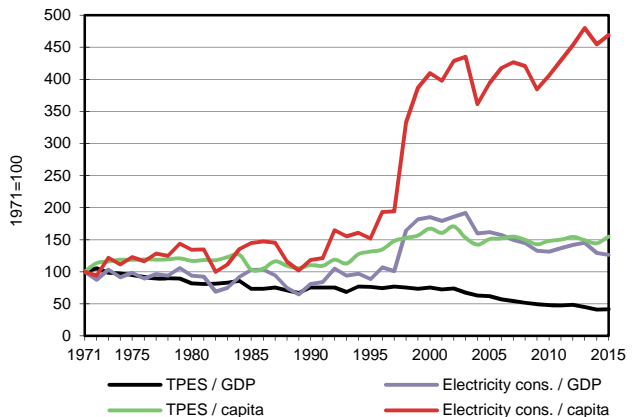
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Dominican Republic

2015

Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	101	90	799	-	-	990
Imports	1042	855	4965	905	-	-	-	-	-	-	7767
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-506	-	-	-	-	-	-	-	-506
Stock changes	-1	7	5	-17	-	-	-	-	-	-	-6
<b>TPES</b>	<b>1040</b>	<b>862</b>	<b>4464</b>	<b>888</b>	<b>-</b>	<b>101</b>	<b>90</b>	<b>799</b>	<b>-</b>	<b>-</b>	<b>8245</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-1	-15	60	-	-	-	-	-	-0	-	44
Electricity plants	-583	-	-2161	-786	-	-101	-82	-16	1587	-	-2141
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-847	771	-	-	-	-	-	-	-	-75
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-55	-	-	-55
Energy industry own use	-	-	-30	-	-	-	-	-	-55	-	-85
Losses	-17	-	-	-	-	-	-	-	-196	-	-213
<b>TFC</b>	<b>439</b>	<b>-</b>	<b>3104</b>	<b>102</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>728</b>	<b>1337</b>	<b>-</b>	<b>5719</b>
<b>INDUSTRY</b>	<b>439</b>	<b>-</b>	<b>300</b>	<b>82</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>232</b>	<b>489</b>	<b>-</b>	<b>1542</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	21	16	-	-	-	-	60	-	97
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	437	-	34	9	-	-	-	-	141	-	621
Transport equipment	-	-	69	-	-	-	-	-	-	-	69
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	2	-	74	29	-	-	-	-	142	-	246
Paper pulp and printing	-	-	7	-	-	-	-	-	20	-	27
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	39	-	-	-	-	-	-	-	39
Textile and leather	-	-	4	1	-	-	-	-	17	-	21
Non-specified	-	-	52	26	-	-	-	232	109	-	420
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1899</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>1924</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1455	-	-	-	-	-	-	-	1455
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	444	20	-	-	-	-	5	-	469
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>600</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>496</b>	<b>843</b>	<b>-</b>	<b>1948</b>
Residential	-	-	476	-	-	-	8	494	458	-	1436
Comm. and public services	-	-	77	-	-	-	0	2	307	-	387
Agriculture/forestry	-	-	47	-	-	-	-	-	78	-	125
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>305</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>305</b>
in industry/transf./energy	-	-	305	-	-	-	-	-	-	-	305
of which: chem./petrochem.	-	-	125	-	-	-	-	-	-	-	125
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2373</b>	<b>-</b>	<b>9871</b>	<b>4066</b>	<b>-</b>	<b>1175</b>	<b>950</b>	<b>22</b>	<b>-</b>	<b>-</b>	<b>18457</b>
Electricity plants	2373	-	9871	4066	-	1175	950	22	-	-	18457
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Ecuador

Figure 1. Energy production

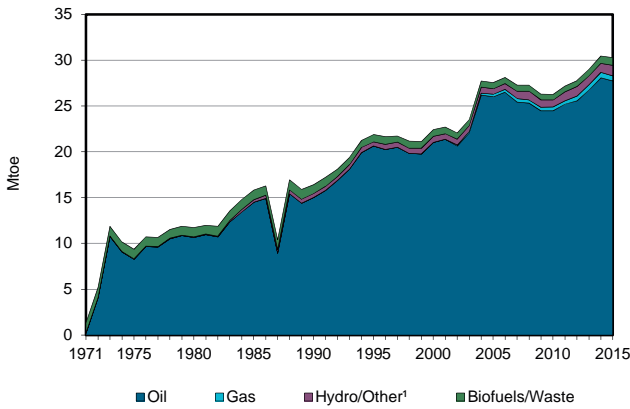


Figure 2. Total primary energy supply²

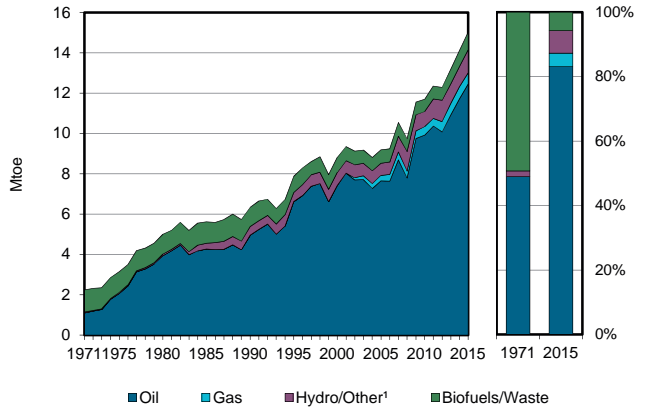


Figure 3. Energy self-sufficiency³

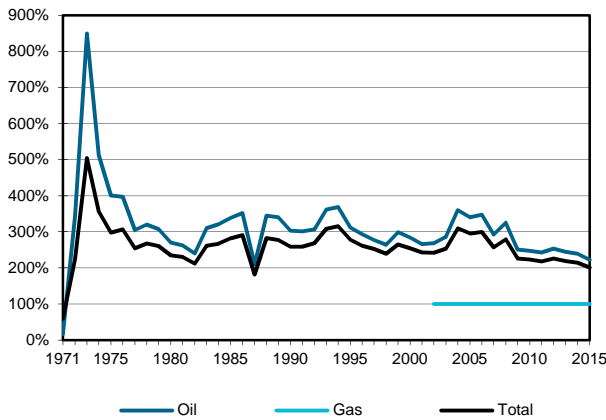


Figure 4. Oil products demand⁴

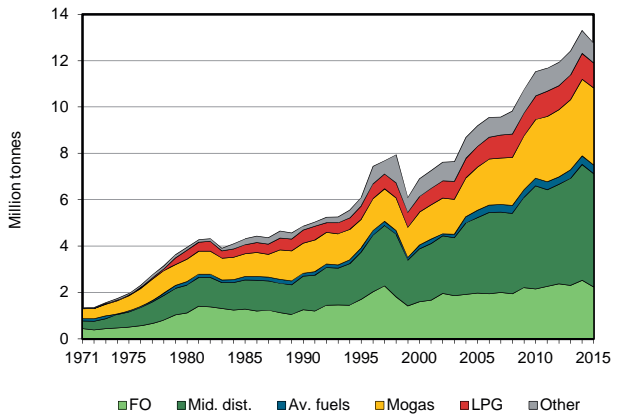


Figure 5. Electricity generation by source

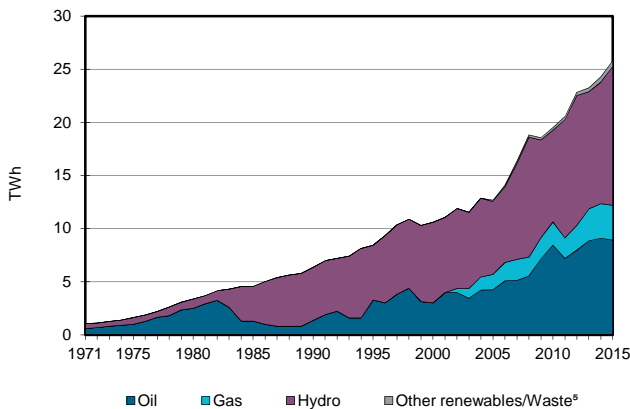
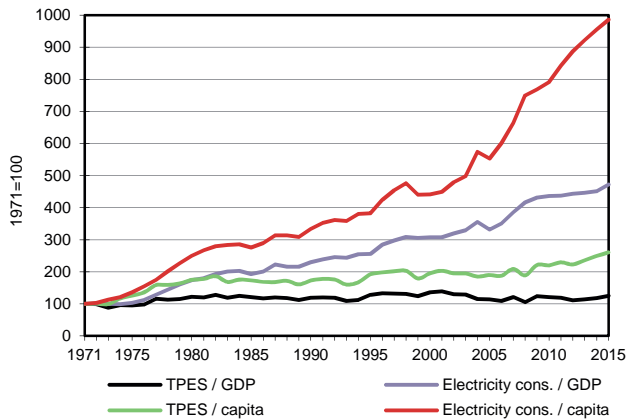


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

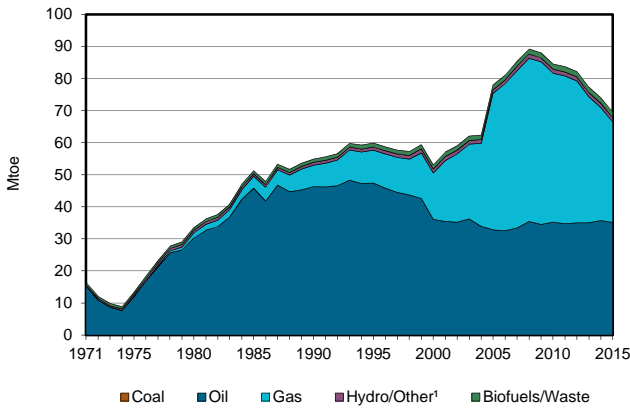
## Ecuador

2015

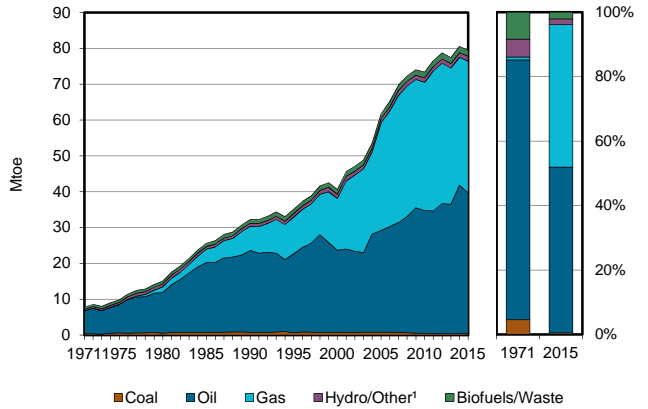
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	27720	-	559	-	1126	14	865	-	-	30285
Imports	-	-	7091	-	-	-	-	-	44	-	7135
Exports	-	-20348	-1358	-	-	-	-	-	-4	-	-21710
Intl. marine bunkers	-	-	-336	-	-	-	-	-	-	-	-336
Intl. aviation bunkers	-	-	-388	-	-	-	-	-	-	-	-388
Stock changes	-	8	62	-	-	-	-	-	-	-	70
<b>TPES</b>	-	<b>7380</b>	<b>5071</b>	<b>559</b>	-	<b>1126</b>	<b>14</b>	<b>865</b>	<b>40</b>	-	<b>15056</b>
Transfers	-	-168	184	-	-	-	-	-	-	-	15
Statistical differences	-	-40	119	-3	-	-	-	-	32	-	108
Electricity plants	-	-249	-2075	-544	-	-1126	-12	-274	2221	-	-2058
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-6742	6673	-	-	-	-	-	-	-	-69
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-104	-357	-0	-	-	-	-	-45	-	-506
Losses	-	-77	-	-	-	-	-	-	-282	-	-359
<b>TFC</b>	-	-	<b>9614</b>	<b>13</b>	-	-	<b>2</b>	<b>592</b>	<b>1967</b>	-	<b>12187</b>
<b>INDUSTRY</b>	-	-	<b>1411</b>	<b>12</b>	-	-	-	<b>365</b>	<b>766</b>	-	<b>2555</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	76	-	-	-	-	-	-	-	76
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	1336	12	-	-	-	365	766	-	2479
<b>TRANSPORT</b>	-	-	<b>5635</b>	-	-	-	-	<b>13</b>	<b>1</b>	-	<b>5649</b>
Domestic aviation	-	-	4	-	-	-	-	-	-	-	4
Road	-	-	5367	-	-	-	-	13	1	-	5381
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	264	-	-	-	-	-	-	-	264
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>2196</b>	<b>0</b>	-	-	<b>2</b>	<b>213</b>	<b>1200</b>	-	<b>3611</b>
Residential	-	-	914	0	-	-	-	213	594	-	1721
Comm. and public services	-	-	372	-	-	-	2	-	435	-	809
Agriculture/forestry	-	-	133	-	-	-	-	-	-	-	133
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	777	-	-	-	-	-	171	-	948
<b>NON-ENERGY USE</b>	-	-	<b>372</b>	-	-	-	-	-	-	-	<b>372</b>
in industry/transf./energy	-	-	372	-	-	-	-	-	-	-	372
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>8919</b>	<b>3272</b>	-	<b>13096</b>	<b>135</b>	<b>408</b>	-	-	<b>25830</b>
Electricity plants	-	-	8919	3272	-	13096	135	408	-	-	25830
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Egypt

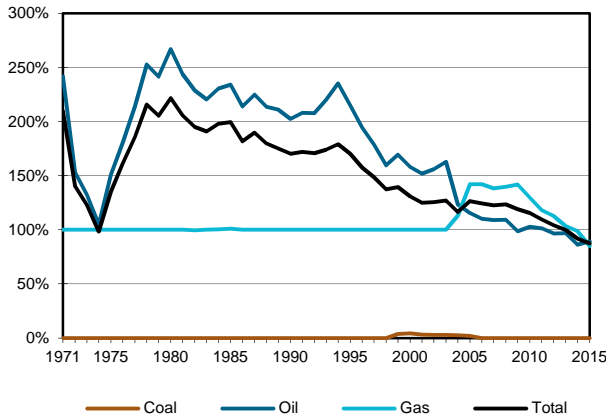
**Figure 1. Energy production**



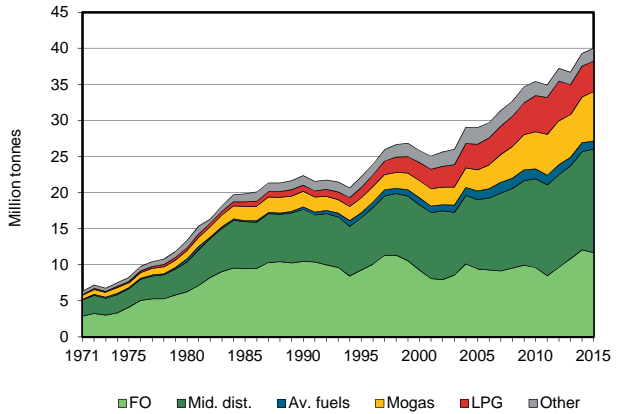
**Figure 2. Total primary energy supply<sup>2</sup>**



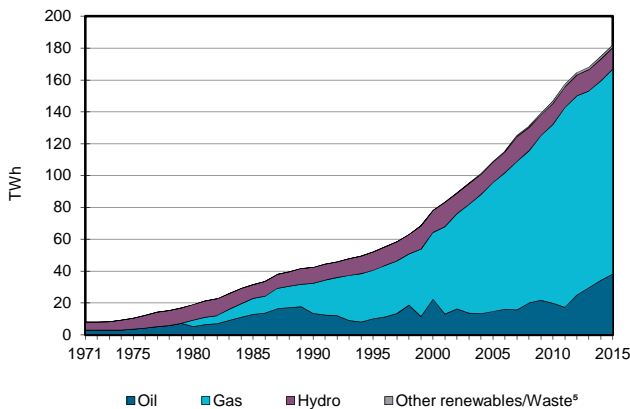
**Figure 3. Energy self-sufficiency<sup>3</sup>**



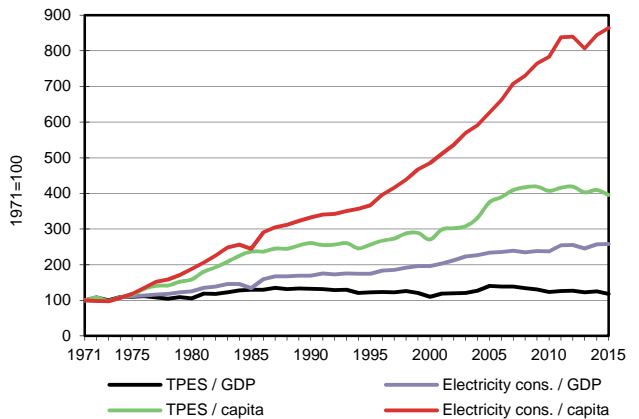
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Egypt

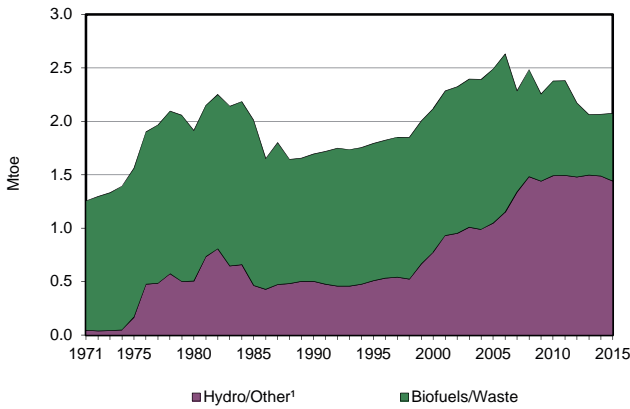
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	35114	-	31278	-	1155	137	1775	-	-	69459
Imports	420	3290	16533	5694	-	-	-	1	4	-	25942
Exports	-66	-12597	-2307	-210	-	-	-	-26	-100	-	-15307
Intl. marine bunkers	-	-	-180	-	-	-	-	-	-	-	-180
Intl. aviation bunkers	-	-	-552	-	-	-	-	-	-	-	-552
Stock changes	-	-	31	-	-	-	-	-	-	-	31
<b>TPES</b>	<b>355</b>	<b>25806</b>	<b>13526</b>	<b>36762</b>	<b>-</b>	<b>1155</b>	<b>137</b>	<b>1749</b>	<b>-96</b>	<b>-</b>	<b>79395</b>
Transfers	-	-1388	1543	-	-	-	-	-	-	-	155
Statistical differences	-	2086	-573	-	-	-	-	-	6	-	1519
Electricity plants	-	-	-9963	-22936	-	-1155	-137	-	15650	-	-18542
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-160	-	-	-	-	-	-	-	-	-	-160
Gas works	-1	-	-	-	-	-	-	-	-	-	-1
Coke/pat.fuel/BKB/PB plants	-14	-	-	-	-	-	-	-	-	-	-14
Oil refineries	-	-26504	26444	-	-	-	-	-	-	-	-61
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-949	-3795	-	-	-	-	-545	-	-5289
Losses	-	-	-	-	-	-	-	-	-1753	-	-1753
<b>TFC</b>	<b>180</b>	<b>-</b>	<b>30028</b>	<b>10031</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1749</b>	<b>13262</b>	<b>-</b>	<b>55250</b>
<b>INDUSTRY</b>	<b>179</b>	<b>-</b>	<b>4824</b>	<b>4266</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3370</b>	<b>-</b>	<b>12639</b>
Iron and steel	179	-	-	-	-	-	-	-	-	-	179
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	4824	4266	-	-	-	-	3370	-	12460
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>17967</b>	<b>318</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>52</b>	<b>-</b>	<b>18337</b>
Domestic aviation	-	-	621	-	-	-	-	-	-	-	621
Road	-	-	17091	318	-	-	-	-	-	-	17409
Rail	-	-	-	-	-	-	-	-	52	-	52
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	255	-	-	-	-	-	-	-	255
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>2</b>	<b>-</b>	<b>5719</b>	<b>1541</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1749</b>	<b>9840</b>	<b>-</b>	<b>18850</b>
Residential	2	-	4791	1541	-	-	-	857	5782	-	12973
Comm. and public services	-	-	-	-	-	-	-	-	3455	-	3455
Agriculture/forestry	-	-	928	-	-	-	-	-	603	-	1530
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	893	-	-	893
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1518</b>	<b>3906</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5424</b>
in industry/transf./energy	-	-	1518	3906	-	-	-	-	-	-	5424
of which: chem./petrochem.	-	-	-	3906	-	-	-	-	-	-	3906
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>38237</b>	<b>128710</b>	<b>-</b>	<b>13432</b>	<b>1598</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>181977</b>
Electricity plants	-	-	38237	128710	-	13432	1598	-	-	-	181977
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

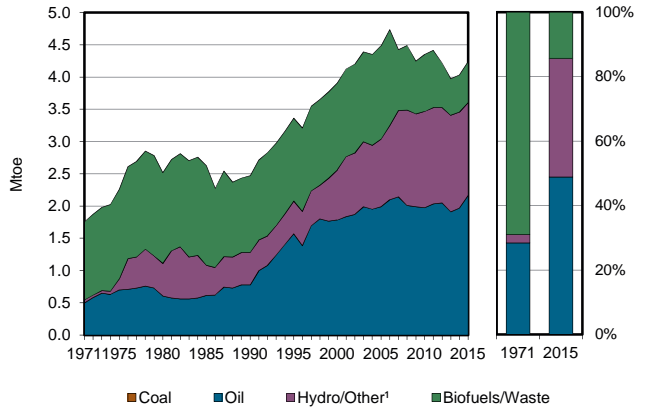


## El Salvador

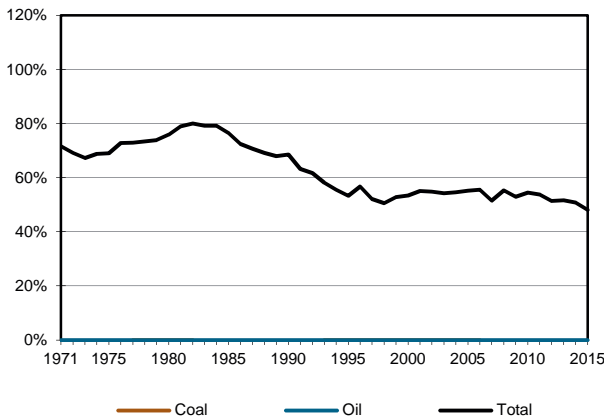
**Figure 1. Energy production**



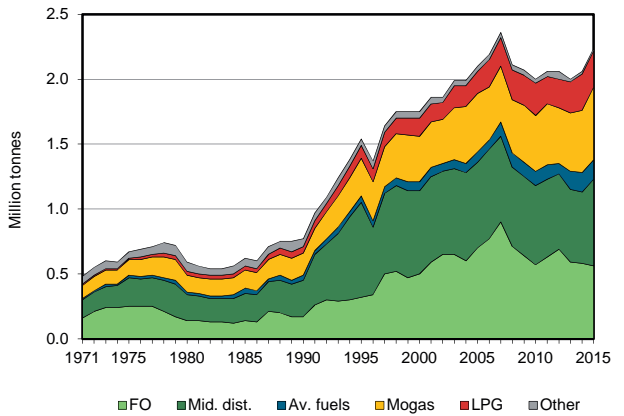
**Figure 2. Total primary energy supply²**



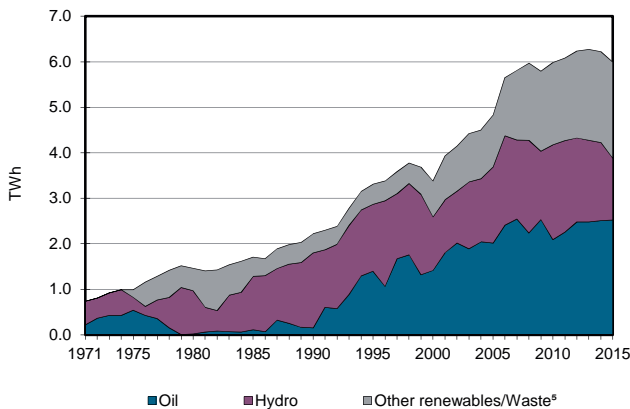
**Figure 3. Energy self-sufficiency³**



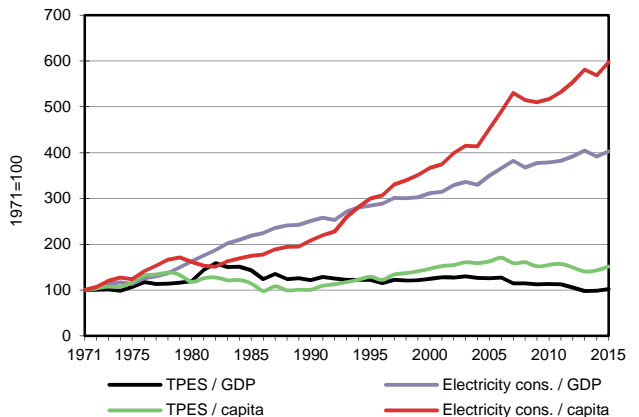
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

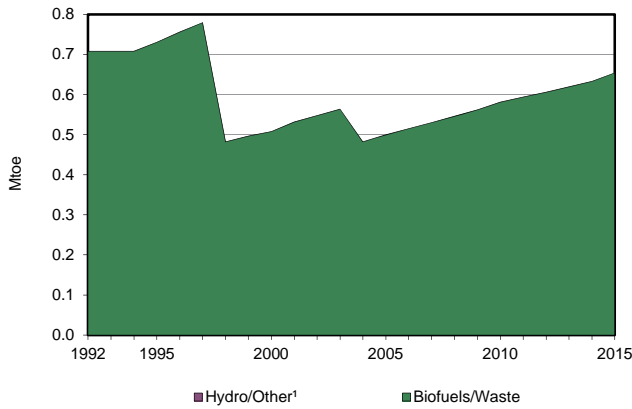
## El Salvador

2015

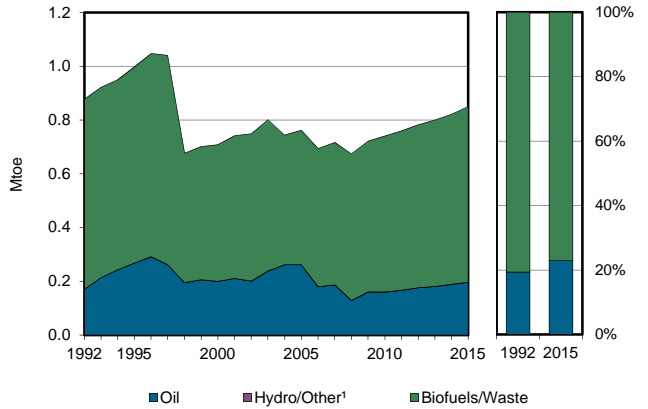
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	116	1324	633	-	-	2074
Imports	-	-	2317	-	-	-	-	-	83	-	2400
Exports	-	-	-17	-	-	-	-	-	-6	-	-23
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-161	-	-	-	-	-	-	-	-161
Stock changes	-	-	27	-	-	-	-	-	-	-	27
<b>TPES</b>	-	-	<b>2165</b>	-	-	<b>116</b>	<b>1324</b>	<b>633</b>	<b>77</b>	-	<b>4316</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-0	-11	-	-11
Electricity plants	-	-	-491	-	-	-116	-1324	-289	515	-	-1705
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-28	-	-	-28
Energy industry own use	-	-	-	-	-	-	-	-	-30	-	-30
Losses	-	-	-	-	-	-	-	-	-58	-	-58
<b>TFC</b>	-	-	<b>1675</b>	-	-	-	-	<b>316</b>	<b>493</b>	-	<b>2484</b>
<b>INDUSTRY</b>	-	-	<b>263</b>	-	-	-	-	<b>22</b>	<b>181</b>	-	<b>466</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	263	-	-	-	-	22	181	-	466
<b>TRANSPORT</b>	-	-	<b>1124</b>	-	-	-	-	-	-	-	<b>1124</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1124	-	-	-	-	-	-	-	1124
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>268</b>	-	-	-	-	<b>294</b>	<b>312</b>	-	<b>874</b>
Residential	-	-	222	-	-	-	-	260	157	-	639
Comm. and public services	-	-	46	-	-	-	-	33	112	-	192
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	43	-	43
<b>NON-ENERGY USE</b>	-	-	<b>20</b>	-	-	-	-	-	-	-	<b>20</b>
in industry/transf./energy	-	-	20	-	-	-	-	-	-	-	20
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>2526</b>	-	-	<b>1353</b>	<b>1540</b>	<b>570</b>	-	-	<b>5989</b>
Electricity plants	-	-	2526	-	-	1353	1540	570	-	-	5989
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Eritrea

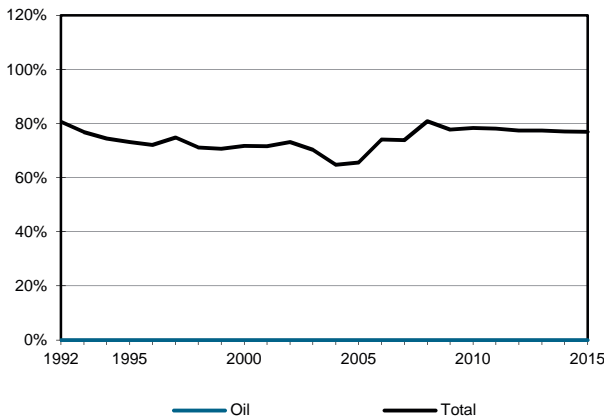
**Figure 1. Energy production**



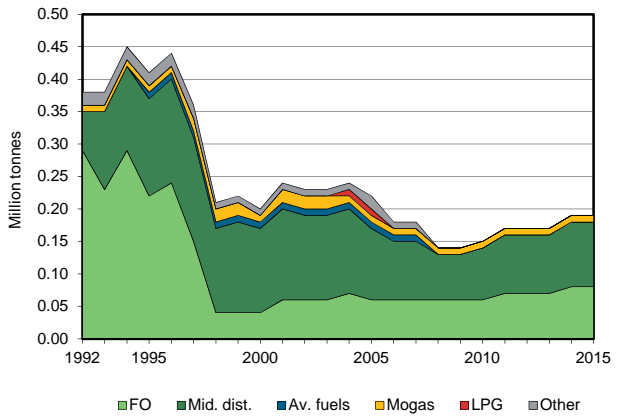
**Figure 2. Total primary energy supply²**



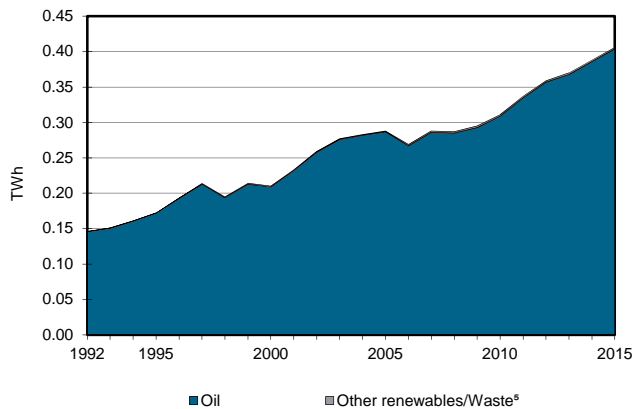
**Figure 3. Energy self-sufficiency³**



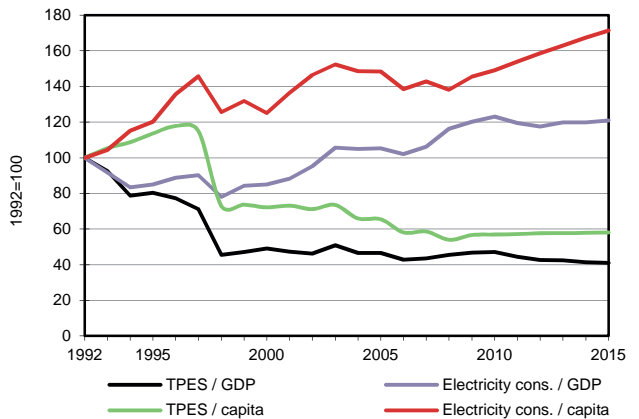
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Eritrea

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	0	654	-	-	654
Imports	-	-	198	-	-	-	-	-	-	-	198
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-1	-	-	-	-	-	-	-	-1
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>196</b>	-	-	-	<b>0</b>	<b>654</b>	-	-	<b>850</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-109	-	-	-	-0	-	35	-	-75
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-206	-	-	-206
Energy industry own use	-	-	-	-	-	-	-	-	-2	-	-2
Losses	-	-	-	-	-	-	-	-	-5	-	-5
<b>TFC</b>	-	-	<b>87</b>	-	-	-	-	<b>448</b>	<b>29</b>	-	<b>563</b>
<b>INDUSTRY</b>	-	-	<b>6</b>	-	-	-	-	-	<b>9</b>	-	<b>14</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	6	-	-	-	-	-	9	-	14
<b>TRANSPORT</b>	-	-	<b>61</b>	-	-	-	-	-	-	-	<b>61</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	61	-	-	-	-	-	-	-	61
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>18</b>	-	-	-	-	<b>448</b>	<b>20</b>	-	<b>485</b>
Residential	-	-	16	-	-	-	-	426	11	-	453
Comm. and public services	-	-	2	-	-	-	-	22	9	-	33
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>2</b>	-	-	-	-	-	-	-	<b>2</b>
in industry/transf./energy	-	-	2	-	-	-	-	-	-	-	2
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>404</b>	-	-	-	<b>2</b>	-	-	-	<b>406</b>
Electricity plants	-	-	404	-	-	-	2	-	-	-	406
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Ethiopia

Figure 1. Energy production

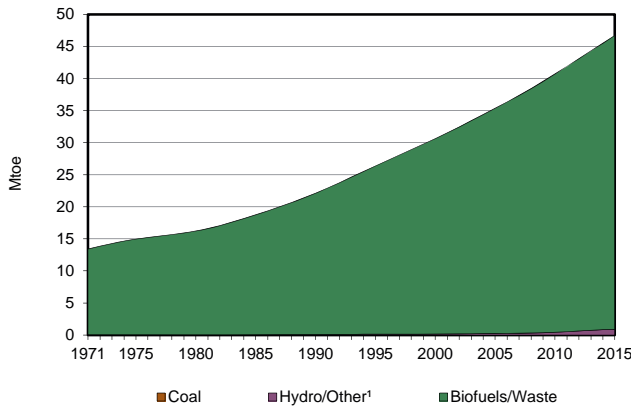


Figure 2. Total primary energy supply²

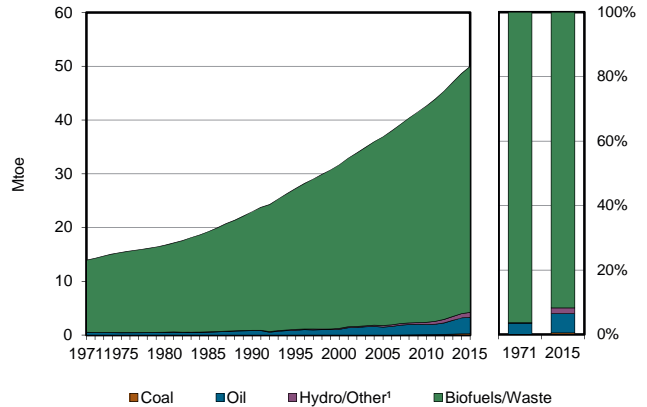


Figure 3. Energy self-sufficiency³

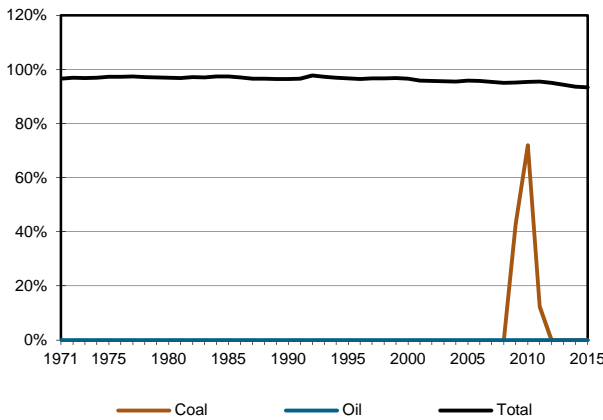


Figure 4. Oil products demand⁴

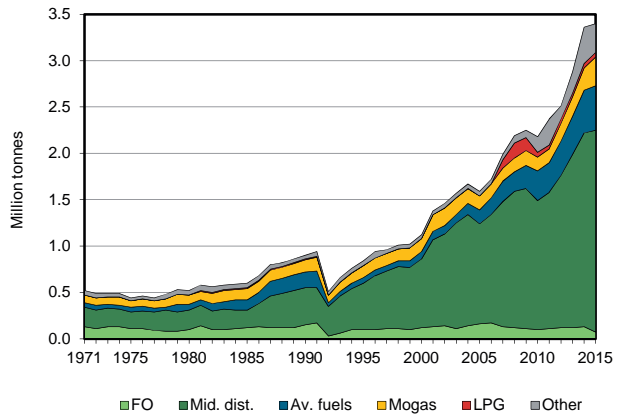


Figure 5. Electricity generation by source

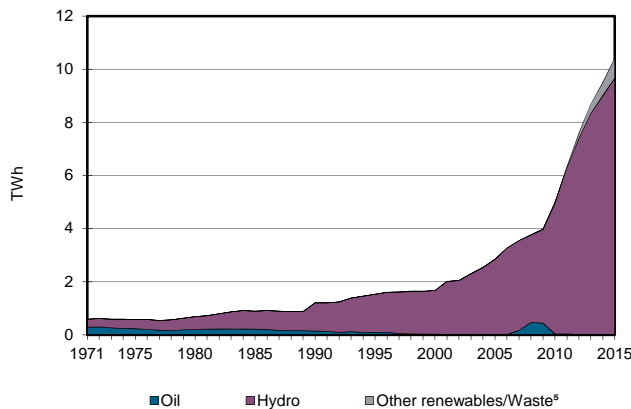
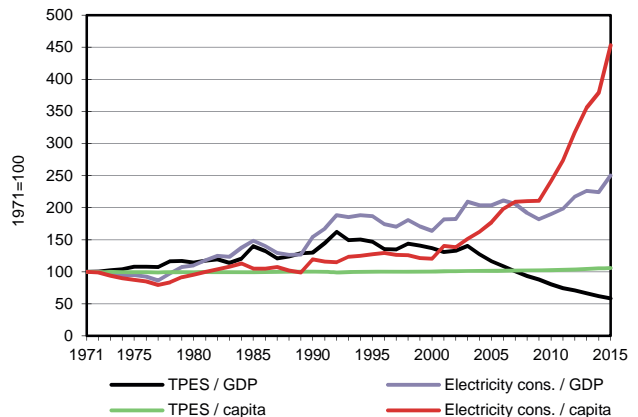


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

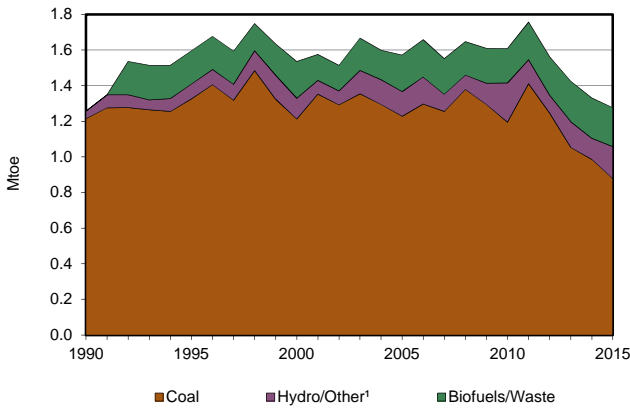
## Ethiopia

2015

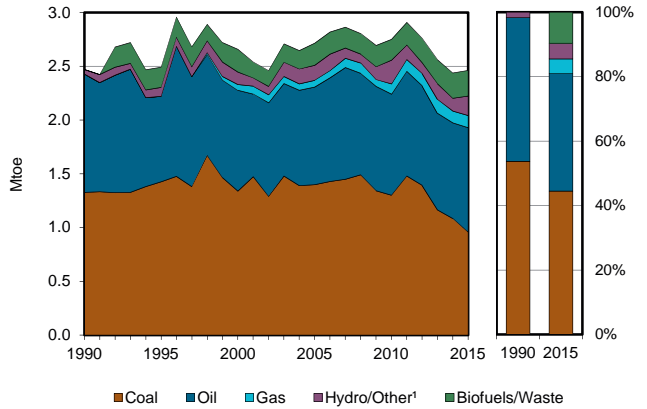
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	832	65	45813	-	-	46710
Imports	253	-	3472	-	-	-	-	-	-	-	3726
Exports	-	-	-	-	-	-	-	-	-14	-	-14
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-438	-	-	-	-	-	-	-	-438
Stock changes	-	-	6	-	-	-	-	-	-	-	6
<b>TPES</b>	<b>253</b>	<b>-</b>	<b>3041</b>	<b>-</b>	<b>-</b>	<b>832</b>	<b>65</b>	<b>45813</b>	<b>-14</b>	<b>-</b>	<b>49990</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-5	-	-	-	-	-	11	-	6
Electricity plants	-	-	-1	-	-	-832	-65	-	898	-	-1
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-8927	-	-	-8927
Energy industry own use	-	-	-	-	-	-	-	-	-27	-	-27
Losses	-	-	-	-	-	-	-	-	-152	-	-152
<b>TFC</b>	<b>253</b>	<b>-</b>	<b>3035</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36886</b>	<b>715</b>	<b>-</b>	<b>40890</b>
<b>INDUSTRY</b>	<b>253</b>	<b>-</b>	<b>737</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>241</b>	<b>-</b>	<b>1231</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	253	-	161	-	-	-	-	-	-	-	415
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	576	-	-	-	-	-	241	-	817
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1612</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>1618</b>
Domestic aviation	-	-	78	-	-	-	-	-	-	-	78
Road	-	-	1534	-	-	-	-	6	-	-	1540
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>594</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36880</b>	<b>474</b>	<b>-</b>	<b>37949</b>
Residential	-	-	281	-	-	-	-	36527	277	-	37085
Comm. and public services	-	-	55	-	-	-	-	353	192	-	600
Agriculture/forestry	-	-	129	-	-	-	-	-	-	-	129
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	129	-	-	-	-	-	5	-	134
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>92</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>92</b>
in industry/transf./energy	-	-	92	-	-	-	-	-	-	-	92
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>9674</b>	<b>759</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10437</b>
Electricity plants	-	-	4	-	-	9674	759	-	-	-	10437
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Former Yugoslav Republic of Macedonia

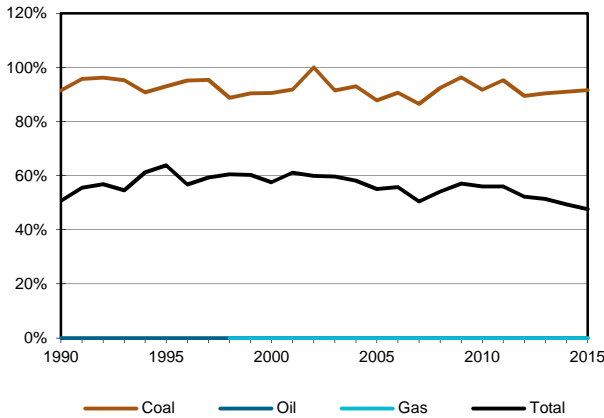
**Figure 1. Energy production**



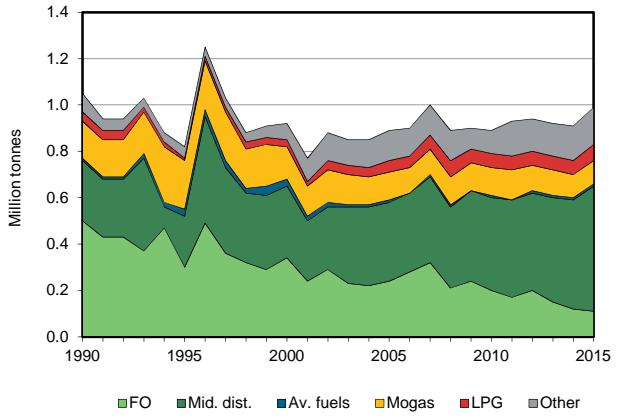
**Figure 2. Total primary energy supply<sup>2</sup>**



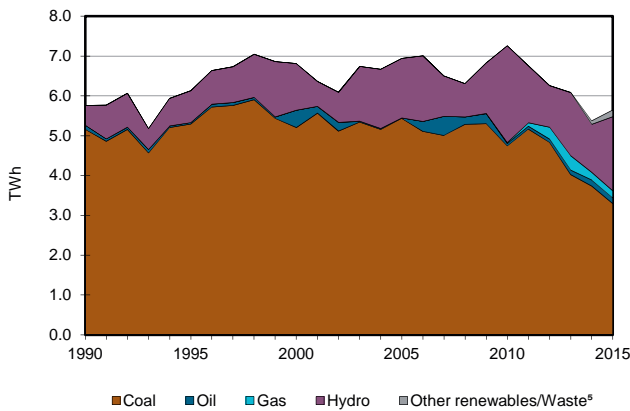
**Figure 3. Energy self-sufficiency<sup>3</sup>**



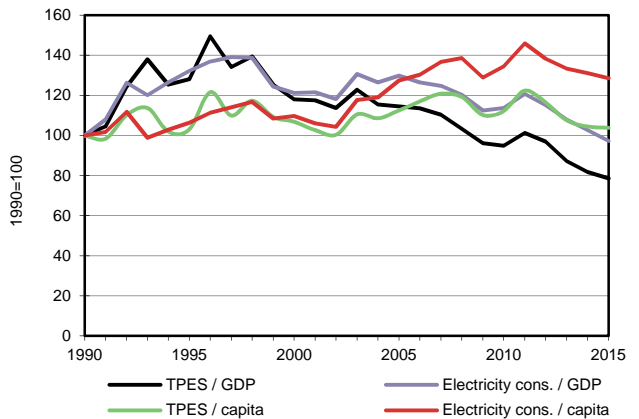
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Former Yugoslav Republic of Macedonia

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	876	-	-	-	-	160	20	218	-	-	1276
Imports	85	-	1138	112	-	-	-	20	228	-	1584
Exports	-2	-	-152	-	-	-	-	-3	-12	-	-169
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-14	-	-	-	-	-	-	-	-14
Stock changes	-3	-	0	-0	-	-	-	6	-	-	2
<b>TPES</b>	<b>957</b>	<b>-</b>	<b>972</b>	<b>112</b>	<b>-</b>	<b>160</b>	<b>20</b>	<b>241</b>	<b>216</b>	<b>-</b>	<b>2678</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	22	-	-	-	-	-	-	-	-	-	22
Electricity plants	-881	-	-37	-	-	-160	-12	-2	470	-	-623
CHP plants	-	-	-	-35	-	-	-	-	16	11	-9
Heat plants	-	-	-	-45	-	-	-	-	-	42	-3
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-2	-	-	-	-	-0	-43	-0	-45
Losses	-	-	-	-1	-	-	-1	-	-89	-6	-96
<b>TFC</b>	<b>98</b>	<b>-</b>	<b>933</b>	<b>31</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>239</b>	<b>570</b>	<b>46</b>	<b>1925</b>
<b>INDUSTRY</b>	<b>96</b>	<b>-</b>	<b>176</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>170</b>	<b>3</b>	<b>477</b>
Iron and steel	93	-	62	16	-	-	-	0	106	3	281
Chemical and petrochemical	-	-	3	1	-	-	-	-	6	-	9
Non-ferrous metals	-	-	1	-	-	-	-	-	1	-	2
Non-metallic minerals	1	-	59	1	-	-	-	0	9	-	69
Transport equipment	-	-	-	2	-	-	-	-	5	-	7
Machinery	1	-	2	0	-	-	-	0	4	-	7
Mining and quarrying	-	-	13	-	-	-	-	0	15	-	29
Food and tobacco	-	-	17	5	-	-	-	4	13	-	39
Paper pulp and printing	-	-	-	0	-	-	-	-	1	-	1
Wood and wood products	-	-	-	-	-	-	-	0	0	-	0
Construction	-	-	13	-	-	-	-	0	2	-	15
Textile and leather	2	-	6	0	-	-	-	0	4	-	12
Non-specified	-	-	-	0	-	-	-	0	4	-	4
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>610</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>611</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	608	0	-	-	-	-	-	-	608
Rail	-	-	2	-	-	-	-	-	1	-	3
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>2</b>	<b>-</b>	<b>85</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>233</b>	<b>398</b>	<b>43</b>	<b>775</b>
Residential	1	-	12	0	-	-	-	228	270	32	543
Comm. and public services	0	-	60	5	-	-	2	4	125	11	208
Agriculture/forestry	1	-	13	-	-	-	6	1	3	-	24
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>62</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>62</b>
in industry/transf./energy	-	-	54	-	-	-	-	-	-	-	54
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	8	-	-	-	-	-	-	-	8
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>3295</b>	<b>-</b>	<b>139</b>	<b>183</b>	<b>-</b>	<b>1865</b>	<b>144</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>5646</b>
Electricity plants	3295	-	139	-	-	1865	144	20	-	-	5463
CHP plants	-	-	-	183	-	-	-	-	-	-	183
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2193</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2193</b>
CHP plants	-	-	-	449	-	-	-	-	-	-	449
Heat plants	-	-	-	1744	-	-	-	-	-	-	1744



## Gabon

Figure 1. Energy production

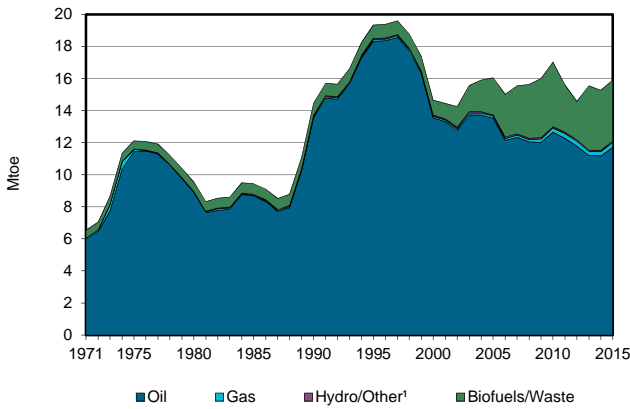


Figure 2. Total primary energy supply²

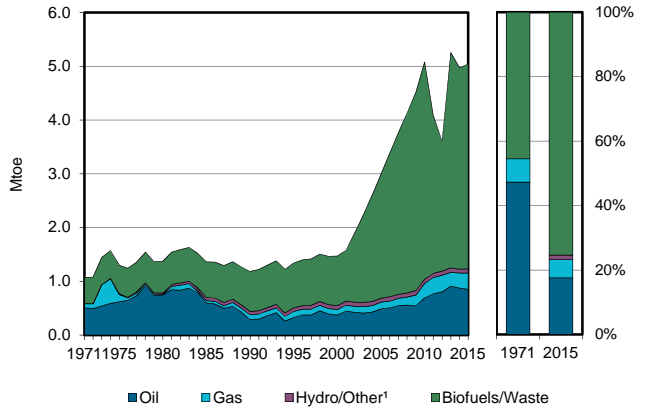


Figure 3. Energy self-sufficiency³

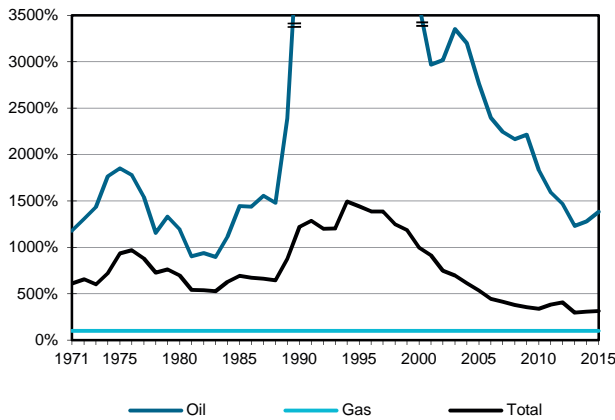


Figure 4. Oil products demand⁴

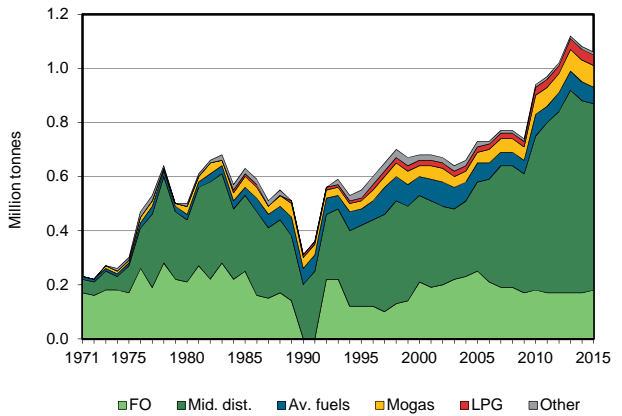


Figure 5. Electricity generation by source

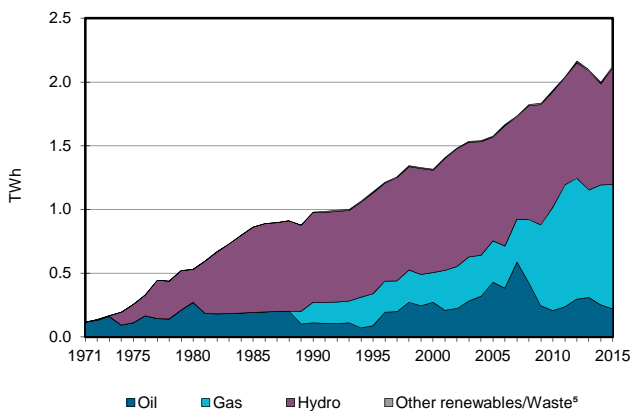
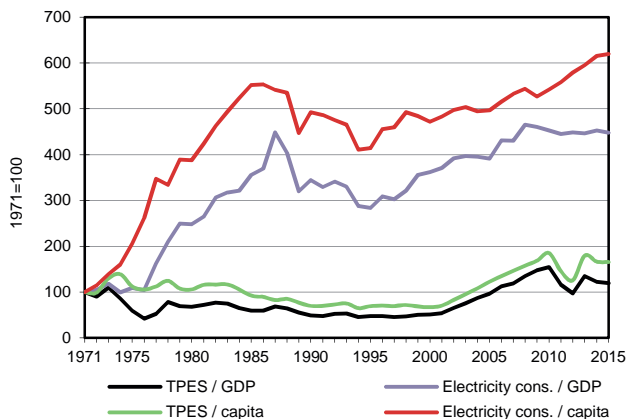


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 3500%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

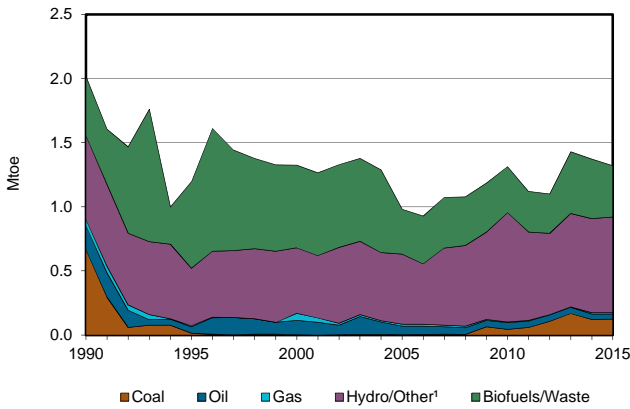
## Gabon

2015

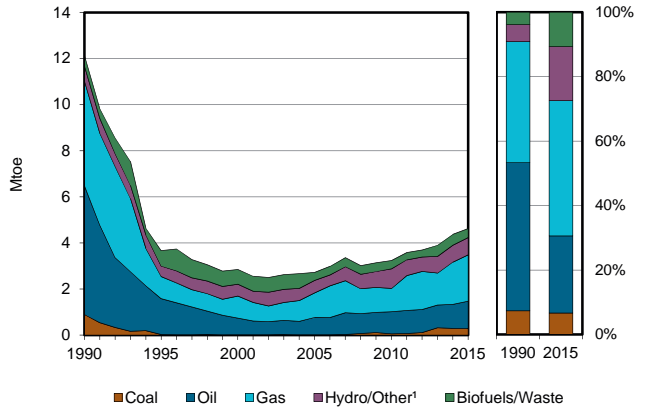
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	11710	-	307	-	79	0	3811	-	-	15907
Imports	-	-	525	-	-	-	-	-	29	-	554
Exports	-	-10894	-243	-	-	-	-	-	-	-	-11137
Intl. marine bunkers	-	-	-182	-	-	-	-	-	-	-	-182
Intl. aviation bunkers	-	-	-68	-	-	-	-	-	-	-	-68
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>816</b>	<b>31</b>	<b>307</b>	-	<b>79</b>	<b>0</b>	<b>3811</b>	<b>29</b>	-	<b>5073</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-66	-285	-	-79	-0	-7	183	-	-255
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-816	805	-	-	-	-	-	-	-	-12
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-19	-	-	-	-	-12	-	-31
Losses	-	-	-	-	-	-	-	-	-41	-	-41
<b>TFC</b>	-	-	<b>770</b>	<b>2</b>	-	-	-	<b>3804</b>	<b>159</b>	-	<b>4735</b>
<b>INDUSTRY</b>	-	-	<b>372</b>	<b>2</b>	-	-	-	<b>2766</b>	<b>43</b>	-	<b>3183</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	0	-	0
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	6	-	6
Food and tobacco	-	-	-	1	-	-	-	-	12	-	13
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	1	-	-	-	-	16	-	17
Construction	-	-	-	-	-	-	-	-	7	-	7
Textile and leather	-	-	-	-	-	-	-	-	0	-	0
Non-specified	-	-	372	-	-	-	-	2766	2	-	3139
<b>TRANSPORT</b>	-	-	<b>265</b>	-	-	-	-	-	<b>1</b>	-	<b>265</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	265	-	-	-	-	-	-	-	265
Rail	-	-	-	-	-	-	-	-	1	-	1
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>122</b>	-	-	-	-	<b>1038</b>	<b>115</b>	-	<b>1275</b>
Residential	-	-	65	-	-	-	-	1038	83	-	1186
Comm. and public services	-	-	40	-	-	-	-	-	24	-	64
Agriculture/forestry	-	-	17	-	-	-	-	-	-	-	17
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	9	-	9
<b>NON-ENERGY USE</b>	-	-	<b>12</b>	-	-	-	-	-	-	-	<b>12</b>
in industry/transf./energy	-	-	12	-	-	-	-	-	-	-	12
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>217</b>	<b>979</b>	-	<b>918</b>	<b>2</b>	<b>10</b>	-	-	<b>2126</b>
Electricity plants	-	-	217	979	-	918	2	10	-	-	2126
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Georgia

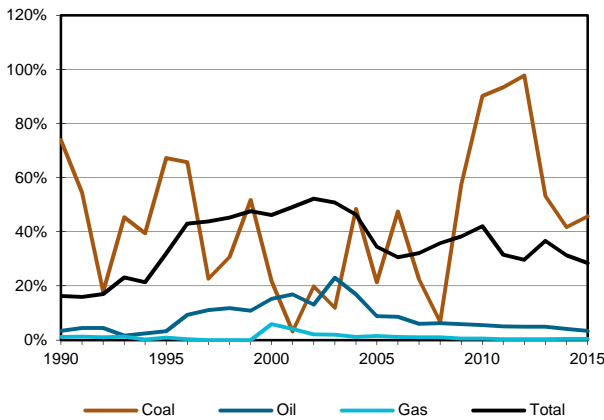
**Figure 1. Energy production**



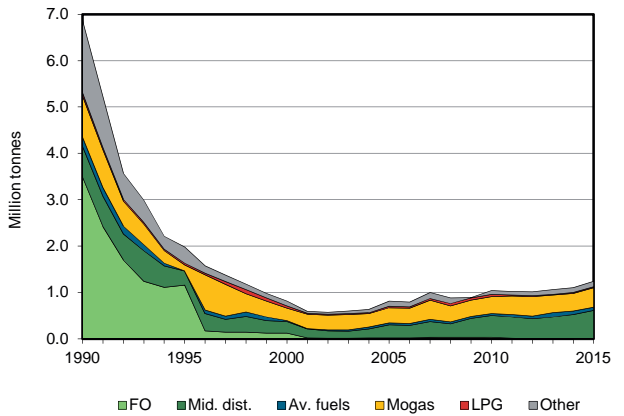
**Figure 2. Total primary energy supply²**



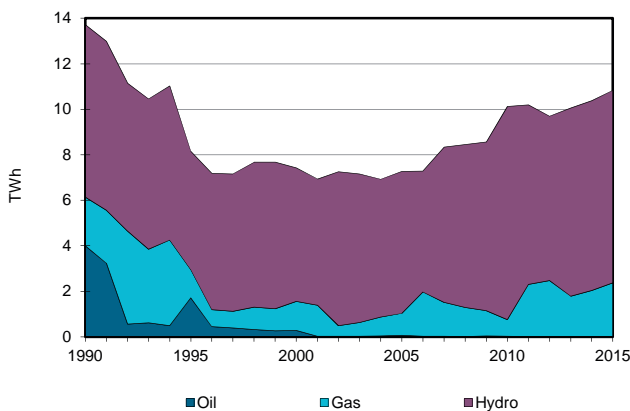
**Figure 3. Energy self-sufficiency³**



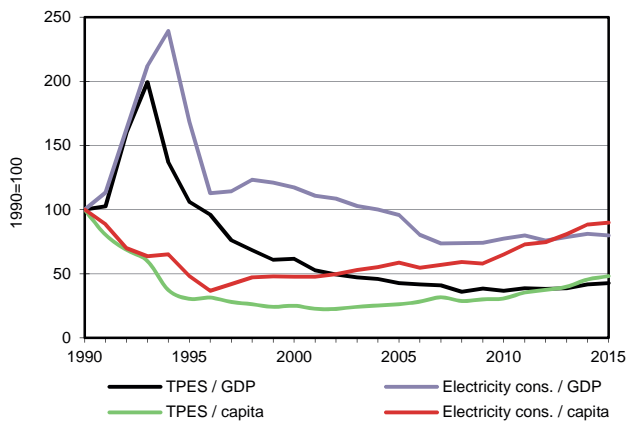
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

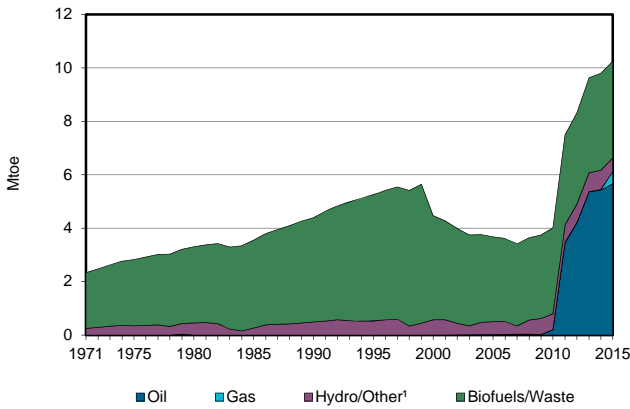
## Georgia

2015

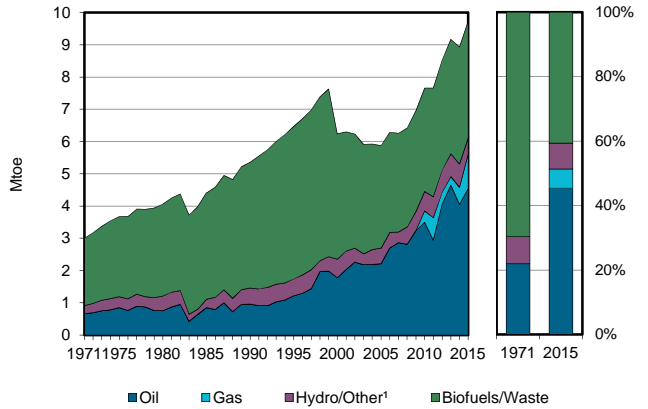
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	124	40	-	9	-	727	18	399	-	-	1318
Imports	153	134	1371	2090	-	-	-	-	60	-	3807
Exports	-1	-154	-107	-84	-	-	-	-1	-57	-	-403
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-71	-	-	-	-	-	-	-	-71
Stock changes	-4	-6	-10	-	-	-	-	-	-	-	-20
<b>TPES</b>	<b>272</b>	<b>14</b>	<b>1183</b>	<b>2016</b>	<b>-</b>	<b>727</b>	<b>18</b>	<b>398</b>	<b>3</b>	<b>-</b>	<b>4631</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0	-	1	-0	-	-	-	-	-	-	1
Electricity plants	-	-	-	-543	-	-727	-	-	932	-	-338
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-14	12	-	-	-	-	-	-	-	-2
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0	-	-	-	-	-	-	-	-22	-	-22
Losses	-	-	-	-109	-	-	-2	-	-61	-	-172
<b>TFC</b>	<b>272</b>	<b>-</b>	<b>1195</b>	<b>1364</b>	<b>-</b>	<b>-</b>	<b>17</b>	<b>398</b>	<b>852</b>	<b>-</b>	<b>4098</b>
<b>INDUSTRY</b>	<b>270</b>	<b>-</b>	<b>90</b>	<b>96</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>237</b>	<b>-</b>	<b>693</b>
Iron and steel	76	-	-	13	-	-	-	0	108	-	197
Chemical and petrochemical	-	-	-	2	-	-	-	-	27	-	30
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	192	-	10	30	-	-	-	0	24	-	255
Transport equipment	-	-	-	0	-	-	-	-	0	-	1
Machinery	-	-	-	0	-	-	-	-	1	-	1
Mining and quarrying	-	-	16	1	-	-	-	-	10	-	27
Food and tobacco	2	-	-	35	-	-	-	1	17	-	54
Paper pulp and printing	-	-	-	2	-	-	-	-	1	-	4
Wood and wood products	-	-	-	0	-	-	-	-	0	-	1
Construction	-	-	64	10	-	-	-	-	11	-	85
Textile and leather	-	-	-	1	-	-	-	-	1	-	2
Non-specified	-	-	-	1	-	-	-	0	35	-	37
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>958</b>	<b>304</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>-</b>	<b>1288</b>
Domestic aviation	-	-	1	-	-	-	-	-	-	-	1
Road	-	-	950	304	-	-	-	-	-	-	1254
Rail	-	-	6	-	-	-	-	-	25	-	31
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1	-	-	-	-	-	-	-	1
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>2</b>	<b>-</b>	<b>43</b>	<b>736</b>	<b>-</b>	<b>-</b>	<b>17</b>	<b>397</b>	<b>590</b>	<b>-</b>	<b>1785</b>
Residential	0	-	20	580	-	-	5	390	212	-	1207
Comm. and public services	1	-	14	153	-	-	11	7	219	-	404
Agriculture/forestry	0	-	9	4	-	-	1	-	5	-	19
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	155	-	155
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>104</b>	<b>228</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>332</b>
in industry/transf./energy	-	-	85	228	-	-	-	-	-	-	313
of which: chem./petrochem.	-	-	-	228	-	-	-	-	-	-	228
in transport	-	-	18	-	-	-	-	-	-	-	18
in other	-	-	1	-	-	-	-	-	-	-	1
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2379</b>	<b>-</b>	<b>8454</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10833</b>
Electricity plants	-	-	-	2379	-	8454	-	-	-	-	10833
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Ghana

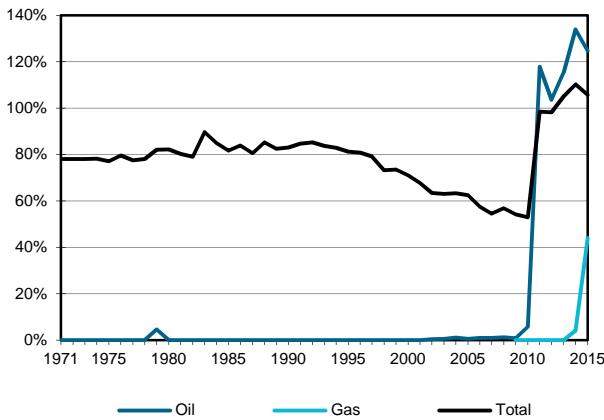
**Figure 1. Energy production**



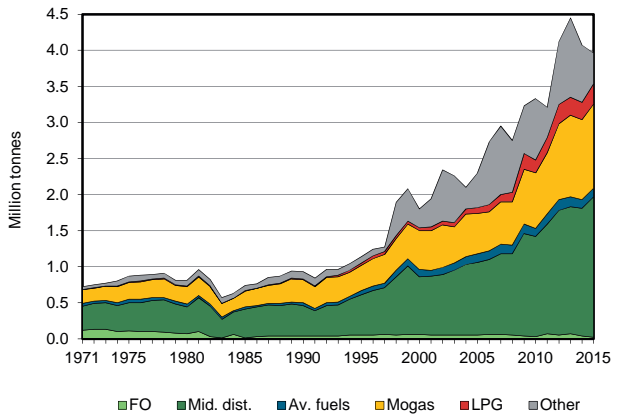
**Figure 2. Total primary energy supply<sup>2</sup>**



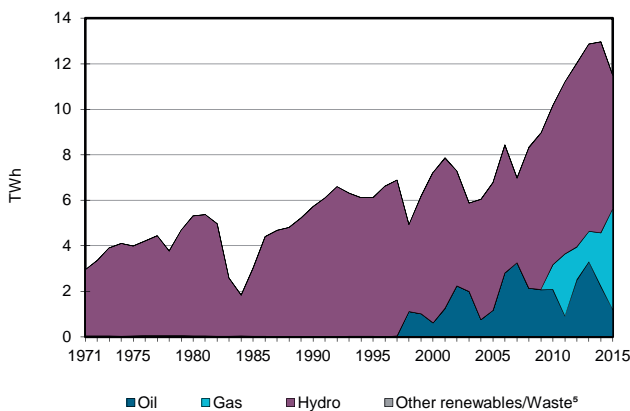
**Figure 3. Energy self-sufficiency<sup>3</sup>**



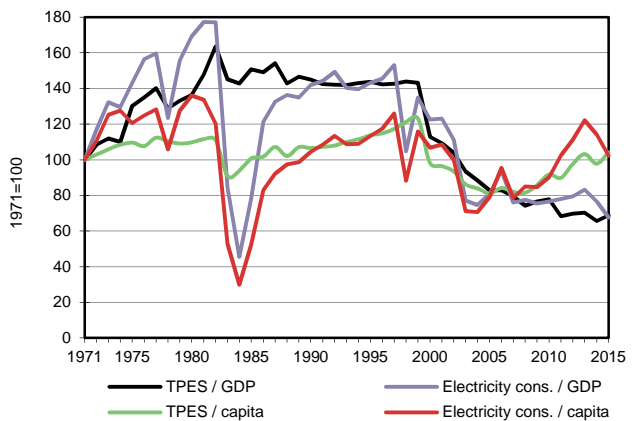
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Ghana

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	5659	-	468	-	503	0	3617	-	-	10247
Imports	-	317	4063	596	-	-	-	-	19	-	4995
Exports	-	-5303	-130	-	-	-	-	-	-47	-	-5480
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-128	-	-	-	-	-	-	-	-128
Stock changes	-	-	62	-	-	-	-	-	-	-	62
<b>TPES</b>	-	<b>673</b>	<b>3868</b>	<b>1064</b>	-	<b>503</b>	<b>0</b>	<b>3617</b>	<b>-28</b>	-	<b>9696</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-307	-196	-	-	-	-	-	-5	-	-508
Electricity plants	-	-253	-	-1064	-	-503	-0	-	988	-	-832
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-112	97	-	-	-	-	-	-	-	-15
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1195	-	-	-1195
Energy industry own use	-	-	-5	-	-	-	-	-	-6	-	-11
Losses	-	-	-	-	-	-	-	-	-205	-	-205
<b>TFC</b>	-	-	<b>3763</b>	-	-	-	-	<b>2422</b>	<b>744</b>	-	<b>6929</b>
<b>INDUSTRY</b>	-	-	<b>583</b>	-	-	-	-	<b>407</b>	<b>356</b>	-	<b>1347</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	583	-	-	-	-	407	356	-	1347
<b>TRANSPORT</b>	-	-	<b>2619</b>	-	-	-	-	-	-	-	<b>2619</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2434	-	-	-	-	-	-	-	2434
Rail	-	-	84	-	-	-	-	-	-	-	84
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	101	-	-	-	-	-	-	-	101
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>395</b>	-	-	-	-	<b>2015</b>	<b>387</b>	-	<b>2797</b>
Residential	-	-	281	-	-	-	-	1885	210	-	2376
Comm. and public services	-	-	36	-	-	-	-	128	178	-	342
Agriculture/forestry	-	-	70	-	-	-	-	2	-	-	72
Fishing	-	-	7	-	-	-	-	-	-	-	7
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>166</b>	-	-	-	-	-	-	-	<b>166</b>
in industry/transf./energy	-	-	166	-	-	-	-	-	-	-	166
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	<b>1179</b>	-	<b>4464</b>	-	<b>5845</b>	<b>3</b>	-	-	-	<b>11491</b>
Electricity plants	-	1179	-	4464	-	5845	3	-	-	-	11491
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Gibraltar

Figure 1. Energy production

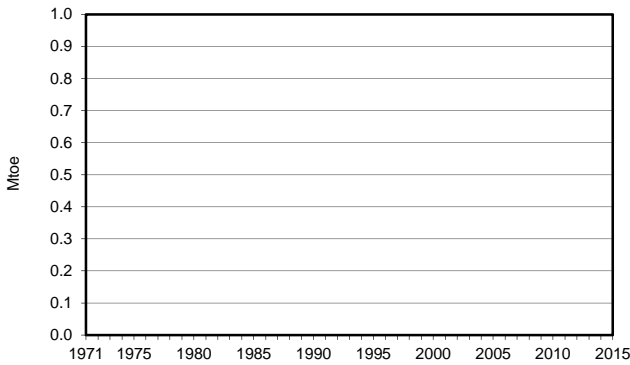


Figure 2. Total primary energy supply<sup>1</sup>

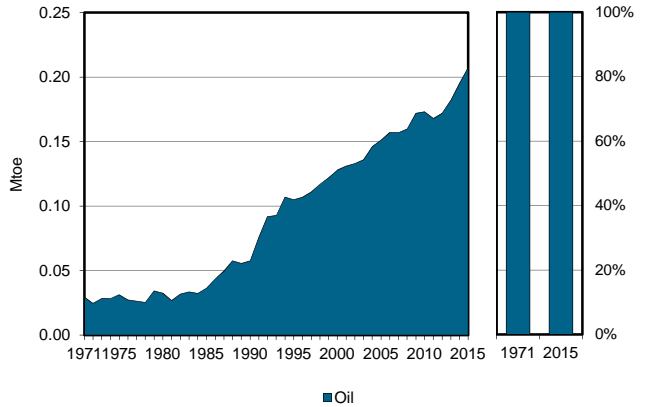


Figure 3. Energy self-sufficiency<sup>2</sup>

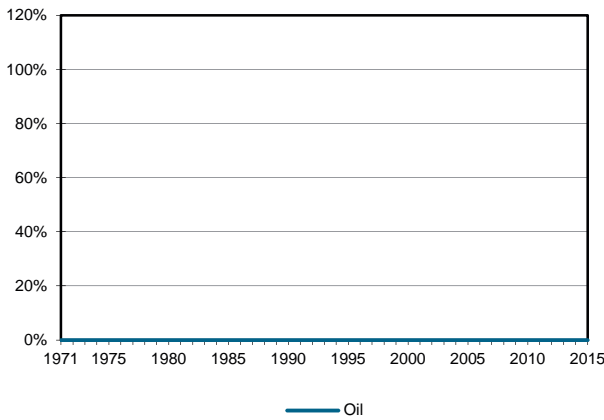


Figure 4. Oil products demand<sup>3</sup>

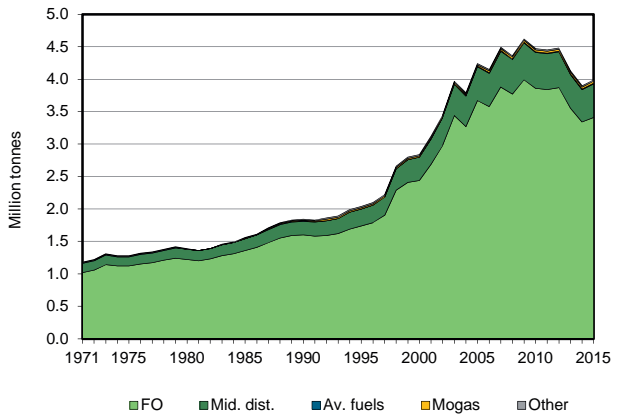


Figure 5. Electricity generation by source

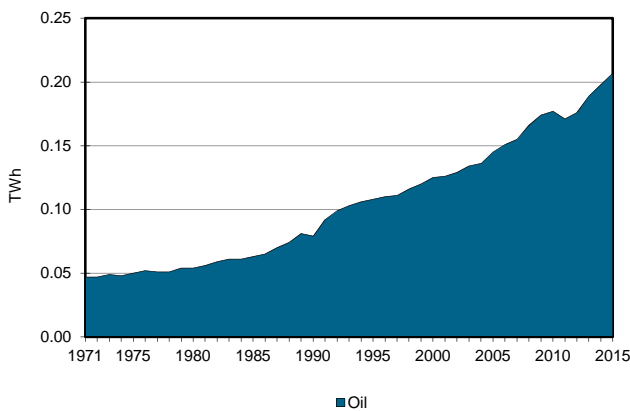
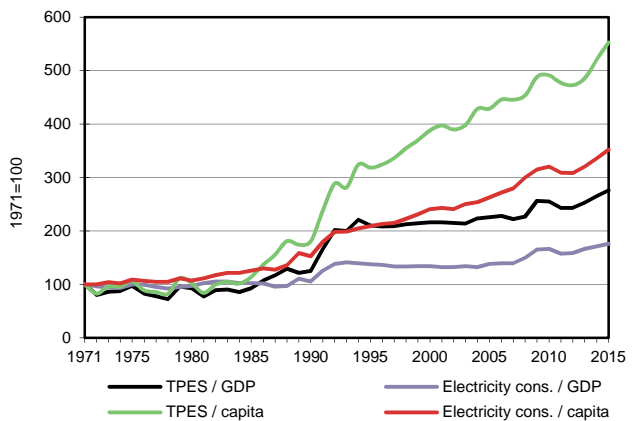


Figure 6. Selected indicators<sup>4</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

## Gibraltar

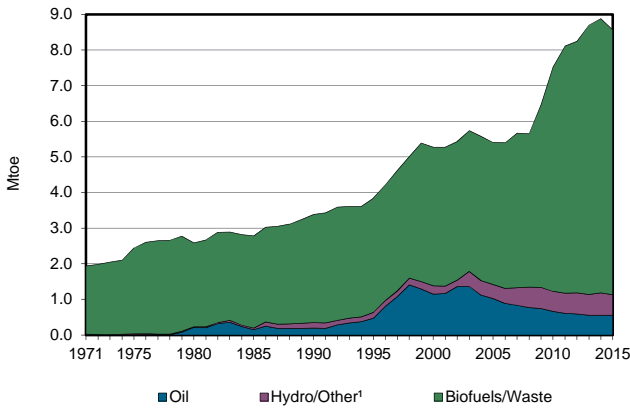
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	-	-	-	-	-
Imports	-	-	3847	-	-	-	-	-	-	-	3847
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-3631	-	-	-	-	-	-	-	-3631
Intl. aviation bunkers	-	-	-8	-	-	-	-	-	-	-	-8
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>207</b>	-	-	-	-	-	-	-	<b>207</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-49	-	-	-	-	-	18	-	-31
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0	-	-0
Losses	-	-	-	-	-	-	-	-	-1	-	-1
<b>TFC</b>	-	-	<b>158</b>	-	-	-	-	-	<b>17</b>	-	<b>175</b>
<b>INDUSTRY</b>	-	-	-	-	-	-	-	-	-	-	-
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>TRANSPORT</b>	-	-	<b>136</b>	-	-	-	-	-	-	-	<b>136</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	136	-	-	-	-	-	-	-	136
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	-	-	-	-	-	-	<b>17</b>	-	<b>17</b>
Residential	-	-	-	-	-	-	-	-	-	-	-
Comm. and public services	-	-	-	-	-	-	-	-	2	-	2
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	15	-	15
<b>NON-ENERGY USE</b>	-	-	<b>22</b>	-	-	-	-	-	-	-	<b>22</b>
in industry/transf./energy	-	-	22	-	-	-	-	-	-	-	22
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>207</b>	-	-	-	-	-	-	-	<b>207</b>
Electricity plants	-	-	207	-	-	-	-	-	-	-	207
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

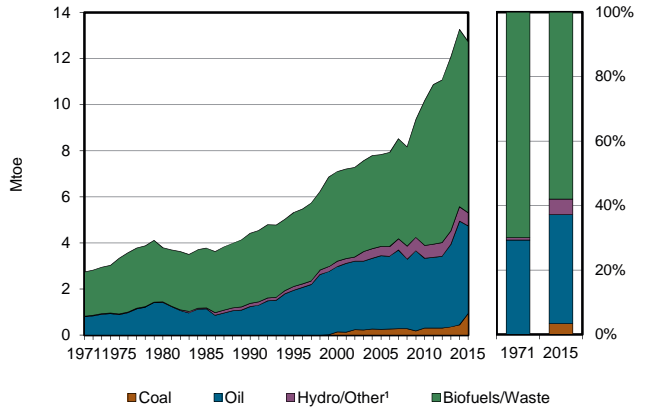


## Guatemala

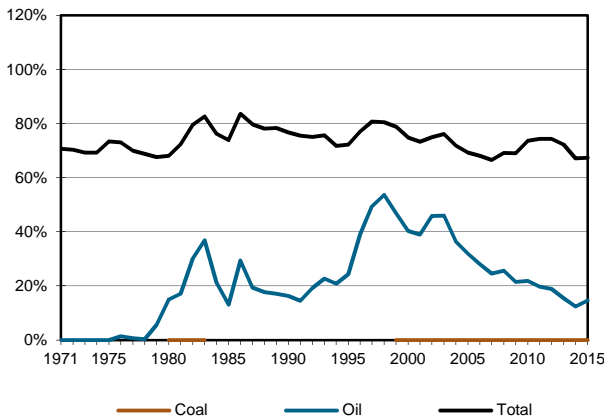
**Figure 1. Energy production**



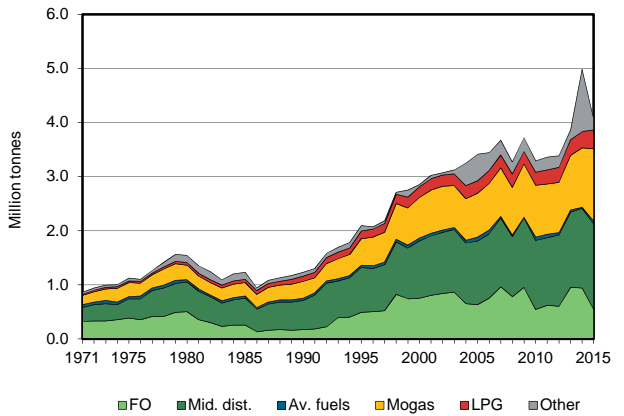
**Figure 2. Total primary energy supply<sup>2</sup>**



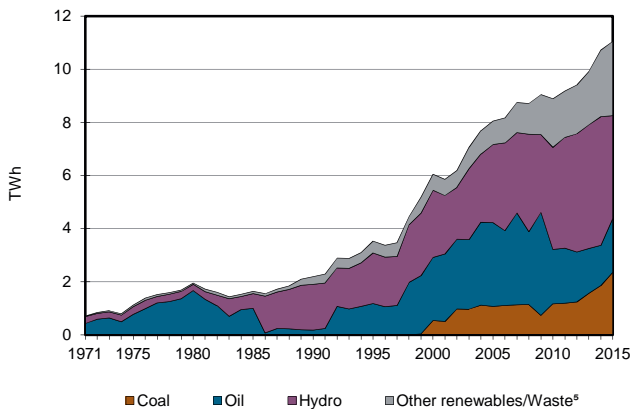
**Figure 3. Energy self-sufficiency<sup>3</sup>**



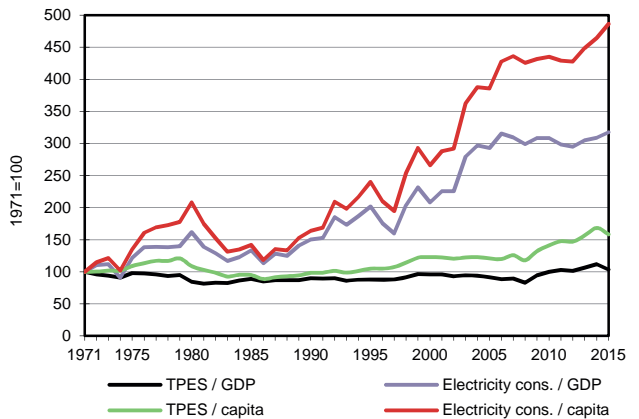
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

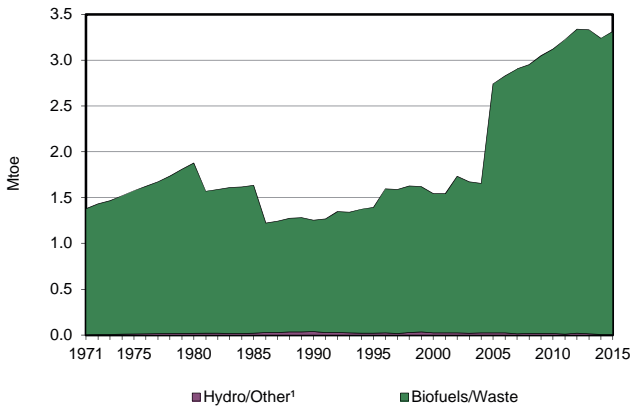
## Guatemala

2015

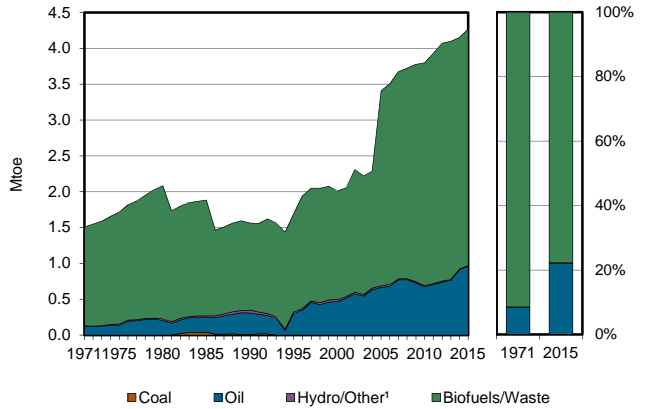
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	555	-	-	-	333	239	7430	-	-	8557
Imports	1375	-	4697	-	-	-	-	-	50	-	6123
Exports	-	-482	-458	-	-	-	-	-	-93	-	-1033
Intl. marine bunkers	-	-	-350	-	-	-	-	-	-	-	-350
Intl. aviation bunkers	-	-	-64	-	-	-	-	-	-	-	-64
Stock changes	-434	-9	-98	-	-	-	-	-	-	-	-541
<b>TPES</b>	<b>942</b>	<b>64</b>	<b>3728</b>	-	-	<b>333</b>	<b>239</b>	<b>7430</b>	<b>-43</b>	-	<b>12692</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-6	-	-	-	-	-0	-	-	-6
Electricity plants	-942	-	-302	-	-	-333	-239	-1319	951	-	-2183
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-64	61	-	-	-	-	-	-	-	-3
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-52	-	-	-52
Energy industry own use	-	-	-39	-	-	-	-	-	-56	-	-95
Losses	-	-	-	-	-	-	-	-	-62	-	-62
<b>TFC</b>	-	-	<b>3441</b>	-	-	-	-	<b>6060</b>	<b>790</b>	-	<b>10291</b>
<b>INDUSTRY</b>	-	-	<b>597</b>	-	-	-	-	-	<b>305</b>	-	<b>902</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	597	-	-	-	-	-	305	-	902
<b>TRANSPORT</b>	-	-	<b>2486</b>	-	-	-	-	-	-	-	<b>2486</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2481	-	-	-	-	-	-	-	2481
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	5	-	-	-	-	-	-	-	5
<b>OTHER</b>	-	-	<b>337</b>	-	-	-	-	<b>6060</b>	<b>485</b>	-	<b>6881</b>
Residential	-	-	328	-	-	-	-	5865	293	-	6486
Comm. and public services	-	-	9	-	-	-	-	194	192	-	395
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>21</b>	-	-	-	-	-	-	-	<b>21</b>
in industry/transf./energy	-	-	21	-	-	-	-	-	-	-	21
<i>of which: chem./petrochem.</i>	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2362</b>	-	<b>2018</b>	-	-	<b>3875</b>	<b>508</b>	<b>2295</b>	-	-	<b>11058</b>
<i>Electricity plants</i>	2362	-	2018	-	-	3875	508	2295	-	-	11058
<i>CHP plants</i>	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
<i>CHP plants</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Heat plants</i>	-	-	-	-	-	-	-	-	-	-	-

## Haiti

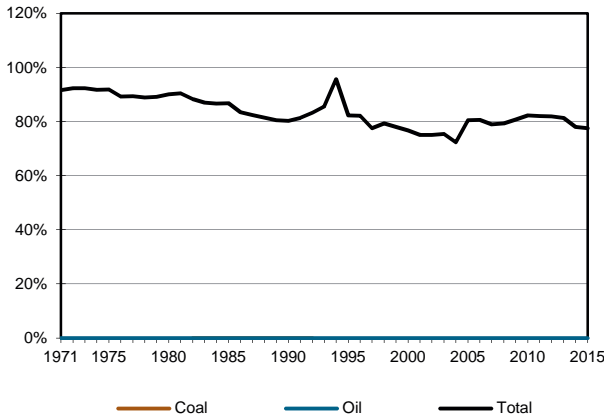
**Figure 1. Energy production**



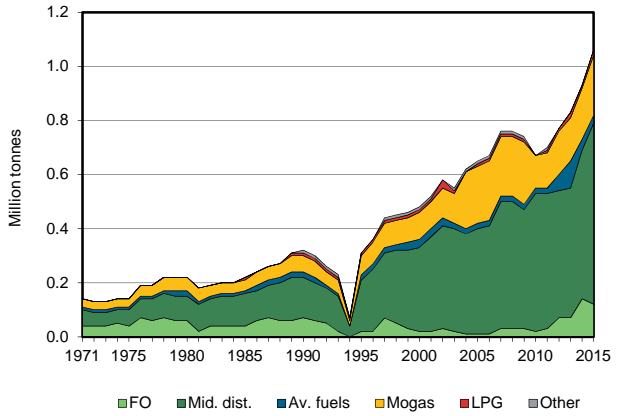
**Figure 2. Total primary energy supply²**



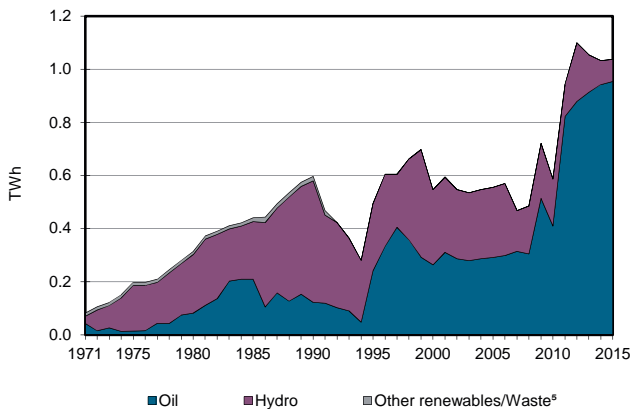
**Figure 3. Energy self-sufficiency³**



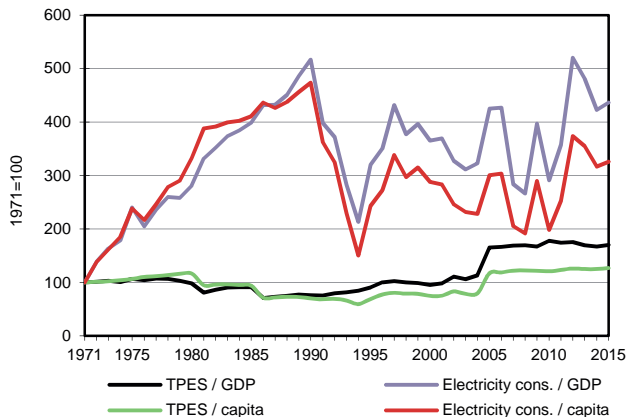
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Haiti

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	7	-	3305	-	-	3312
Imports	-	-	983	-	-	-	-	-	-	-	983
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-23	-	-	-	-	-	-	-	-23
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>960</b>	-	-	<b>7</b>	-	<b>3305</b>	-	-	<b>4272</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	108	-	-	-	-	-	-0	-	108
Electricity plants	-	-	-300	-	-	-7	-	-	89	-	-218
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-824	-	-	-824
Energy industry own use	-	-	-	-	-	-	-	-	-1	-	-1
Losses	-	-	-15	-	-	-	-	-	-52	-	-67
<b>TFC</b>	-	-	<b>752</b>	-	-	-	-	<b>2481</b>	<b>35</b>	-	<b>3269</b>
<b>INDUSTRY</b>	-	-	<b>192</b>	-	-	-	-	<b>80</b>	<b>16</b>	-	<b>288</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	192	-	-	-	-	80	16	-	288
<b>TRANSPORT</b>	-	-	<b>467</b>	-	-	-	-	-	-	-	<b>467</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	467	-	-	-	-	-	-	-	467
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>90</b>	-	-	-	-	<b>2400</b>	<b>20</b>	-	<b>2510</b>
Residential	-	-	89	-	-	-	-	2353	16	-	2458
Comm. and public services	-	-	1	-	-	-	-	48	3	-	52
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>4</b>	-	-	-	-	-	-	-	<b>4</b>
in industry/transf./energy	-	-	4	-	-	-	-	-	-	-	4
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>955</b>	-	-	<b>83</b>	-	-	-	-	<b>1038</b>
Electricity plants	-	-	955	-	-	83	-	-	-	-	1038
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Honduras

Figure 1. Energy production

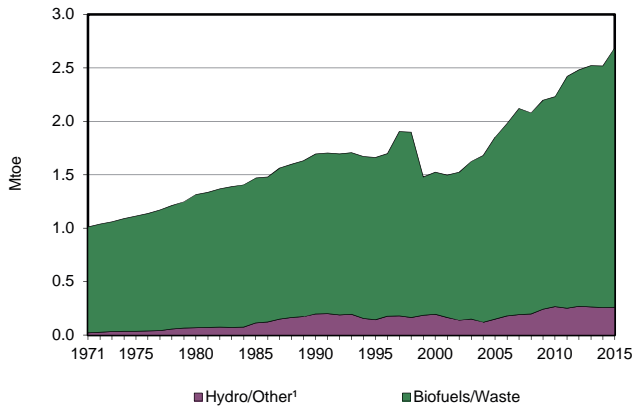


Figure 2. Total primary energy supply<sup>2</sup>

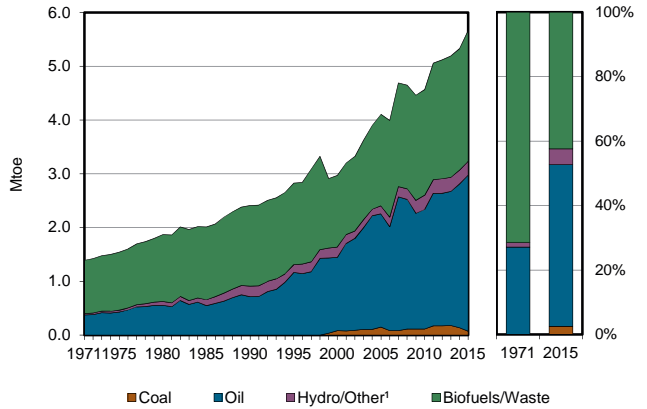


Figure 3. Energy self-sufficiency<sup>3</sup>

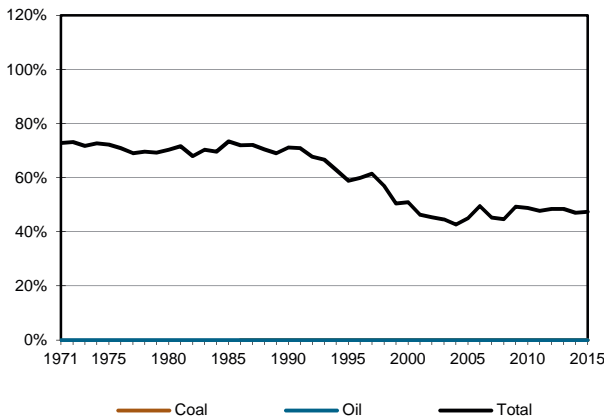


Figure 4. Oil products demand<sup>4</sup>

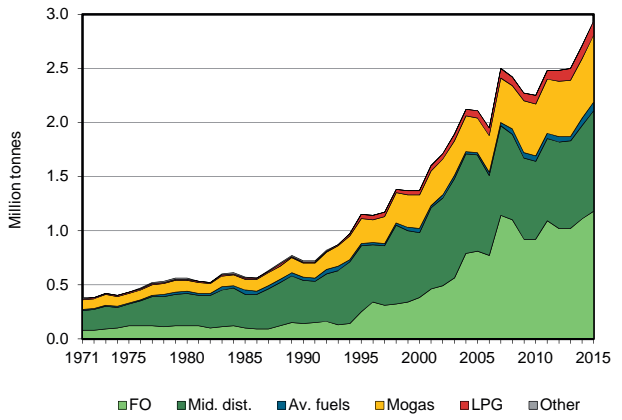


Figure 5. Electricity generation by source

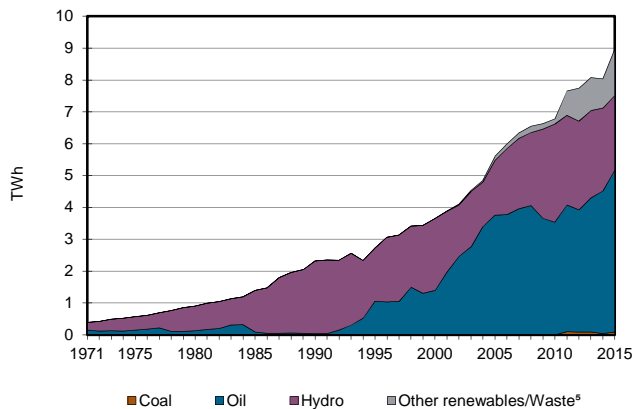
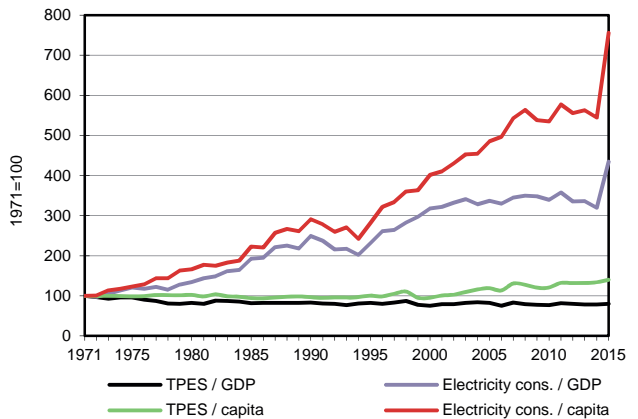


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

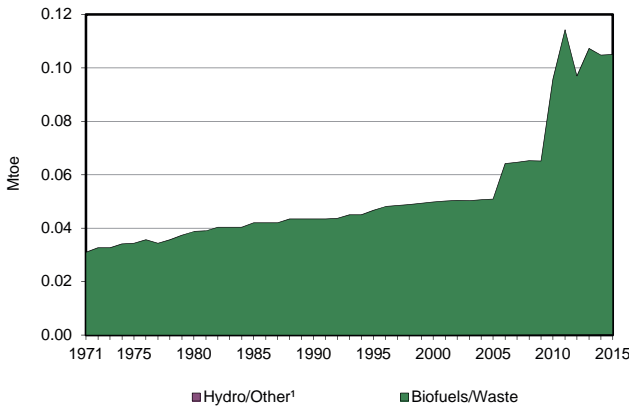
## Honduras

2015

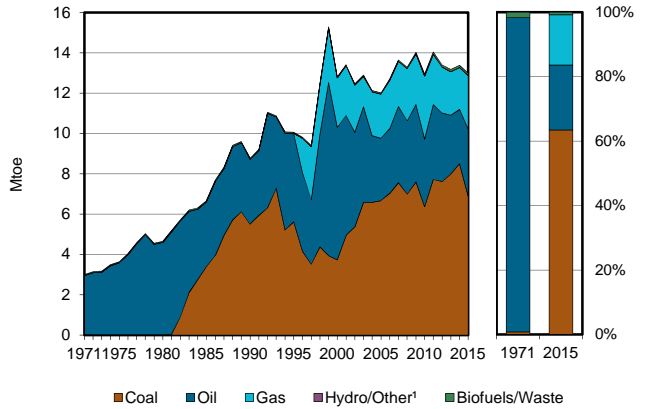
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	201	57	2429	-	-	2688
Imports	70	-	2762	-	-	-	-	-	58	-	2890
Exports	-	-	-459	-	-	-	-	-	-46	-	-505
Intl. marine bunkers	-	-	-6	-	-	-	-	-	-	-	-6
Intl. aviation bunkers	-	-	-83	-	-	-	-	-	-	-	-83
Stock changes	-	-	693	-	-	-	-	-	-	-	693
<b>TPES</b>	<b>70</b>	<b>-</b>	<b>2907</b>	<b>-</b>	<b>-</b>	<b>201</b>	<b>57</b>	<b>2429</b>	<b>12</b>	<b>-</b>	<b>5677</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-3	-	-	-	-	-0	0	-	-3
Electricity plants	-22	-	-1042	-	-	-201	-57	-270	771	-	-822
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0	-	-	-0
Energy industry own use	-	-	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-111	-	-111
<b>TFC</b>	<b>47</b>	<b>-</b>	<b>1862</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2159</b>	<b>672</b>	<b>-</b>	<b>4740</b>
<b>INDUSTRY</b>	<b>47</b>	<b>-</b>	<b>351</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>129</b>	<b>182</b>	<b>-</b>	<b>709</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	129	-	-	-	-	-	-	-	129
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	47	-	222	-	-	-	-	129	182	-	580
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1374</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1374</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1304	-	-	-	-	-	-	-	1304
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	70	-	-	-	-	-	-	-	70
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>137</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2030</b>	<b>490</b>	<b>-</b>	<b>2657</b>
Residential	-	-	101	-	-	-	-	1919	260	-	2280
Comm. and public services	-	-	-	-	-	-	-	111	230	-	341
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	36	-	-	-	-	-	-	-	36
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>93</b>	<b>-</b>	<b>5082</b>	<b>-</b>	<b>-</b>	<b>2340</b>	<b>665</b>	<b>785</b>	<b>-</b>	<b>-</b>	<b>8965</b>
Electricity plants	93	-	5082	-	-	2340	665	785	-	-	8965
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Hong Kong, China

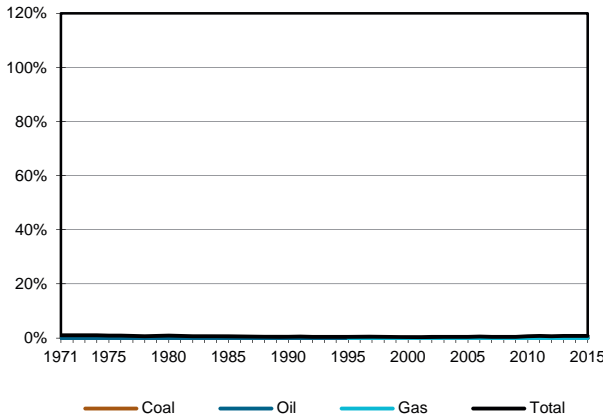
**Figure 1. Energy production**



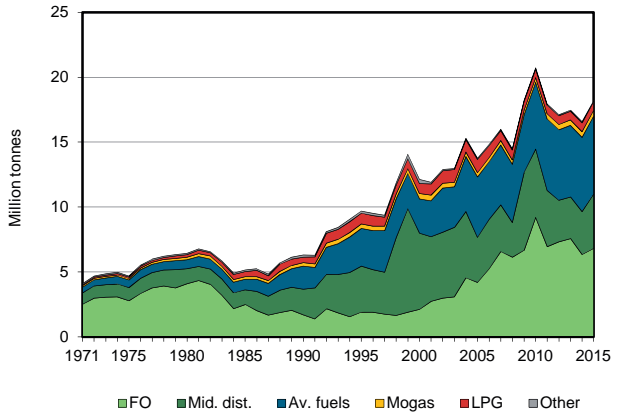
**Figure 2. Total primary energy supply²**



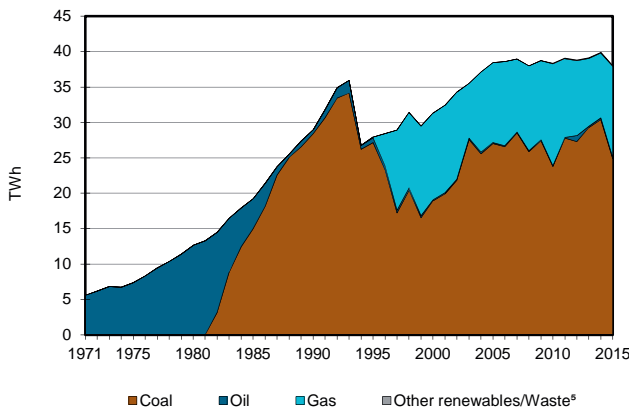
**Figure 3. Energy self-sufficiency³**



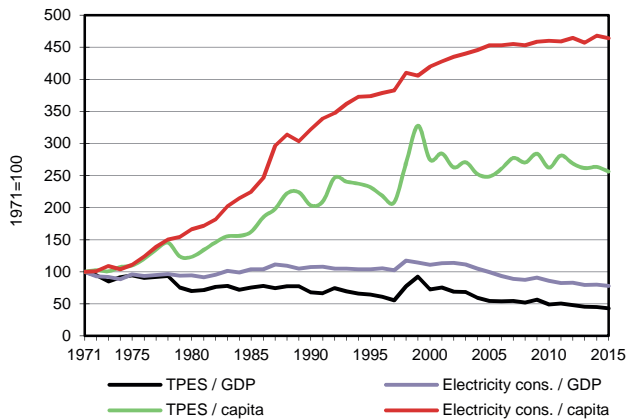
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Hong Kong, China

2015

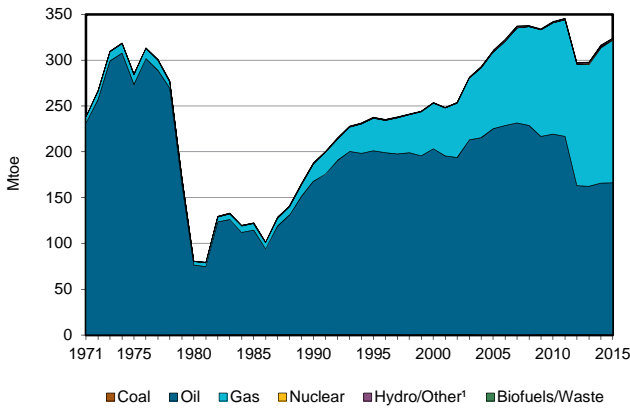
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	0	105	-	-	105
Imports	6892	-	19268	2653	-	-	-	4	1010	-	29826
Exports	-	-	-837	-	-	-	-	-	-102	-	-939
Intl. marine bunkers	-	-	-8567	-	-	-	-	-	-	-	-8567
Intl. aviation bunkers	-	-	-6405	-	-	-	-	-	-	-	-6405
Stock changes	-	-	-131	-	-	-	-	-	-	-	-131
<b>TPES</b>	<b>6892</b>	-	<b>3328</b>	<b>2653</b>	-	-	<b>0</b>	<b>108</b>	<b>908</b>	-	<b>13889</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	265	-	-	-	-	-	-	-	265
Electricity plants	-5634	-	-54	-2317	-	-	-0	-	3262	-	-4743
CHP plants	-	-	-	-	-	-	-	-30	9	-	-21
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-298	275	-	-	-	-14	-	-	-37
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-393	-	-393
<b>TFC</b>	<b>1258</b>	-	<b>3242</b>	<b>610</b>	-	-	-	<b>65</b>	<b>3786</b>	-	<b>8961</b>
<b>INDUSTRY</b>	<b>1258</b>	-	<b>653</b>	<b>35</b>	-	-	-	-	<b>273</b>	-	<b>2220</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1258	-	653	35	-	-	-	-	273	-	2220
<b>TRANSPORT</b>	-	-	<b>2430</b>	-	-	-	-	<b>7</b>	-	-	<b>2437</b>
Domestic aviation	-	-	5	-	-	-	-	-	-	-	5
Road	-	-	2424	-	-	-	-	7	-	-	2431
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>87</b>	<b>575</b>	-	-	-	<b>58</b>	<b>3512</b>	-	<b>4232</b>
Residential	-	-	5	321	-	-	-	55	1012	-	1393
Comm. and public services	-	-	81	254	-	-	-	-	2491	-	2827
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	4	9	-	13
<b>NON-ENERGY USE</b>	-	-	<b>72</b>	-	-	-	-	-	-	-	<b>72</b>
in industry/transf./energy	-	-	72	-	-	-	-	-	-	-	72
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>24887</b>	-	<b>187</b>	<b>12850</b>	-	-	<b>3</b>	<b>103</b>	-	-	<b>38030</b>
Electricity plants	24887	-	187	12850	-	-	3	-	-	-	37927
CHP plants	-	-	-	-	-	-	-	103	-	-	103
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

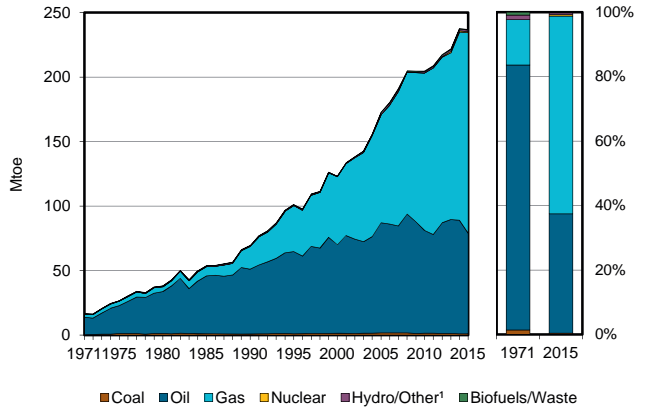


## Islamic Republic of Iran

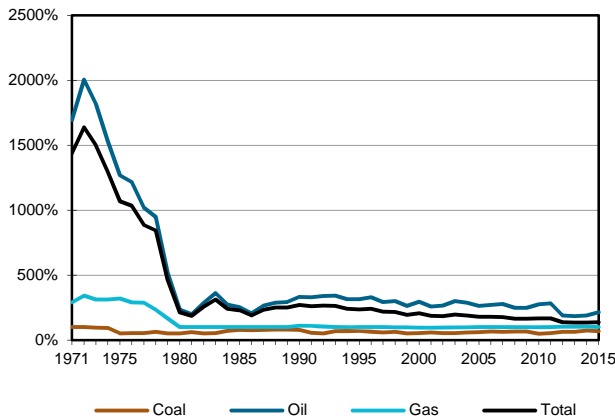
**Figure 1. Energy production**



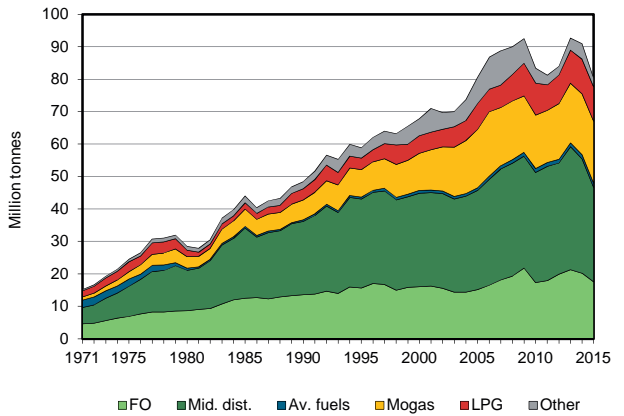
**Figure 2. Total primary energy supply<sup>2</sup>**



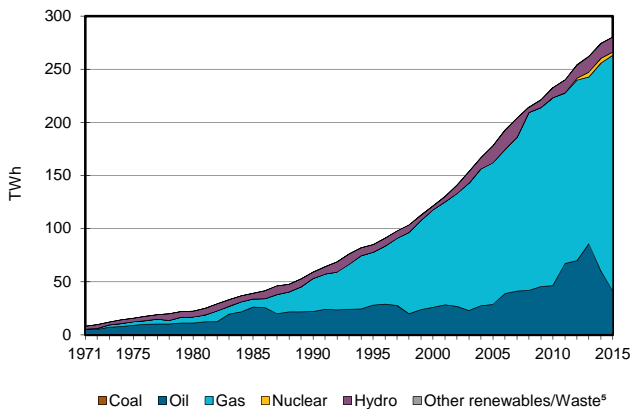
**Figure 3. Energy self-sufficiency<sup>3</sup>**



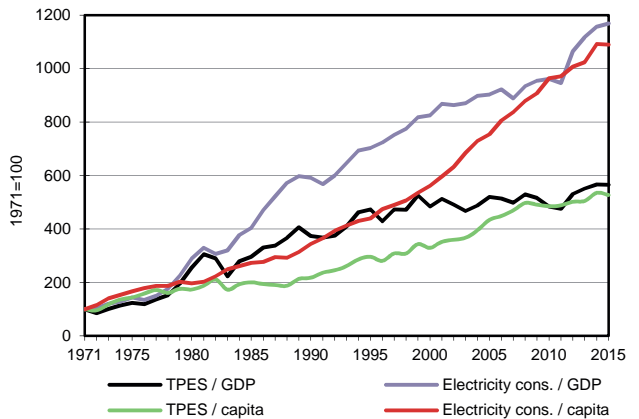
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Islamic Republic of Iran

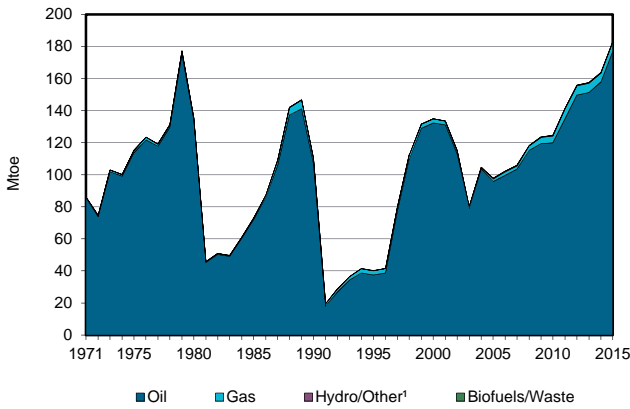
2015

Thousand tonnes of oil equivalent

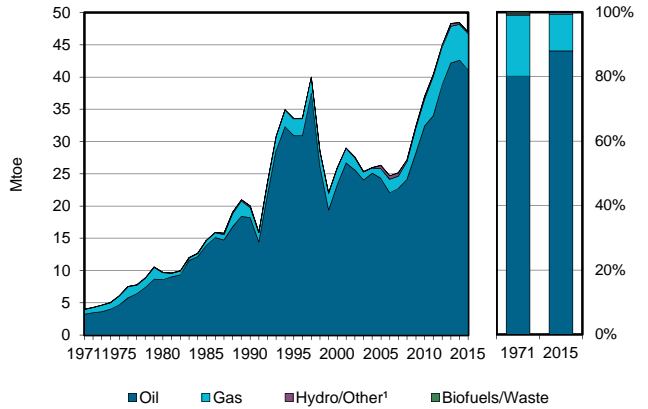
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	727	165272	-	155688	759	1212	19	506	-	-	324182
Imports	479	1561	2854	7246	-	-	-	4	357	-	12500
Exports	-133	-67282	-19314	-7668	-	-	-	-	-587	-	-94983
Intl. marine bunkers	-	-	-4656	-	-	-	-	-	-	-	-4656
Intl. aviation bunkers	-	-	-1386	-	-	-	-	-	-	-	-1386
Stock changes	-	1075	-203	-	-	-	-	-	-	-	871
<b>TPES</b>	<b>1073</b>	<b>100626</b>	<b>-22706</b>	<b>155265</b>	<b>759</b>	<b>1212</b>	<b>19</b>	<b>510</b>	<b>-230</b>	<b>-</b>	<b>236528</b>
Transfers	-	-10465	11887	-	-	-	-	-	-	-	1422
Statistical differences	411	-772	-778	439	-	-	-	-	-1257	-	-1958
Electricity plants	-158	-	-11604	-49413	-759	-1212	-19	-4	24134	-	-39035
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-484	-	-	-	-	-	-	-	-	-	-484
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-126	-	-	-	-	-	-	-	-	-	-126
Oil refineries	-	-87734	86936	-	-	-	-	-	-	-	-798
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1	-	-	-1
Energy industry own use	-165	-1654	-2494	-10966	-	-	-	-	-921	-	-16200
Losses	-71	-	-	-49	-	-	-	-	-3574	-	-3695
<b>TFC</b>	<b>479</b>	<b>-</b>	<b>61243</b>	<b>95275</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>505</b>	<b>18153</b>	<b>-</b>	<b>175654</b>
<b>INDUSTRY</b>	<b>259</b>	<b>-</b>	<b>3656</b>	<b>32103</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4768</b>	<b>-</b>	<b>40786</b>
Iron and steel	107	-	-	-	-	-	-	-	-	-	107
Chemical and petrochemical	-	-	193	9669	-	-	-	-	-	-	9862
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	152	-	3463	22433	-	-	-	-	4768	-	30817
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>40083</b>	<b>6665</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47</b>	<b>-</b>	<b>46795</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	35663	6276	-	-	-	-	-	-	41938
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	66	389	-	-	-	-	-	-	455
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	4354	-	-	-	-	-	47	-	4402
<b>OTHER</b>	<b>9</b>	<b>-</b>	<b>8733</b>	<b>46647</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>505</b>	<b>13337</b>	<b>-</b>	<b>69231</b>
Residential	9	-	4554	39390	-	-	-	252	6545	-	50750
Comm. and public services	-	-	1400	5870	-	-	-	248	3343	-	10861
Agriculture/forestry	-	-	2778	1387	-	-	-	-	3104	-	7269
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	5	345	-	351
<b>NON-ENERGY USE</b>	<b>211</b>	<b>-</b>	<b>8770</b>	<b>9861</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18842</b>
in industry/transf./energy	211	-	8770	9861	-	-	-	-	-	-	18842
of which: chem./petrochem.	-	-	7660	9861	-	-	-	-	-	-	17521
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>462</b>	<b>-</b>	<b>40483</b>	<b>222448</b>	<b>2914</b>	<b>14090</b>	<b>222</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>280633</b>
Electricity plants	462	-	40483	222448	2914	14090	222	14	-	-	280633
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Iraq

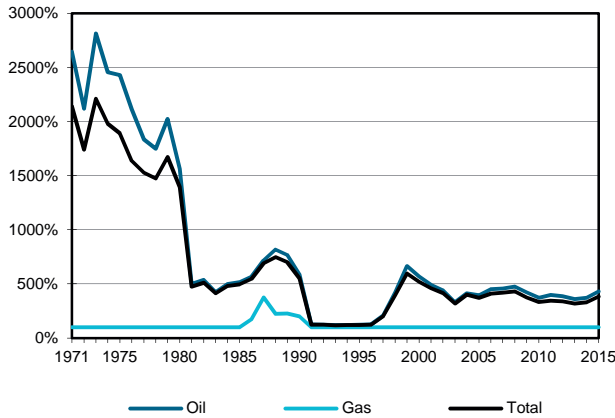
**Figure 1. Energy production**



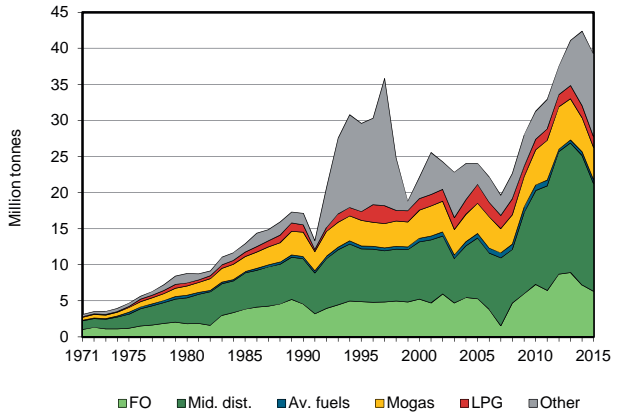
**Figure 2. Total primary energy supply<sup>2</sup>**



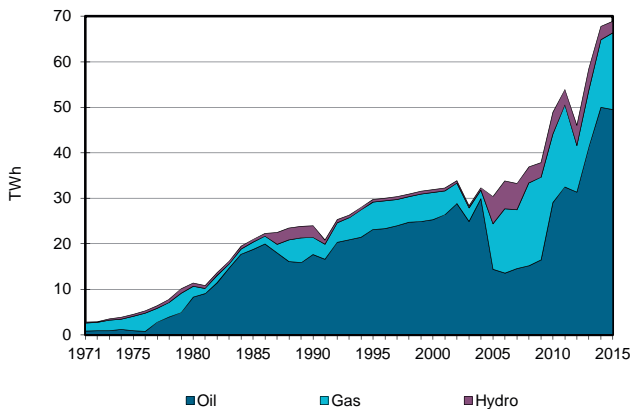
**Figure 3. Energy self-sufficiency<sup>3</sup>**



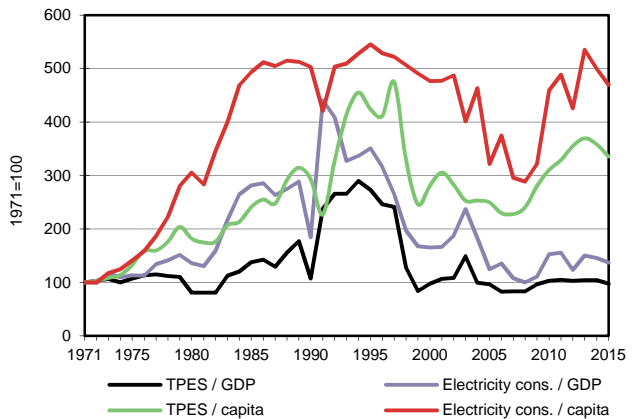
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Iraq

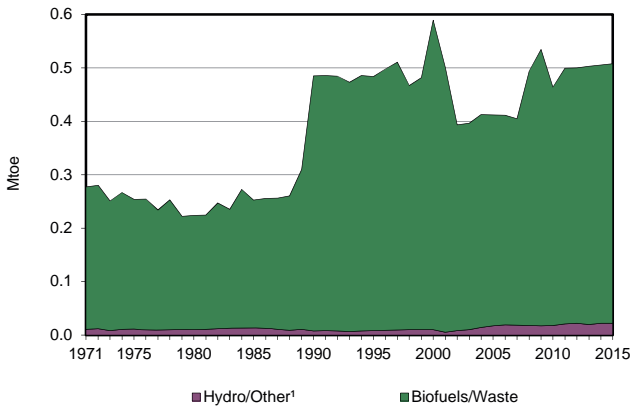
2015

Thousand tonnes of oil equivalent

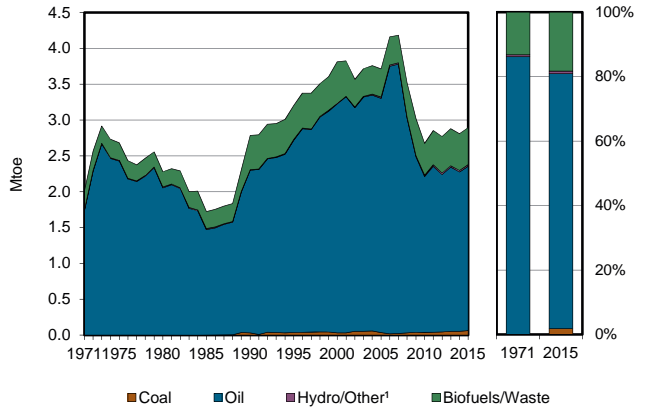
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	176887	-	5673	-	221	-	46	-	-	182828
Imports	-	-	12618	-	-	-	-	-	889	-	13507
Exports	-	-150933	-436	-	-	-	-	-	-	-	-151368
Intl. marine bunkers	-	-	-215	-	-	-	-	-	-	-	-215
Intl. aviation bunkers	-	-	-561	-	-	-	-	-	-	-	-561
Stock changes	-	2340	1328	-	-	-	-	-	-	-	3667
<b>TPES</b>	-	<b>28294</b>	<b>12733</b>	<b>5673</b>	-	<b>221</b>	-	<b>46</b>	<b>889</b>	-	<b>47857</b>
Transfers	-	4520	-4112	-	-	-	-	-	-	-	408
Statistical differences	-	-580	-	-	-	-	-	-	-605	-	-1185
Electricity plants	-	-8417	-13431	-4455	-	-221	-	-	5927	-	-20597
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-21029	19574	-	-	-	-	-	-	-	-1454
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-20	-	-	-20
Energy industry own use	-	-2628	-1002	-	-	-	-	-	-150	-	-3779
Losses	-	-160	-	-	-	-	-	-	-3001	-	-3161
<b>TFC</b>	-	-	<b>13764</b>	<b>1218</b>	-	-	-	<b>26</b>	<b>3060</b>	-	<b>18068</b>
<b>INDUSTRY</b>	-	-	<b>2035</b>	<b>996</b>	-	-	-	-	<b>555</b>	-	<b>3586</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2035	996	-	-	-	-	555	-	3586
<b>TRANSPORT</b>	-	-	<b>8472</b>	-	-	-	-	-	-	-	<b>8472</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	8472	-	-	-	-	-	-	-	8472
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>2953</b>	-	-	-	-	<b>26</b>	<b>2506</b>	-	<b>5485</b>
Residential	-	-	2953	-	-	-	-	-	1428	-	4381
Comm. and public services	-	-	-	-	-	-	-	-	217	-	217
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	26	861	-	886
<b>NON-ENERGY USE</b>	-	-	<b>303</b>	<b>222</b>	-	-	-	-	-	-	<b>525</b>
in industry/transf./energy	-	-	303	222	-	-	-	-	-	-	525
of which: chem./petrochem.	-	-	-	222	-	-	-	-	-	-	222
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	<b>31786</b>	<b>17735</b>	<b>16829</b>	-	<b>2572</b>	-	-	-	-	<b>68922</b>
Electricity plants	-	31786	17735	16829	-	2572	-	-	-	-	68922
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Jamaica

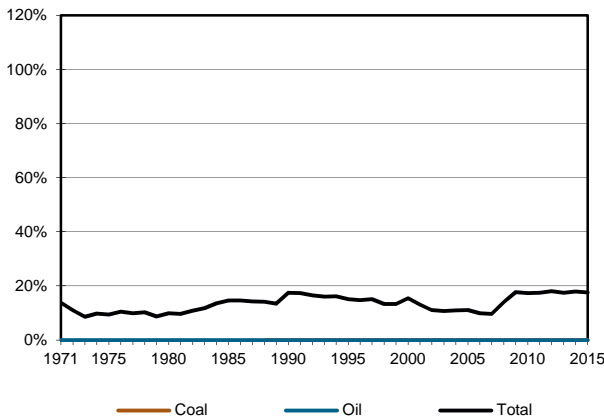
**Figure 1. Energy production**



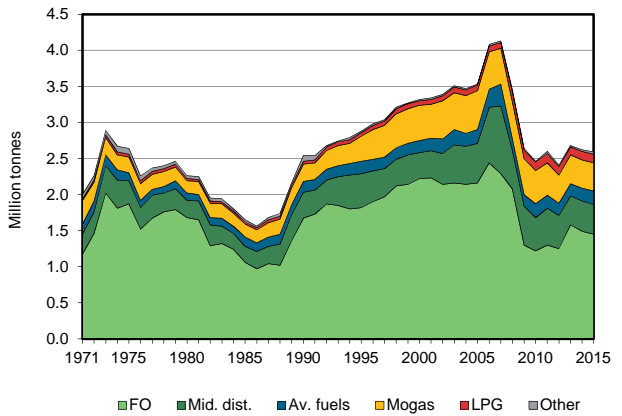
**Figure 2. Total primary energy supply²**



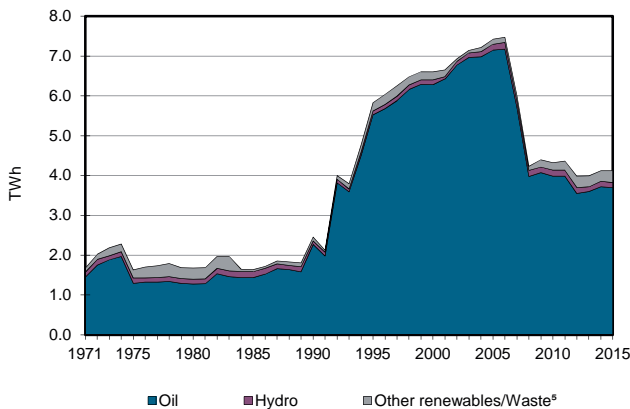
**Figure 3. Energy self-sufficiency³**



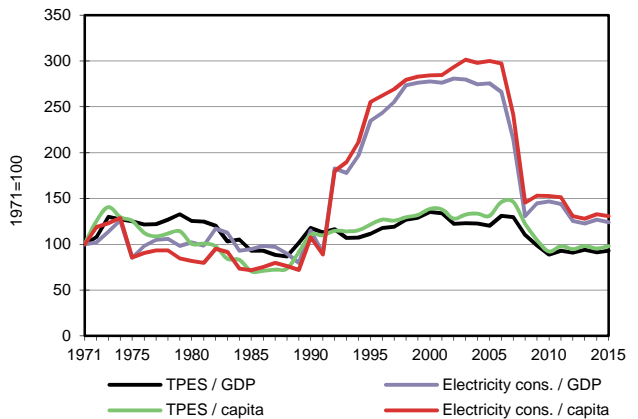
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

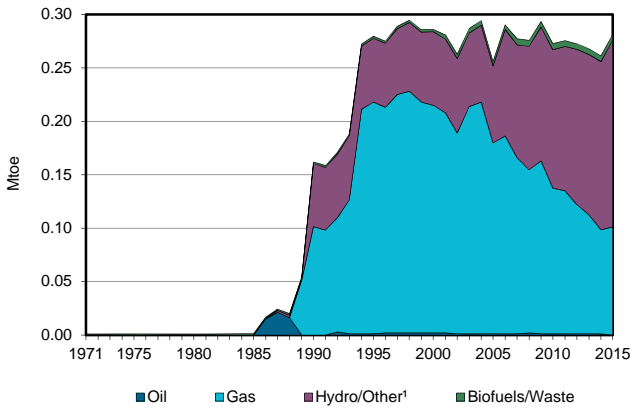
## Jamaica

2015

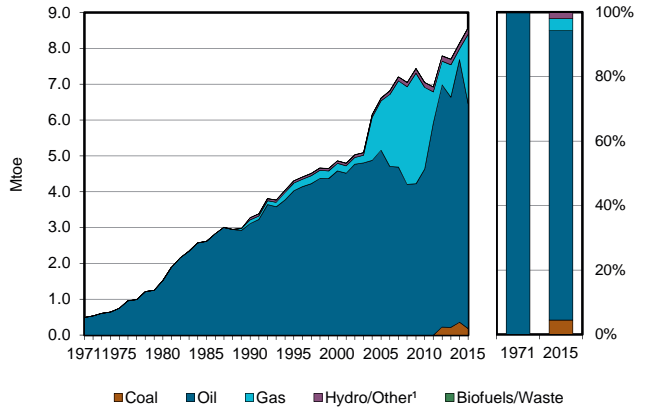
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	11	11	486	-	-	508
Imports	67	1227	1510	-	-	-	-	31	-	-	2834
Exports	-	-	-42	-	-	-	-	-	-	-	-42
Intl. marine bunkers	-	-	-195	-	-	-	-	-	-	-	-195
Intl. aviation bunkers	-	-	-197	-	-	-	-	-	-	-	-197
Stock changes	-6	-	-7	-	-	-	-	-	-	-	-13
<b>TPES</b>	<b>60</b>	<b>1227</b>	<b>1069</b>	-	-	<b>11</b>	<b>11</b>	<b>517</b>	-	-	<b>2895</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-1	-	-60	-	-	-	-	-	7	-	-54
Electricity plants	-	-	-828	-	-	-11	-11	-	340	-	-510
CHP plants	-	-	-	-	-	-	-	-81	15	-	-66
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1227	1186	-	-	-	-	-	-	-	-40
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-134	-	-	-134
Energy industry own use	-	-	-	-	-	-	-	-	-2	-	-2
Losses	-	-	-	-	-	-	-	-	-98	-	-98
<b>TFC</b>	<b>60</b>	-	<b>1367</b>	-	-	-	-	<b>302</b>	<b>262</b>	-	<b>1991</b>
<b>INDUSTRY</b>	<b>60</b>	-	<b>643</b>	-	-	-	-	<b>88</b>	<b>96</b>	-	<b>886</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	60	-	2	-	-	-	-	-	3	-	65
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	556	-	-	-	-	-	64	-	620
Food and tobacco	-	-	2	-	-	-	-	-	3	-	5
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	12	-	-	-	-	-	2	-	15
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	71	-	-	-	-	88	23	-	182
<b>TRANSPORT</b>	-	-	<b>574</b>	-	-	-	-	<b>31</b>	-	-	<b>606</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	574	-	-	-	-	31	-	-	606
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>121</b>	-	-	-	-	<b>183</b>	<b>166</b>	-	<b>470</b>
Residential	-	-	52	-	-	-	-	183	85	-	321
Comm. and public services	-	-	56	-	-	-	-	-	79	-	135
Agriculture/forestry	-	-	13	-	-	-	-	-	-	-	13
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	2	-	2
<b>NON-ENERGY USE</b>	-	-	<b>29</b>	-	-	-	-	-	-	-	<b>29</b>
in industry/transf./energy	-	-	29	-	-	-	-	-	-	-	29
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>3699</b>	-	-	<b>129</b>	<b>125</b>	<b>169</b>	-	-	<b>4122</b>
Electricity plants	-	-	3699	-	-	129	125	-	-	-	3953
CHP plants	-	-	-	-	-	-	-	169	-	-	169
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Jordan

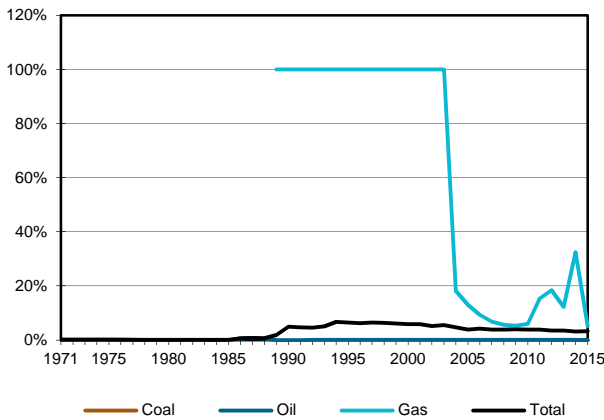
**Figure 1. Energy production**



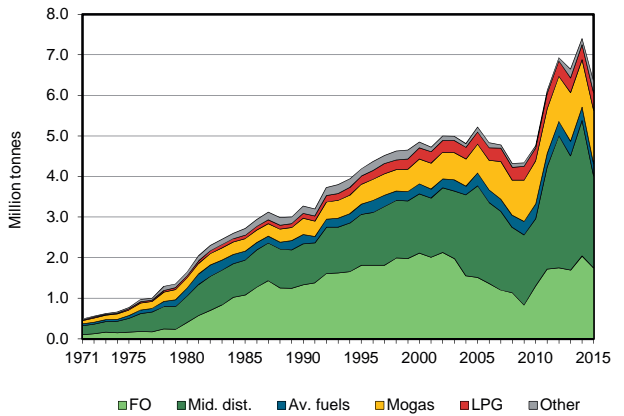
**Figure 2. Total primary energy supply²**



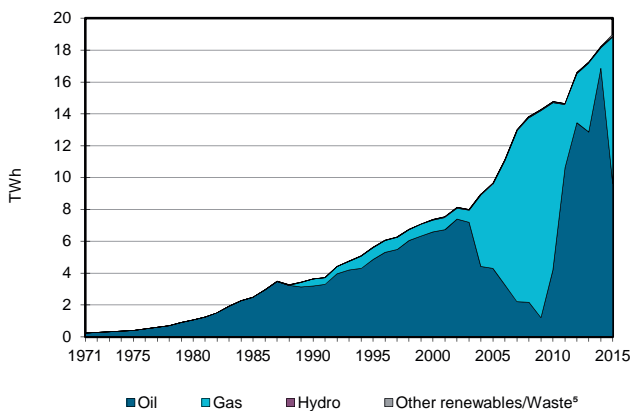
**Figure 3. Energy self-sufficiency³**



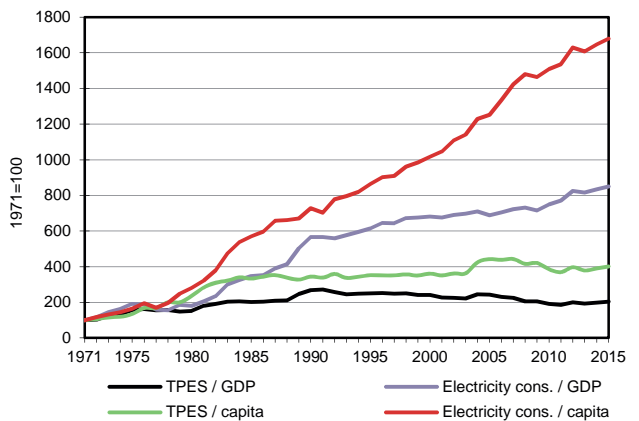
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Jordan

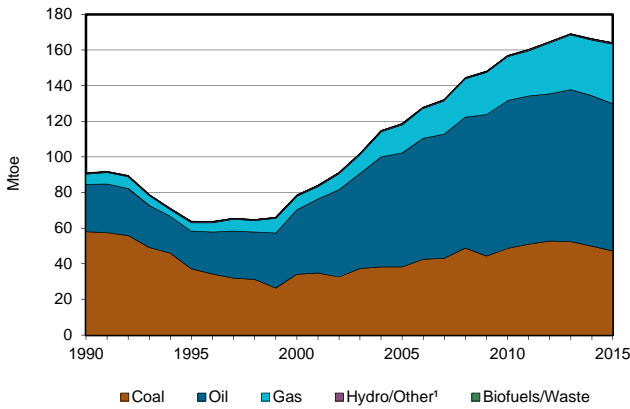
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	101	-	5	170	5	-	-	281
Imports	175	3467	3220	1843	-	-	-	-	52	-	8756
Exports	-	-	-	-	-	-	-	-	-4	-	-4
Intl. marine bunkers	-	-	-5	-	-	-	-	-	-	-	-5
Intl. aviation bunkers	-	-	-303	-	-	-	-	-	-	-	-303
Stock changes	-	-88	-14	-	-	-	-	-	-	-	-102
<b>TPES</b>	<b>175</b>	<b>3379</b>	<b>2898</b>	<b>1944</b>	<b>-</b>	<b>5</b>	<b>170</b>	<b>5</b>	<b>48</b>	<b>-</b>	<b>8624</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	1	30	0	-	-	-	-	-49	-	-18
Electricity plants	-	-	-2068	-1944	-	-5	-11	-2	1635	-	-2393
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-3380	3147	-	-	-	-	-	-	-	-234
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-185	-	-	-	-	-	-58	-	-243
Losses	-	-	-	-	-	-	-	-	-188	-	-188
<b>TFC</b>	<b>175</b>	<b>-</b>	<b>3822</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>160</b>	<b>4</b>	<b>1387</b>	<b>-</b>	<b>5548</b>
<b>INDUSTRY</b>	<b>175</b>	<b>-</b>	<b>313</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>319</b>	<b>-</b>	<b>806</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	13	-	13
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	175	-	152	-	-	-	-	-	42	-	369
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	42	-	42
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	161	-	-	-	-	-	221	-	382
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>2613</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2613</b>
Domestic aviation	-	-	9	-	-	-	-	-	-	-	9
Road	-	-	2603	-	-	-	-	-	-	-	2603
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	1	-	-	-	-	-	-	-	1
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>823</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>160</b>	<b>4</b>	<b>1068</b>	<b>-</b>	<b>2054</b>
Residential	-	-	550	-	-	-	127	4	622	-	1302
Comm. and public services	-	-	123	-	-	-	33	-	239	-	395
Agriculture/forestry	-	-	-	-	-	-	-	-	207	-	207
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	150	-	-	-	-	-	-	-	150
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>74</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>74</b>
in industry/transf./energy	-	-	74	-	-	-	-	-	-	-	74
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>9619</b>	<b>9211</b>	<b>-</b>	<b>53</b>	<b>125</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>19014</b>
Electricity plants	-	-	9619	9211	-	53	125	6	-	-	19014
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

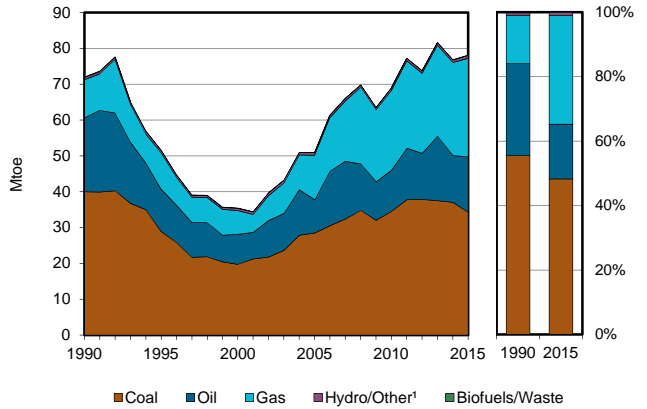


## Kazakhstan

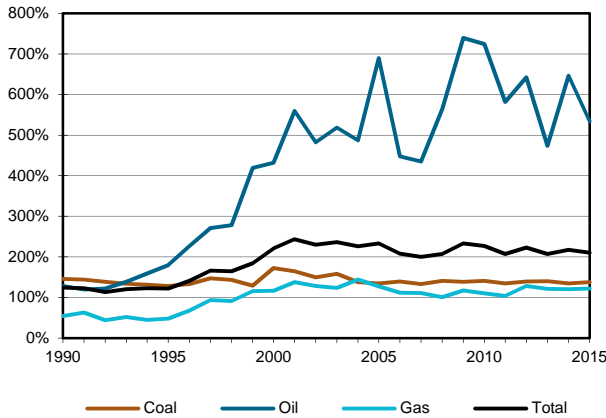
**Figure 1. Energy production**



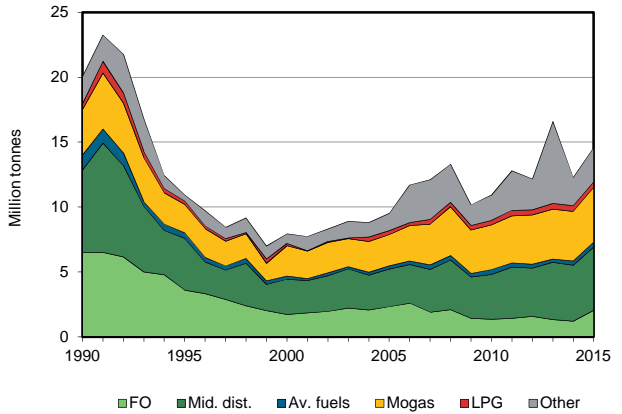
**Figure 2. Total primary energy supply<sup>2</sup>**



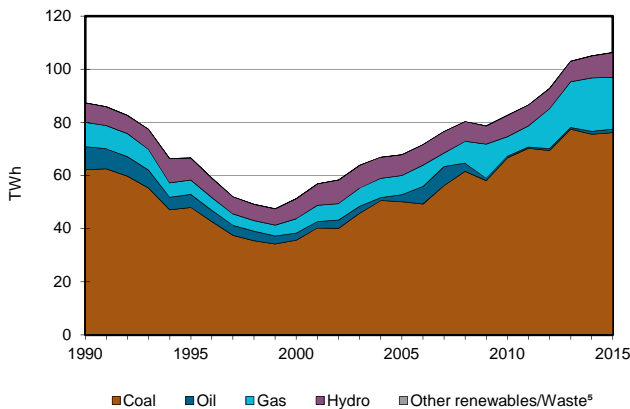
**Figure 3. Energy self-sufficiency<sup>3</sup>**



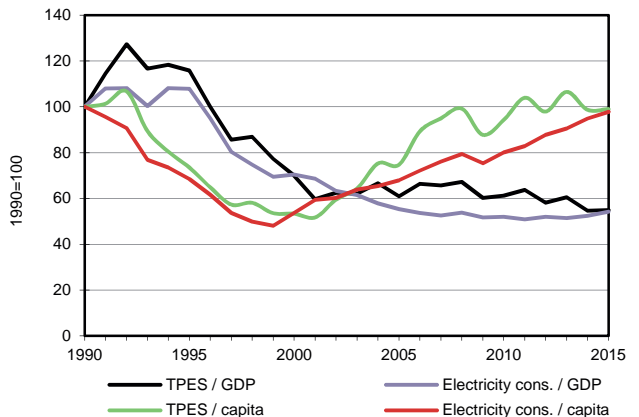
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

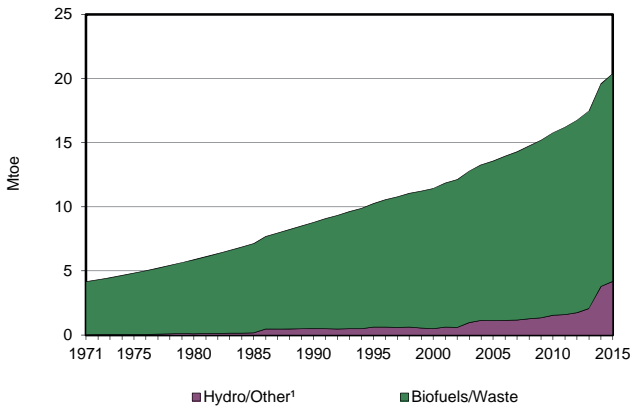
## Kazakhstan

2015

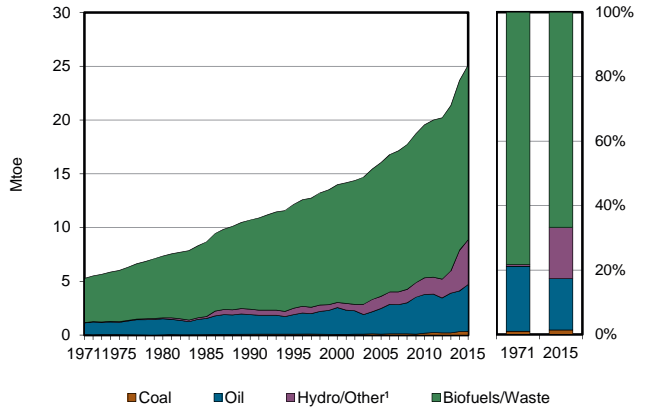
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	47110	82733	-	33350	-	797	15	70	-	-	164076
Imports	590	75	1818	4887	-	-	-	7	139	-	7517
Exports	-13649	-65179	-4402	-10655	-	-	-	-	-139	-	-94022
Intl. marine bunkers	-	-	-97	-	-	-	-	-	-	-	-97
Intl. aviation bunkers	-	-	-316	-	-	-	-	-	-	-	-316
Stock changes	188	429	451	-132	-	-	-	-	-	-	935
<b>TPES</b>	<b>34239</b>	<b>18059</b>	<b>-2546</b>	<b>27450</b>	<b>-</b>	<b>797</b>	<b>15</b>	<b>77</b>	<b>0</b>	<b>-</b>	<b>78093</b>
Transfers	-	-1363	1363	-	-	-	-	-	-	-	-
Statistical differences	-5	47	372	-249	-	-	-	-7	27	378	563
Electricity plants	-	-	-	-	-	-797	-15	-	813	-	-
CHP plants	-18731	-	-437	-4853	-	-	-	-	8344	9747	-5931
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-775	-	-	-	-	-	-	-	-	-	-775
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-1929	-	-	-	-	-	-	-	-	-	-1929
Oil refineries	-	-14943	13454	-	-	-	-	-	-	-	-1489
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-458	-908	-365	-18625	-	-	-	-	-2873	-3035	-26265
Losses	-1759	-392	-23	-536	-	-	-	-	-446	-697	-3852
<b>TFC</b>	<b>10582</b>	<b>499</b>	<b>11820</b>	<b>3186</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>70</b>	<b>5865</b>	<b>6393</b>	<b>38416</b>
<b>INDUSTRY</b>	<b>7741</b>	<b>499</b>	<b>3344</b>	<b>1786</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3879</b>	<b>1892</b>	<b>19141</b>
Iron and steel	2385	-	482	303	-	-	-	-	908	1208	5286
Chemical and petrochemical	26	-	23	342	-	-	-	-	248	133	771
Non-ferrous metals	1002	-	302	182	-	-	-	-	701	12	2199
Non-metallic minerals	13	-	238	-	-	-	-	-	152	-	403
Transport equipment	2	-	1	6	-	-	-	-	5	13	27
Machinery	21	-	46	13	-	-	-	-	18	36	134
Mining and quarrying	455	-	45	633	-	-	-	-	493	147	1773
Food and tobacco	48	-	61	247	-	-	-	-	113	128	597
Paper pulp and printing	0	-	2	17	-	-	-	-	5	16	40
Wood and wood products	2	-	1	1	-	-	-	-	3	4	11
Construction	36	-	1618	36	-	-	-	-	48	38	1777
Textile and leather	1	-	2	7	-	-	-	-	8	1	20
Non-specified	3749	499	522	-	-	-	-	-	1177	156	6103
<b>TRANSPORT</b>	<b>36</b>	<b>-</b>	<b>5005</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>307</b>	<b>-</b>	<b>5349</b>
Domestic aviation	-	-	61	-	-	-	-	-	-	-	61
Road	-	-	4561	-	-	-	-	-	10	-	4571
Rail	-	-	87	-	-	-	-	-	65	-	152
Pipeline transport	-	-	-	-	-	-	-	-	41	-	41
Domestic navigation	-	-	9	-	-	-	-	-	-	-	9
Non-specified	36	-	287	-	-	-	-	-	192	-	515
<b>OTHER</b>	<b>2805</b>	<b>-</b>	<b>3245</b>	<b>1105</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>70</b>	<b>1678</b>	<b>4501</b>	<b>13404</b>
Residential	1931	-	1998	313	-	-	-	70	1038	2059	7409
Comm. and public services	760	-	804	769	-	-	-	-	572	1405	4310
Agriculture/forestry	114	-	443	23	-	-	-	-	68	82	730
Fishing	-	-	-	-	-	-	-	-	0	0	0
Non-specified	-	-	-	-	-	-	-	-	-	955	955
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>226</b>	<b>295</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>522</b>
in industry/transf./energy	-	-	226	295	-	-	-	-	-	-	522
of which: chem./petrochem.	-	-	-	295	-	-	-	-	-	-	295
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>76198</b>	<b>-</b>	<b>1239</b>	<b>19583</b>	<b>-</b>	<b>9269</b>	<b>179</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>106468</b>
Electricity plants	-	-	-	-	-	9269	179	-	-	-	9448
CHP plants	76198	-	1239	19583	-	-	-	-	-	-	97020
<b>Heat generated - TJ</b>	<b>400521</b>	<b>-</b>	<b>7626</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>408147</b>
CHP plants	400521	-	7626	-	-	-	-	-	-	-	408147
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Kenya

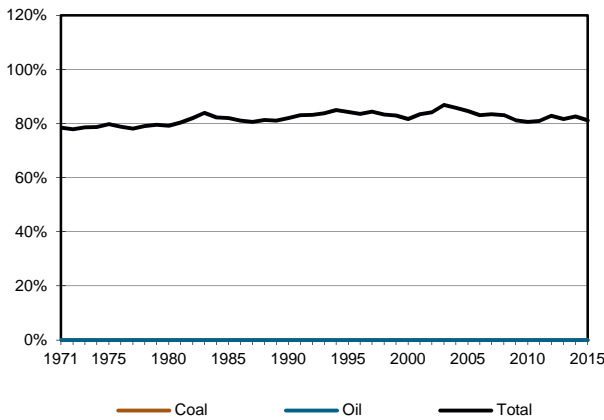
**Figure 1. Energy production**



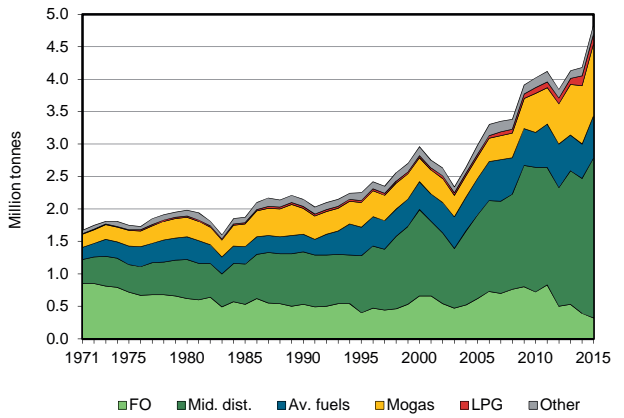
**Figure 2. Total primary energy supply<sup>2</sup>**



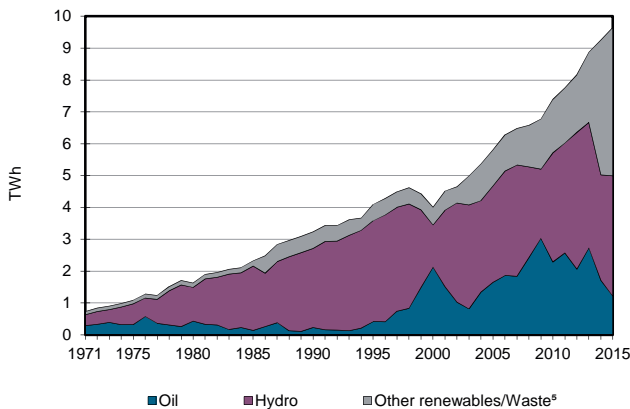
**Figure 3. Energy self-sufficiency<sup>3</sup>**



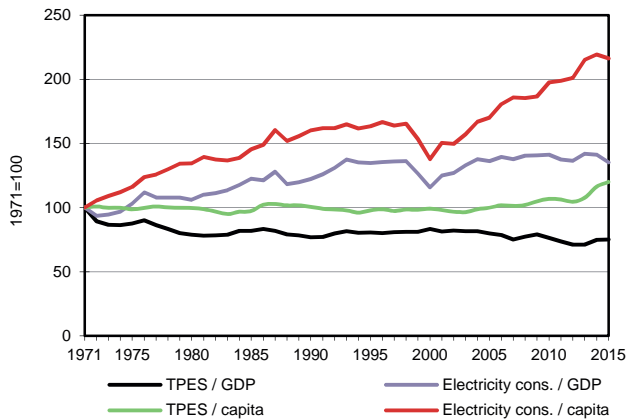
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

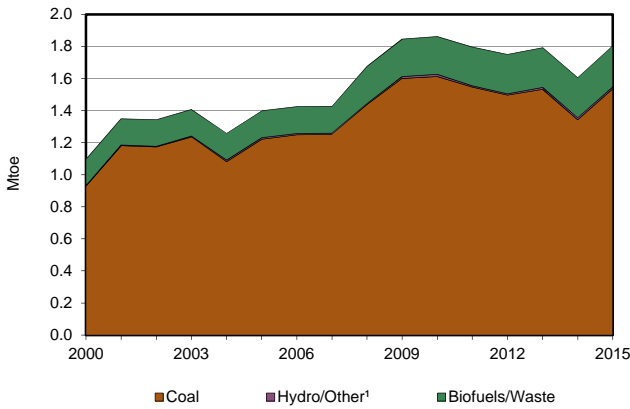
## Kenya

2015

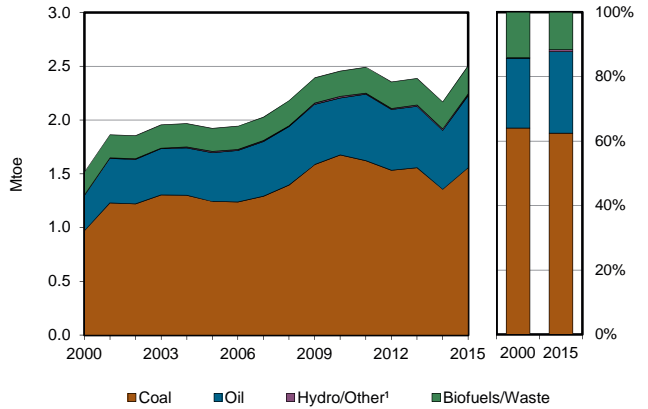
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	326	3855	16208	-	-	20389
Imports	349	634	4385	-	-	-	-	-	6	-	5373
Exports	-	-	-9	-	-	-	-	-	-4	-	-13
Intl. marine bunkers	-	-	-40	-	-	-	-	-	-	-	-40
Intl. aviation bunkers	-	-	-676	-	-	-	-	-	-	-	-676
Stock changes	-	67	-	-	-	-	-	-	-	-	67
<b>TPES</b>	<b>349</b>	<b>701</b>	<b>3659</b>	-	-	<b>326</b>	<b>3855</b>	<b>16208</b>	<b>2</b>	-	<b>25100</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	16	-	16
Electricity plants	-	-	-346	-	-	-326	-3855	-35	830	-	-3732
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-701	672	-	-	-	-	-	-	-	-29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-5402	-	-	-5402
Energy industry own use	-	-	-34	-	-	-	-	-	-3	-	-37
Losses	-	-	-	-	-	-	-	-	-164	-	-164
<b>TFC</b>	<b>349</b>	-	<b>3951</b>	-	-	-	-	<b>10771</b>	<b>682</b>	-	<b>15753</b>
<b>INDUSTRY</b>	<b>349</b>	-	<b>655</b>	-	-	-	-	-	<b>364</b>	-	<b>1368</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	349	-	-	-	-	-	-	-	-	-	349
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	11	-	11
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	655	-	-	-	-	-	353	-	1008
<b>TRANSPORT</b>	-	-	<b>2690</b>	-	-	-	-	-	-	-	<b>2690</b>
Domestic aviation	-	-	20	-	-	-	-	-	-	-	20
Road	-	-	2631	-	-	-	-	-	-	-	2631
Rail	-	-	38	-	-	-	-	-	-	-	38
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1	-	-	-	-	-	-	-	1
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>497</b>	-	-	-	-	<b>10771</b>	<b>318</b>	-	<b>11586</b>
Residential	-	-	432	-	-	-	-	10771	219	-	11422
Comm. and public services	-	-	-	-	-	-	-	-	99	-	99
Agriculture/forestry	-	-	24	-	-	-	-	-	-	-	24
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	42	-	-	-	-	-	-	-	42
<b>NON-ENERGY USE</b>	-	-	<b>109</b>	-	-	-	-	-	-	-	<b>109</b>
in industry/transf./energy	-	-	109	-	-	-	-	-	-	-	109
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1205</b>	-	-	<b>3787</b>	<b>4537</b>	<b>122</b>	-	-	<b>9651</b>
Electricity plants	-	-	1205	-	-	3787	4537	122	-	-	9651
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Kosovo

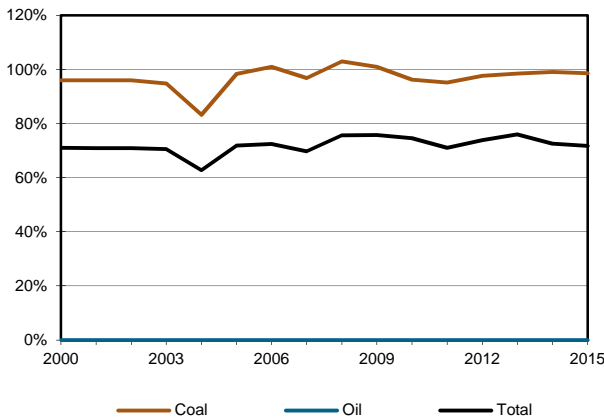
**Figure 1. Energy production**



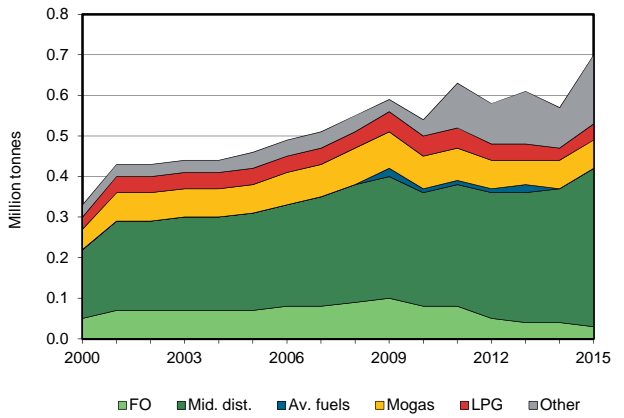
**Figure 2. Total primary energy supply<sup>2</sup>**



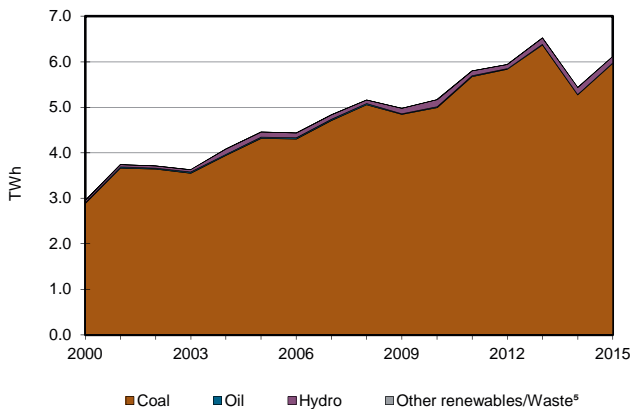
**Figure 3. Energy self-sufficiency<sup>3</sup>**



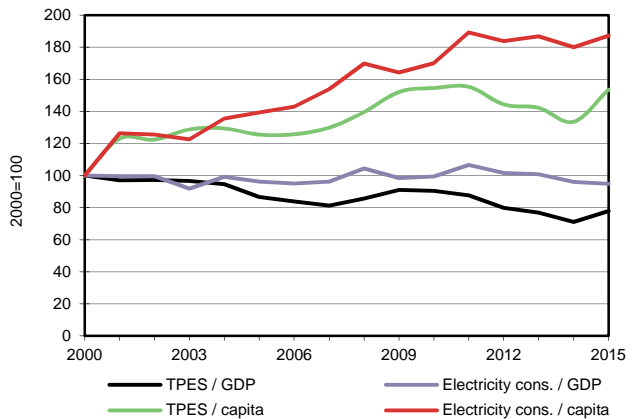
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

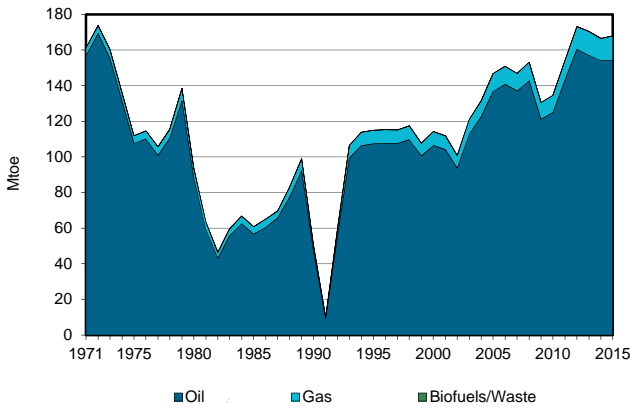
## Kosovo

2015

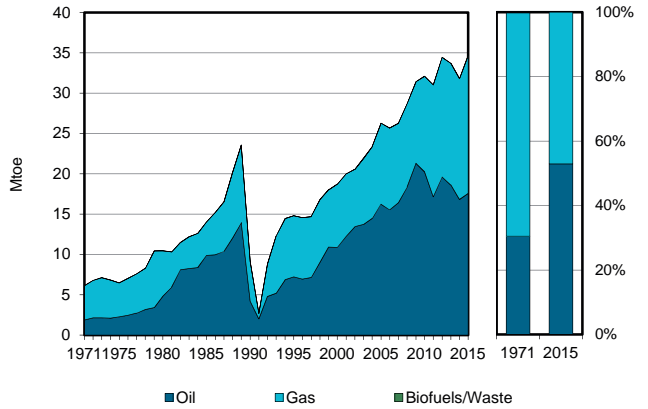
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1536	-	-	-	-	12	0	256	-	-	1804
Imports	7	-	683	-	-	-	-	7	59	-	756
Exports	-8	-	-8	-	-	-	-	-0	-48	-	-64
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-4	-	-	-	-	-	-	-	-4
Stock changes	23	-	-	-	-	-	-	-	-	-	23
<b>TPES</b>	<b>1558</b>	-	<b>671</b>	-	-	<b>12</b>	<b>0</b>	<b>263</b>	<b>11</b>	-	<b>2516</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	8	-	-	-	-	-	-	0	-1	-0	7
Electricity plants	-1517	-	-5	-	-	-12	-	-	526	-	-1008
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-1	-	-	-	-	-	-	14	13
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-53	-2	-55
Losses	-	-	-	-	-	-	-	-	-86	-2	-88
<b>TFC</b>	<b>48</b>	-	<b>665</b>	-	-	-	<b>0</b>	<b>263</b>	<b>397</b>	<b>10</b>	<b>1384</b>
<b>INDUSTRY</b>	<b>19</b>	-	<b>160</b>	-	-	-	-	<b>12</b>	<b>118</b>	-	<b>308</b>
Iron and steel	17	-	12	-	-	-	-	0	50	-	78
Chemical and petrochemical	-	-	1	-	-	-	-	0	0	-	1
Non-ferrous metals	-	-	26	-	-	-	-	-	1	-	27
Non-metallic minerals	-	-	84	-	-	-	-	0	6	-	90
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	0	1	-	1
Mining and quarrying	-	-	3	-	-	-	-	-	-	-	3
Food and tobacco	2	-	8	-	-	-	-	5	43	-	58
Paper pulp and printing	-	-	-	-	-	-	-	-	0	-	0
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0	-	-	-	-	-	-	-	-	-	0
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0	-	25	-	-	-	-	6	16	-	48
<b>TRANSPORT</b>	-	-	<b>374</b>	-	-	-	-	-	-	-	<b>374</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	372	-	-	-	-	-	-	-	372
Rail	-	-	2	-	-	-	-	-	-	-	2
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>29</b>	-	<b>81</b>	-	-	-	<b>0</b>	<b>251</b>	<b>280</b>	<b>10</b>	<b>651</b>
Residential	10	-	15	-	-	-	0	242	204	6	476
Comm. and public services	19	-	51	-	-	-	0	7	67	3	148
Agriculture/forestry	0	-	15	-	-	-	-	2	9	-	27
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>50</b>	-	-	-	-	-	-	-	<b>50</b>
in industry/transf./energy	-	-	50	-	-	-	-	-	-	-	50
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>5964</b>	-	<b>15</b>	-	-	<b>140</b>	-	-	-	-	<b>6119</b>
Electricity plants	5964	-	15	-	-	140	-	-	-	-	6119
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	<b>44</b>	-	-	-	-	-	<b>535</b>	-	<b>579</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	44	-	-	-	-	-	535	-	579

## Kuwait

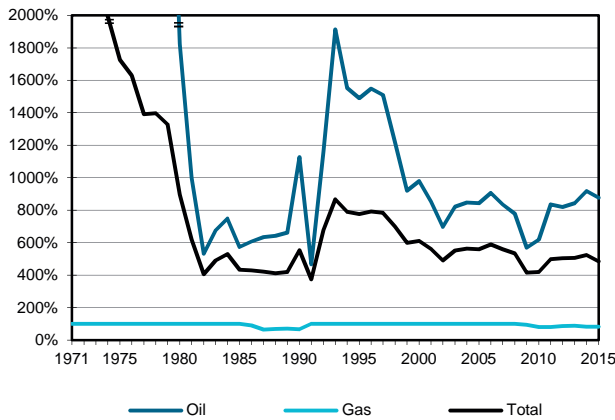
**Figure 1. Energy production**



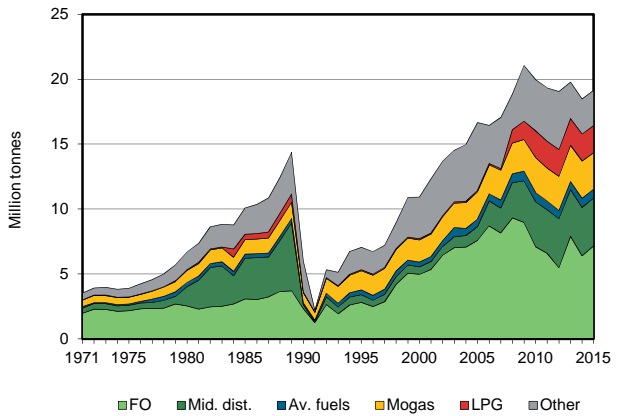
**Figure 2. Total primary energy supply<sup>1</sup>**



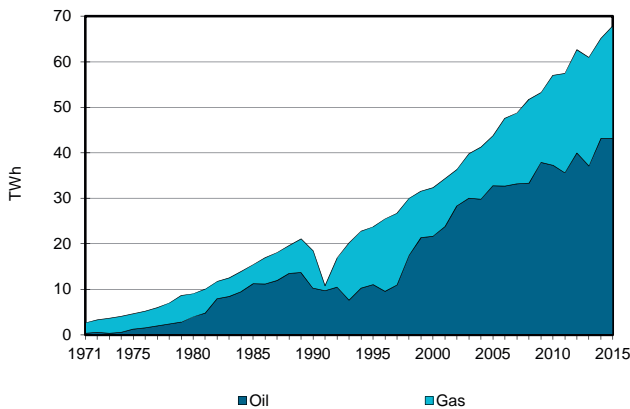
**Figure 3. Energy self-sufficiency<sup>2</sup>**



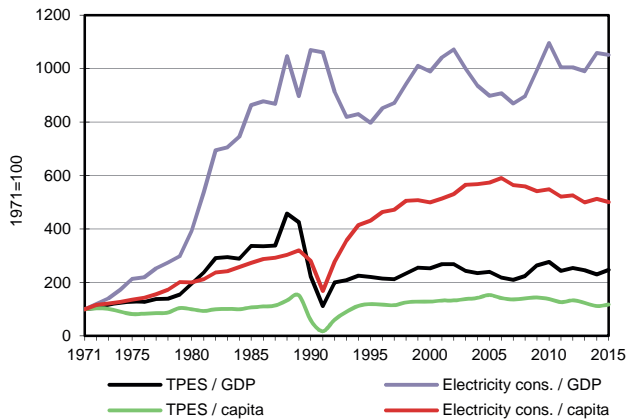
**Figure 4. Oil products demand<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>4</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 2000%.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

## Kuwait

2015

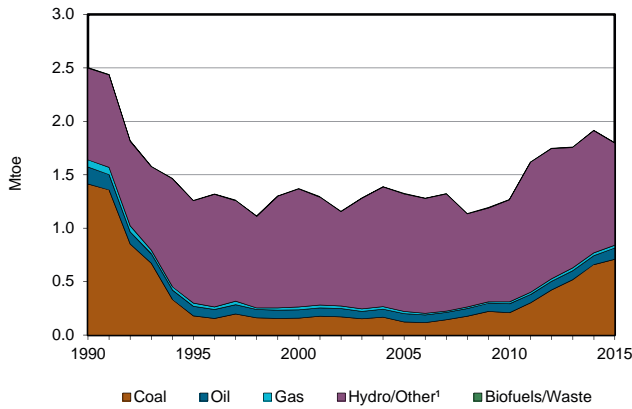
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	154027	-	13808	-	-	-	-	-	-	167835
Imports	-	-	-	3266	-	-	-	-	-	-	3266
Exports	-	-101147	-32889	-	-	-	-	-	-	-	-134036
Intl. marine bunkers	-	-	-1348	-	-	-	-	-	-	-	-1348
Intl. aviation bunkers	-	-	-735	-	-	-	-	-	-	-	-735
Stock changes	-	-	-332	-	-	-	-	-	-	-	-332
<b>TPES</b>	-	<b>52880</b>	<b>-35304</b>	<b>17075</b>	-	-	-	-	-	-	<b>34651</b>
Transfers	-	-6800	7644	-	-	-	-	-	-	-	843
Statistical differences	-	-	-382	-	-	-	-	-	-	-	-382
Electricity plants	-	-1720	-7128	-6075	-	-	-	-	5841	-	-9082
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-44360	43881	-	-	-	-	-	-	-	-479
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-461	-5372	-	-	-	-	-1281	-	-7113
Losses	-	-	-	-	-	-	-	-	-837	-	-837
<b>TFC</b>	-	-	<b>8250</b>	<b>5628</b>	-	-	-	-	<b>3723</b>	-	<b>17602</b>
<b>INDUSTRY</b>	-	-	<b>866</b>	<b>5628</b>	-	-	-	-	-	-	<b>6494</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	2451	-	-	-	-	-	-	2451
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	866	3177	-	-	-	-	-	-	4043
<b>TRANSPORT</b>	-	-	<b>4292</b>	-	-	-	-	-	-	-	<b>4292</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	4292	-	-	-	-	-	-	-	4292
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>217</b>	-	-	-	-	-	<b>3723</b>	-	<b>3940</b>
Residential	-	-	217	-	-	-	-	-	2402	-	2619
Comm. and public services	-	-	-	-	-	-	-	-	1321	-	1321
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>2876</b>	-	-	-	-	-	-	-	<b>2876</b>
in industry/transf./energy	-	-	2876	-	-	-	-	-	-	-	2876
of which: chem./petrochem.	-	-	2283	-	-	-	-	-	-	-	2283
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>43183</b>	<b>24735</b>	-	-	-	-	-	-	<b>67918</b>
Electricity plants	-	-	43183	24735	-	-	-	-	-	-	67918
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

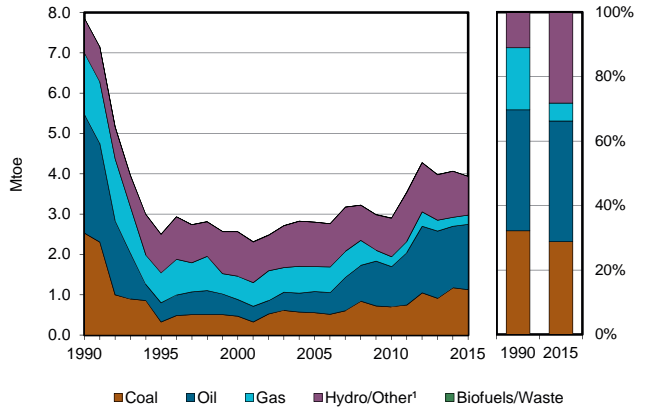


## Kyrgyzstan

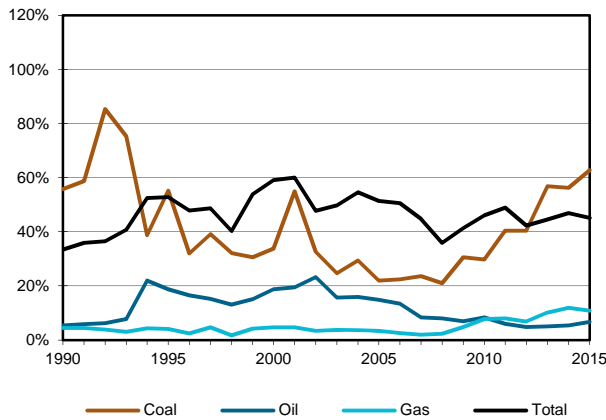
**Figure 1. Energy production**



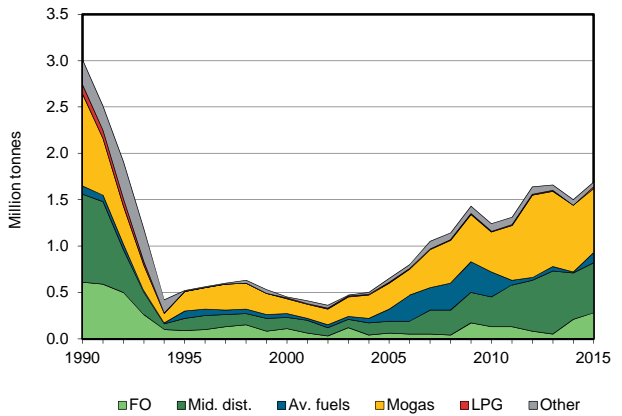
**Figure 2. Total primary energy supply<sup>2</sup>**



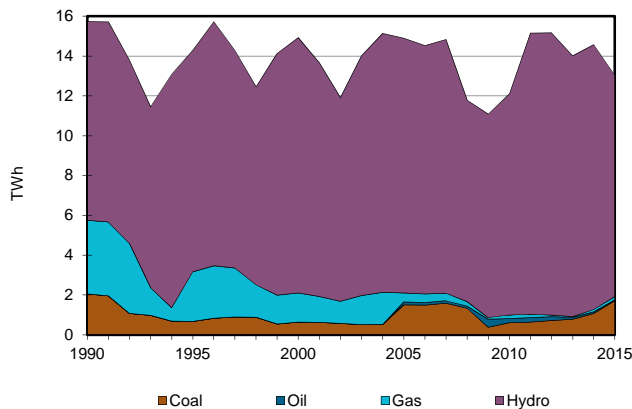
**Figure 3. Energy self-sufficiency<sup>3</sup>**



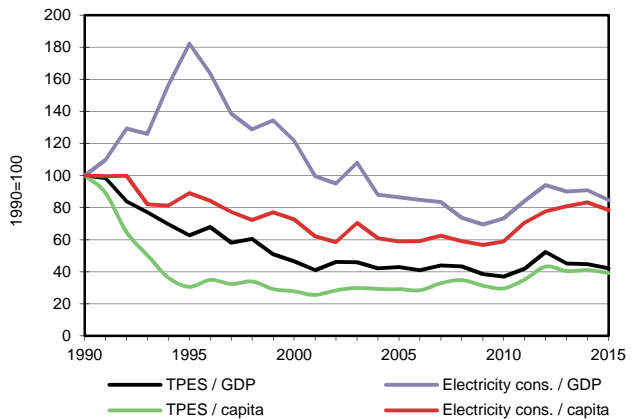
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

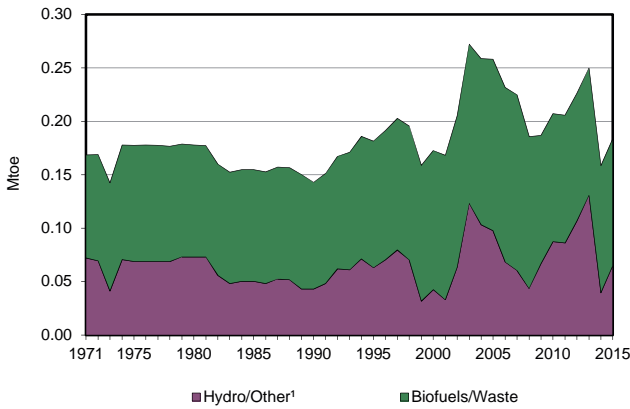
## Kyrgyzstan

2015

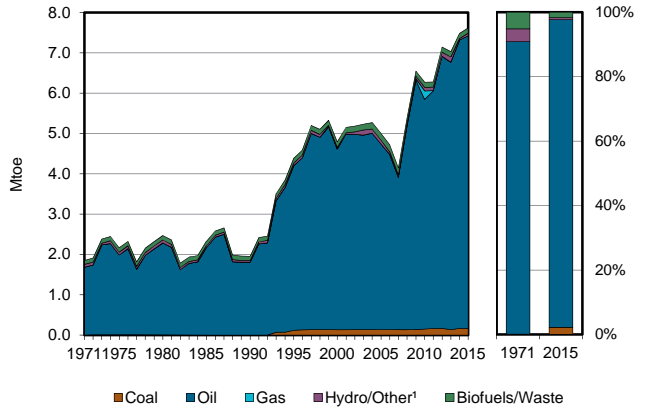
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	708	108	-	25	-	955	-	3	-	-	1798
Imports	680	225	1629	205	-	-	-	-	63	-	2802
Exports	-104	-	-107	-	-	-	-	-	-16	-	-227
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-108	-	-	-	-	-	-	-	-108
Stock changes	-156	-8	-120	-	-	-	-	-	-	-	-284
<b>TPES</b>	<b>1128</b>	<b>325</b>	<b>1295</b>	<b>229</b>	<b>-</b>	<b>955</b>	<b>-</b>	<b>3</b>	<b>47</b>	<b>-</b>	<b>3981</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-4	-	-1	-	-	-	-	-	-	-1	-7
Electricity plants	-8	-	-	-	-	-955	-	-	957	-	-6
CHP plants	-582	-	-15	-52	-	-	-	-	164	314	-171
Heat plants	-51	-	-11	-42	-	-	-	-	-	86	-19
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-325	322	-	-	-	-	-	-	-	-3
Petrochemical plants	-	-	-5	-	-	-	-	-	-	-	-5
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-16	-3	-	-	-	-	-28	-88	-135
Losses	-1	-	-3	-15	-	-	-	-0	-229	-27	-276
<b>TFC</b>	<b>481</b>	<b>-</b>	<b>1564</b>	<b>118</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>910</b>	<b>283</b>	<b>3360</b>
<b>INDUSTRY</b>	<b>201</b>	<b>-</b>	<b>292</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>203</b>	<b>14</b>	<b>730</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	1	-	-	-	-	-	-	-	3	0	4
Non-ferrous metals	-	-	-	-	-	-	-	-	33	-	33
Non-metallic minerals	196	-	1	0	-	-	-	-	36	3	236
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	4	12	-	-	-	-	4	2	23
Mining and quarrying	-	-	3	-	-	-	-	-	4	-	7
Food and tobacco	3	-	7	6	-	-	-	-	26	8	50
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	3	-	3
Construction	-	-	52	-	-	-	-	-	27	0	79
Textile and leather	-	-	1	-	-	-	-	-	2	2	5
Non-specified	1	-	224	1	-	-	-	-	65	-	291
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>910</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15</b>	<b>-</b>	<b>925</b>
Domestic aviation	-	-	2	-	-	-	-	-	-	-	2
Road	-	-	907	-	-	-	-	-	3	-	910
Rail	-	-	1	-	-	-	-	-	11	-	12
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	1	-	1
<b>OTHER</b>	<b>273</b>	<b>-</b>	<b>349</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>693</b>	<b>269</b>	<b>1685</b>
Residential	212	-	215	85	-	-	-	2	595	146	1255
Comm. and public services	-	-	23	-	-	-	-	-	72	119	215
Agriculture/forestry	2	-	98	2	-	-	-	-	19	0	122
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	59	-	12	11	-	-	-	0	7	3	93
<b>NON-ENERGY USE</b>	<b>7</b>	<b>-</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20</b>
in industry/transf./energy	7	-	13	-	-	-	-	-	-	-	20
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>1722</b>	<b>-</b>	<b>38</b>	<b>170</b>	<b>-</b>	<b>11100</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13030</b>
Electricity plants	24	-	-	-	-	11100	-	-	-	-	11124
CHP plants	1698	-	38	170	-	-	-	-	-	-	1906
<b>Heat generated - TJ</b>	<b>13421</b>	<b>-</b>	<b>725</b>	<b>2599</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16745</b>
CHP plants	11518	-	295	1350	-	-	-	-	-	-	13163
Heat plants	1903	-	430	1249	-	-	-	-	-	-	3582

## Lebanon

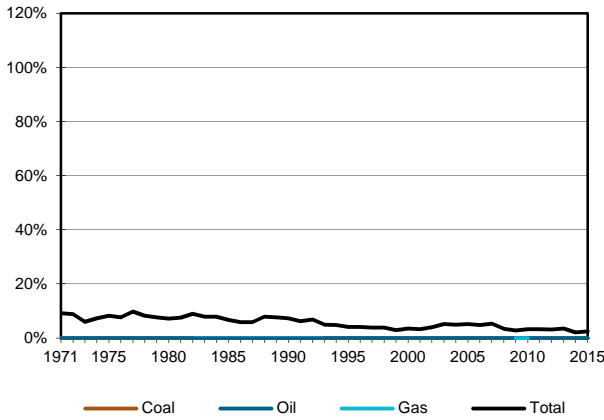
**Figure 1. Energy production**



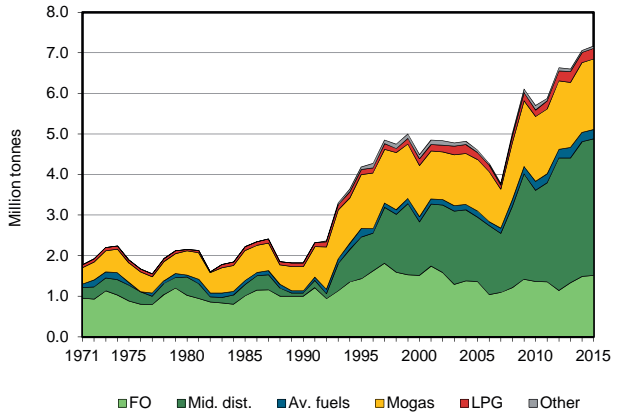
**Figure 2. Total primary energy supply²**



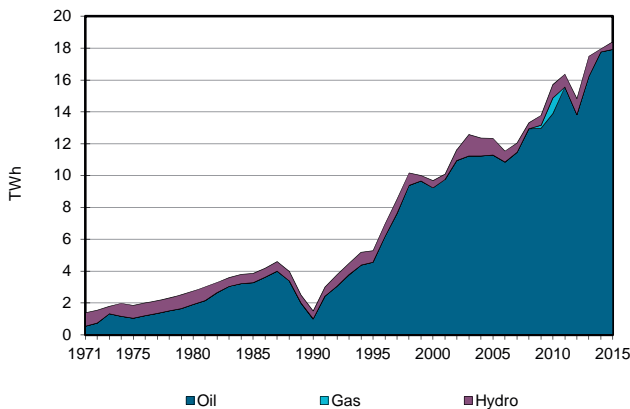
**Figure 3. Energy self-sufficiency³**



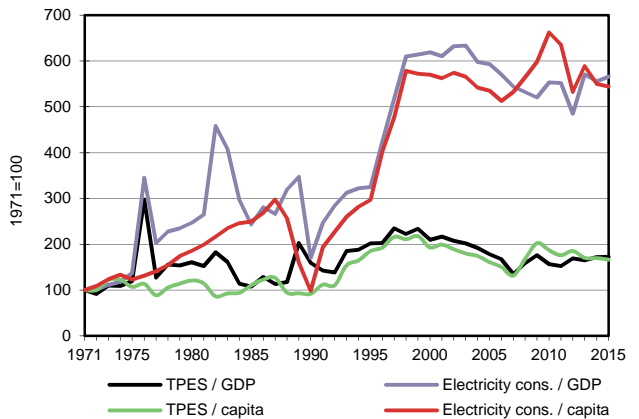
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

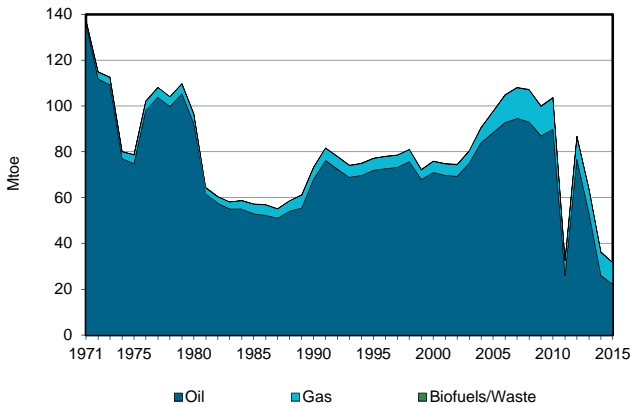
## Lebanon

2015

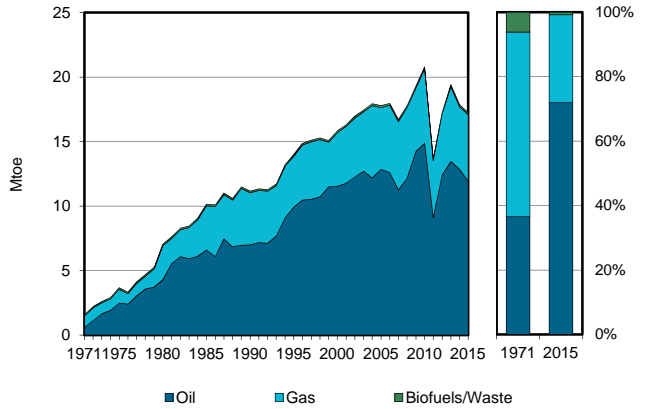
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	41	24	119	-	-	184
Imports	167	-	7534	-	-	-	-	10	23	-	7735
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-30	-	-	-	-	-	-	-	-30
Intl. aviation bunkers	-	-	-248	-	-	-	-	-	-	-	-248
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>167</b>	<b>-</b>	<b>7257</b>	<b>-</b>	<b>-</b>	<b>41</b>	<b>24</b>	<b>129</b>	<b>23</b>	<b>-</b>	<b>7641</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-12	-	-12
Electricity plants	-	-	-4107	-	-	-41	-	-	1582	-	-2566
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-14	-	-	-14
Energy industry own use	-	-	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-166	-	-166
<b>TFC</b>	<b>167</b>	<b>-</b>	<b>3150</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>115</b>	<b>1428</b>	<b>-</b>	<b>4884</b>
<b>INDUSTRY</b>	<b>167</b>	<b>-</b>	<b>135</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>371</b>	<b>-</b>	<b>674</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	167	-	-	-	-	-	-	-	-	-	167
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	135	-	-	-	1	-	371	-	507
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1913</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1913</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1913	-	-	-	-	-	-	-	1913
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1051</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23</b>	<b>115</b>	<b>1057</b>	<b>-</b>	<b>2246</b>
Residential	-	-	1051	-	-	-	15	98	554	-	1718
Comm. and public services	-	-	-	-	-	-	7	-	237	-	244
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	18	267	-	284
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51</b>
in industry/transf./energy	-	-	51	-	-	-	-	-	-	-	51
<i>of which: chem./petrochem.</i>	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>17917</b>	<b>-</b>	<b>-</b>	<b>479</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18396</b>
<i>Electricity plants</i>	-	-	17917	-	-	479	-	-	-	-	18396
<i>CHP plants</i>	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>CHP plants</i>	-	-	-	-	-	-	-	-	-	-	-
<i>Heat plants</i>	-	-	-	-	-	-	-	-	-	-	-

## Libya

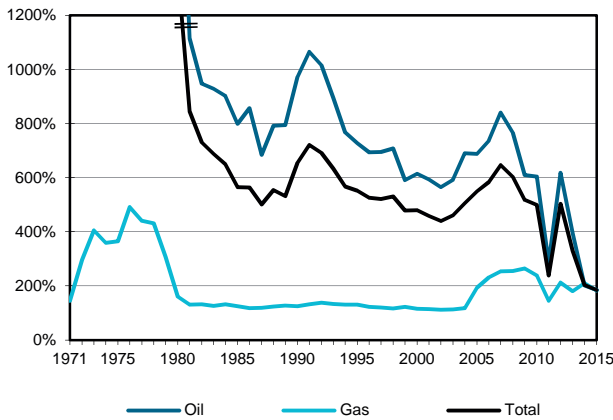
**Figure 1. Energy production**



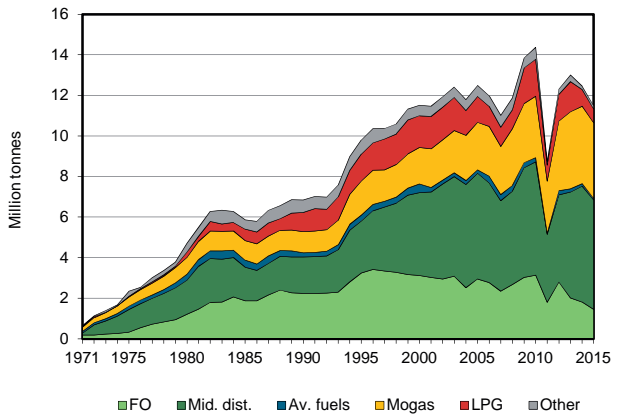
**Figure 2. Total primary energy supply<sup>1</sup>**



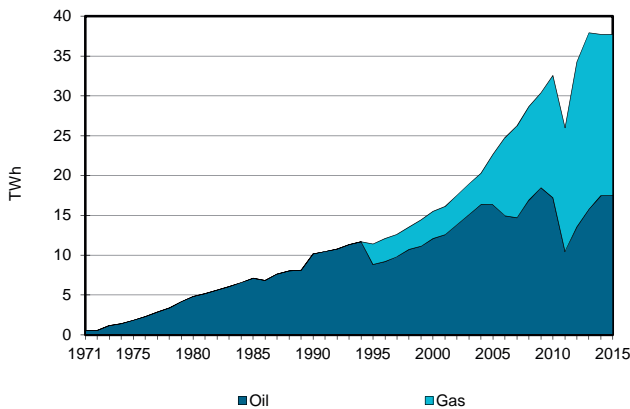
**Figure 3. Energy self-sufficiency<sup>2</sup>**



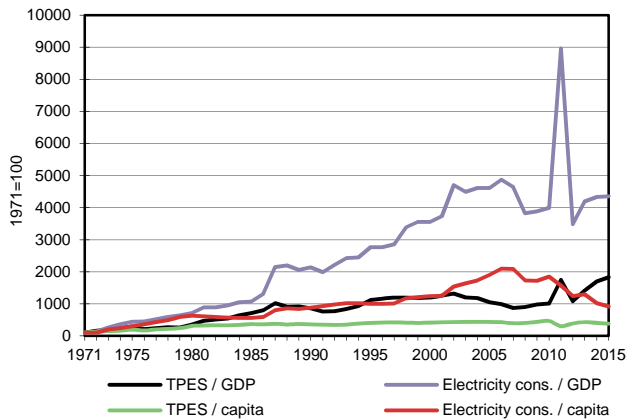
**Figure 4. Oil products demand<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>4</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 1200%.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

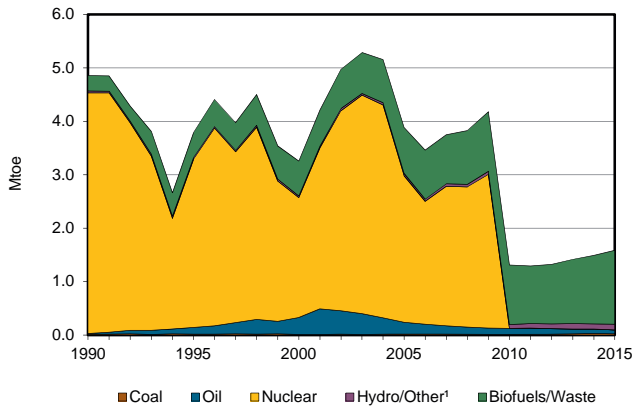
## Libya

2015

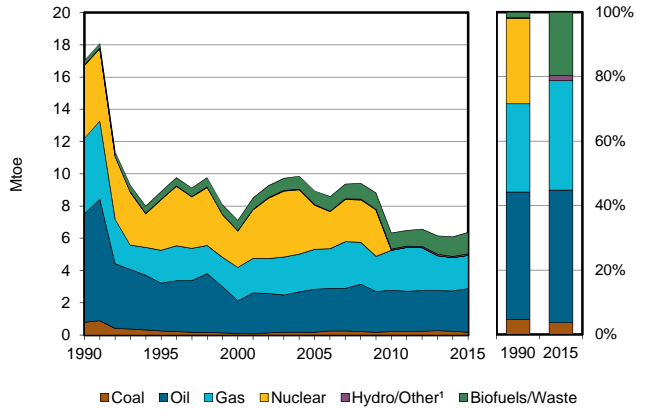
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	22016	-	9473	-	-	-	152	-	-	31640
Imports	-	-	7934	-	-	-	-	-	8	-	7941
Exports	-	-16273	-1013	-4295	-	-	-	-	-	-	-21580
Intl. marine bunkers	-	-	-80	-	-	-	-	-	-	-	-80
Intl. aviation bunkers	-	-	-67	-	-	-	-	-	-	-	-67
Stock changes	-	-608	-	-	-	-	-	-	-	-	-608
<b>TPES</b>	-	<b>5135</b>	<b>6774</b>	<b>5178</b>	-	-	-	<b>152</b>	<b>8</b>	-	<b>17246</b>
Transfers	-	-649	694	-	-	-	-	-	-	-	45
Statistical differences	-	-	-	-350	-	-	-	-	-	-	-350
Electricity plants	-	-	-4455	-4649	-	-	-	-	3243	-	-5860
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-4486	4320	-	-	-	-	-	-	-	-166
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-155	-50	-	-	-	-	-53	-	-257
Losses	-	-	-	-	-	-	-	-	-2357	-	-2357
<b>TFC</b>	-	-	<b>7179</b>	<b>130</b>	-	-	-	<b>152</b>	<b>841</b>	-	<b>8301</b>
<b>INDUSTRY</b>	-	-	<b>243</b>	<b>46</b>	-	-	-	-	<b>120</b>	-	<b>409</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	243	46	-	-	-	-	120	-	409
<b>TRANSPORT</b>	-	-	<b>6009</b>	-	-	-	-	-	-	-	<b>6009</b>
Domestic aviation	-	-	2	-	-	-	-	-	-	-	2
Road	-	-	6007	-	-	-	-	-	-	-	6007
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>423</b>	-	-	-	-	<b>152</b>	<b>721</b>	-	<b>1295</b>
Residential	-	-	423	-	-	-	-	152	331	-	906
Comm. and public services	-	-	-	-	-	-	-	-	285	-	285
Agriculture/forestry	-	-	-	-	-	-	-	-	104	-	104
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>504</b>	<b>84</b>	-	-	-	-	-	-	<b>588</b>
in industry/transf./energy	-	-	504	84	-	-	-	-	-	-	588
of which: chem./petrochem.	-	-	442	84	-	-	-	-	-	-	526
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>17461</b>	<b>20252</b>	-	-	-	-	-	-	<b>37713</b>
Electricity plants	-	-	17461	20252	-	-	-	-	-	-	37713
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Lithuania

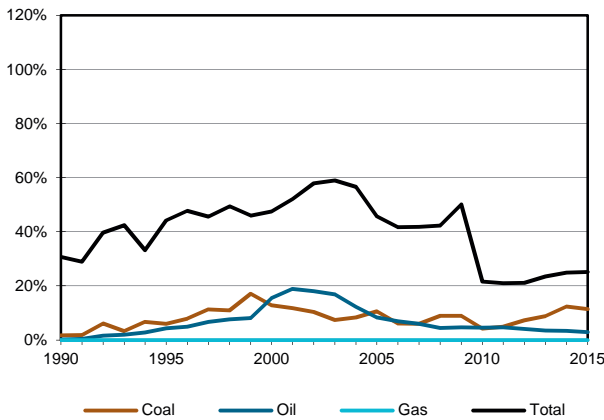
**Figure 1. Energy production**



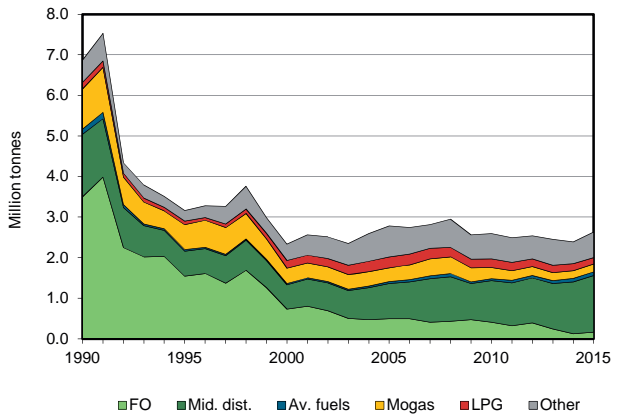
**Figure 2. Total primary energy supply<sup>2</sup>**



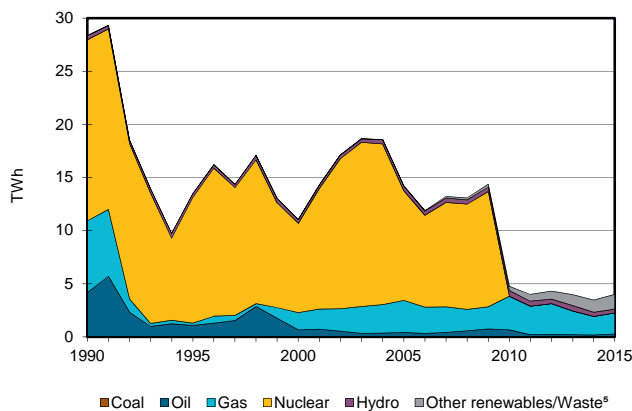
**Figure 3. Energy self-sufficiency<sup>3</sup>**



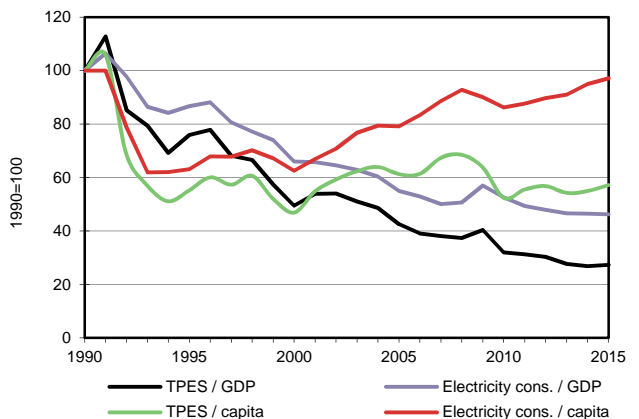
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Lithuania

2015

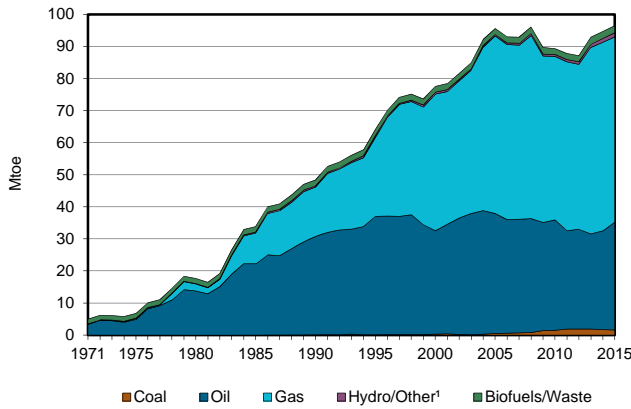
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	21	77	-	-	-	30	77	1382	-	229	1816
Imports	160	9276	2057	2140	-	-	-	195	683	-	14510
Exports	-3	-52	-8413	-80	-	-	-	-251	-63	-	-8862
Intl. marine bunkers	-	-	-76	-	-	-	-	-	-	-	-76
Intl. aviation bunkers	-	-	-81	-	-	-	-	-	-	-	-81
Stock changes	3	-62	-39	6	-	-	-	7	-	-	-85
<b>TPES</b>	<b>181</b>	<b>9238</b>	<b>-6552</b>	<b>2067</b>	<b>-</b>	<b>30</b>	<b>77</b>	<b>1332</b>	<b>620</b>	<b>229</b>	<b>7222</b>
Transfers	-	-1	-2	-	-	-	-	-	-	-	-3
Statistical differences	-0	-	-	-	-	-	-	2	-	-	1
Electricity plants	-	-	-	-	-	-30	-76	-	129	-67	-44
CHP plants	-	-	-53	-461	-	-	-	-206	237	312	-172
Heat plants	-4	-	-6	-114	-	-	-2	-431	-0	449	-108
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-0	-	-	-	-	-	-	-	-	-	-0
Oil refineries	-	-9237	9102	-	-	-	-	-	-	-	-135
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0	-	-	-0
Energy industry own use	-	-	-537	-31	-	-	-	-0	-114	-7	-689
Losses	-	-	-1	-	-	-	-	-	-68	-118	-188
<b>TFC</b>	<b>177</b>	<b>-</b>	<b>1951</b>	<b>1460</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>697</b>	<b>803</b>	<b>798</b>	<b>5886</b>
<b>INDUSTRY</b>	<b>97</b>	<b>-</b>	<b>39</b>	<b>284</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>89</b>	<b>285</b>	<b>190</b>	<b>983</b>
Iron and steel	1	-	-	0	-	-	-	-	2	-	2
Chemical and petrochemical	-	-	1	131	-	-	-	4	61	161	358
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	93	-	4	23	-	-	-	6	21	1	147
Transport equipment	-	-	-	1	-	-	-	-	3	0	4
Machinery	-	-	-	6	-	-	-	0	15	1	22
Mining and quarrying	-	-	2	0	-	-	-	0	2	0	5
Food and tobacco	2	-	15	81	-	-	-	17	60	10	185
Paper pulp and printing	-	-	-	9	-	-	-	4	14	0	27
Wood and wood products	-	-	2	3	-	-	-	40	29	10	84
Construction	-	-	11	11	-	-	-	1	12	1	38
Textile and leather	-	-	1	14	-	-	-	1	14	2	31
Non-specified	1	-	2	5	-	-	-	15	52	2	77
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1639</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>68</b>	<b>6</b>	<b>-</b>	<b>1743</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1577	8	-	-	-	66	3	-	1654
Rail	-	-	51	-	-	-	-	2	1	-	54
Pipeline transport	-	-	-	22	-	-	-	-	2	-	24
Domestic navigation	-	-	5	-	-	-	-	-	-	-	5
Non-specified	-	-	6	-	-	-	-	-	-	-	6
<b>OTHER</b>	<b>80</b>	<b>-</b>	<b>100</b>	<b>205</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>540</b>	<b>513</b>	<b>609</b>	<b>2046</b>
Residential	46	-	41	123	-	-	-	491	229	430	1359
Comm. and public services	31	-	2	61	-	-	-	38	267	174	575
Agriculture/forestry	2	-	43	21	-	-	-	11	16	5	97
Fishing	-	-	2	-	-	-	-	-	0	-	2
Non-specified	-	-	12	-	-	-	-	-	-	-	12
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>173</b>	<b>942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1114</b>
in industry/transf./energy	-	-	154	942	-	-	-	-	-	-	1095
of which: chem./petrochem.	-	-	65	942	-	-	-	-	-	-	1007
in transport	-	-	19	-	-	-	-	-	-	-	19
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>275</b>	<b>1979</b>	<b>-</b>	<b>349</b>	<b>883</b>	<b>507</b>	<b>-</b>	<b>265</b>	<b>4258</b>
Electricity plants	-	-	-	-	-	349	883	-	-	-	1232
CHP plants	-	-	275	1979	-	-	-	507	-	265	3026
<b>Heat generated - TJ</b>	<b>109</b>	<b>-</b>	<b>540</b>	<b>11507</b>	<b>-</b>	<b>-</b>	<b>32</b>	<b>19664</b>	<b>8</b>	<b>9600</b>	<b>41460</b>
CHP plants	-	-	363	7509	-	-	-	5189	-	6045	19106
Heat plants	109	-	177	3998	-	-	32	14475	8	3555	22354

1. Includes peat.

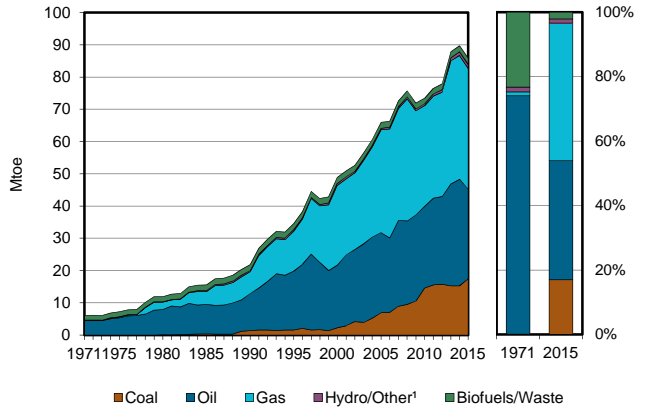


## Malaysia

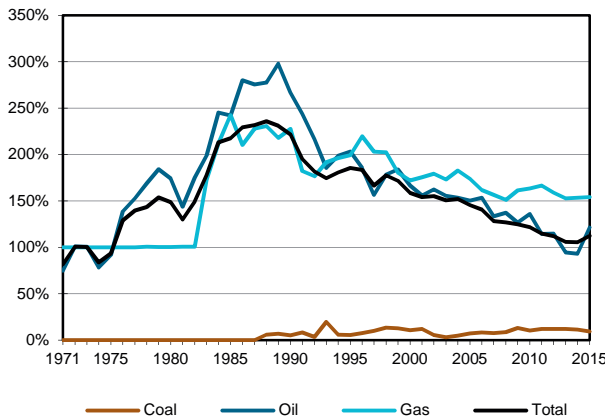
**Figure 1. Energy production**



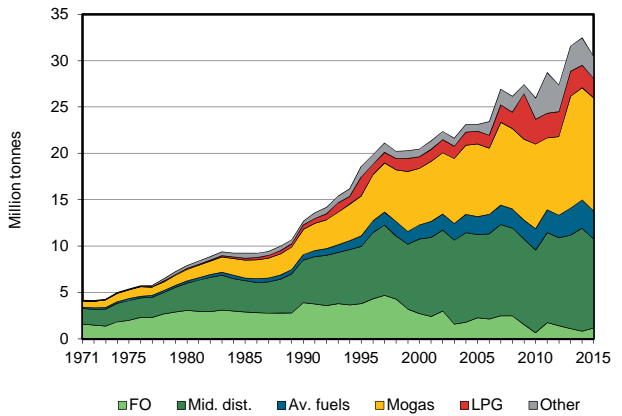
**Figure 2. Total primary energy supply<sup>2</sup>**



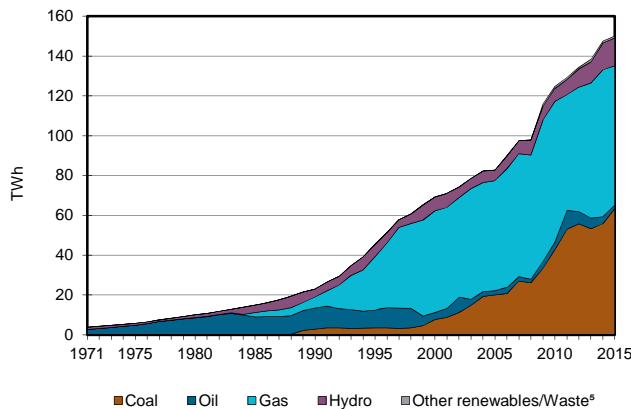
**Figure 3. Energy self-sufficiency<sup>3</sup>**



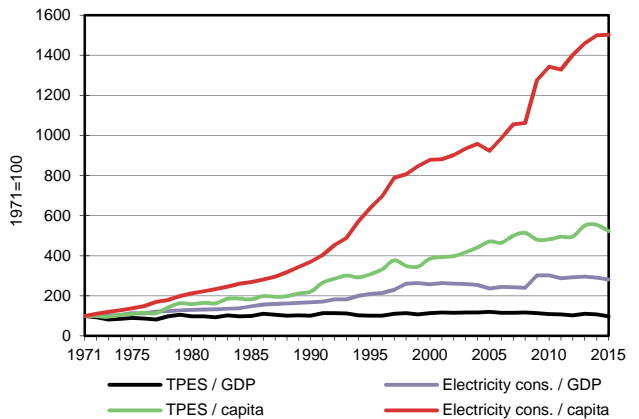
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

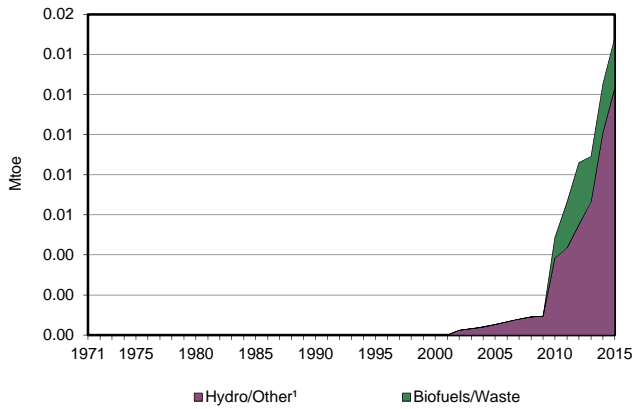
## Malaysia

2015

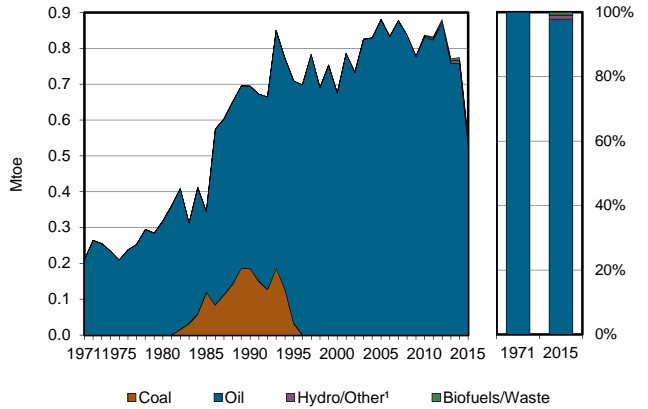
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1613	33566	-	57827	-	1197	23	2261	-	-	96488
Imports	16051	8445	14220	7812	-	-	-	4	1	-	46532
Exports	-156	-16127	-10219	-28111	-	-	-	-214	-0	-	-54828
Intl. marine bunkers	-	-	-347	-	-	-	-	-	-	-	-347
Intl. aviation bunkers	-	-	-2507	-	-	-	-	-	-	-	-2507
Stock changes	9	57	567	-	-	-	-	-113	-	-	520
<b>TPES</b>	<b>17517</b>	<b>25941</b>	<b>1713</b>	<b>37528</b>	<b>-</b>	<b>1197</b>	<b>23</b>	<b>1937</b>	<b>1</b>	<b>-</b>	<b>85858</b>
Transfers	-	-1590	1628	-	-	-	-	-	-	-	38
Statistical differences	-112	182	604	0	-	-	-	-0	-183	-	492
Electricity plants	-15627	-	-431	-16986	-	-1197	-23	-254	12911	-	-21608
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-24601	24291	-	-	-	-	-	-	-	-310
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	465	-	-862	-	-	-	-	-	-	-397
Other transformation	-	-	-	-49	-	-	-	-447	-	-	-496
Energy industry own use	-	-396	-198	-7950	-	-	-	-	-563	-	-9109
Losses	-	-	-	-2118	-	-	-	-	-766	-	-2884
<b>TFC</b>	<b>1778</b>	<b>-</b>	<b>27607</b>	<b>9563</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1237</b>	<b>11399</b>	<b>-</b>	<b>51585</b>
<b>INDUSTRY</b>	<b>1778</b>	<b>-</b>	<b>3402</b>	<b>4806</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5201</b>	<b>-</b>	<b>15187</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1778	-	3402	4806	-	-	-	-	5201	-	15187
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>20422</b>	<b>264</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>388</b>	<b>23</b>	<b>-</b>	<b>21097</b>
Domestic aviation	-	-	626	-	-	-	-	-	-	-	626
Road	-	-	19622	264	-	-	-	388	-	-	20274
Rail	-	-	-	-	-	-	-	-	23	-	23
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	173	-	-	-	-	-	-	-	173
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>2326</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>848</b>	<b>6176</b>	<b>-</b>	<b>9374</b>
Residential	-	-	674	1	-	-	-	848	2471	-	3995
Comm. and public services	-	-	782	24	-	-	-	-	3664	-	4469
Agriculture/forestry	-	-	206	-	-	-	-	-	41	-	246
Fishing	-	-	664	-	-	-	-	-	-	-	664
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1458</b>	<b>4469</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5927</b>
in industry/transf./energy	-	-	1458	4469	-	-	-	-	-	-	5927
of which: chem./petrochem.	-	-	837	4469	-	-	-	-	-	-	5306
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>63474</b>	<b>-</b>	<b>1739</b>	<b>69962</b>	<b>-</b>	<b>13924</b>	<b>273</b>	<b>751</b>	<b>-</b>	<b>-</b>	<b>150123</b>
Electricity plants	63474	-	1739	69962	-	13924	273	751	-	-	150123
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Malta

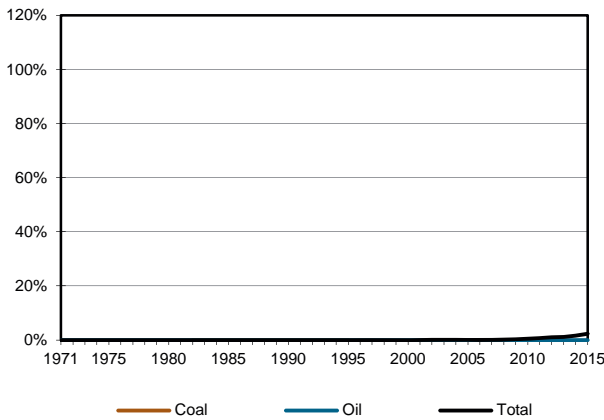
**Figure 1. Energy production**



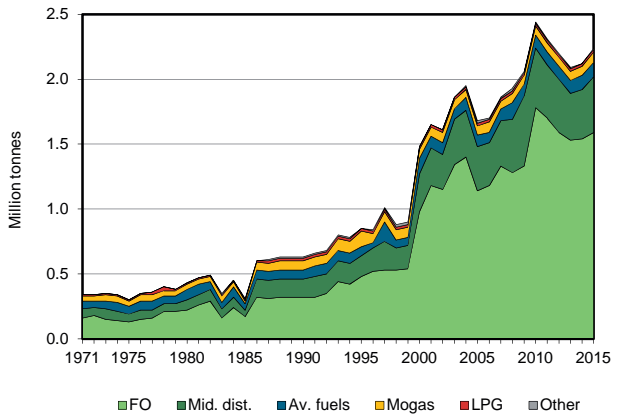
**Figure 2. Total primary energy supply²**



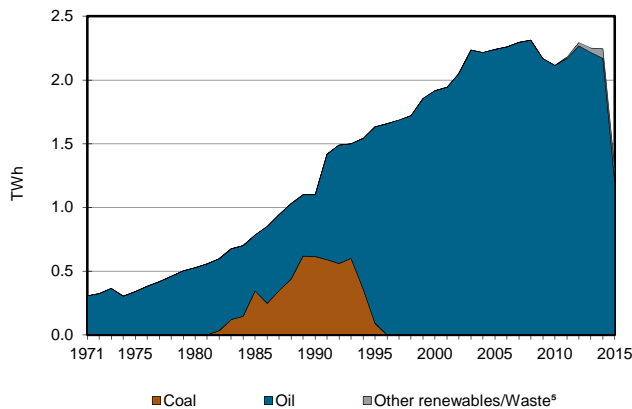
**Figure 3. Energy self-sufficiency³**



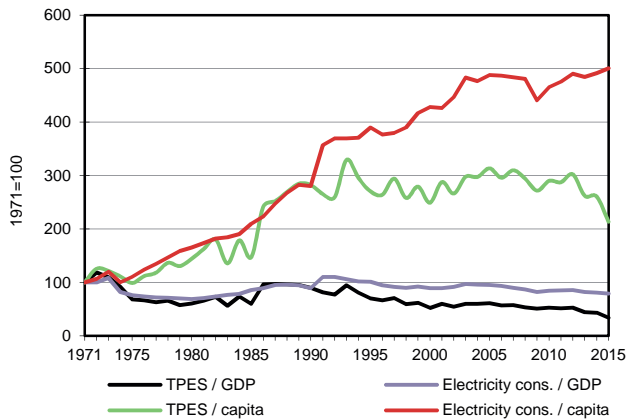
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Malta

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	-	12	3	-	-	15
Imports	-	-	2660	-	-	-	-	6	91	-	2756
Exports	-	-	-528	-	-	-	-	-	-	-	-528
Intl. marine bunkers	-	-	-1534	-	-	-	-	-	-	-	-1534
Intl. aviation bunkers	-	-	-115	-	-	-	-	-	-	-	-115
Stock changes	-	-	47	-	-	-	-	-	-	-	47
<b>TPES</b>	-	-	<b>530</b>	-	-	-	<b>12</b>	<b>8</b>	<b>91</b>	-	<b>641</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	3	-	-	-	-	-1	-	-	2
Electricity plants	-	-	-263	-	-	-	-8	-	111	-	-160
CHP plants	-	-	-	-	-	-	-	-1	1	0	-0
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-6	-	-6
Losses	-	-	-	-	-	-	-	-	-15	-	-15
<b>TFC</b>	-	-	<b>270</b>	-	-	-	<b>4</b>	<b>6</b>	<b>182</b>	<b>0</b>	<b>463</b>
<b>INDUSTRY</b>	-	-	<b>10</b>	-	-	-	-	-	<b>36</b>	-	<b>46</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	4	-	4
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	1	-	1
Transport equipment	-	-	-	-	-	-	-	-	2	-	2
Machinery	-	-	-	-	-	-	-	-	10	-	10
Mining and quarrying	-	-	-	-	-	-	-	-	0	-	0
Food and tobacco	-	-	-	-	-	-	-	-	5	-	5
Paper pulp and printing	-	-	-	-	-	-	-	-	2	-	2
Wood and wood products	-	-	-	-	-	-	-	-	0	-	0
Construction	-	-	-	-	-	-	-	-	2	-	2
Textile and leather	-	-	-	-	-	-	-	-	3	-	3
Non-specified	-	-	10	-	-	-	-	-	7	-	17
<b>TRANSPORT</b>	-	-	<b>193</b>	-	-	-	-	<b>4</b>	-	-	<b>197</b>
Domestic aviation	-	-	2	-	-	-	-	-	-	-	2
Road	-	-	176	-	-	-	-	4	-	-	181
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	14	-	-	-	-	-	-	-	14
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>63</b>	-	-	-	<b>4</b>	<b>2</b>	<b>146</b>	<b>0</b>	<b>215</b>
Residential	-	-	16	-	-	-	4	1	56	-	78
Comm. and public services	-	-	39	-	-	-	-	1	86	0	126
Agriculture/forestry	-	-	4	-	-	-	-	-	1	-	5
Fishing	-	-	3	-	-	-	-	-	0	-	3
Non-specified	-	-	-	-	-	-	-	-	2	-	2
<b>NON-ENERGY USE</b>	-	-	<b>5</b>	-	-	-	-	-	-	-	<b>5</b>
in industry/transf./energy	-	-	5	-	-	-	-	-	-	-	5
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1203</b>	-	-	-	<b>93</b>	<b>7</b>	-	-	<b>1303</b>
Electricity plants	-	-	1203	-	-	-	93	-	-	-	1296
CHP plants	-	-	-	-	-	-	-	7	-	-	7
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	<b>6</b>	-	-	<b>6</b>
CHP plants	-	-	-	-	-	-	-	6	-	-	6
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Mauritius

Figure 1. Energy production

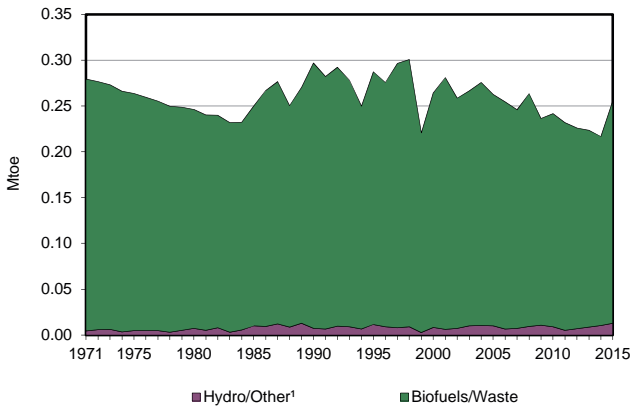


Figure 2. Total primary energy supply²

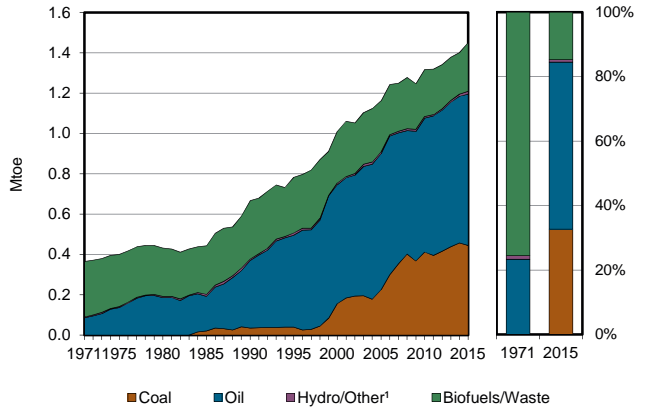


Figure 3. Energy self-sufficiency³

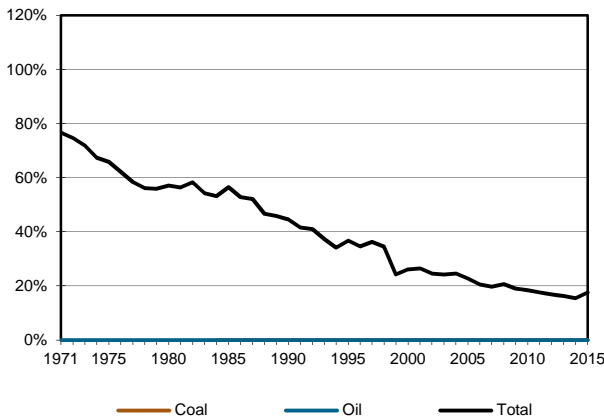


Figure 4. Oil products demand⁴

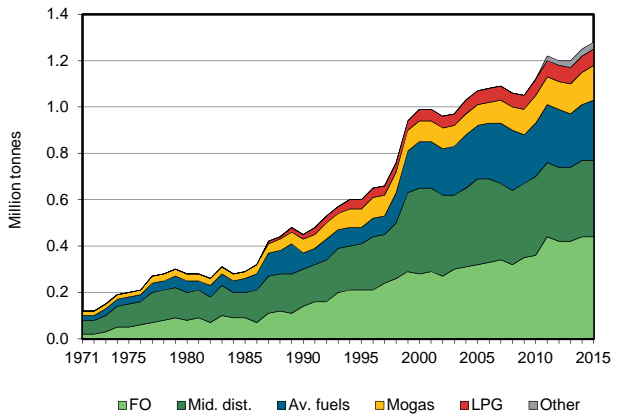


Figure 5. Electricity generation by source

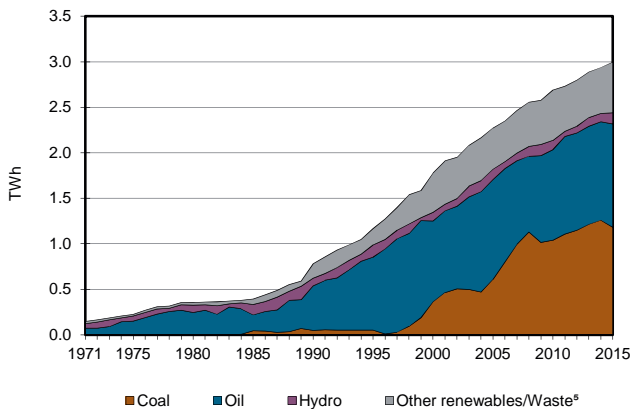
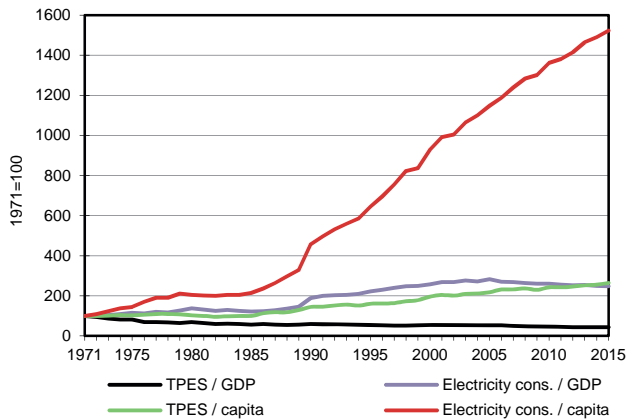


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

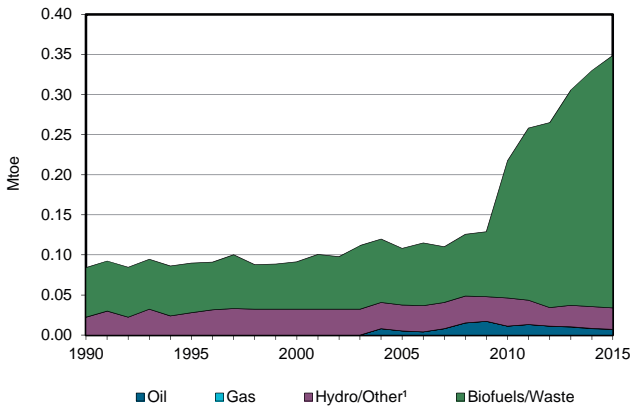
## Mauritius

2015

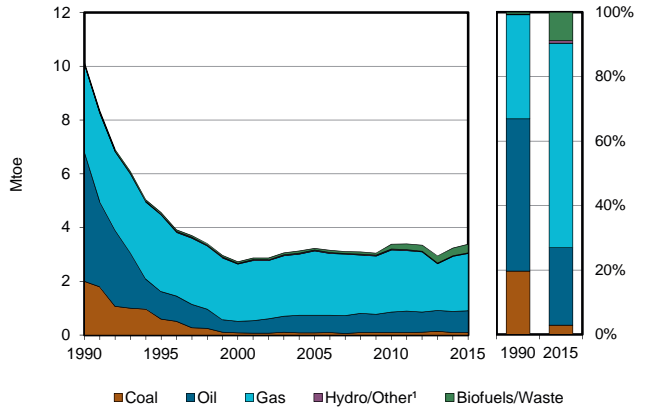
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	10	2	242	-	-	255
Imports	495	-	1321	-	-	-	-	-	-	-	1817
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-280	-	-	-	-	-	-	-	-280
Intl. aviation bunkers	-	-	-274	-	-	-	-	-	-	-	-274
Stock changes	-52	-	-15	-	-	-	-	-	-	-	-67
<b>TPES</b>	<b>444</b>	-	<b>752</b>	-	-	<b>10</b>	<b>2</b>	<b>242</b>	-	-	<b>1451</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	0	-0	-	-0
Electricity plants	-421	-	-223	-	-	-10	-2	-204	258	-	-604
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0	-	-	-0
Energy industry own use	-	-	-	-	-	-	-	-	-4	-	-4
Losses	-	-	-	-	-	-	-	-	-15	-	-15
<b>TFC</b>	<b>22</b>	-	<b>529</b>	-	-	-	-	<b>38</b>	<b>239</b>	-	<b>828</b>
<b>INDUSTRY</b>	<b>22</b>	-	<b>81</b>	-	-	-	-	<b>32</b>	<b>83</b>	-	<b>218</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	22	-	81	-	-	-	-	32	83	-	218
<b>TRANSPORT</b>	-	-	<b>346</b>	-	-	-	-	-	-	-	<b>346</b>
Domestic aviation	-	-	5	-	-	-	-	-	-	-	5
Road	-	-	330	-	-	-	-	-	-	-	330
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	7	-	-	-	-	-	-	-	7
Non-specified	-	-	3	-	-	-	-	-	-	-	3
<b>OTHER</b>	-	-	<b>74</b>	-	-	-	-	<b>6</b>	<b>156</b>	-	<b>236</b>
Residential	-	-	55	-	-	-	-	5	71	-	132
Comm. and public services	-	-	17	-	-	-	-	-	79	-	96
Agriculture/forestry	-	-	2	-	-	-	-	-	2	-	4
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	1	4	-	4
<b>NON-ENERGY USE</b>	-	-	<b>28</b>	-	-	-	-	-	-	-	<b>28</b>
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	28	-	-	-	-	-	-	-	28
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>1182</b>	-	<b>1134</b>	-	-	<b>122</b>	<b>29</b>	<b>530</b>	-	-	<b>2997</b>
Electricity plants	1182	-	1134	-	-	122	29	530	-	-	2997
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Moldova

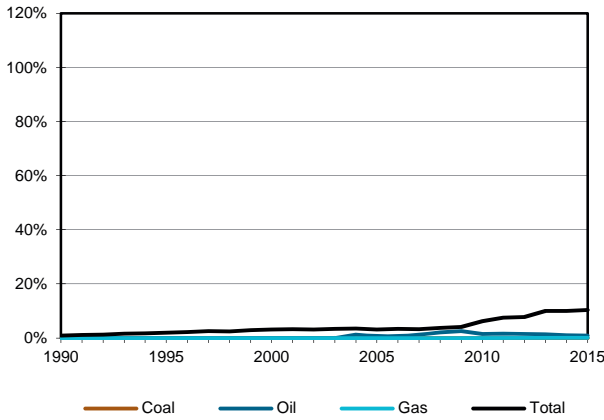
**Figure 1. Energy production**



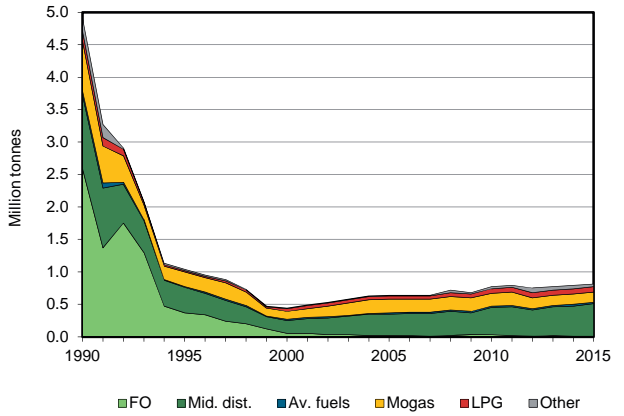
**Figure 2. Total primary energy supply<sup>2</sup>**



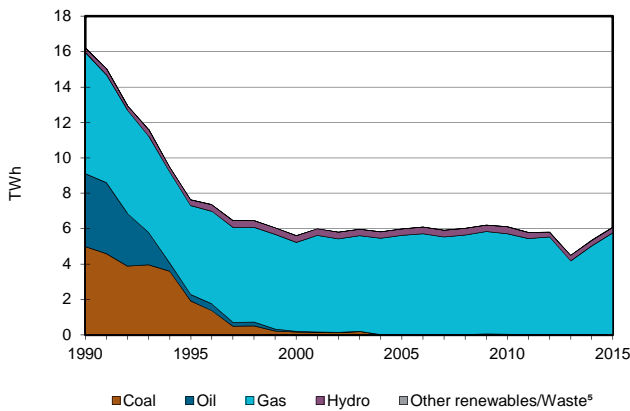
**Figure 3. Energy self-sufficiency<sup>3</sup>**



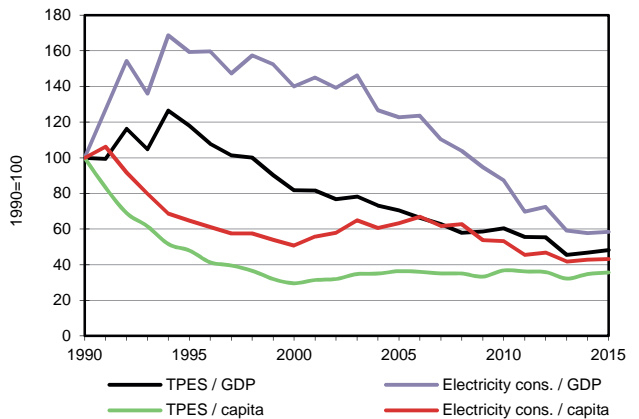
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Moldova

2015

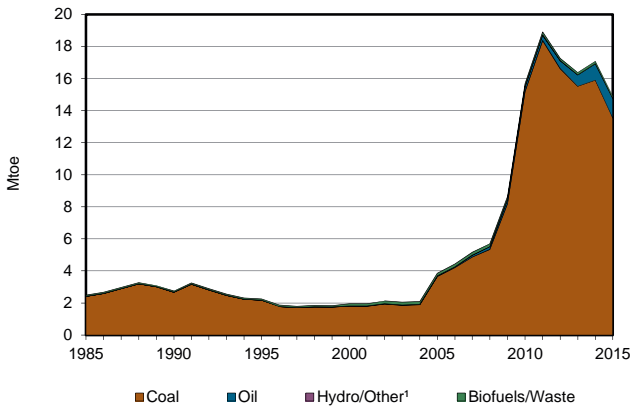
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	7	-	0	-	26	0	315	-	-	349
Imports	95	-	852	2128	-	-	-	1	2	-	3078
Exports	-	-	-14	-	-	-	-	-2	-	-	-16
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-25	-	-	-	-	-	-	-	-25
Stock changes	2	-	-15	1	-	-	-	7	-	-	-4
<b>TPES</b>	<b>97</b>	<b>7</b>	<b>798</b>	<b>2129</b>	<b>-</b>	<b>26</b>	<b>0</b>	<b>321</b>	<b>2</b>	<b>-</b>	<b>3382</b>
Transfers	-	4	-4	-	-	-	-	-	-	-	0
Statistical differences	-0	-	-	-	-	-	-	-	-0	-	-0
Electricity plants	-	-	-	-1201	-	-26	-0	-0	448	-	-781
CHP plants	-	-	-7	-255	-	-	-	-9	76	159	-36
Heat plants	-2	-	-	-74	-	-	-	-9	-	81	-3
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-11	11	-	-	-	-	-	-	-	-1
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1	-	-	-1
Energy industry own use	-	-	-	-	-	-	-	-	-35	-2	-37
Losses	-	-	-3	-52	-	-	-	-0	-99	-36	-190
<b>TFC</b>	<b>96</b>	<b>-</b>	<b>795</b>	<b>547</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>301</b>	<b>391</b>	<b>202</b>	<b>2332</b>
<b>INDUSTRY</b>	<b>39</b>	<b>-</b>	<b>11</b>	<b>247</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>120</b>	<b>40</b>	<b>460</b>
Iron and steel	-	-	-	-	-	-	-	-	0	-	0
Chemical and petrochemical	-	-	4	1	-	-	-	0	4	0	9
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	38	-	-	32	-	-	-	-	14	0	83
Transport equipment	-	-	-	-	-	-	-	0	-	-	0
Machinery	-	-	-	0	-	-	-	-	4	0	4
Mining and quarrying	-	-	1	-	-	-	-	-	1	-	2
Food and tobacco	1	-	2	19	-	-	-	1	34	38	95
Paper pulp and printing	-	-	-	1	-	-	-	-	1	1	2
Wood and wood products	-	-	-	-	-	-	-	0	3	-	4
Construction	-	-	4	1	-	-	-	-	1	0	5
Textile and leather	-	-	-	1	-	-	-	0	3	2	5
Non-specified	-	-	-	193	-	-	-	-	56	0	249
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>627</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>640</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	619	3	-	-	-	-	-	-	622
Rail	-	-	6	-	-	-	-	-	-	-	6
Pipeline transport	-	-	-	6	-	-	-	-	1	-	7
Domestic navigation	-	-	1	-	-	-	-	-	-	-	1
Non-specified	-	-	1	-	-	-	-	-	4	-	5
<b>OTHER</b>	<b>56</b>	<b>-</b>	<b>121</b>	<b>291</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>299</b>	<b>267</b>	<b>162</b>	<b>1196</b>
Residential	39	-	66	213	-	-	-	280	164	118	879
Comm. and public services	17	-	1	76	-	-	-	10	99	44	247
Agriculture/forestry	1	-	50	2	-	-	-	1	4	0	57
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	4	-	-	-	-	9	-	-	13
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>36</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36</b>
in industry/transf./energy	-	-	27	-	-	-	-	-	-	-	27
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	8	-	-	-	-	-	-	-	8
in other	-	-	1	-	-	-	-	-	-	-	1
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>5755</b>	<b>-</b>	<b>308</b>	<b>4</b>	<b>15</b>	<b>-</b>	<b>-</b>	<b>6091</b>
Electricity plants	-	-	2	4892	-	308	4	1	-	-	5207
CHP plants	-	-	7	863	-	-	-	14	-	-	884
<b>Heat generated - TJ</b>	<b>57</b>	<b>-</b>	<b>221</b>	<b>9477</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>287</b>	<b>-</b>	<b>-</b>	<b>10042</b>
CHP plants	-	-	205	6426	-	-	-	11	-	-	6642
Heat plants	57	-	16	3051	-	-	-	276	-	-	3400

1. Includes peat.

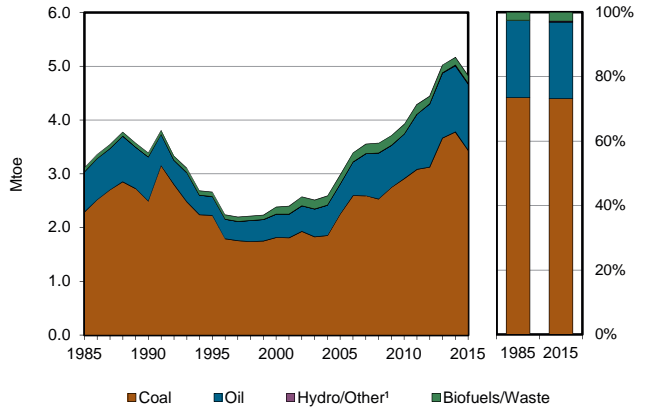


## Mongolia

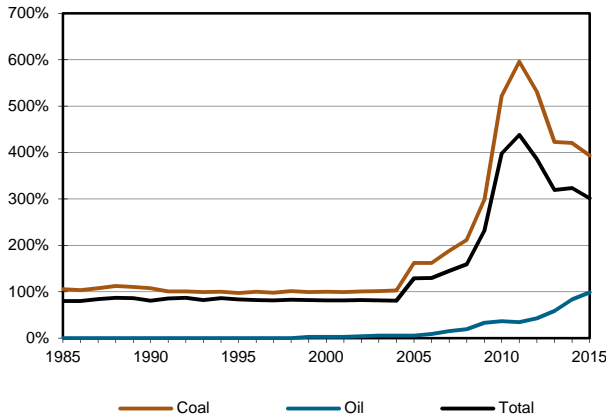
**Figure 1. Energy production**



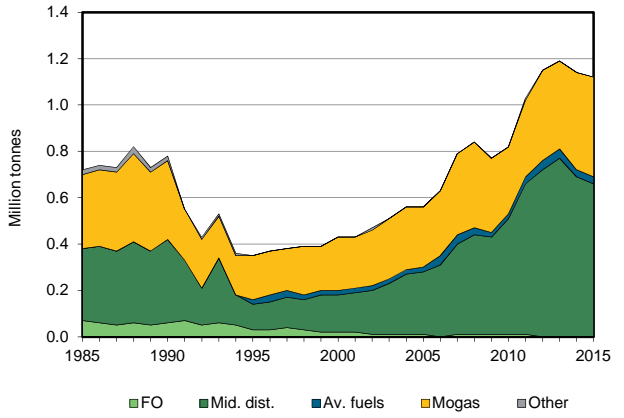
**Figure 2. Total primary energy supply<sup>2</sup>**



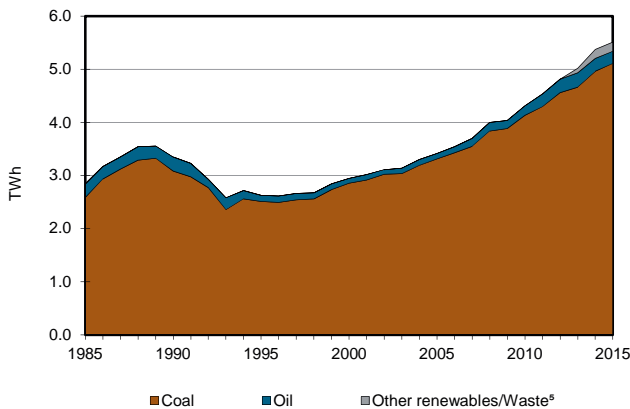
**Figure 3. Energy self-sufficiency<sup>3</sup>**



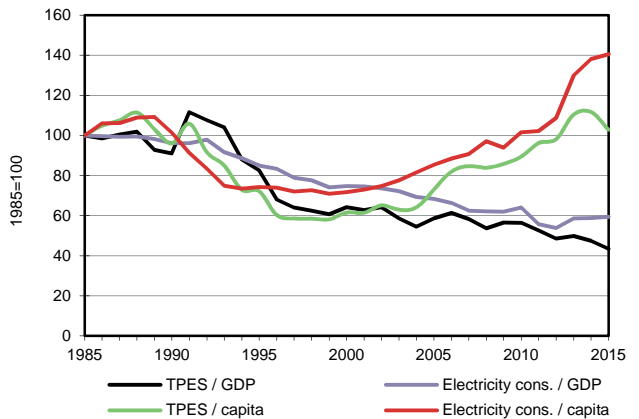
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Mongolia

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	13514	1209	-	-	-	-	15	143	-	-	14882
Imports	1	-	1174	-	-	-	-	-	123	-	1298
Exports	-9751	-1122	-	-	-	-	-	-	-4	-	-10877
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-29	-	-	-	-	-	-	-	-29
Stock changes	-329	-	-	-	-	-	-	-	-	-	-329
<b>TPES</b>	<b>3435</b>	<b>88</b>	<b>1146</b>	-	-	-	<b>15</b>	<b>143</b>	<b>118</b>	-	<b>4945</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0	-88	-	-	-	-	-	-	-	-	-87
Electricity plants	-	-	-77	-	-	-	-15	-	34	-	-57
CHP plants	-2785	-	-3	-	-	-	-	-	440	1068	-1280
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-11	-	-	-	-	-	-	-	-	-	-11
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-51	-	-	-51
Energy industry own use	-11	-	-	-	-	-	-	-	-67	-65	-142
Losses	-103	-	-	-	-	-	-	-	-67	-33	-203
<b>TFC</b>	<b>525</b>	-	<b>1066</b>	-	-	-	-	<b>93</b>	<b>458</b>	<b>971</b>	<b>3113</b>
<b>INDUSTRY</b>	<b>76</b>	-	<b>361</b>	-	-	-	-	-	<b>280</b>	<b>236</b>	<b>953</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	169	-	-	-	-	-	-	-	169
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	76	-	192	-	-	-	-	-	280	236	785
<b>TRANSPORT</b>	<b>17</b>	-	<b>650</b>	-	-	-	-	-	-	-	<b>667</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	499	-	-	-	-	-	-	-	499
Rail	14	-	151	-	-	-	-	-	-	-	165
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	3	-	-	-	-	-	-	-	-	-	3
<b>OTHER</b>	<b>432</b>	-	<b>55</b>	-	-	-	-	<b>93</b>	<b>178</b>	<b>735</b>	<b>1492</b>
Residential	265	-	-	-	-	-	-	65	114	404	847
Comm. and public services	0	-	-	-	-	-	-	-	-	294	295
Agriculture/forestry	5	-	55	-	-	-	-	7	5	5	77
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	162	-	-	-	-	-	-	20	59	32	273
<b>NON-ENERGY USE</b>	-	-	<b>1</b>	-	-	-	-	-	-	-	<b>1</b>
in industry/transf./energy	-	-	1	-	-	-	-	-	-	-	1
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>5113</b>	-	<b>230</b>	-	-	-	<b>170</b>	-	-	-	<b>5513</b>
Electricity plants	-	-	223	-	-	-	170	-	-	-	393
CHP plants	5113	-	7	-	-	-	-	-	-	-	5120
<b>Heat generated - TJ</b>	<b>44653</b>	-	<b>60</b>	-	-	-	-	-	-	-	<b>44713</b>
CHP plants	44653	-	60	-	-	-	-	-	-	-	44713
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Montenegro

Figure 1. Energy production

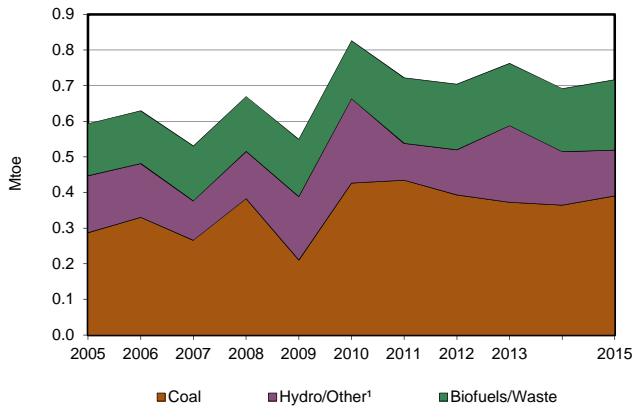


Figure 2. Total primary energy supply²

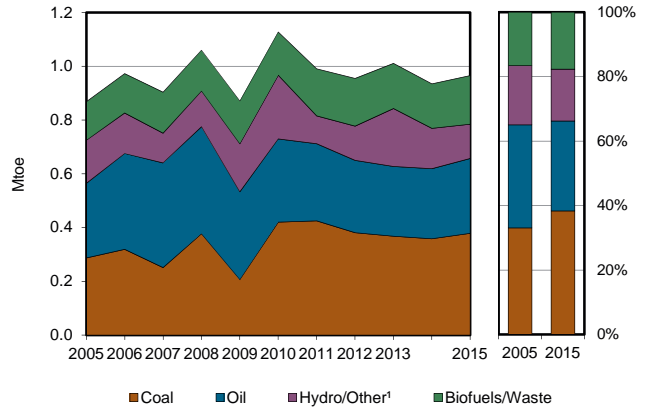


Figure 3. Energy self-sufficiency³

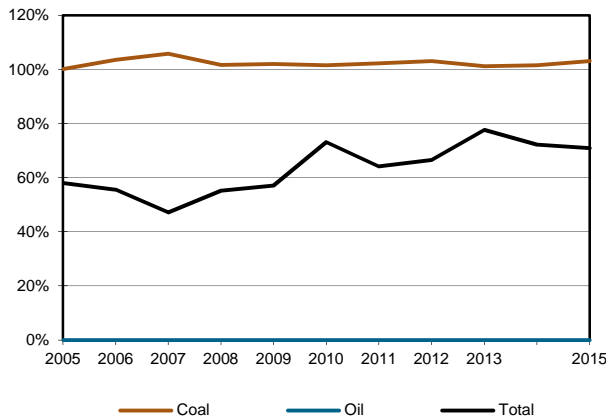


Figure 4. Oil products demand⁴

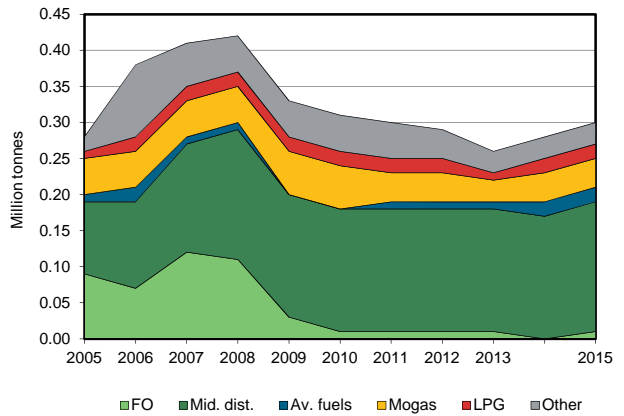


Figure 5. Electricity generation by source

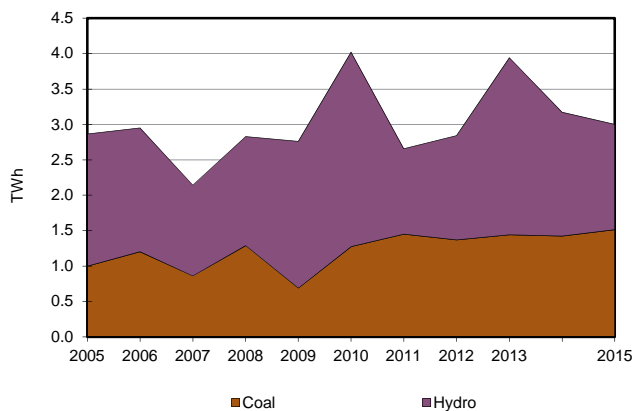
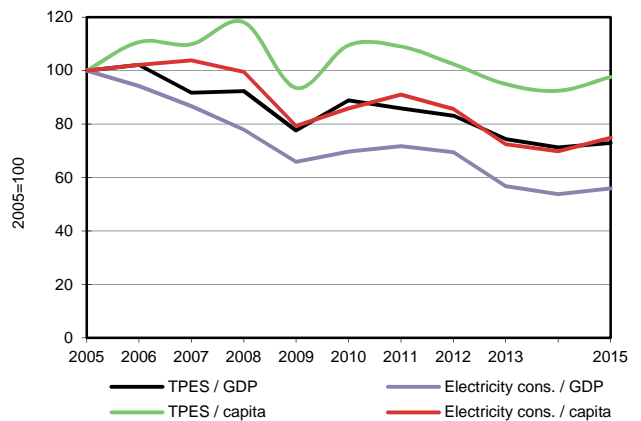


Figure 6. Selected indicators⁵



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Montenegro

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	390	-	-	-	-	128	0	198	-	-	716
Imports	1	-	306	-	-	-	-	2	89	-	398
Exports	-13	-	-16	-	-	-	-	-19	-44	-	-93
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-18	-	-	-	-	-	-	-	-18
Stock changes	-	-	7	-	-	-	-	-	-	-	7
<b>TPES</b>	<b>378</b>	-	<b>278</b>	-	-	<b>128</b>	<b>0</b>	<b>180</b>	<b>45</b>	-	<b>1010</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-11	-	-11
Electricity plants	-367	-	-	-	-	-128	-	-	258	-	-237
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-11	-	-	-11
Energy industry own use	-	-	-	-	-	-	-	-	-11	-	-11
Losses	-	-	-	-	-	-	-	-	-50	-	-50
<b>TFC</b>	<b>11</b>	-	<b>278</b>	-	-	-	<b>0</b>	<b>170</b>	<b>230</b>	-	<b>690</b>
<b>INDUSTRY</b>	<b>7</b>	-	<b>49</b>	-	-	-	-	<b>9</b>	<b>66</b>	-	<b>131</b>
Iron and steel	5	-	2	-	-	-	-	0	4	-	11
Chemical and petrochemical	-	-	2	-	-	-	-	2	1	-	5
Non-ferrous metals	-	-	-	-	-	-	-	-	55	-	55
Non-metallic minerals	-	-	2	-	-	-	-	0	0	-	3
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	0	-	2	-	-	-	-	1	1	-	3
Mining and quarrying	-	-	4	-	-	-	-	-	0	-	4
Food and tobacco	1	-	10	-	-	-	-	6	3	-	19
Paper pulp and printing	-	-	-	-	-	-	-	-	0	-	0
Wood and wood products	0	-	9	-	-	-	-	0	1	-	10
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	0	0	-	0
Non-specified	0	-	18	-	-	-	-	0	1	-	19
<b>TRANSPORT</b>	-	-	<b>184</b>	-	-	-	-	-	<b>3</b>	-	<b>187</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	181	-	-	-	-	-	-	-	181
Rail	-	-	-	-	-	-	-	-	2	-	2
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	3	-	-	-	-	-	-	-	3
Non-specified	-	-	-	-	-	-	-	-	1	-	1
<b>OTHER</b>	<b>5</b>	-	<b>16</b>	-	-	-	<b>0</b>	<b>160</b>	<b>162</b>	-	<b>344</b>
Residential	3	-	1	-	-	-	-	154	107	-	266
Comm. and public services	2	-	8	-	-	-	0	6	54	-	70
Agriculture/forestry	-	-	7	-	-	-	-	-	1	-	8
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>29</b>	-	-	-	-	-	-	-	<b>29</b>
in industry/transf./energy	-	-	19	-	-	-	-	-	-	-	19
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	5	-	-	-	-	-	-	-	5
in other	-	-	5	-	-	-	-	-	-	-	5
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>1512</b>	-	-	-	-	<b>1491</b>	-	-	-	-	<b>3003</b>
Electricity plants	1512	-	-	-	-	1491	-	-	-	-	3003
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Mozambique

Figure 1. Energy production

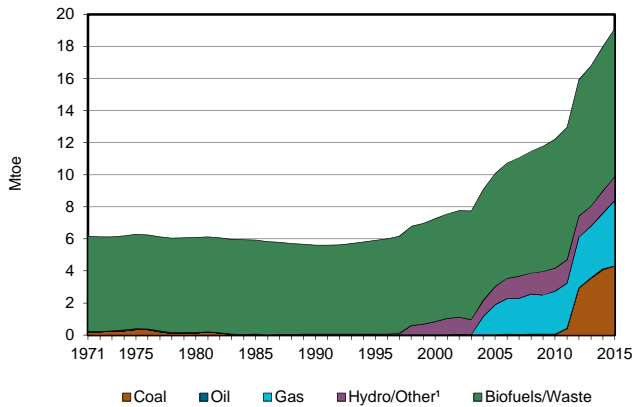


Figure 2. Total primary energy supply<sup>2</sup>

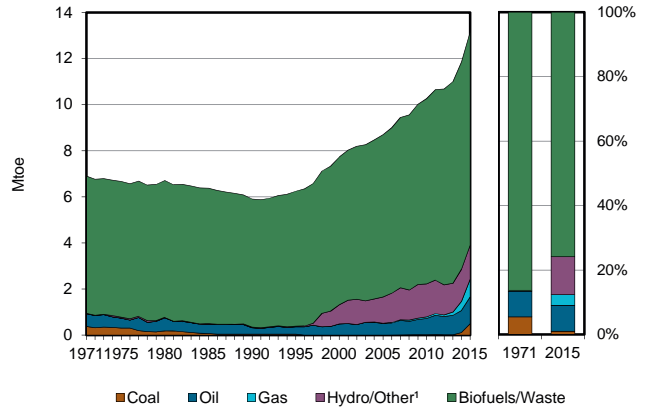


Figure 3. Energy self-sufficiency<sup>3</sup>

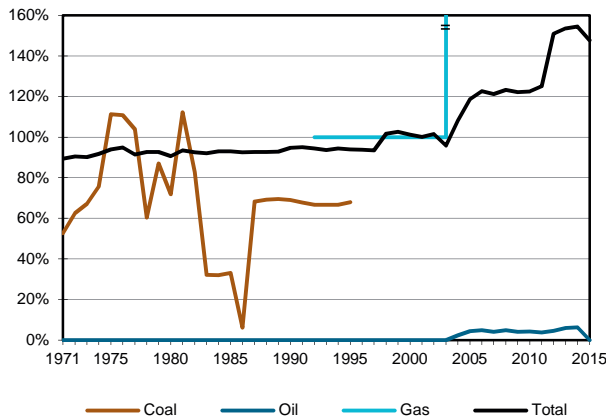


Figure 4. Oil products demand<sup>4</sup>

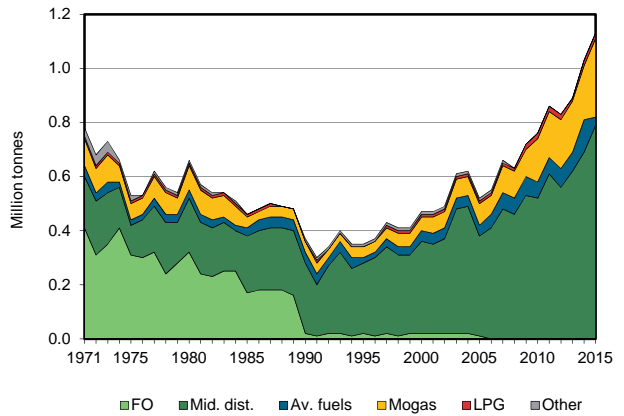


Figure 5. Electricity generation by source

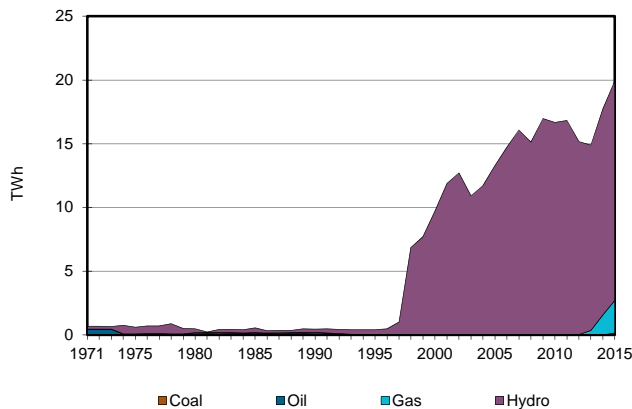
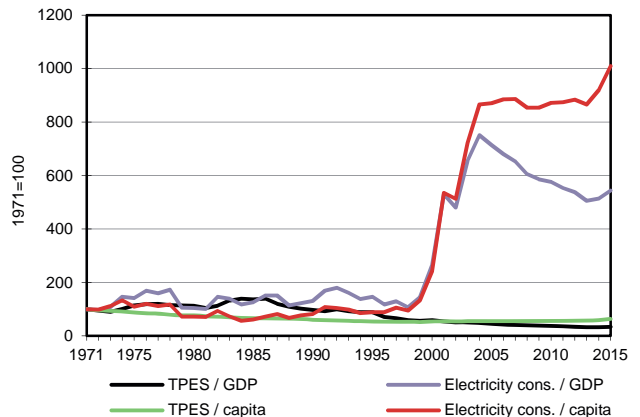


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 160%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

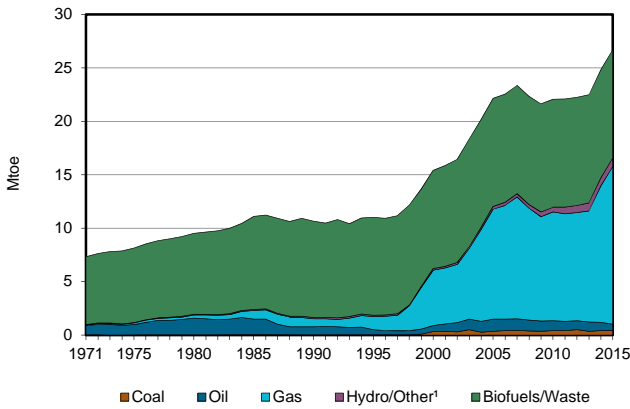
## Mozambique

2015

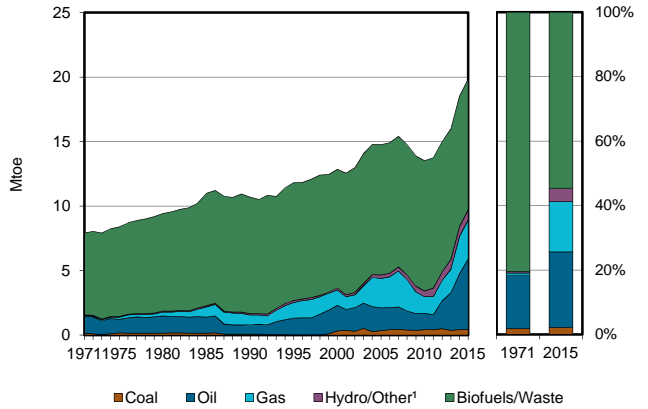
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	4307	-	-	4090	-	1480	-	9249	-	-	19126
Imports	-	-	1226	-	-	-	-	-	907	-	2133
Exports	-3182	-	-	-3329	-	-	-	-	-1107	-	-7618
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-36	-	-	-	-	-	-	-	-36
Stock changes	-627	-	-27	-	-	-	-	-	-	-	-655
<b>TPES</b>	<b>498</b>	-	<b>1163</b>	<b>761</b>	-	<b>1480</b>	-	<b>9249</b>	<b>-200</b>	-	<b>12950</b>
Transfers	-	-	-1	-	-	-	-	-	-	-	-1
Statistical differences	-490	-	-15	-109	-	-	-	-	-44	-	-657
Electricity plants	-	-	-26	-514	-	-1480	-	-	1713	-	-308
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1251	-	-	-1251
Energy industry own use	-8	-	-	-	-	-	-	-	-20	-	-29
Losses	-	-	-	-	-	-	-	-	-291	-	-291
<b>TFC</b>	-	-	<b>1122</b>	<b>137</b>	-	-	-	<b>7998</b>	<b>1157</b>	-	<b>10414</b>
<b>INDUSTRY</b>	-	-	<b>141</b>	<b>134</b>	-	-	-	<b>905</b>	<b>811</b>	-	<b>1990</b>
Iron and steel	-	-	-	1	-	-	-	-	-	-	1
Chemical and petrochemical	-	-	-	0	-	-	-	-	-	-	0
Non-ferrous metals	-	-	-	49	-	-	-	-	702	-	751
Non-metallic minerals	-	-	-	72	-	-	-	-	-	-	72
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	8	-	-	-	-	-	-	8
Paper pulp and printing	-	-	-	1	-	-	-	-	-	-	1
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	63	-	-	-	-	-	-	-	63
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	78	3	-	-	-	905	109	-	1094
<b>TRANSPORT</b>	-	-	<b>839</b>	<b>2</b>	-	-	-	-	-	-	<b>841</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	776	2	-	-	-	-	-	-	778
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	63	-	-	-	-	-	-	-	63
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>142</b>	<b>1</b>	-	-	-	<b>7093</b>	<b>346</b>	-	<b>7582</b>
Residential	-	-	35	1	-	-	-	7064	142	-	7242
Comm. and public services	-	-	34	0	-	-	-	29	60	-	124
Agriculture/forestry	-	-	63	-	-	-	-	-	3	-	66
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	9	-	-	-	-	-	141	-	150
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>152</b>	<b>2554</b>	-	<b>17207</b>	-	-	-	-	<b>19913</b>
Electricity plants	-	-	152	2554	-	17207	-	-	-	-	19913
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Myanmar

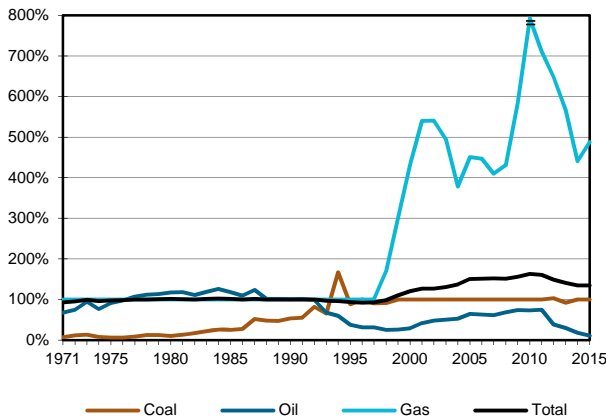
**Figure 1. Energy production**



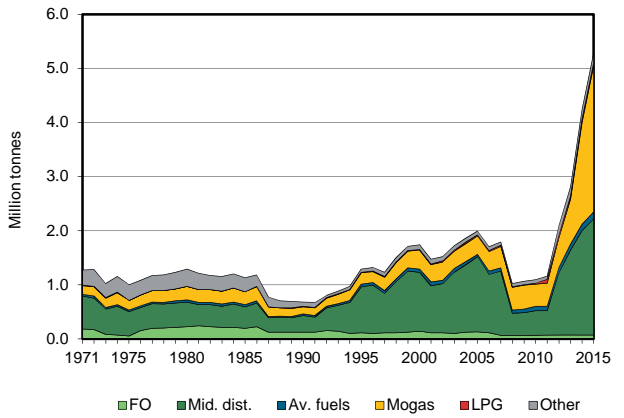
**Figure 2. Total primary energy supply<sup>2</sup>**



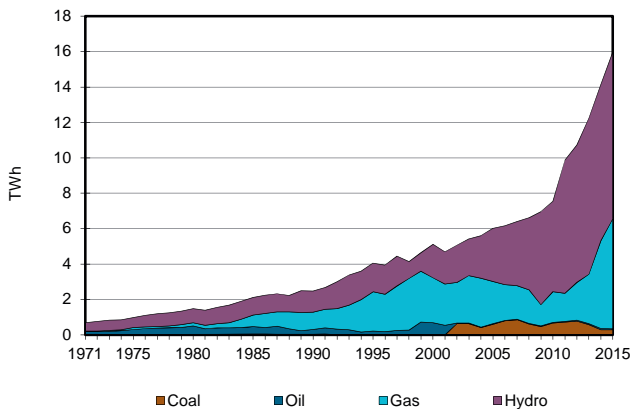
**Figure 3. Energy self-sufficiency<sup>3</sup>**



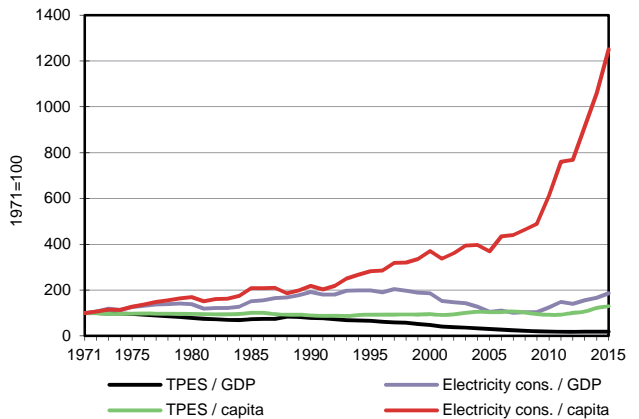
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Myanmar

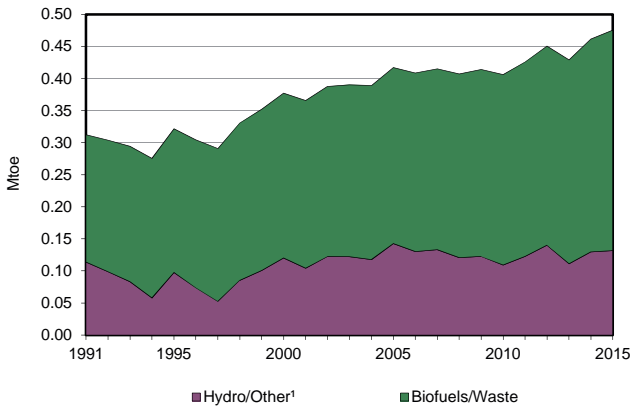
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	445	575	-	14768	-	808	-	10112	-	-	26708
Imports	-	-	4914	-	-	-	-	-	-	-	4914
Exports	-	-95	-	-11739	-	-	-	-	-	-	-11833
Intl. marine bunkers	-	-	-2	-	-	-	-	-	-	-	-2
Intl. aviation bunkers	-	-	-46	-	-	-	-	-	-	-	-46
Stock changes	-	-	89	-	-	-	-	-	-	-	89
<b>TPES</b>	<b>445</b>	<b>480</b>	<b>4955</b>	<b>3030</b>	<b>-</b>	<b>808</b>	<b>-</b>	<b>10112</b>	<b>-</b>	<b>-</b>	<b>19830</b>
Transfers	-	-12	13	-	-	-	-	-	-	-	1
Statistical differences	-	175	-88	-95	-	-	-	-	-	-	-8
Electricity plants	-70	-	-14	-1933	-	-808	-	-	1373	-	-1452
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-643	614	-	-	-	-	-	-	-	-29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-42	-	-	-42
Energy industry own use	-	-	-48	-297	-	-	-	-	-	-	-345
Losses	-	-	-	-	-	-	-	-	-221	-	-221
<b>TFC</b>	<b>375</b>	<b>-</b>	<b>5431</b>	<b>705</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10070</b>	<b>1152</b>	<b>-</b>	<b>17734</b>
<b>INDUSTRY</b>	<b>360</b>	<b>-</b>	<b>936</b>	<b>378</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>315</b>	<b>184</b>	<b>-</b>	<b>2173</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	319	-	-	-	-	-	-	-	-	-	319
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	220	-	-	-	-	-	-	-	220
Food and tobacco	-	-	214	-	-	-	-	-	-	-	214
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	131	-	-	-	-	-	-	-	131
Construction	-	-	282	-	-	-	-	-	-	-	282
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	41	-	89	378	-	-	-	315	184	-	1008
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3357</b>	<b>174</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3532</b>
Domestic aviation	-	-	94	-	-	-	-	-	-	-	94
Road	-	-	2916	174	-	-	-	-	-	-	3091
Rail	-	-	256	-	-	-	-	-	-	-	256
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	91	-	-	-	-	-	-	-	91
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>15</b>	<b>-</b>	<b>1006</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9755</b>	<b>968</b>	<b>-</b>	<b>11764</b>
Residential	-	-	1	-	-	-	-	9755	307	-	10063
Comm. and public services	-	-	1	-	-	-	-	-	126	-	127
Agriculture/forestry	-	-	176	-	-	-	-	-	-	-	176
Fishing	-	-	128	-	-	-	-	-	-	-	128
Non-specified	15	-	699	20	-	-	-	-	535	-	1270
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>132</b>	<b>133</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>265</b>
in industry/transf./energy	-	-	97	133	-	-	-	-	-	-	230
of which: chem./petrochem.	-	-	-	133	-	-	-	-	-	-	133
in transport	-	-	35	-	-	-	-	-	-	-	35
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>285</b>	<b>-</b>	<b>55</b>	<b>6231</b>	<b>-</b>	<b>9399</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15970</b>
Electricity plants	285	-	55	6231	-	9399	-	-	-	-	15970
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

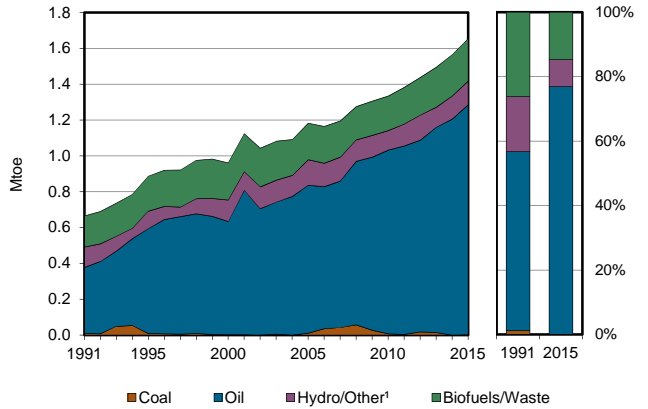


## Namibia

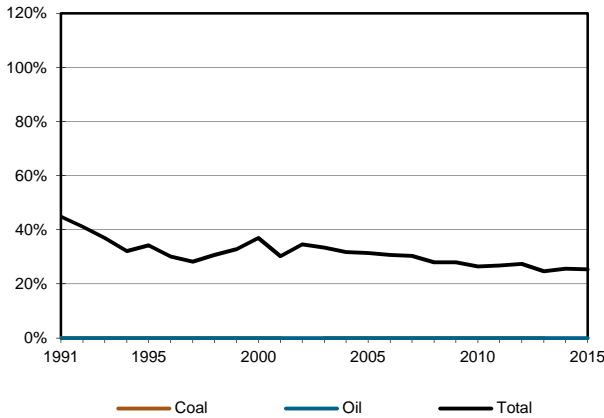
**Figure 1. Energy production**



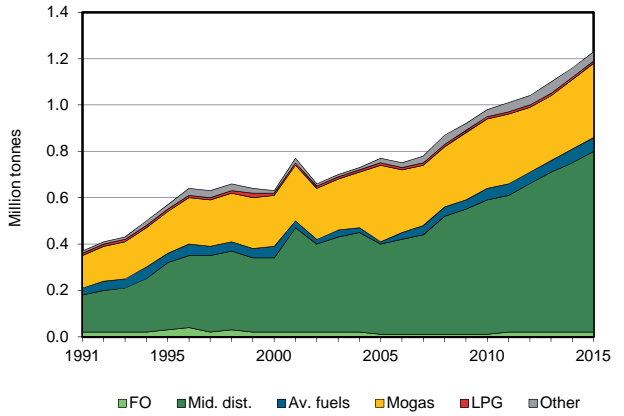
**Figure 2. Total primary energy supply²**



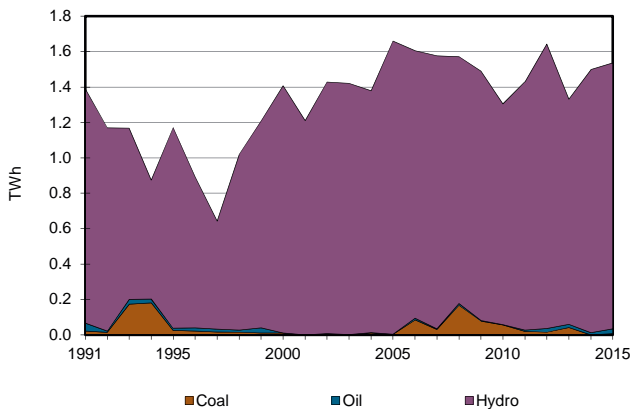
**Figure 3. Energy self-sufficiency³**



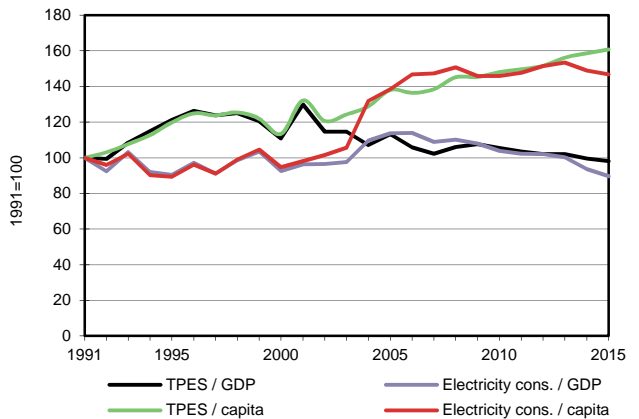
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

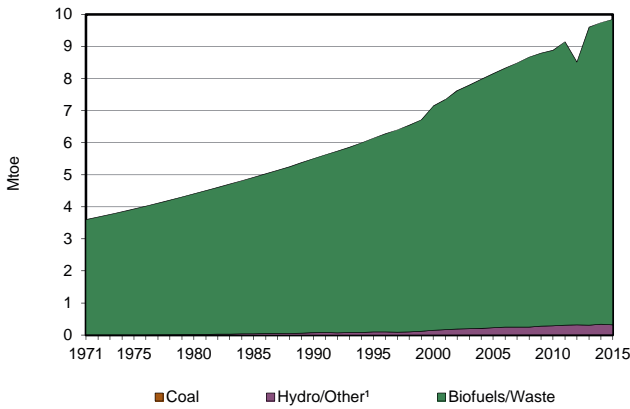
## Namibia

2015

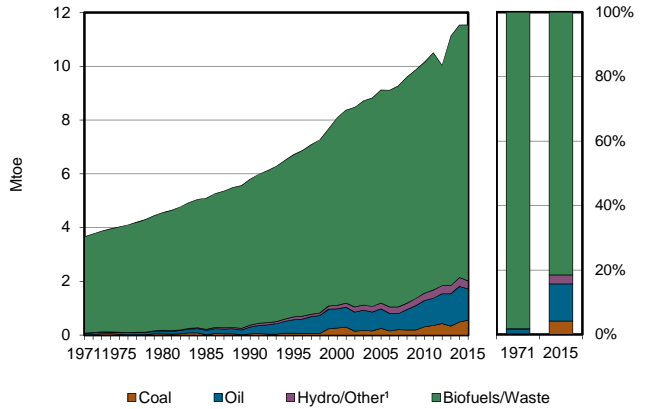
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	129	2	344	-	-	475
Imports	-	-	1340	-	-	-	-	-	226	-	1566
Exports	-	-	-4	-	-	-	-	-107	-8	-	-118
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-52	-	-	-	-	-	-	-	-52
Stock changes	2	-	-	-	-	-	-	-	-	-	2
<b>TPES</b>	<b>2</b>	<b>-</b>	<b>1284</b>	<b>-</b>	<b>-</b>	<b>129</b>	<b>2</b>	<b>237</b>	<b>218</b>	<b>-</b>	<b>1873</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-1	-	-	-	-	-	-1	-	-2
Electricity plants	-2	-	-10	-	-	-129	-	-	132	-	-9
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-107	-	-	-107
Energy industry own use	-	-	-	-	-	-	-	-	-	-	-
Losses	-	-	-	-	-	-	-	-	-24	-	-24
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>1273</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>130</b>	<b>325</b>	<b>-</b>	<b>1731</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>110</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>53</b>	<b>-</b>	<b>191</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	28	-	-	28
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	75	-	-	-	-	-	41	-	116
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	25	-	-	-	-	-	-	-	25
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	10	-	-	-	-	-	12	-	22
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>703</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>703</b>
Domestic aviation	-	-	12	-	-	-	-	-	-	-	12
Road	-	-	665	-	-	-	-	-	-	-	665
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	26	-	-	-	-	-	-	-	26
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>432</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>102</b>	<b>273</b>	<b>-</b>	<b>809</b>
Residential	-	-	2	-	-	-	-	102	-	-	104
Comm. and public services	-	-	2	-	-	-	-	-	-	-	2
Agriculture/forestry	-	-	354	-	-	-	-	-	-	-	354
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	74	-	-	-	2	-	273	-	349
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>
in industry/transf./energy	-	-	19	-	-	-	-	-	-	-	19
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	6	-	-	-	-	-	-	-	6
in other	-	-	3	-	-	-	-	-	-	-	3
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>7</b>	<b>-</b>	<b>27</b>	<b>-</b>	<b>-</b>	<b>1502</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1536</b>
Electricity plants	7	-	27	-	-	1502	-	-	-	-	1536
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Nepal

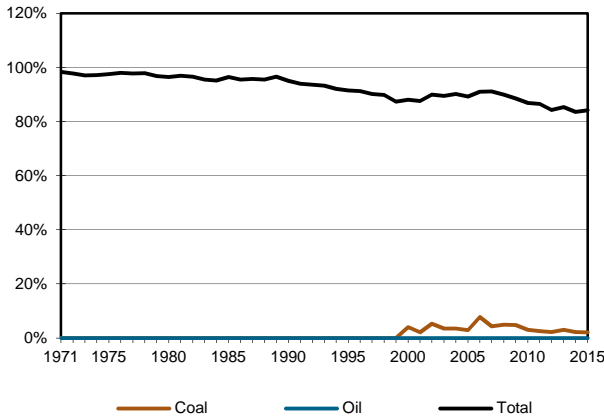
**Figure 1. Energy production**



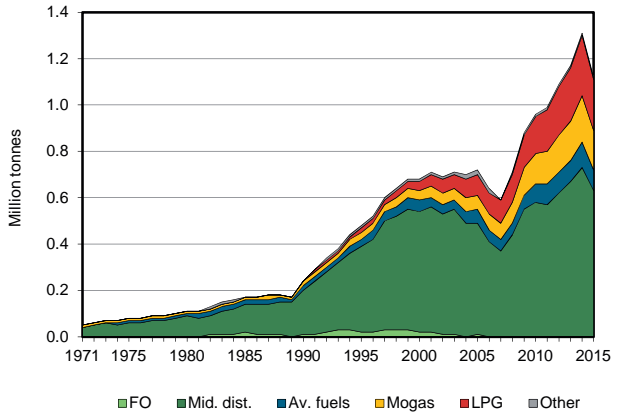
**Figure 2. Total primary energy supply<sup>2</sup>**



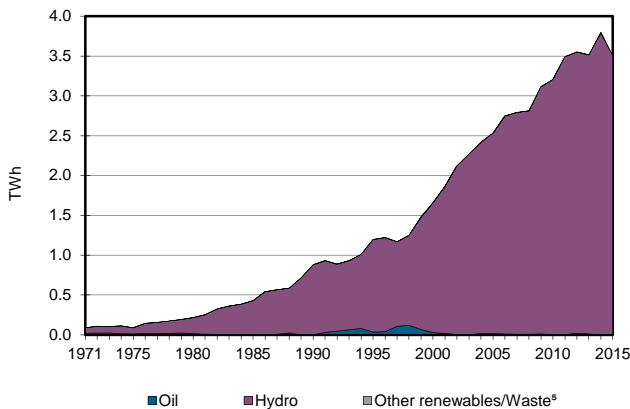
**Figure 3. Energy self-sufficiency<sup>3</sup>**



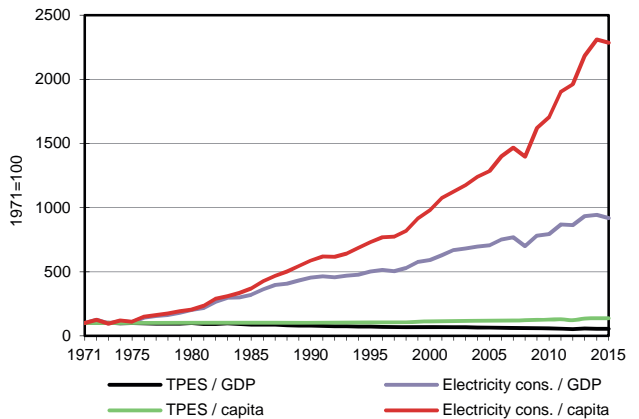
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Nepal

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	11	-	-	-	-	301	1	9528	-	-	9840
Imports	546	-	1257	-	-	-	-	-	151	-	1955
Exports	-	-	-	-	-	-	-	-	-0	-	-0
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-104	-	-	-	-	-	-	-	-104
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>557</b>	<b>-</b>	<b>1154</b>	<b>-</b>	<b>-</b>	<b>301</b>	<b>1</b>	<b>9528</b>	<b>151</b>	<b>-</b>	<b>11691</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	0	-1	-	-1
Electricity plants	-	-	-	-	-	-301	-1	-	301	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-15	-	-	-15
Energy industry own use	-	-	-	-	-	-	-	-	-3	-	-3
Losses	-	-	-	-	-	-	-	-	-113	-	-113
<b>TFC</b>	<b>557</b>	<b>-</b>	<b>1154</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9513</b>	<b>335</b>	<b>-</b>	<b>11560</b>
<b>INDUSTRY</b>	<b>555</b>	<b>-</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>61</b>	<b>104</b>	<b>-</b>	<b>731</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	555	-	11	-	-	-	-	61	104	-	731
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>745</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>746</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	745	-	-	-	-	-	-	-	745
Rail	-	-	-	-	-	-	-	-	1	-	1
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>2</b>	<b>-</b>	<b>389</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9453</b>	<b>230</b>	<b>-</b>	<b>10074</b>
Residential	2	-	151	-	-	-	-	9394	169	-	9716
Comm. and public services	-	-	113	-	-	-	-	59	44	-	215
Agriculture/forestry	-	-	125	-	-	-	-	-	9	-	134
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	9	-	9
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>
in industry/transf./energy	-	-	9	-	-	-	-	-	-	-	9
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3496</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3503</b>
Electricity plants	-	-	-	-	-	3496	7	-	-	-	3503
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Nicaragua

Figure 1. Energy production

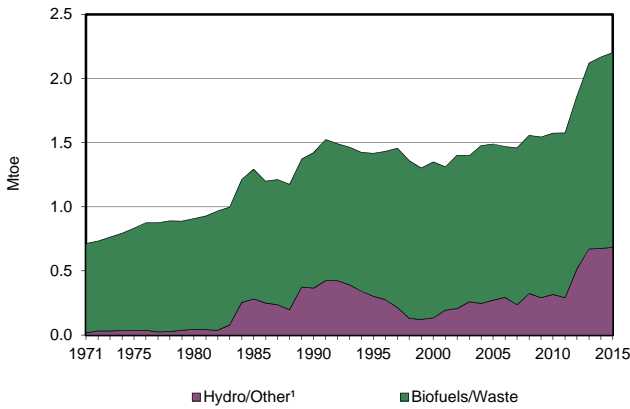


Figure 2. Total primary energy supply²

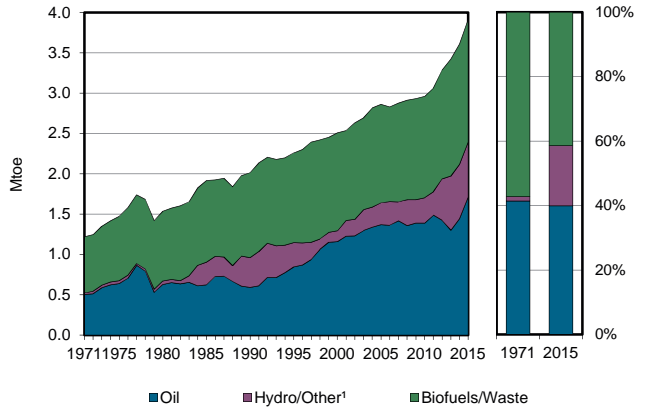


Figure 3. Energy self-sufficiency³

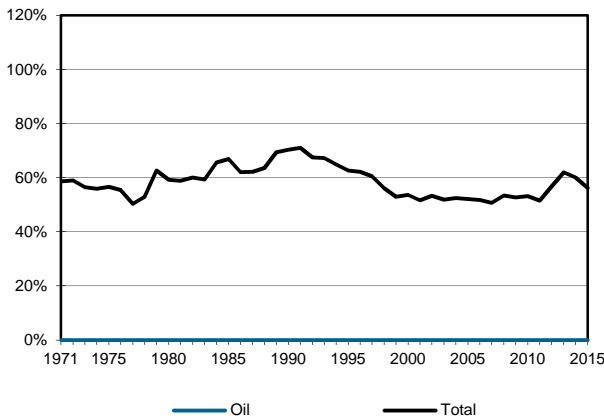


Figure 4. Oil products demand⁴

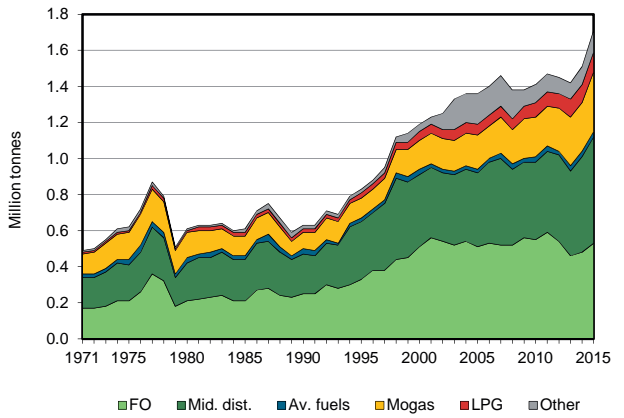


Figure 5. Electricity generation by source

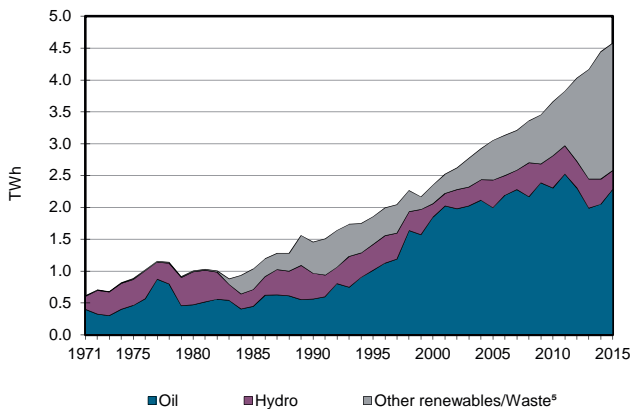
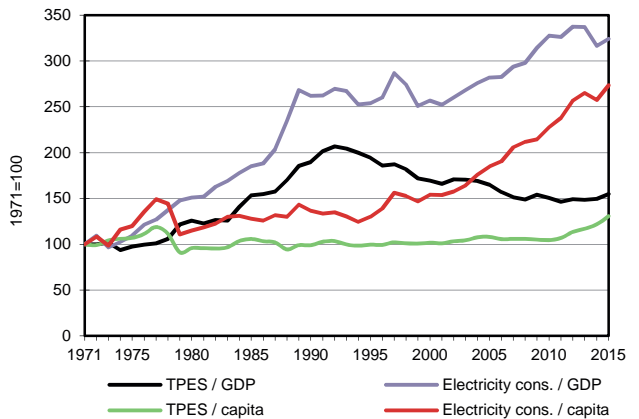


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Nicaragua

2015

Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	25	657	1520	-	-	2202
Imports	-	790	955	-	-	-	-	-	3	-	1748
Exports	-	-	-21	-	-	-	-	-	-2	-	-22
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-26	-	-	-	-	-	-	-	-26
Stock changes	-	-54	65	-	-	-	-	-	-	-	11
<b>TPES</b>	-	<b>736</b>	<b>974</b>	-	-	<b>25</b>	<b>657</b>	<b>1520</b>	<b>1</b>	-	<b>3913</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-24	19	-	-	-	-	0	1	-	-5
Electricity plants	-	-	-507	-	-	-25	-657	-472	394	-	-1268
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-712	712	-	-	-	-	-	-	-	0
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	2	-	-	2
Energy industry own use	-	-	-19	-	-	-	-	-	-31	-	-51
Losses	-	-	-	-	-	-	-	-	-72	-	-72
<b>TFC</b>	-	-	<b>1178</b>	-	-	-	-	<b>1049</b>	<b>292</b>	-	<b>2519</b>
<b>INDUSTRY</b>	-	-	<b>189</b>	-	-	-	-	<b>66</b>	<b>97</b>	-	<b>352</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	5	-	-	-	-	-	-	-	5
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	9	-	-	-	-	-	8	-	17
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	175	-	-	-	-	66	89	-	330
<b>TRANSPORT</b>	-	-	<b>736</b>	-	-	-	-	-	-	-	<b>736</b>
Domestic aviation	-	-	7	-	-	-	-	-	-	-	7
Road	-	-	665	-	-	-	-	-	-	-	665
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	63	-	-	-	-	-	-	-	63
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>214</b>	-	-	-	-	<b>983</b>	<b>195</b>	-	<b>1391</b>
Residential	-	-	53	-	-	-	-	904	94	-	1050
Comm. and public services	-	-	146	-	-	-	-	41	91	-	278
Agriculture/forestry	-	-	15	-	-	-	-	38	10	-	62
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>40</b>	-	-	-	-	-	-	-	<b>40</b>
in industry/transf./energy	-	-	40	-	-	-	-	-	-	-	40
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>2287</b>	-	-	<b>295</b>	<b>1543</b>	<b>454</b>	-	-	<b>4579</b>
Electricity plants	-	-	2287	-	-	295	1543	454	-	-	4579
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Niger

Figure 1. Energy production

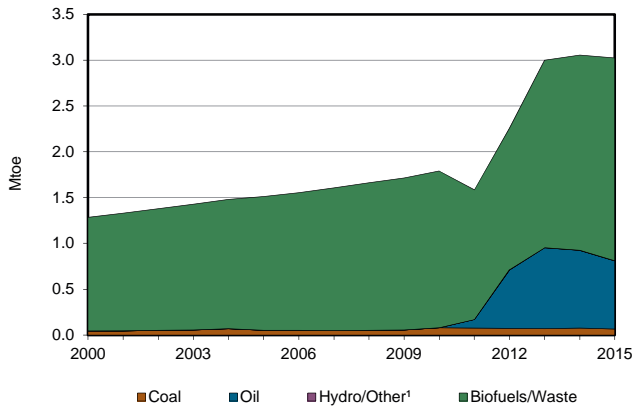


Figure 2. Total primary energy supply<sup>2</sup>

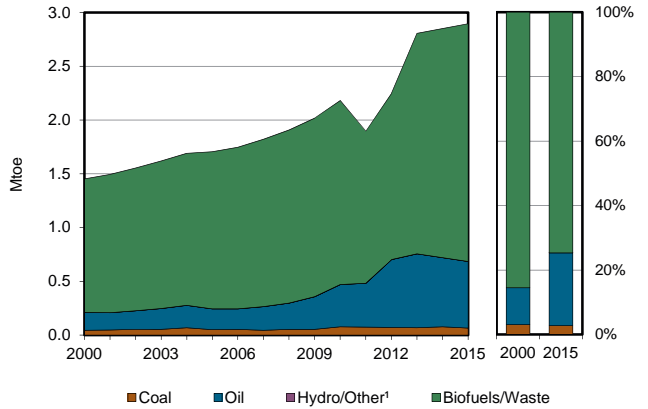


Figure 3. Energy self-sufficiency<sup>3</sup>

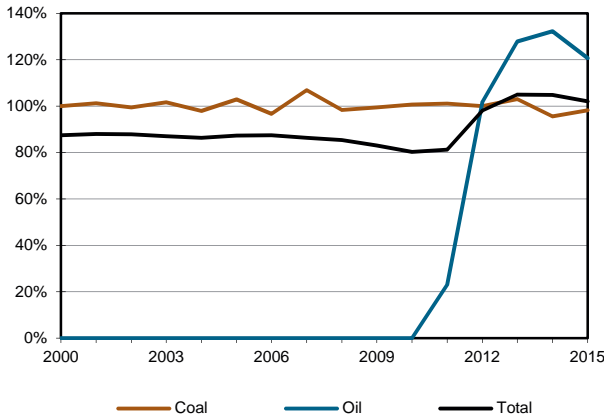


Figure 4. Oil products demand<sup>4</sup>

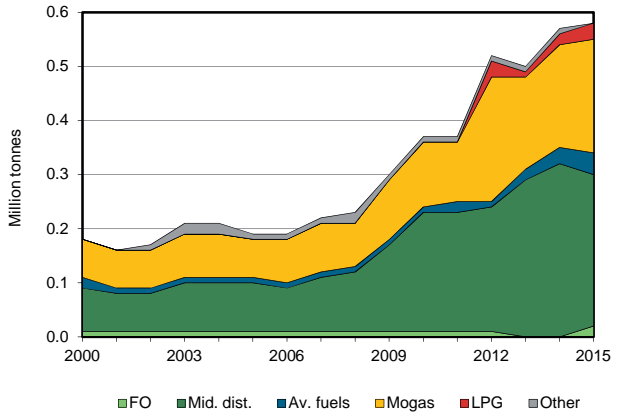


Figure 5. Electricity generation by source

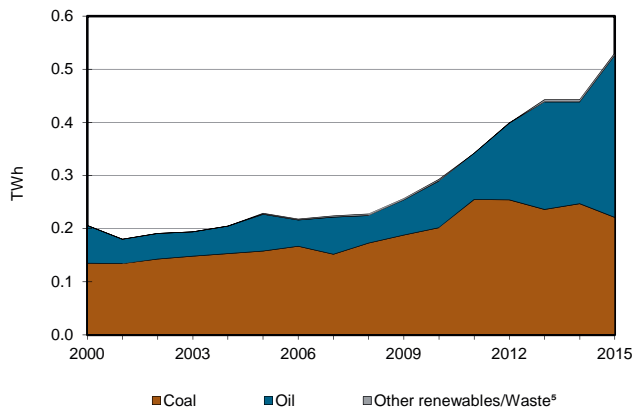
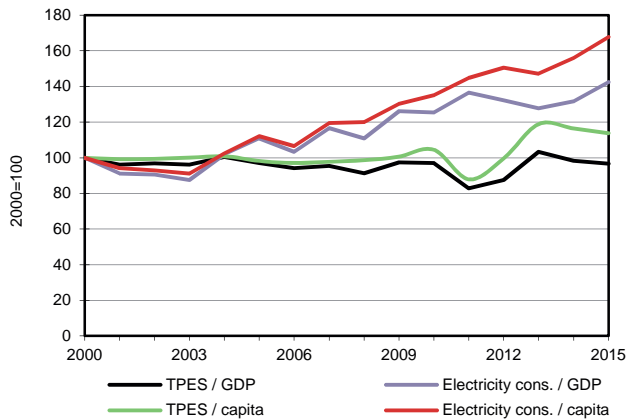


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Niger

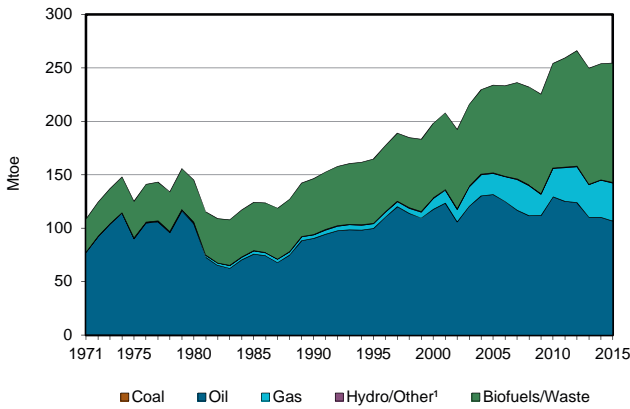
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	64	746	-	-	-	-	0	2213	-	-	3024
Imports	-	-	182	-	-	-	-	-	67	-	250
Exports	-	-	-259	-	-	-	-	-	-	-	-259
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-44	-	-	-	-	-	-	-	-44
Stock changes	1	1	-8	-	-	-	-	-	-	-	-6
<b>TPES</b>	<b>65</b>	<b>747</b>	<b>-129</b>	-	-	-	<b>0</b>	<b>2213</b>	<b>67</b>	-	<b>2964</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0	-	9	-	-	-	-	-	-1	-	8
Electricity plants	-63	-	-85	-	-	-	-0	-	46	-	-102
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	0	-	-	-	-	-	-	-	-	-	0
Oil refineries	-	-747	698	-	-	-	-	-	-	-	-50
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-68	-	-	-68
Energy industry own use	-	-	-	-	-	-	-	-	-10	-	-10
Losses	-3	-	-	-	-	-	-	-	-18	-	-21
<b>TFC</b>	-	-	<b>493</b>	-	-	-	-	<b>2145</b>	<b>84</b>	-	<b>2722</b>
<b>INDUSTRY</b>	-	-	<b>65</b>	-	-	-	-	-	<b>24</b>	-	<b>89</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	65	-	-	-	-	-	24	-	89
<b>TRANSPORT</b>	-	-	<b>402</b>	-	-	-	-	-	-	-	<b>402</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	402	-	-	-	-	-	-	-	402
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>23</b>	-	-	-	-	<b>2145</b>	<b>60</b>	-	<b>2228</b>
Residential	-	-	23	-	-	-	-	2145	50	-	2218
Comm. and public services	-	-	-	-	-	-	-	-	10	-	10
Agriculture/forestry	-	-	-	-	-	-	-	-	1	-	1
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>4</b>	-	-	-	-	-	-	-	<b>4</b>
in industry/transf./energy	-	-	4	-	-	-	-	-	-	-	4
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>221</b>	-	<b>306</b>	-	-	-	<b>4</b>	-	-	-	<b>531</b>
Electricity plants	221	-	306	-	-	-	4	-	-	-	531
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

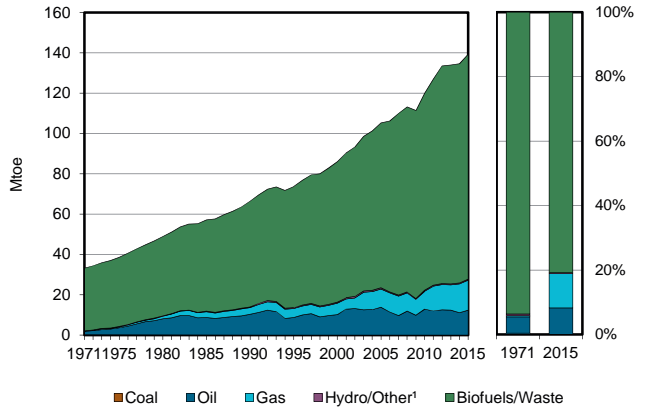


## Nigeria

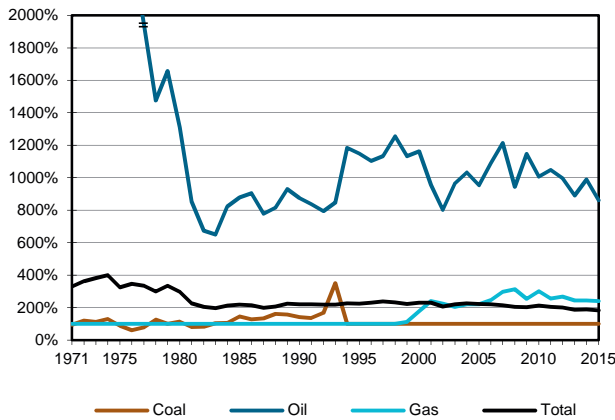
**Figure 1. Energy production**



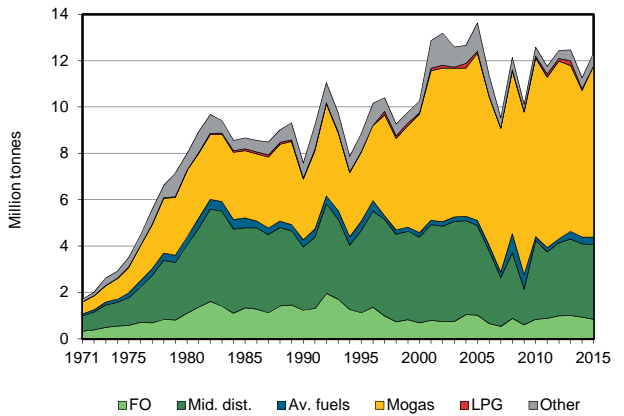
**Figure 2. Total primary energy supply<sup>2</sup>**



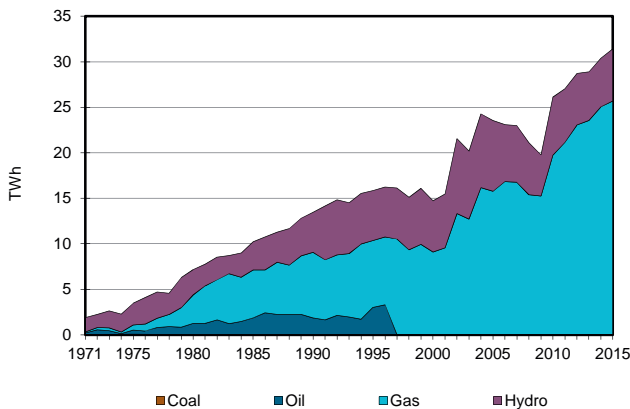
**Figure 3. Energy self-sufficiency<sup>3</sup>**



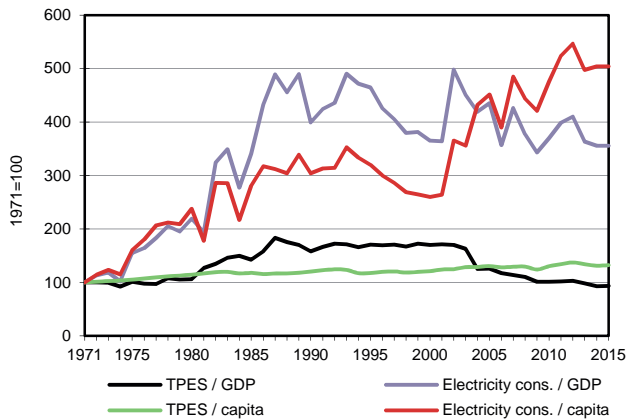
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 2000%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

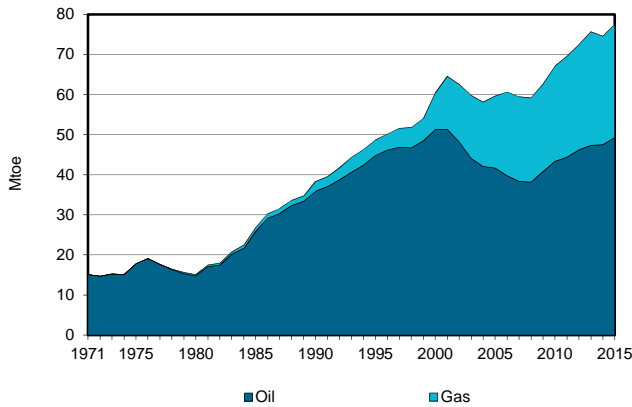
## Nigeria

2015

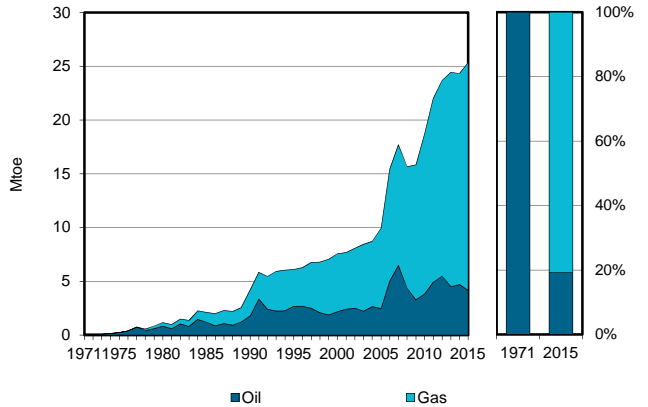
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	29	106493	-	35676	-	492	-	111566	-	-	254256
Imports	-	-	10431	-	-	-	-	-	-	-	10431
Exports	-	-106252	-120	-20775	-	-	-	-	-	-	-127146
Intl. marine bunkers	-	-	-369	-	-	-	-	-	-	-	-369
Intl. aviation bunkers	-	-	-361	-	-	-	-	-	-	-	-361
Stock changes	-	1614	947	-	-	-	-	-	-	-	2561
<b>TPES</b>	<b>29</b>	<b>1855</b>	<b>10529</b>	<b>14901</b>	<b>-</b>	<b>492</b>	<b>-</b>	<b>111566</b>	<b>-</b>	<b>-</b>	<b>139373</b>
Transfers	-	399	-356	-	-	-	-	-	-	-	43
Statistical differences	-	-	-1	-871	-	-	-	-	-	-	-872
Electricity plants	-	-	-	-5525	-	-492	-	-	2703	-	-3314
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1762	1627	-	-	-	-	-	-	-	-135
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-8759	-	-	-8759
Energy industry own use	-	-	-165	-4565	-	-	-	-	-93	-	-4823
Losses	-	-492	-41	-	-	-	-	-	-452	-	-986
<b>TFC</b>	<b>29</b>	<b>-</b>	<b>11593</b>	<b>3940</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>102807</b>	<b>2158</b>	<b>-</b>	<b>120527</b>
<b>INDUSTRY</b>	<b>29</b>	<b>-</b>	<b>434</b>	<b>2558</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4153</b>	<b>358</b>	<b>-</b>	<b>7532</b>
Iron and steel	-	-	-	267	-	-	-	-	-	-	267
Chemical and petrochemical	-	-	-	441	-	-	-	-	-	-	441
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	29	-	-	-	-	-	-	-	-	-	29
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	434	1850	-	-	-	4153	358	-	6795
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>8428</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8428</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	8424	-	-	-	-	-	-	-	8424
Rail	-	-	2	-	-	-	-	-	-	-	2
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	2	-	-	-	-	-	-	-	2
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>2705</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>98655</b>	<b>1799</b>	<b>-</b>	<b>103159</b>
Residential	-	-	541	-	-	-	-	95884	1236	-	97661
Comm. and public services	-	-	1	-	-	-	-	2771	563	-	3335
Agriculture/forestry	-	-	4	-	-	-	-	-	-	-	4
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2159	-	-	-	-	-	-	-	2159
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>1382</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1407</b>
in industry/transf./energy	-	-	25	1382	-	-	-	-	-	-	1407
of which: chem./petrochem.	-	-	-	1382	-	-	-	-	-	-	1382
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25708</b>	<b>-</b>	<b>5718</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31426</b>
Electricity plants	-	-	-	25708	-	5718	-	-	-	-	31426
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Oman

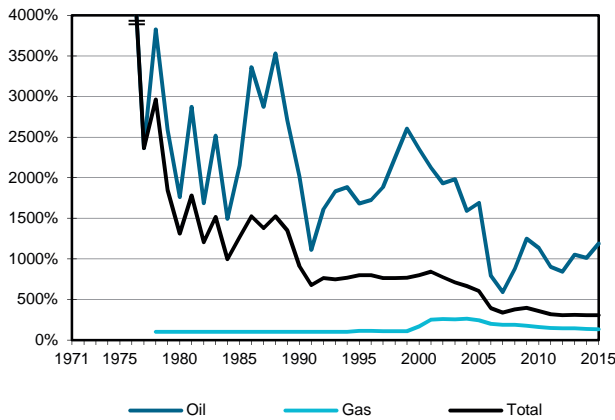
**Figure 1. Energy production**



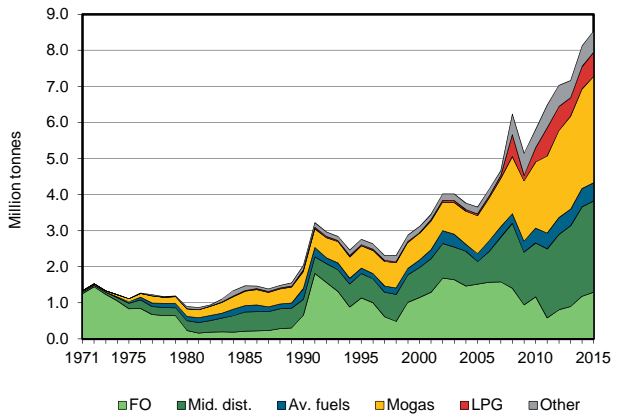
**Figure 2. Total primary energy supply<sup>1</sup>**



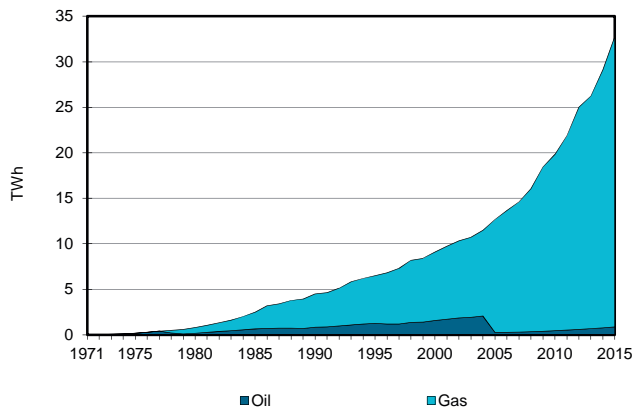
**Figure 3. Energy self-sufficiency<sup>2</sup>**



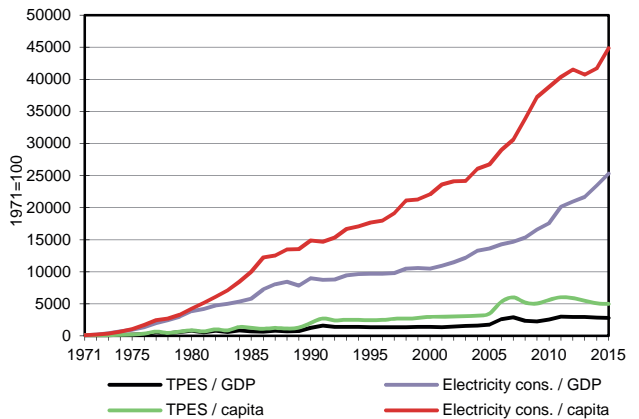
**Figure 4. Oil products demand<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>4</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 4000%.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

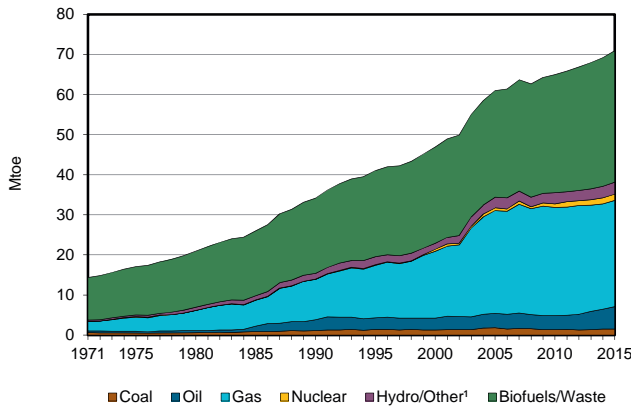
## Oman

2015

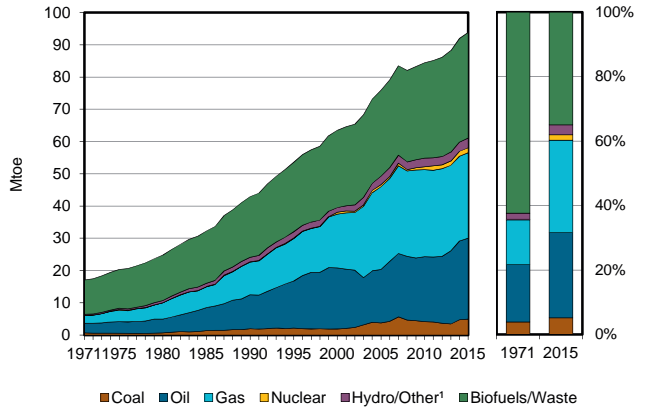
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	49274	-	28270	-	-	-	-	-	-	77544
Imports	-	259	42	1770	-	-	-	-	-	-	2071
Exports	-	-42183	-1507	-8809	-	-	-	-	-	-	-52498
Intl. marine bunkers	-	-	-1239	-	-	-	-	-	-	-	-1239
Intl. aviation bunkers	-	-	-538	-	-	-	-	-	-	-	-538
Stock changes	-	-	40	-	-	-	-	-	-	-	40
<b>TPES</b>	-	<b>7350</b>	<b>-3202</b>	<b>21231</b>	-	-	-	-	-	-	<b>25380</b>
Transfers	-	1071	-910	-	-	-	-	-	-	-	162
Statistical differences	-	2671	28	-197	-	-	-	-	-	-	2502
Electricity plants	-	-	-209	-6824	-	-	-	-	2817	-	-4216
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-11092	11236	-	-	-	-	-	-	-	144
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-264	-2951	-	-	-	-	-58	-	-3273
Losses	-	-	-	-	-	-	-	-	-273	-	-273
<b>TFC</b>	-	-	<b>6680</b>	<b>11260</b>	-	-	-	-	<b>2486</b>	-	<b>20426</b>
<b>INDUSTRY</b>	-	-	<b>431</b>	<b>9606</b>	-	-	-	-	<b>406</b>	-	<b>10444</b>
Iron and steel	-	-	-	628	-	-	-	-	-	-	628
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	287	-	-	-	-	-	-	287
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	64	-	-	-	-	-	-	64
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	431	8628	-	-	-	-	406	-	9465
<b>TRANSPORT</b>	-	-	<b>4439</b>	-	-	-	-	-	-	-	<b>4439</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	4439	-	-	-	-	-	-	-	4439
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>878</b>	<b>161</b>	-	-	-	-	<b>2080</b>	-	<b>3120</b>
Residential	-	-	186	-	-	-	-	-	1183	-	1370
Comm. and public services	-	-	-	-	-	-	-	-	864	-	864
Agriculture/forestry	-	-	-	-	-	-	-	-	33	-	33
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	692	161	-	-	-	-	-	-	853
<b>NON-ENERGY USE</b>	-	-	<b>931</b>	<b>1493</b>	-	-	-	-	-	-	<b>2424</b>
in industry/transf./energy	-	-	931	1493	-	-	-	-	-	-	2424
of which: chem./petrochem.	-	-	826	1493	-	-	-	-	-	-	2319
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>863</b>	<b>31895</b>	-	-	-	-	-	-	<b>32758</b>
Electricity plants	-	-	863	31895	-	-	-	-	-	-	32758
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Pakistan

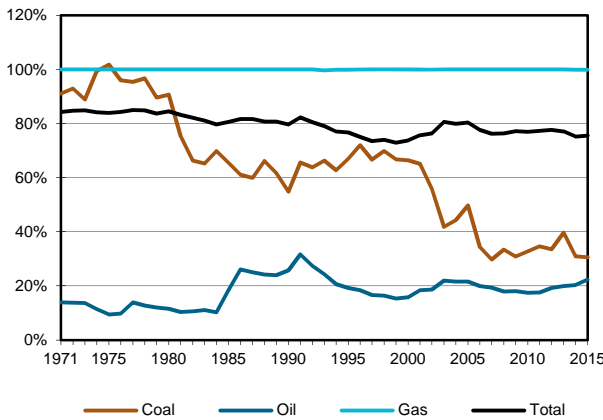
**Figure 1. Energy production**



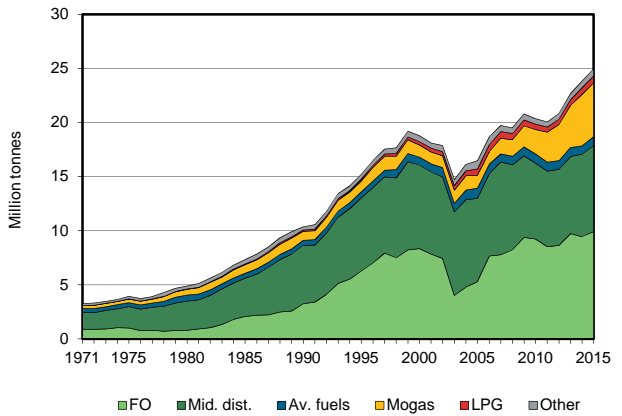
**Figure 2. Total primary energy supply²**



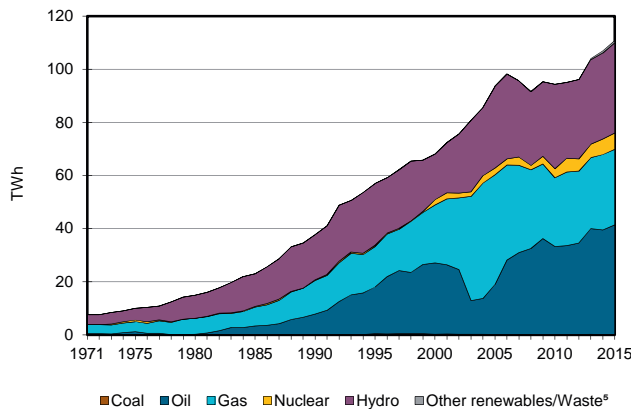
**Figure 3. Energy self-sufficiency³**



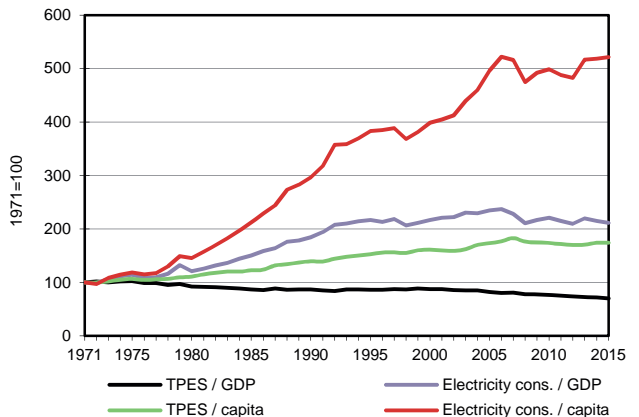
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

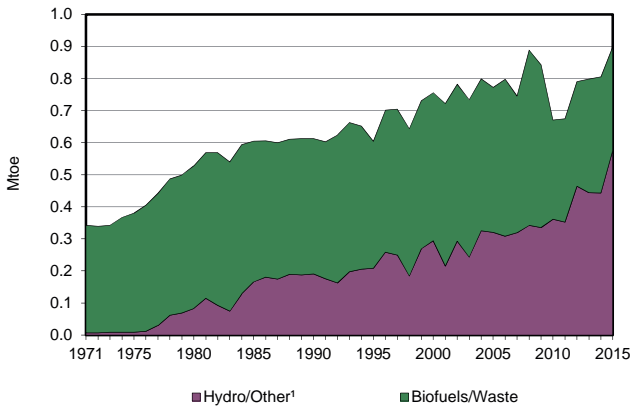
## Pakistan

2015

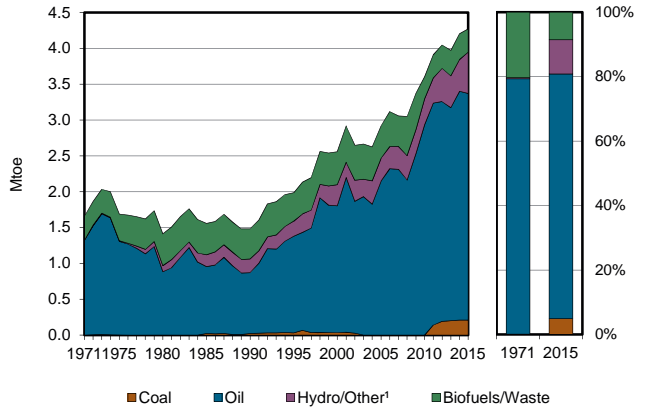
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1526	5582	-	26452	1584	2924	72	32795	-	-	70935
Imports	3459	8720	13364	-	-	-	-	-	39	-	25581
Exports	-	-642	-1213	-	-	-	-	-	-	-	-1855
Intl. marine bunkers	-	-	-67	-	-	-	-	-	-	-	-67
Intl. aviation bunkers	-	-	-712	-	-	-	-	-	-	-	-712
Stock changes	-	-	1	27	-	-	-	-	-	-	28
<b>TPES</b>	<b>4984</b>	<b>13660</b>	<b>11372</b>	<b>26479</b>	<b>1584</b>	<b>2924</b>	<b>72</b>	<b>32795</b>	<b>39</b>	<b>-</b>	<b>93910</b>
Transfers	-	-321	340	-	-	-	-	-	-	-	19
Statistical differences	-17	8	-3	-28	-	-	-	-	66	-	26
Electricity plants	-92	-	-9216	-6543	-1584	-2924	-72	-	9534	-	-10898
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-91	-	-	-	-	-	-	-	-	-	-91
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-75	-	-	-	-	-	-	-	-	-	-75
Oil refineries	-	-13347	13090	-	-	-	-	-	-	-	-257
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-654	-	-	-654
Energy industry own use	-	-	-413	-137	-	-	-	-	-355	-	-905
Losses	-	-	-	-1764	-	-	-	-	-1641	-	-3406
<b>TFC</b>	<b>4709</b>	<b>-</b>	<b>15170</b>	<b>18006</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>32141</b>	<b>7643</b>	<b>-</b>	<b>77669</b>
<b>INDUSTRY</b>	<b>4709</b>	<b>-</b>	<b>1371</b>	<b>6563</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3567</b>	<b>2249</b>	<b>-</b>	<b>18460</b>
Iron and steel	99	-	-	170	-	-	-	-	-	-	269
Chemical and petrochemical	-	-	496	1017	-	-	-	-	-	-	1513
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	4611	-	529	19	-	-	-	-	-	-	5158
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	346	5357	-	-	-	3567	2249	-	11520
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>12365</b>	<b>1487</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13852</b>
Domestic aviation	-	-	123	-	-	-	-	-	-	-	123
Road	-	-	11975	1487	-	-	-	-	-	-	13463
Rail	-	-	266	-	-	-	-	-	-	-	266
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1040</b>	<b>7004</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28574</b>	<b>5393</b>	<b>-</b>	<b>42011</b>
Residential	-	-	414	6217	-	-	-	28574	3647	-	38853
Comm. and public services	-	-	541	787	-	-	-	-	1023	-	2351
Agriculture/forestry	-	-	41	-	-	-	-	-	723	-	764
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	43	-	-	-	-	-	-	-	43
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>393</b>	<b>2951</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3345</b>
in industry/transf./energy	-	-	393	2951	-	-	-	-	-	-	3345
of which: chem./petrochem.	-	-	-	2951	-	-	-	-	-	-	2951
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>152</b>	<b>-</b>	<b>41268</b>	<b>28519</b>	<b>6078</b>	<b>34004</b>	<b>840</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>110861</b>
Electricity plants	152	-	41268	28519	6078	34004	840	-	-	-	110861
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Panama

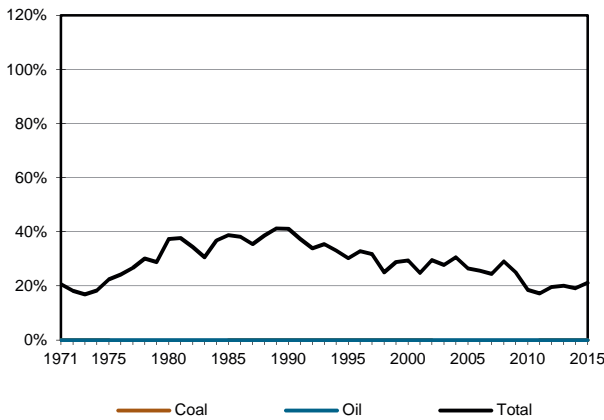
**Figure 1. Energy production**



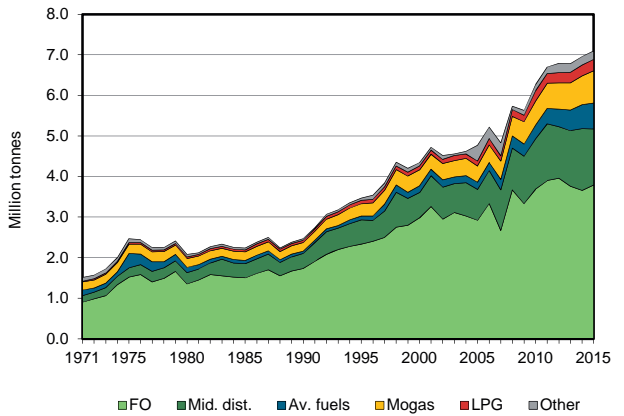
**Figure 2. Total primary energy supply<sup>2</sup>**



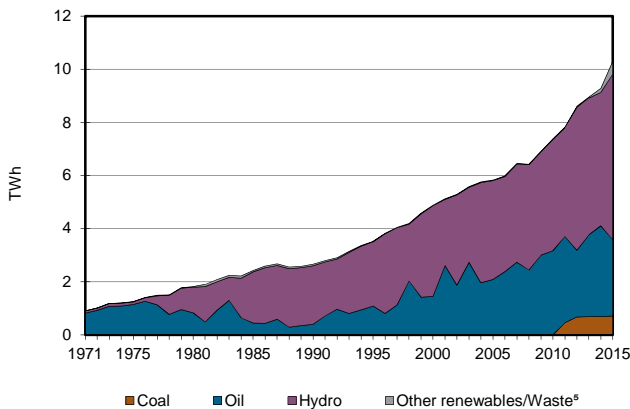
**Figure 3. Energy self-sufficiency<sup>3</sup>**



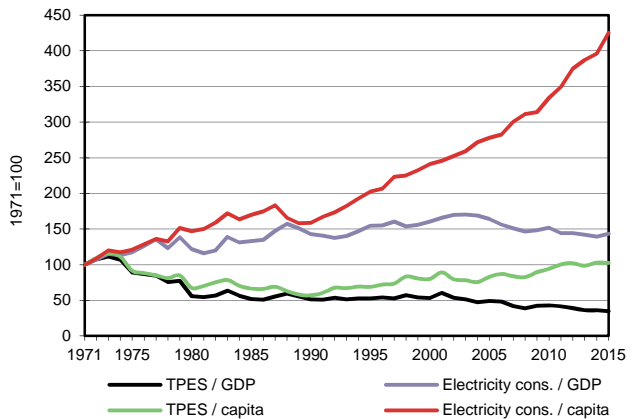
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Panama

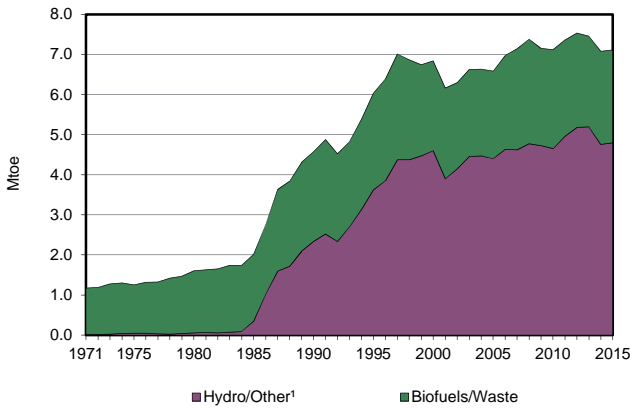
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	538	37	323	-	-	899
Imports	209	-	6387	-	-	-	-	-	1	-	6598
Exports	-	-	-3	-	-	-	-	-	-12	-	-15
Intl. marine bunkers	-	-	-3150	-	-	-	-	-	-	-	-3150
Intl. aviation bunkers	-	-	-683	-	-	-	-	-	-	-	-683
Stock changes	-	-	611	-	-	-	-	-	-	-	611
<b>TPES</b>	<b>209</b>	<b>-</b>	<b>3163</b>	<b>-</b>	<b>-</b>	<b>538</b>	<b>37</b>	<b>323</b>	<b>-10</b>	<b>-</b>	<b>4260</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	95	-	-	-	-	0	-3	-	92
Electricity plants	-209	-	-742	-	-	-538	-37	-68	885	-	-709
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1	-	-	-1
Energy industry own use	-	-	-	-	-	-	-	-	-17	-	-17
Losses	-	-	-	-	-	-	-	-	-120	-	-120
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>2516</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>254</b>	<b>734</b>	<b>-</b>	<b>3504</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>737</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>85</b>	<b>70</b>	<b>-</b>	<b>891</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	737	-	-	-	-	85	70	-	891
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1447</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1447</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1445	-	-	-	-	-	-	-	1445
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2	-	-	-	-	-	-	-	2
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>283</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>169</b>	<b>665</b>	<b>-</b>	<b>1117</b>
Residential	-	-	211	-	-	-	-	168	233	-	613
Comm. and public services	-	-	50	-	-	-	-	1	430	-	482
Agriculture/forestry	-	-	22	-	-	-	-	-	-	-	22
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	1	-	1
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49</b>
in industry/transf./energy	-	-	49	-	-	-	-	-	-	-	49
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>712</b>	<b>-</b>	<b>2858</b>	<b>-</b>	<b>-</b>	<b>6257</b>	<b>435</b>	<b>34</b>	<b>-</b>	<b>-</b>	<b>10296</b>
Electricity plants	712	-	2858	-	-	6257	435	34	-	-	10296
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

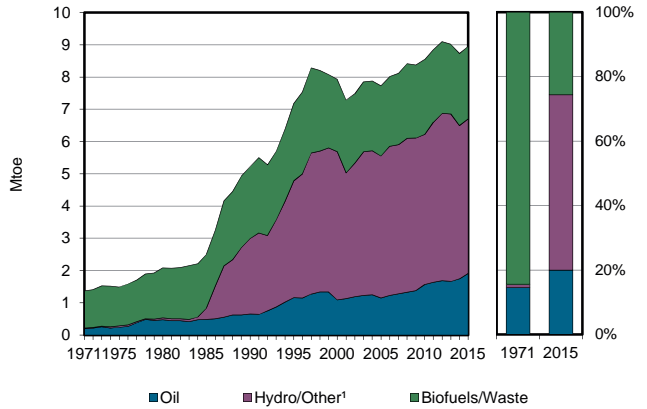


## Paraguay

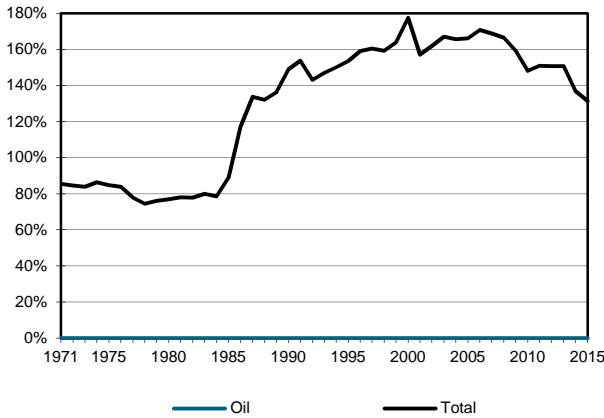
**Figure 1. Energy production**



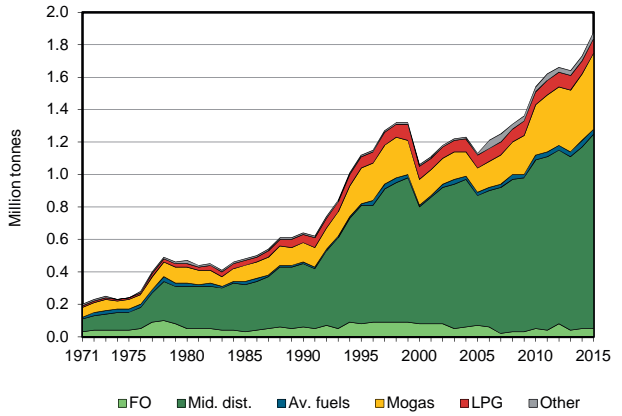
**Figure 2. Total primary energy supply²**



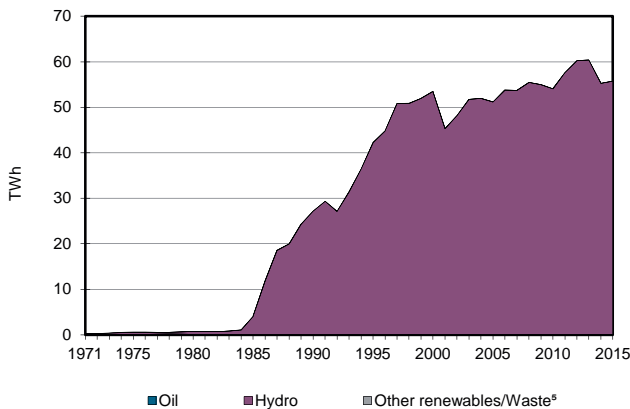
**Figure 3. Energy self-sufficiency³**



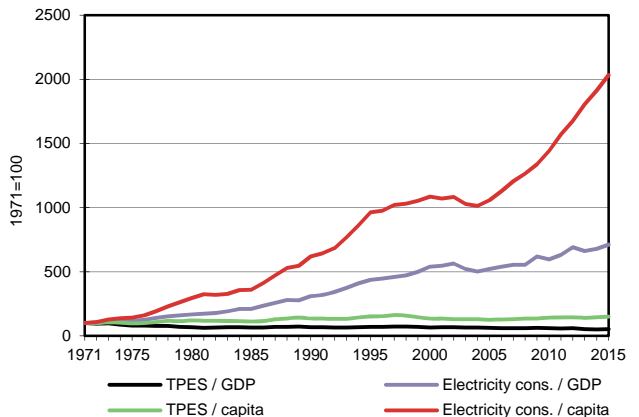
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Paraguay

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	4794	-	2318	-	-	7112
Imports	-	-	1948	-	-	-	-	-	-	-	1948
Exports	-	-	-	-	-	-	-	-70	-3537	-	-3607
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-32	-	-	-	-	-	-	-	-32
Stock changes	-	-	-6	-	-	-	-	-	-	-	-6
<b>TPES</b>	-	-	<b>1910</b>	-	-	<b>4794</b>	-	<b>2248</b>	<b>-3537</b>	-	<b>5415</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	1	-	-	-	-	0	0	-	1
Electricity plants	-	-	-1	-	-	-4794	-	-	4794	-	-1
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-139	-	-	-139
Energy industry own use	-	-	-	-	-	-	-	-	-39	-	-39
Losses	-	-	-	-	-	-	-	-	-309	-	-309
<b>TFC</b>	-	-	<b>1910</b>	-	-	-	-	<b>2108</b>	<b>910</b>	-	<b>4928</b>
<b>INDUSTRY</b>	-	-	<b>47</b>	-	-	-	-	<b>1103</b>	<b>182</b>	-	<b>1332</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	47	-	-	-	-	1103	182	-	1332
<b>TRANSPORT</b>	-	-	<b>1747</b>	-	-	-	-	<b>124</b>	-	-	<b>1870</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1736	-	-	-	-	124	-	-	1859
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	11	-	-	-	-	-	-	-	11
<b>OTHER</b>	-	-	<b>81</b>	-	-	-	-	<b>882</b>	<b>728</b>	-	<b>1691</b>
Residential	-	-	81	-	-	-	-	878	391	-	1350
Comm. and public services	-	-	-	-	-	-	-	4	337	-	340
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>35</b>	-	-	-	-	-	-	-	<b>35</b>
in industry/transf./energy	-	-	9	-	-	-	-	-	-	-	9
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	27	-	-	-	-	-	-	-	27
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1</b>	-	-	<b>55743</b>	-	-	-	-	<b>55744</b>
Electricity plants	-	-	1	-	-	55743	-	-	-	-	55744
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

Peru

Figure 1. Energy production

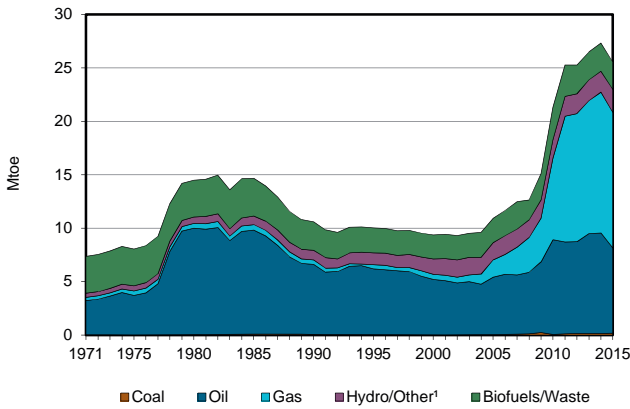


Figure 2. Total primary energy supply²

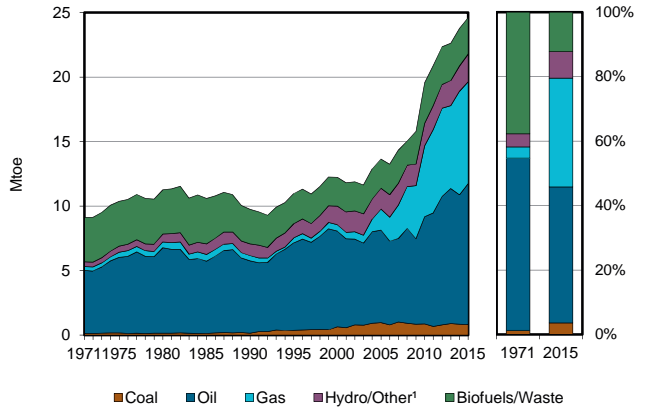


Figure 3. Energy self-sufficiency³

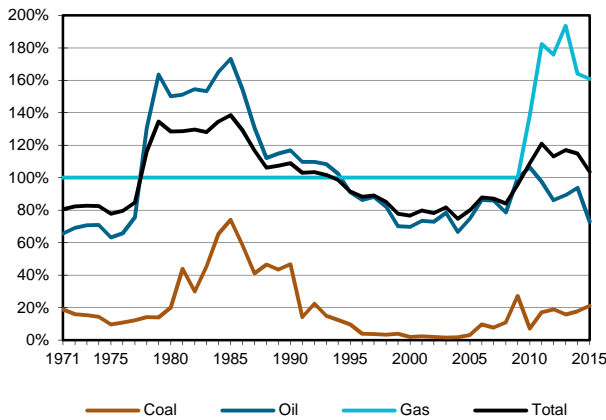


Figure 4. Oil products demand⁴

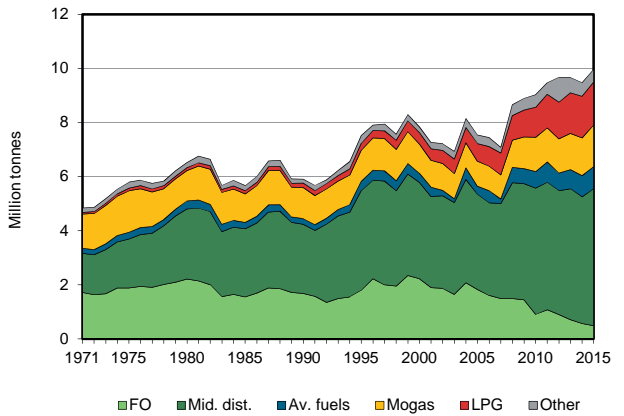


Figure 5. Electricity generation by source

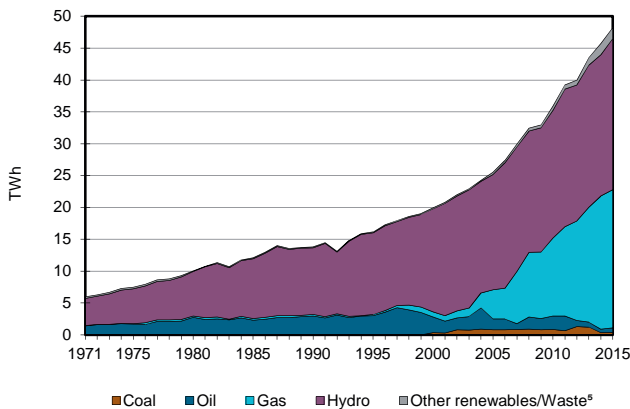
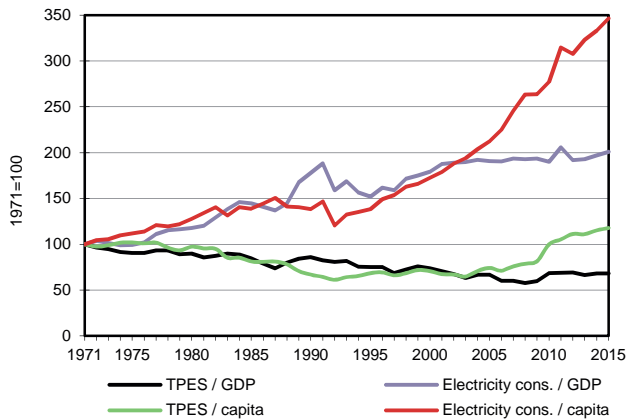


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

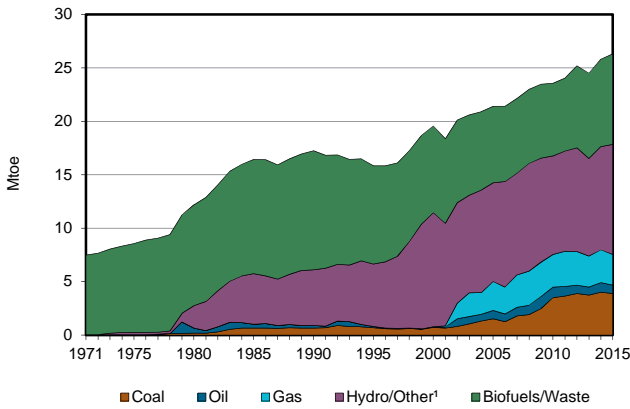
## Peru

2015

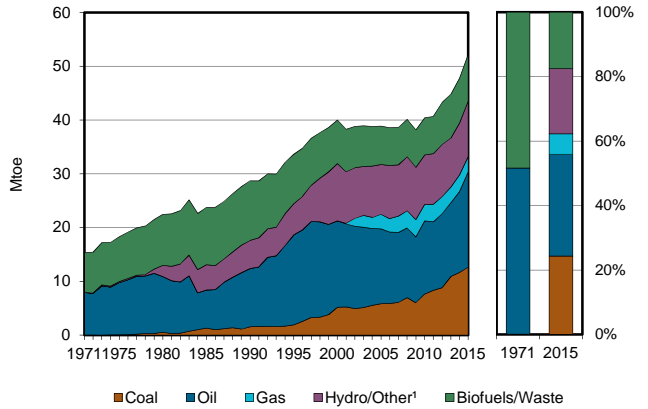
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	170	7963	-	12684	-	2039	97	2554	-	-	25507
Imports	307	4333	3267	-	-	-	-	300	-	-	8207
Exports	-177	-402	-2976	-4798	-	-	-	-	-5	-	-8358
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-870	-	-	-	-	-	-	-	-870
Stock changes	510	308	-681	-	-	-	-	-9	-	-	128
<b>TPES</b>	<b>810</b>	<b>12202</b>	<b>-1261</b>	<b>7886</b>	<b>-</b>	<b>2039</b>	<b>97</b>	<b>2845</b>	<b>-5</b>	<b>-</b>	<b>24613</b>
Transfers	-	-3231	3428	-	-	-	-	-	-	-	196
Statistical differences	82	16	-970	-246	-	-	-	78	0	-	-1039
Electricity plants	-165	-	-293	-4355	-	-2039	-71	-309	4150	-	-3083
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-8987	8418	-	-	-	-	-	-	-	-569
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-59	-	-	-59
Energy industry own use	-	-	-244	-1363	-	-	-	-	-49	-	-1655
Losses	-	-	-	-	-	-	-	-	-458	-	-458
<b>TFC</b>	<b>726</b>	<b>-</b>	<b>9079</b>	<b>1922</b>	<b>-</b>	<b>-</b>	<b>26</b>	<b>2555</b>	<b>3639</b>	<b>-</b>	<b>17947</b>
<b>INDUSTRY</b>	<b>723</b>	<b>-</b>	<b>1180</b>	<b>1072</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>29</b>	<b>2015</b>	<b>-</b>	<b>5020</b>
Iron and steel	124	-	373	55	-	-	-	8	962	-	1522
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	32	-	-	-	0	-	-	-	32
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	600	-	775	1017	-	-	0	21	1054	-	3466
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>6389</b>	<b>638</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>347</b>	<b>4</b>	<b>-</b>	<b>7378</b>
Domestic aviation	-	-	1	-	-	-	-	-	-	-	1
Road	-	-	6246	638	-	-	-	347	-	-	7231
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	142	-	-	-	-	-	-	-	142
Non-specified	-	-	-	-	-	-	-	-	4	-	4
<b>OTHER</b>	<b>3</b>	<b>-</b>	<b>1205</b>	<b>211</b>	<b>-</b>	<b>-</b>	<b>26</b>	<b>2180</b>	<b>1619</b>	<b>-</b>	<b>5244</b>
Residential	-	-	829	60	-	-	16	2027	791	-	3723
Comm. and public services	1	-	231	110	-	-	10	19	722	-	1094
Agriculture/forestry	1	-	26	-	-	-	0	129	80	-	236
Fishing	-	-	119	42	-	-	-	4	26	-	191
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>305</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>305</b>
in industry/transf./energy	-	-	305	-	-	-	-	-	-	-	305
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>405</b>	<b>-</b>	<b>677</b>	<b>21726</b>	<b>-</b>	<b>23711</b>	<b>825</b>	<b>907</b>	<b>-</b>	<b>-</b>	<b>48251</b>
Electricity plants	405	-	677	21726	-	23711	825	907	-	-	48251
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Philippines

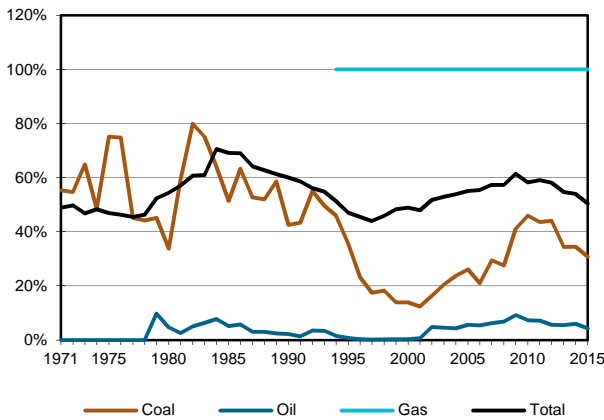
**Figure 1. Energy production**



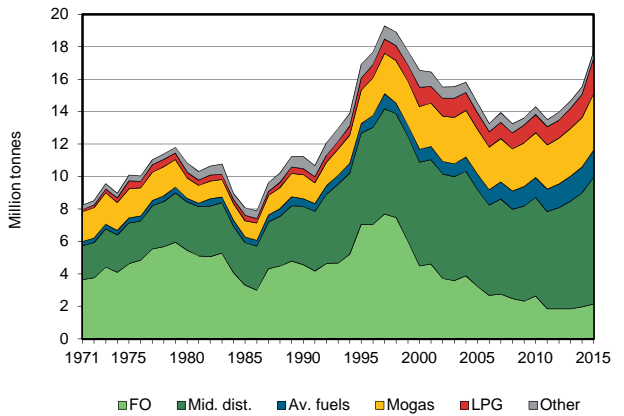
**Figure 2. Total primary energy supply²**



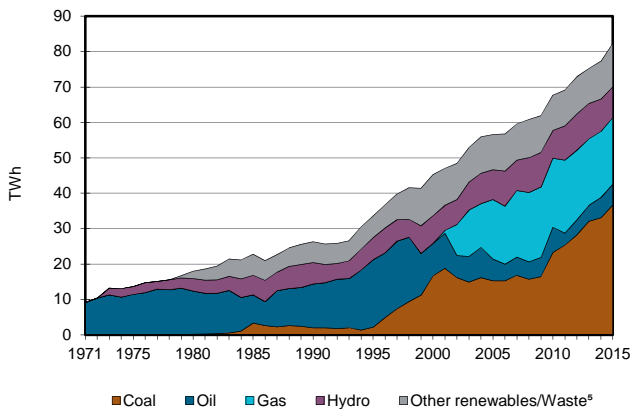
**Figure 3. Energy self-sufficiency³**



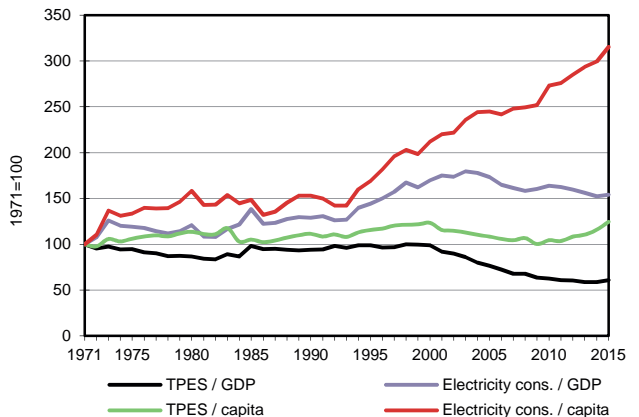
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

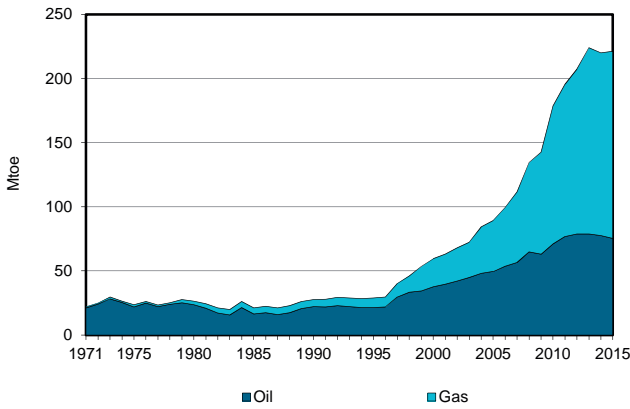
## Philippines

2015

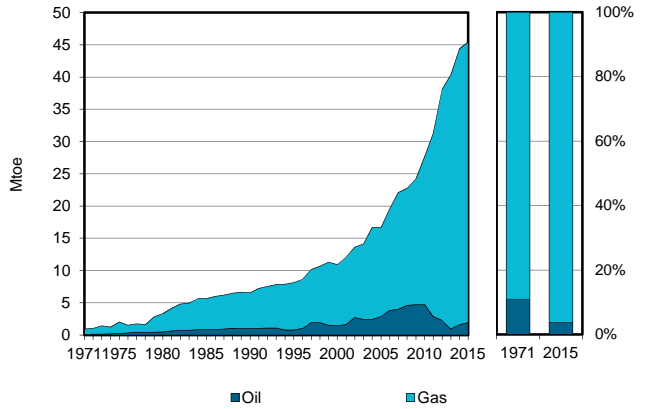
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	3894	761	-	2875	-	745	9571	8463	-	-	26309
Imports	10141	10471	9901	-	-	-	-	174	-	-	30687
Exports	-1639	-765	-1327	-	-	-	-	-	-	-	-3730
Intl. marine bunkers	-	-	-27	-	-	-	-	-	-	-	-27
Intl. aviation bunkers	-	-	-1216	-	-	-	-	-	-	-	-1216
Stock changes	240	-36	-84	-	-	-	-	4	-	-	125
<b>TPES</b>	<b>12637</b>	<b>10431</b>	<b>7248</b>	<b>2875</b>	-	<b>745</b>	<b>9571</b>	<b>8641</b>	-	-	<b>52147</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-258	-19	-455	-	-	-	-	1	-	-	-732
Electricity plants	-9988	-	-1413	-2716	-	-745	-9571	-145	7088	-	-17491
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-101	-	-	-	-	-	-	-	-	-	-101
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-10181	9812	-	-	-	-	-	-	-	-368
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-2140	-	-	-2140
Energy industry own use	-	-232	-118	-108	-	-	-	-	-613	-	-1071
Losses	-	-	-	-	-	-	-	-	-643	-	-643
<b>TFC</b>	<b>2289</b>	-	<b>15074</b>	<b>50</b>	-	-	-	<b>6356</b>	<b>5831</b>	-	<b>29601</b>
<b>INDUSTRY</b>	<b>2289</b>	-	<b>1384</b>	<b>50</b>	-	-	-	<b>1774</b>	<b>1936</b>	-	<b>7433</b>
Iron and steel	285	-	112	-	-	-	-	-	395	-	791
Chemical and petrochemical	11	-	198	-	-	-	-	1	118	-	327
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	1771	-	201	-	-	-	-	1	147	-	2120
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	149	-	-	-	-	1	484	-	634
Mining and quarrying	-	-	298	-	-	-	-	5	60	-	363
Food and tobacco	122	-	237	-	-	-	-	1751	354	-	2464
Paper pulp and printing	74	-	6	-	-	-	-	-	108	-	189
Wood and wood products	-	-	15	-	-	-	-	-	46	-	61
Construction	-	-	134	-	-	-	-	2	18	-	154
Textile and leather	9	-	15	-	-	-	-	-	150	-	174
Non-specified	17	-	19	50	-	-	-	14	56	-	155
<b>TRANSPORT</b>	-	-	<b>10185</b>	-	-	-	-	<b>397</b>	<b>8</b>	-	<b>10591</b>
Domestic aviation	-	-	446	-	-	-	-	-	-	-	446
Road	-	-	8725	-	-	-	-	388	-	-	9112
Rail	-	-	2	-	-	-	-	-	8	-	10
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1012	-	-	-	-	9	-	-	1022
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>2457</b>	-	-	-	-	<b>4186</b>	<b>3887</b>	-	<b>10530</b>
Residential	-	-	972	-	-	-	-	3831	1956	-	6760
Comm. and public services	-	-	1291	-	-	-	-	351	1727	-	3369
Agriculture/forestry	-	-	34	-	-	-	-	1	179	-	214
Fishing	-	-	159	-	-	-	-	3	24	-	186
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>1048</b>	-	-	-	-	-	-	-	<b>1048</b>
in industry/transf./energy	-	-	1048	-	-	-	-	-	-	-	1048
of which: chem./petrochem.	-	-	984	-	-	-	-	-	-	-	984
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>36686</b>	-	<b>5886</b>	<b>18878</b>	-	<b>8665</b>	<b>11931</b>	<b>367</b>	-	-	<b>82413</b>
Electricity plants	36686	-	5886	18878	-	8665	11931	367	-	-	82413
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

**Qatar**

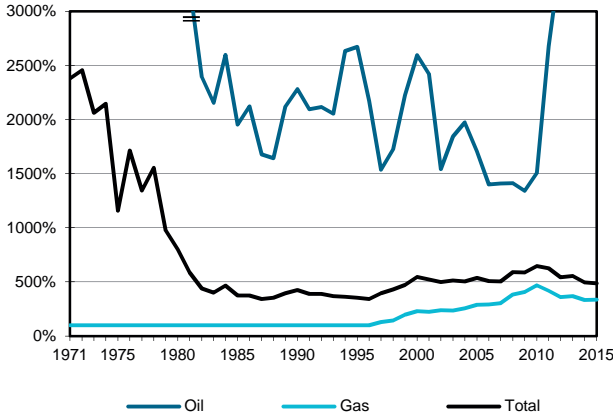
**Figure 1. Energy production**



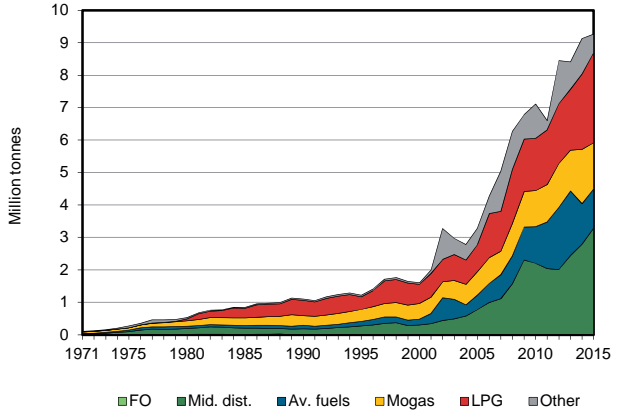
**Figure 2. Total primary energy supply<sup>1</sup>**



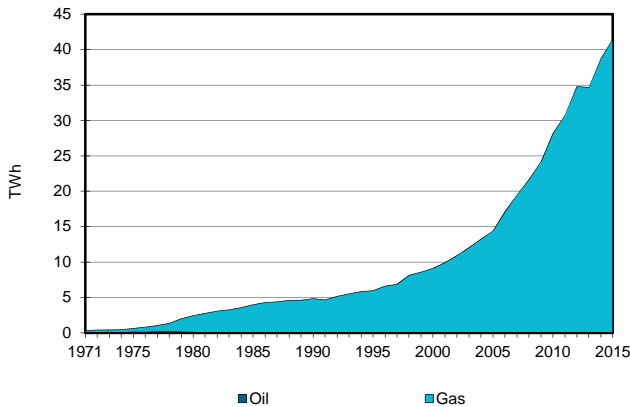
**Figure 3. Energy self-sufficiency<sup>2</sup>**



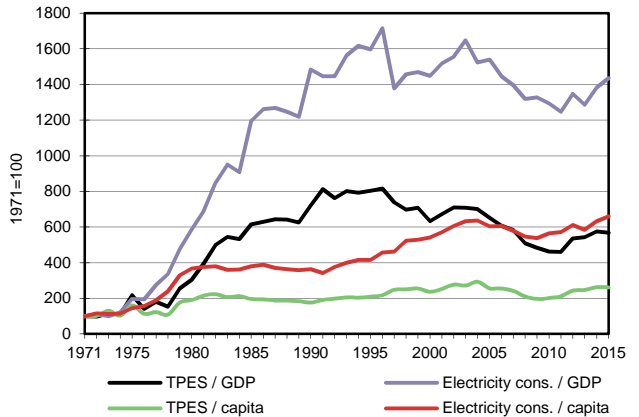
**Figure 4. Oil products demand<sup>3</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>4</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 3000%.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

## Qatar

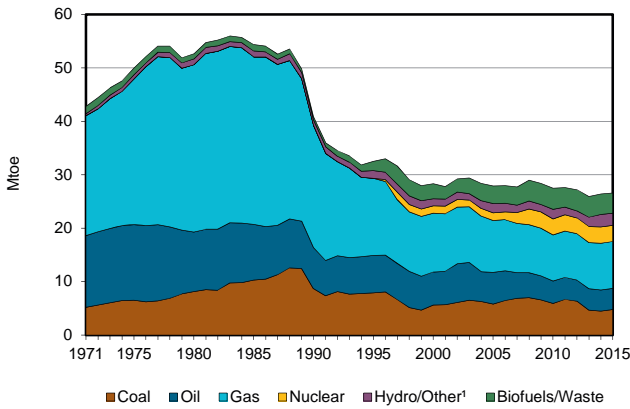
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	75354	-	145955	-	-	-	-	-	-	221309
Imports	-	-	623	-	-	-	-	-	-	-	623
Exports	-	-50302	-19812	-102436	-	-	-	-	-	-	-172551
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-1288	-	-	-	-	-	-	-	-1288
Stock changes	-	-	-2648	-	-	-	-	-	-	-	-2648
<b>TPES</b>	-	<b>25051</b>	<b>-23125</b>	<b>43519</b>	-	-	-	-	-	-	<b>45445</b>
Transfers	-	-18201	19252	-	-	-	-	-	-	-	1051
Statistical differences	-	-	-	-	-	-	-	-	0	-	0
Electricity plants	-	-	-	-8592	-	-	-	-	3569	-	-5023
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-12638	12587	-	-	-	-	-	-	-	-51
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	5788	-	-14038	-	-	-	-	-	-	-8250
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-140	-12993	-	-	-	-	-228	-	-13361
Losses	-	-	-	-	-	-	-	-	-213	-	-213
<b>TFC</b>	-	-	<b>8574</b>	<b>7896</b>	-	-	-	-	<b>3129</b>	-	<b>19599</b>
<b>INDUSTRY</b>	-	-	<b>484</b>	<b>5143</b>	-	-	-	-	<b>1022</b>	-	<b>6649</b>
Iron and steel	-	-	-	524	-	-	-	-	-	-	524
Chemical and petrochemical	-	-	-	3992	-	-	-	-	-	-	3992
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	627	-	-	-	-	-	-	627
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	484	-	-	-	-	-	1022	-	1507
<b>TRANSPORT</b>	-	-	<b>4927</b>	-	-	-	-	-	-	-	<b>4927</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	4927	-	-	-	-	-	-	-	4927
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>131</b>	-	-	-	-	-	<b>2106</b>	-	<b>2237</b>
Residential	-	-	131	-	-	-	-	-	1302	-	1433
Comm. and public services	-	-	-	-	-	-	-	-	539	-	539
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	266	-	266
<b>NON-ENERGY USE</b>	-	-	<b>3031</b>	<b>2754</b>	-	-	-	-	-	-	<b>5785</b>
in industry/transf./energy	-	-	3031	2754	-	-	-	-	-	-	5785
of which: chem./petrochem.	-	-	3031	2754	-	-	-	-	-	-	5785
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	-	<b>41499</b>	-	-	-	-	-	-	<b>41499</b>
Electricity plants	-	-	-	41499	-	-	-	-	-	-	41499
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

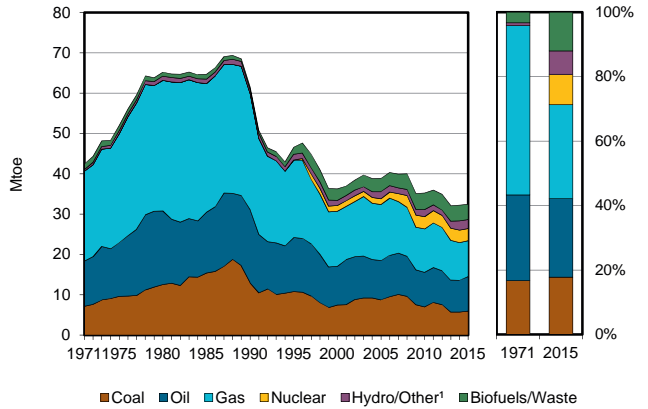


## Romania

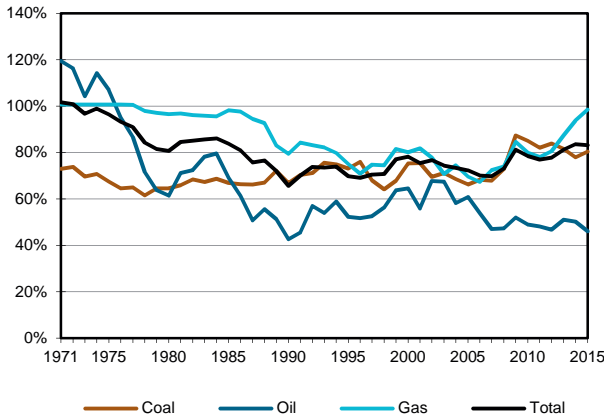
**Figure 1. Energy production**



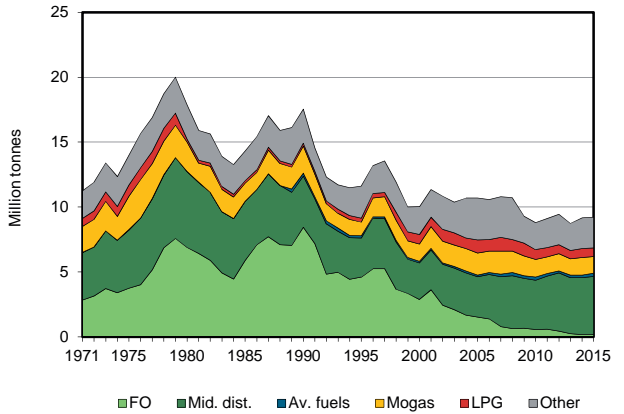
**Figure 2. Total primary energy supply²**



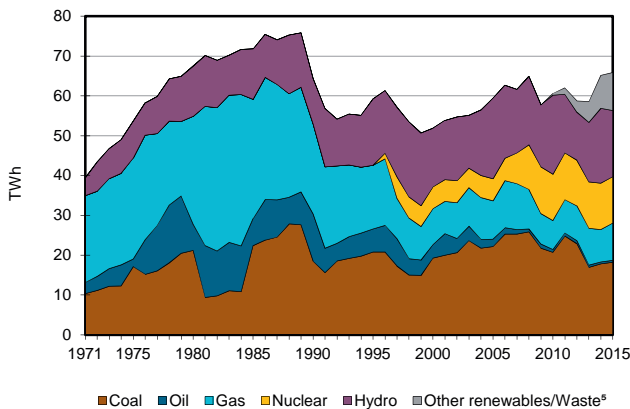
**Figure 3. Energy self-sufficiency³**



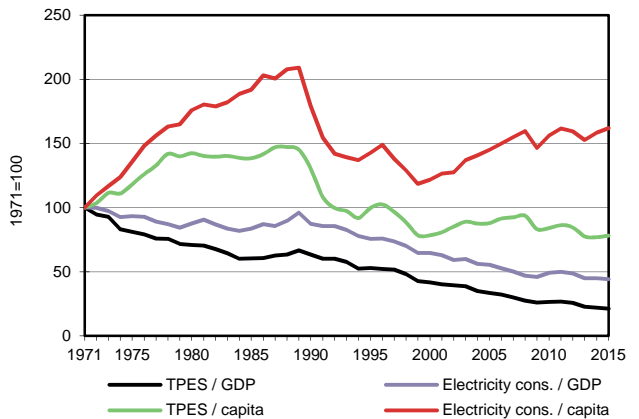
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Romania

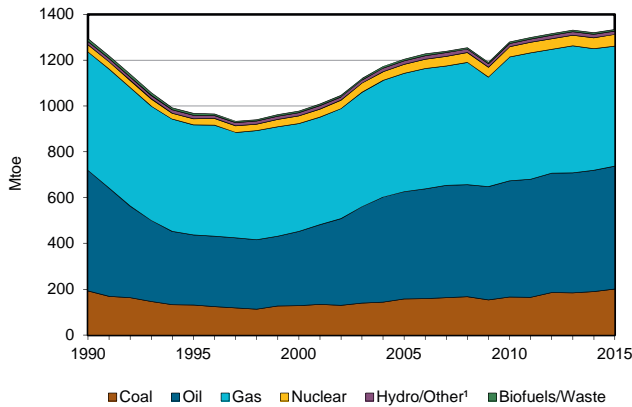
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	4786	3929	-	8783	3033	1430	807	3770	-	-	26539
Imports	1055	7274	2420	161	-	-	-	191	386	-	11488
Exports	-67	-93	-4768	-1	-	-	-	-151	-965	-	-6045
Intl. marine bunkers	-	-	-45	-	-	-	-	-	-	-	-45
Intl. aviation bunkers	-	-	-201	-	-	-	-	-	-	-	-201
Stock changes	175	-68	87	-21	-	-	-	-4	-	-	170
<b>TPES</b>	<b>5949</b>	<b>11042</b>	<b>-2507</b>	<b>8923</b>	<b>3033</b>	<b>1430</b>	<b>807</b>	<b>3807</b>	<b>-579</b>	<b>-</b>	<b>31906</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	46	-24	-208	25	-	-	-	-19	-9	45	-143
Electricity plants	-3503	-	-3	-946	-3033	-1430	-778	-31	4830	-	-4895
CHP plants	-1461	-	-173	-1403	-	-	-	-112	839	1515	-796
Heat plants	-12	-	-55	-354	-	-	-9	-48	-	315	-163
Blast furnaces	-252	-	-	-	-	-	-	-	-	-	-252
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-11505	11789	-	-	-	-	-	-	-	284
Petrochemical plants	-	403	-386	-	-	-	-	-	-	-	18
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	91	-	-101	-	-	-	-	-	-	-10
Energy industry own use	-42	-	-851	-440	-	-	-	-12	-765	-232	-2343
Losses	-19	-	-1	-71	-	-	-	-1	-616	-369	-1077
<b>TFC</b>	<b>707</b>	<b>7</b>	<b>7605</b>	<b>5631</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>3584</b>	<b>3701</b>	<b>1273</b>	<b>22529</b>
<b>INDUSTRY</b>	<b>615</b>	<b>7</b>	<b>943</b>	<b>2237</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>312</b>	<b>1765</b>	<b>271</b>	<b>6150</b>
Iron and steel	456	-	5	574	-	-	-	1	490	6	1532
Chemical and petrochemical	77	7	266	588	-	-	-	22	266	190	1416
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	71	-	312	246	-	-	-	79	204	4	916
Transport equipment	-	-	-	92	-	-	-	-	120	14	226
Machinery	-	-	15	150	-	-	0	2	175	9	351
Mining and quarrying	-	-	12	2	-	-	-	2	19	0	35
Food and tobacco	10	-	33	289	-	-	0	38	157	32	559
Paper pulp and printing	-	-	-	67	-	-	-	2	53	1	123
Wood and wood products	-	-	13	48	-	-	0	138	84	7	290
Construction	0	-	269	75	-	-	-	3	39	3	389
Textile and leather	-	-	4	97	-	-	0	1	64	6	171
Non-specified	-	-	15	11	-	-	-	23	93	-	142
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5071</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>202</b>	<b>93</b>	<b>-</b>	<b>5367</b>
Domestic aviation	-	-	37	-	-	-	-	-	-	-	37
Road	-	-	4877	-	-	-	-	202	4	-	5083
Rail	-	-	113	-	-	-	-	0	88	-	201
Pipeline transport	-	-	-	1	-	-	-	-	2	-	3
Domestic navigation	-	-	44	-	-	-	-	-	-	-	44
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>84</b>	<b>-</b>	<b>748</b>	<b>3060</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>3070</b>	<b>1842</b>	<b>1002</b>	<b>9826</b>
Residential	76	-	244	2242	-	-	4	2950	1040	801	7358
Comm. and public services	0	-	82	750	-	-	15	6	723	184	1761
Agriculture/forestry	8	-	280	67	-	-	0	8	79	17	459
Fishing	-	-	-	0	-	-	-	-	0	-	0
Non-specified	-	-	142	-	-	-	-	106	-	-	248
<b>NON-ENERGY USE</b>	<b>8</b>	<b>-</b>	<b>843</b>	<b>334</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1185</b>
in industry/transf./energy	8	-	783	334	-	-	-	-	-	-	1125
of which: chem./petrochem.	-	-	21	334	-	-	-	-	-	-	354
in transport	-	-	38	-	-	-	-	-	-	-	38
in other	-	-	22	-	-	-	-	-	-	-	22
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>18220</b>	<b>-</b>	<b>474</b>	<b>9386</b>	<b>11640</b>	<b>16633</b>	<b>9045</b>	<b>524</b>	<b>-</b>	<b>-</b>	<b>65922</b>
Electricity plants	13798	-	14	4900	11640	16633	9045	137	-	-	56167
CHP plants	4422	-	460	4486	-	-	-	387	-	-	9755
<b>Heat generated - TJ</b>	<b>24395</b>	<b>-</b>	<b>4471</b>	<b>44449</b>	<b>-</b>	<b>-</b>	<b>251</b>	<b>3051</b>	<b>-</b>	<b>-</b>	<b>76617</b>
CHP plants	23967	-	2478	35388	-	-	-	1601	-	-	63434
Heat plants	428	-	1993	9061	-	-	251	1450	-	-	13183

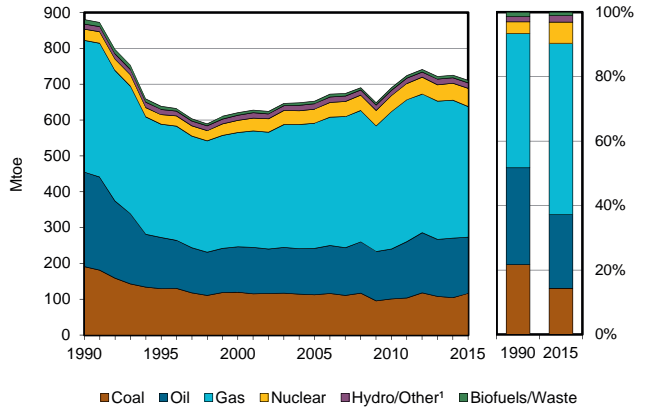
1. Includes peat.

## Russian Federation

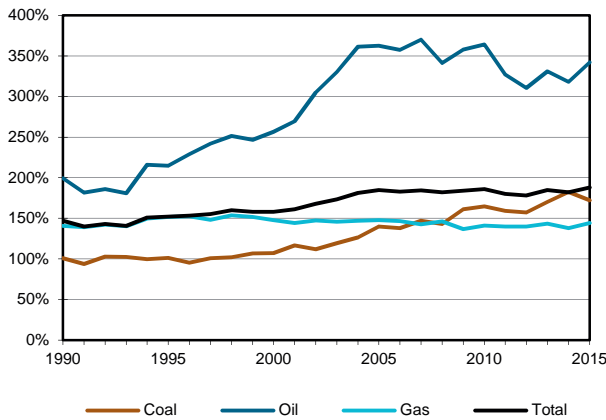
**Figure 1. Energy production**



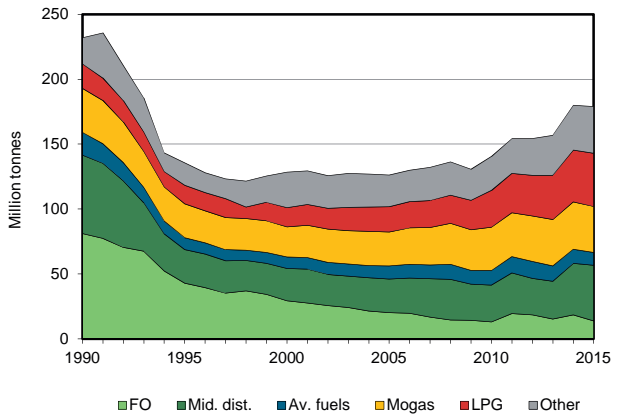
**Figure 2. Total primary energy supply<sup>2</sup>**



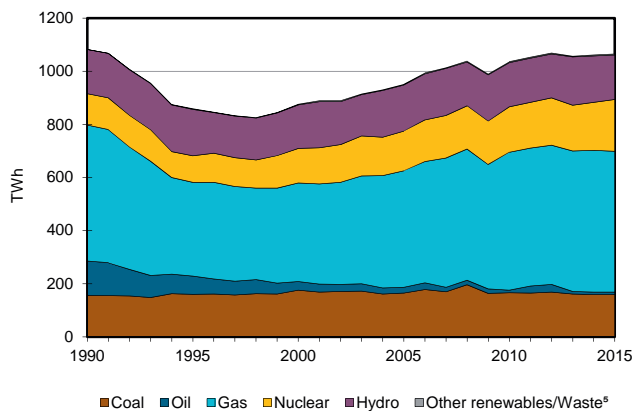
**Figure 3. Energy self-sufficiency<sup>3</sup>**



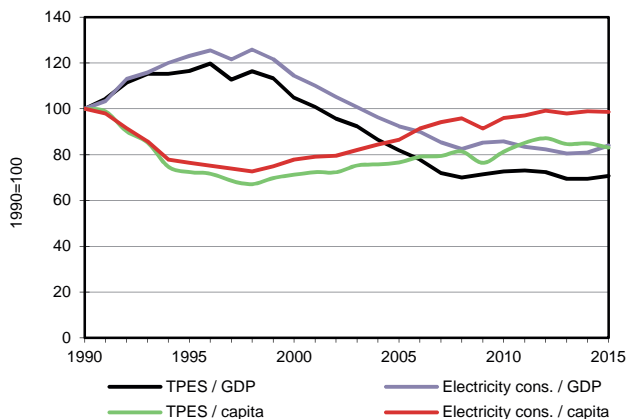
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Russian Federation

2015

Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	200270	536284	-	524178	51279	14447	157	7570	-	-	1334185
Imports	14301	3543	1962	7229	-	-	-	4	566	-	27604
Exports	-99746	-247531	-115734	-164926	-	-	-	-21	-1569	-	-629528
Intl. marine bunkers	-	-	-15612	-	-	-	-	-	-	-	-15612
Intl. aviation bunkers	-	-	-5066	-	-	-	-	-	-	-	-5066
Stock changes	1577	-2280	1172	-2332	-	-	-	10	-	-	-1852
<b>TPES</b>	<b>116402</b>	<b>290015</b>	<b>-133278</b>	<b>364149</b>	<b>51279</b>	<b>14447</b>	<b>157</b>	<b>7563</b>	<b>-1003</b>	<b>-</b>	<b>709732</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-3280	-	8289	1813	-	-	-	-29	-	1	6793
Electricity plants	-	-	-803	-4408	-50941	-14447	-146	-	32260	-	-38485
CHP plants	-54148	-7	-3024	-157256	-339	-	-	-2057	59383	67840	-89608
Heat plants	-10485	-587	-5399	-43723	-	-	-11	-2223	-	56502	-5926
Blast furnaces	-23420	-	-	-	-	-	-	-	-	-	-23420
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-10839	-	-	-	-	-	-	-	-	-	-10839
Oil refineries	-	-283459	283621	-	-	-	-	-	-	-	162
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-1993	-	-	-	-	-	-	-1993
Energy industry own use	-1987	-83	-14768	-12113	-	-	-	-238	-19014	-12734	-60938
Losses	-	-5787	-	-5299	-	-	-	-	-9164	-8331	-28580
<b>TFC</b>	<b>12242</b>	<b>91</b>	<b>134638</b>	<b>141170</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3014</b>	<b>62463</b>	<b>103278</b>	<b>456897</b>
<b>INDUSTRY</b>	<b>8498</b>	<b>23</b>	<b>14453</b>	<b>35490</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>876</b>	<b>28294</b>	<b>36538</b>	<b>124172</b>
Iron and steel	6766	-	168	12550	-	-	-	389	5266	6751	31889
Chemical and petrochemical	434	20	8413	5715	-	-	-	43	3958	12003	30586
Non-ferrous metals	-	-	-	-	-	-	-	-	8167	-	8167
Non-metallic minerals	975	1	79	10191	-	-	-	12	1604	2371	15233
Transport equipment	25	-	159	390	-	-	-	5	1022	1899	3499
Machinery	49	-	177	1042	-	-	-	4	1503	3127	5903
Mining and quarrying	87	-	1351	1210	-	-	-	20	2227	722	5617
Food and tobacco	91	2	530	1505	-	-	-	60	1314	3663	7165
Paper pulp and printing	1	-	142	298	-	-	-	72	1521	3859	5892
Wood and wood products	-	-	127	205	-	-	-	265	335	779	1711
Construction	68	-	1117	2260	-	-	-	2	1044	668	5159
Textile and leather	-	-	12	43	-	-	-	2	255	346	659
Non-specified	3	-	2178	80	-	-	-	3	78	349	2690
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>59594</b>	<b>27210</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7062</b>	<b>-</b>	<b>93866</b>
Domestic aviation	-	-	5076	-	-	-	-	-	-	-	5076
Road	-	-	50875	80	-	-	-	-	-	-	50955
Rail	-	-	1603	-	-	-	-	-	4261	-	5864
Pipeline transport	-	-	224	27130	-	-	-	-	1760	-	29115
Domestic navigation	-	-	577	-	-	-	-	-	-	-	577
Non-specified	-	-	1238	-	-	-	-	-	1041	-	2279
<b>OTHER</b>	<b>3560</b>	<b>68</b>	<b>14350</b>	<b>45592</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2138</b>	<b>27107</b>	<b>66740</b>	<b>159556</b>
Residential	2083	-	8162	42325	-	-	-	1074	12602	48194	114440
Comm. and public services	1384	-	2380	2160	-	-	-	935	13087	16190	36137
Agriculture/forestry	92	10	3292	1107	-	-	-	128	1398	2348	8375
Fishing	1	-	516	0	-	-	-	0	20	8	546
Non-specified	-	58	-	-	-	-	-	-	-	-	58
<b>NON-ENERGY USE</b>	<b>184</b>	<b>-</b>	<b>46241</b>	<b>32877</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>79302</b>
in industry/transf./energy	184	-	46241	32877	-	-	-	-	-	-	79302
of which: chem./petrochem.	184	-	37830	32877	-	-	-	-	-	-	70891
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>158550</b>	<b>11</b>	<b>10091</b>	<b>529749</b>	<b>195470</b>	<b>167993</b>	<b>940</b>	<b>2819</b>	<b>-</b>	<b>-</b>	<b>1065623</b>
Electricity plants	-	-	2007	8710	195470	167993	940	-	-	-	375120
CHP plants	158550	11	8084	521039	-	-	-	2819	-	-	690503
<b>Heat generated - TJ</b>	<b>993468</b>	<b>17999</b>	<b>213593</b>	<b>3521278</b>	<b>14180</b>	<b>-</b>	<b>339371</b>	<b>107040</b>	<b>-</b>	<b>-</b>	<b>5206929</b>
CHP plants	653709	135	34877	2105329	14180	-	-	32633	-	-	2840863
Heat plants	339759	17864	178716	1415949	-	-	339371	74407	-	-	2366066

1. Includes peat.

## Saudi Arabia

Figure 1. Energy production

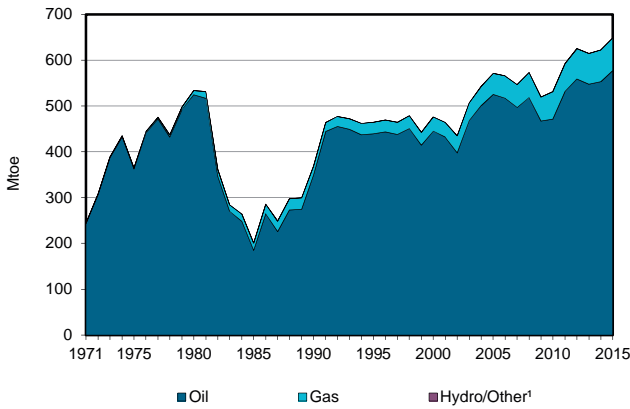


Figure 2. Total primary energy supply<sup>2</sup>

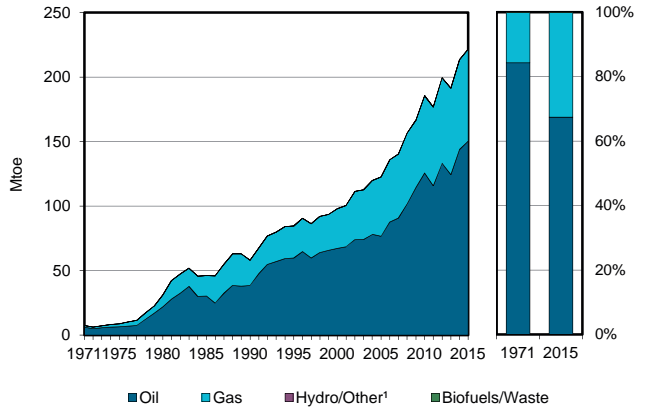


Figure 3. Energy self-sufficiency<sup>3</sup>

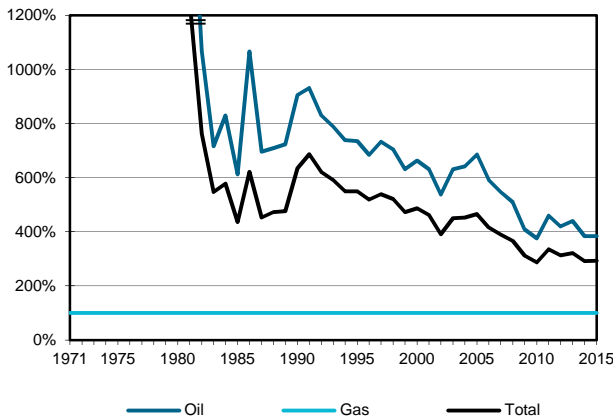


Figure 4. Oil products demand<sup>4</sup>

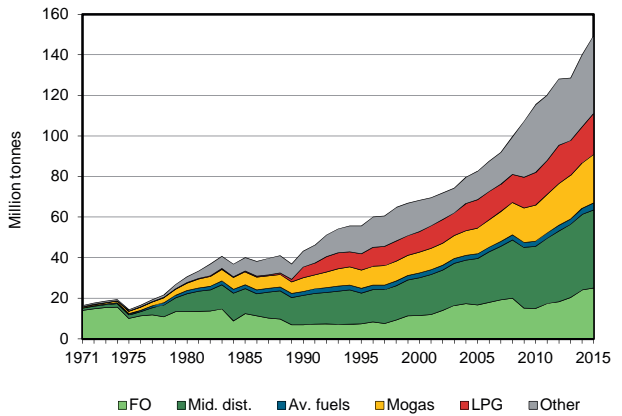


Figure 5. Electricity generation by source

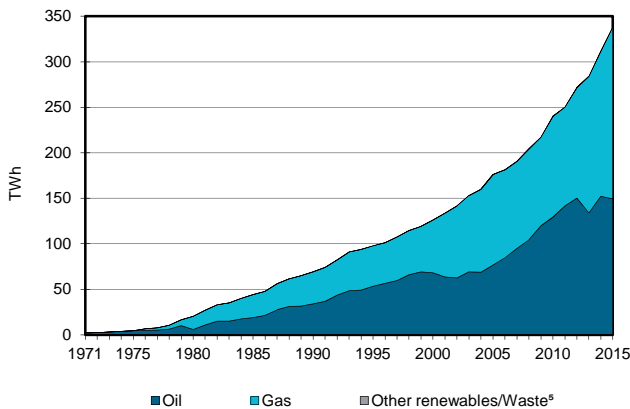
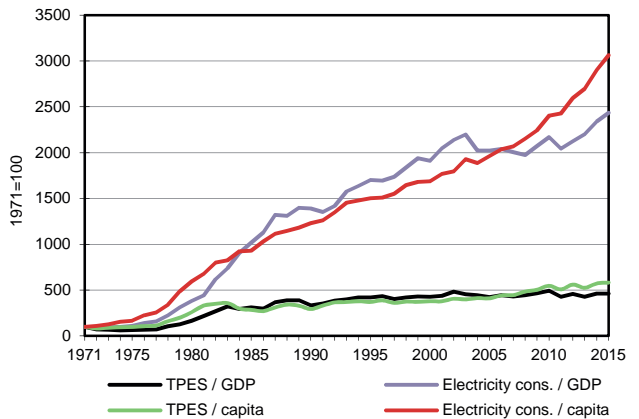


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 1200%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

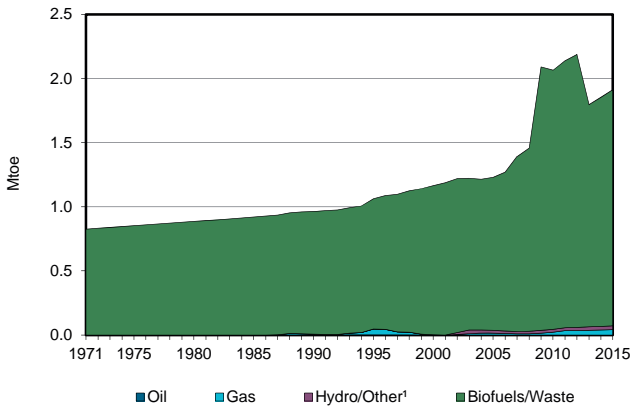
## Saudi Arabia

2015

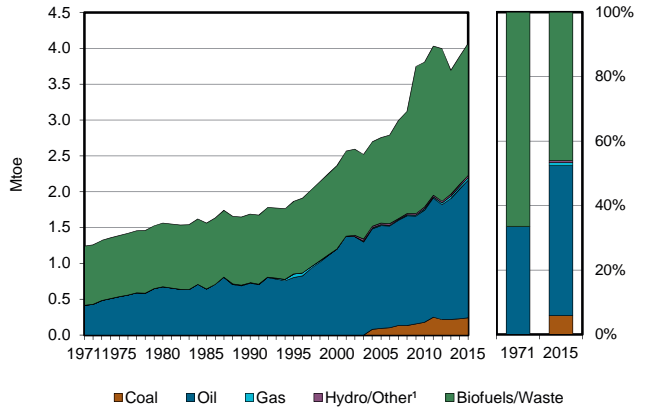
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	577355	-	71254	-	-	0	-	-	-	648609
Imports	-	-	30210	-	-	-	-	7	-	-	30217
Exports	-	-374538	-78792	-	-	-	-	-	-	-	-453330
Intl. marine bunkers	-	-	-3052	-	-	-	-	-	-	-	-3052
Intl. aviation bunkers	-	-	-2810	-	-	-	-	-	-	-	-2810
Stock changes	-	2324	-263	-	-	-	-	-	-	-	2060
<b>TPES</b>	-	<b>205141</b>	<b>-54707</b>	<b>71254</b>	-	-	<b>0</b>	<b>7</b>	-	-	<b>221694</b>
Transfers	-	-50707	53340	-	-	-	-	-	-	-	2633
Statistical differences	-	-1023	-1311	-	-	-	-	-	-	-	-2335
Electricity plants	-	-23625	-19818	-47160	-	-	-0	-	29097	-	-61506
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-124347	123274	-	-	-	-	-	-	-	-1074
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-7	-7538	-2850	-	-	-	-	-1745	-	-12141
Losses	-	-	-	-	-	-	-	-	-2174	-	-2174
<b>TFC</b>	-	<b>5431</b>	<b>93239</b>	<b>21244</b>	-	-	-	<b>7</b>	<b>25178</b>	-	<b>145098</b>
<b>INDUSTRY</b>	-	<b>5431</b>	<b>17655</b>	<b>16551</b>	-	-	-	-	<b>4256</b>	-	<b>43893</b>
Iron and steel	-	-	-	-	-	-	-	-	447	-	447
Chemical and petrochemical	-	-	-	-	-	-	-	-	949	-	949
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	49	-	49
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	29	-	29
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	5431	17655	16551	-	-	-	-	2783	-	42419
<b>TRANSPORT</b>	-	-	<b>47512</b>	-	-	-	-	-	-	-	<b>47512</b>
Domestic aviation	-	-	936	-	-	-	-	-	-	-	936
Road	-	-	46576	-	-	-	-	-	-	-	46576
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1686</b>	-	-	-	-	<b>7</b>	<b>20921</b>	-	<b>22614</b>
Residential	-	-	1686	-	-	-	-	7	12428	-	14121
Comm. and public services	-	-	-	-	-	-	-	-	8449	-	8449
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	44	-	44
<b>NON-ENERGY USE</b>	-	-	<b>26386</b>	<b>4693</b>	-	-	-	-	-	-	<b>31078</b>
in industry/transf./energy	-	-	26386	4693	-	-	-	-	-	-	31078
of which: chem./petrochem.	-	-	21698	4693	-	-	-	-	-	-	26391
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	<b>80489</b>	<b>69042</b>	<b>188804</b>	-	-	<b>1</b>	-	-	-	<b>338336</b>
Electricity plants	-	80489	69042	188804	-	-	1	-	-	-	338336
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Senegal

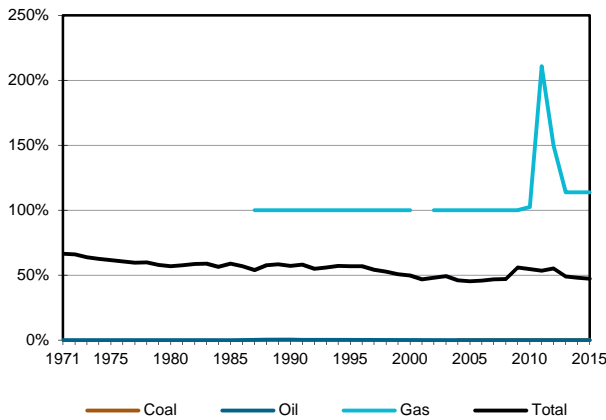
**Figure 1. Energy production**



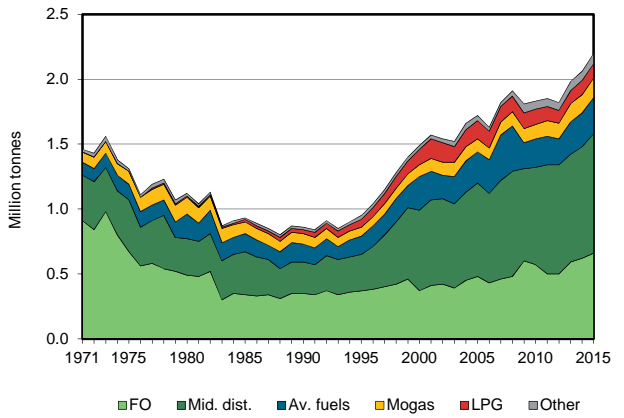
**Figure 2. Total primary energy supply<sup>2</sup>**



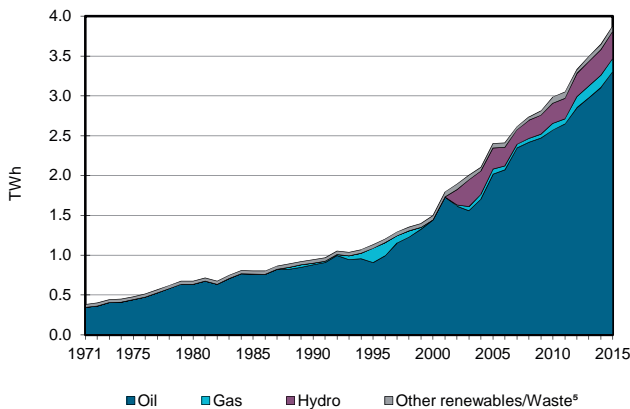
**Figure 3. Energy self-sufficiency<sup>3</sup>**



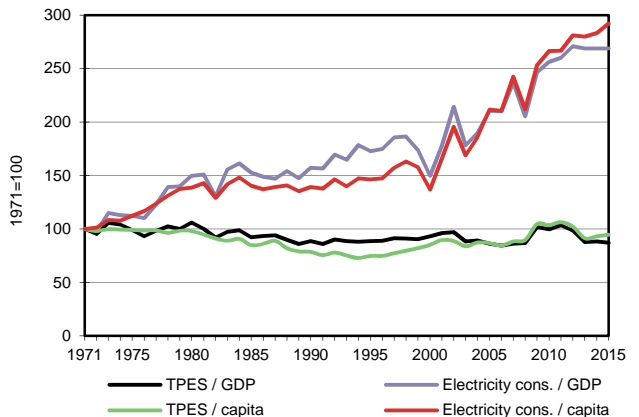
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Senegal

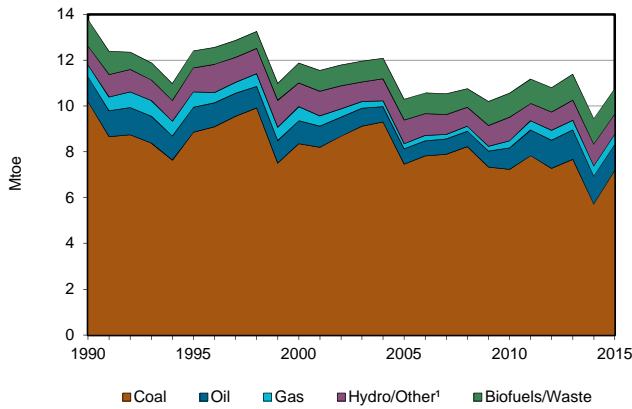
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	41	-	29	0	1842	-	19	1932
Imports	241	910	1553	-	-	-	-	-	-	-	2703
Exports	-	-	-193	-	-	-	-	-	-	-	-193
Intl. marine bunkers	-	-	-78	-	-	-	-	-	-	-	-78
Intl. aviation bunkers	-	-	-292	-	-	-	-	-	-	-	-292
Stock changes	-	-	21	-5	-	-	-	-	-	-	16
<b>TPES</b>	<b>241</b>	<b>910</b>	<b>1011</b>	<b>36</b>	<b>-</b>	<b>29</b>	<b>0</b>	<b>1842</b>	<b>-</b>	<b>19</b>	<b>4089</b>
Transfers	-	-	0	-	-	-	-	-	-	-	0
Statistical differences	-	-	-1	-	-	-	-	-	10	-	9
Electricity plants	-	-	-733	-36	-	-29	-0	-36	340	-19	-514
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-910	860	-	-	-	-	-	-	-	-50
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-671	-	-	-671
Energy industry own use	-	-	-18	-	-	-	-	-	-4	-	-22
Losses	-	-	-	-	-	-	-	-	-57	-	-57
<b>TFC</b>	<b>241</b>	<b>-</b>	<b>1119</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1135</b>	<b>290</b>	<b>-</b>	<b>2784</b>
<b>INDUSTRY</b>	<b>241</b>	<b>-</b>	<b>84</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>42</b>	<b>81</b>	<b>-</b>	<b>447</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	18	-	18
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	241	-	17	-	-	-	-	-	42	-	300
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	18	-	-	18
Food and tobacco	-	-	1	-	-	-	-	23	14	-	38
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	3	-	3
Textile and leather	-	-	-	-	-	-	-	-	2	-	2
Non-specified	-	-	66	-	-	-	-	-	2	-	67
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>846</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>846</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	803	-	-	-	-	-	-	-	803
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	43	-	-	-	-	-	-	-	43
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>132</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1093</b>	<b>209</b>	<b>-</b>	<b>1434</b>
Residential	-	-	117	-	-	-	-	1093	94	-	1305
Comm. and public services	-	-	6	-	-	-	-	-	75	-	80
Agriculture/forestry	-	-	-	-	-	-	-	-	2	-	2
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	9	-	-	-	-	-	39	-	48
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>56</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>56</b>
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	56	-	-	-	-	-	-	-	56
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>3307</b>	<b>165</b>	<b>-</b>	<b>342</b>	<b>4</b>	<b>66</b>	<b>-</b>	<b>71</b>	<b>3955</b>
Electricity plants	-	-	3307	165	-	342	4	66	-	71	3955
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>775</b>	<b>775</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	775	775

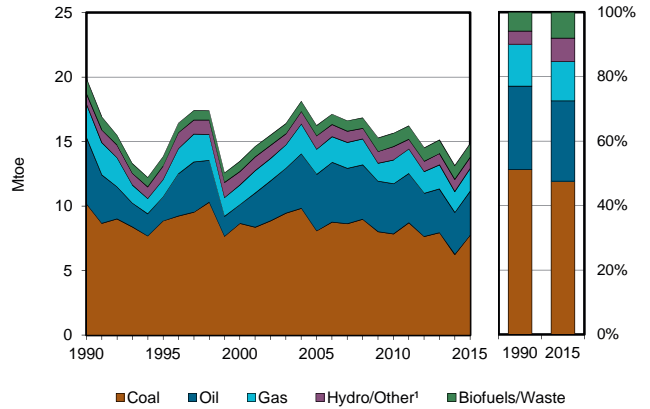


## Serbia

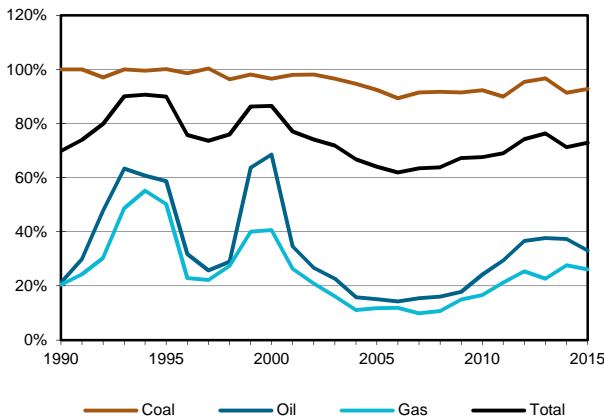
**Figure 1. Energy production**



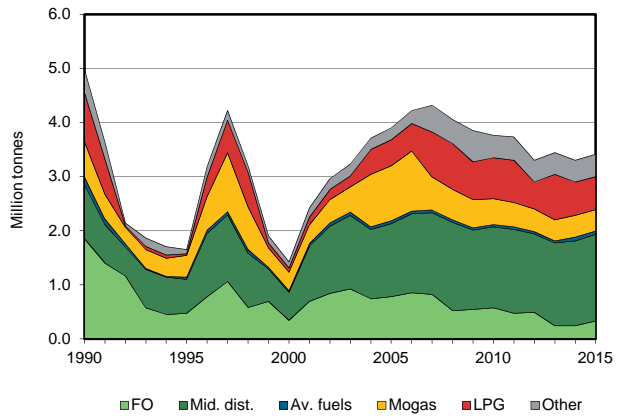
**Figure 2. Total primary energy supply<sup>2</sup>**



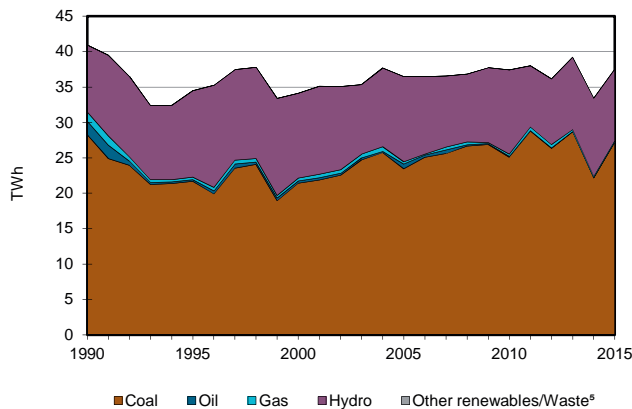
**Figure 3. Energy self-sufficiency<sup>3</sup>**



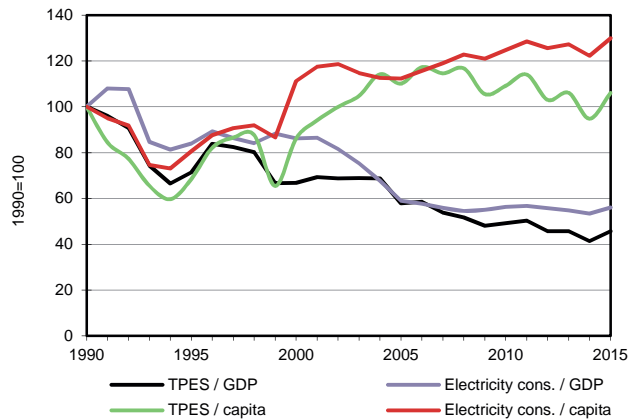
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Serbia

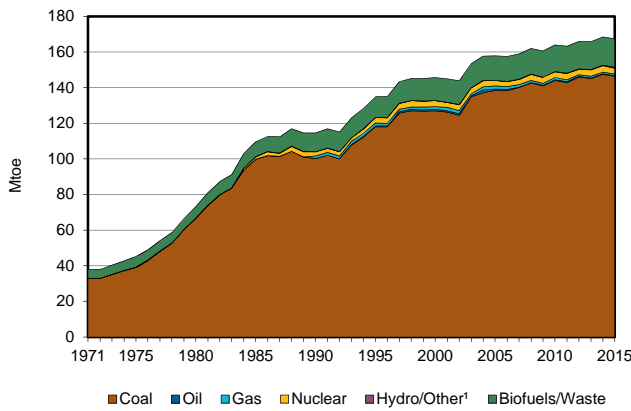
2015

Thousand tonnes of oil equivalent

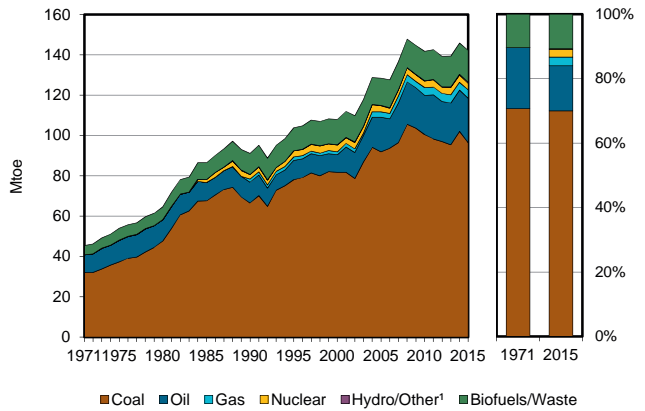
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	7201	1123	-	456	-	867	7	1111	-	-	10764
Imports	630	2128	862	1385	-	-	-	10	542	-	5557
Exports	-8	-6	-753	-	-	-	-	-68	-621	-	-1456
Intl. marine bunkers	-	-	-24	-	-	-	-	-	-	-	-24
Intl. aviation bunkers	-	-	-64	-	-	-	-	-	-	-	-64
Stock changes	-66	128	3	-91	-	-	-	5	-	-	-21
<b>TPES</b>	<b>7756</b>	<b>3373</b>	<b>24</b>	<b>1750</b>	<b>-</b>	<b>867</b>	<b>7</b>	<b>1058</b>	<b>-79</b>	<b>-</b>	<b>14756</b>
Transfers	-	78	-69	-	-	-	-	-	-	-	9
Statistical differences	-53	-4	-3	-	-	-	-	-	-	-	-59
Electricity plants	-3281	-	-	-	-	-867	-1	-	2053	-	-2096
CHP plants	-3476	-	-48	-107	-	-	-	-6	1180	211	-2247
Heat plants	-115	-	-116	-488	-	-	-	-2	-	631	-90
Blast furnaces	-173	-	-	-	-	-	-	-	-	-	-173
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-35	-	-	-	-	-	-	-	-	-	-35
Oil refineries	-	-3633	3427	-	-	-	-	-	-	-	-206
Petrochemical plants	-	112	-114	-	-	-	-	-	-	-	-2
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	74	-	-109	-	-	-	-14	-	-	-48
Energy industry own use	-	-	-155	-167	-	-	-	-	-381	-48	-751
Losses	-38	-	-	-9	-	-	-0	-1	-445	-78	-570
<b>TFC</b>	<b>586</b>	<b>-</b>	<b>2946</b>	<b>869</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>1035</b>	<b>2328</b>	<b>716</b>	<b>8486</b>
<b>INDUSTRY</b>	<b>342</b>	<b>-</b>	<b>336</b>	<b>432</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>134</b>	<b>638</b>	<b>238</b>	<b>2120</b>
Iron and steel	101	-	-	66	-	-	-	-	62	12	240
Chemical and petrochemical	24	-	62	85	-	-	-	3	78	110	362
Non-ferrous metals	9	-	3	19	-	-	-	1	31	10	73
Non-metallic minerals	100	-	116	63	-	-	-	1	55	1	336
Transport equipment	-	-	-	9	-	-	-	0	18	0	28
Machinery	3	-	31	11	-	-	-	6	58	1	110
Mining and quarrying	7	-	22	0	-	-	-	0	71	-	101
Food and tobacco	82	-	52	131	-	-	-	15	129	80	489
Paper pulp and printing	6	-	3	24	-	-	-	13	30	15	91
Wood and wood products	-	-	10	1	-	-	-	79	12	0	101
Construction	1	-	27	-	-	-	-	-	27	-	55
Textile and leather	5	-	8	9	-	-	-	7	23	1	53
Non-specified	3	-	3	14	-	-	-	9	44	7	80
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1930</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>1969</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1912	7	-	-	-	-	-	-	1919
Rail	-	-	9	-	-	-	-	-	30	-	39
Pipeline transport	-	-	-	2	-	-	-	-	-	-	2
Domestic navigation	-	-	8	-	-	-	-	-	-	-	8
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>221</b>	<b>-</b>	<b>232</b>	<b>302</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>901</b>	<b>1660</b>	<b>478</b>	<b>3800</b>
Residential	156	-	59	151	-	-	-	847	1209	401	2824
Comm. and public services	65	-	71	135	-	-	2	51	423	76	824
Agriculture/forestry	-	-	101	16	-	-	4	3	27	-	152
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>23</b>	<b>-</b>	<b>449</b>	<b>126</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>597</b>
in industry/transf./energy	23	-	437	126	-	-	-	-	-	-	585
of which: chem./petrochem.	-	-	264	126	-	-	-	-	-	-	390
in transport	-	-	12	-	-	-	-	-	-	-	12
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>27230</b>	<b>-</b>	<b>28</b>	<b>218</b>	<b>-</b>	<b>10080</b>	<b>11</b>	<b>28</b>	<b>-</b>	<b>-</b>	<b>37595</b>
Electricity plants	13784	-	-	-	-	10080	11	-	-	-	23875
CHP plants	13446	-	28	218	-	-	-	28	-	-	13720
<b>Heat generated - TJ</b>	<b>7963</b>	<b>-</b>	<b>5606</b>	<b>21523</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>164</b>	<b>-</b>	<b>-</b>	<b>35256</b>
CHP plants	4155	-	1758	2812	-	-	-	97	-	-	8822
Heat plants	3808	-	3848	18711	-	-	-	67	-	-	26434

## South Africa

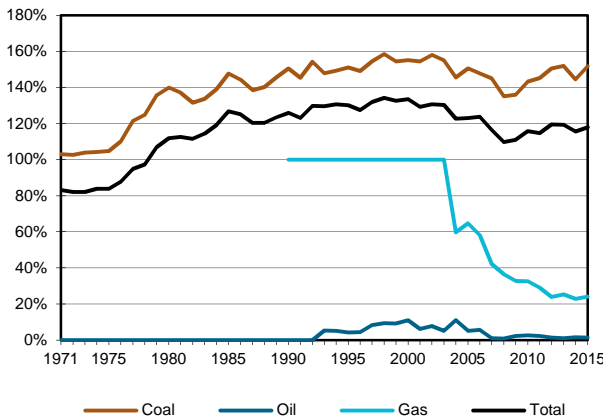
**Figure 1. Energy production**



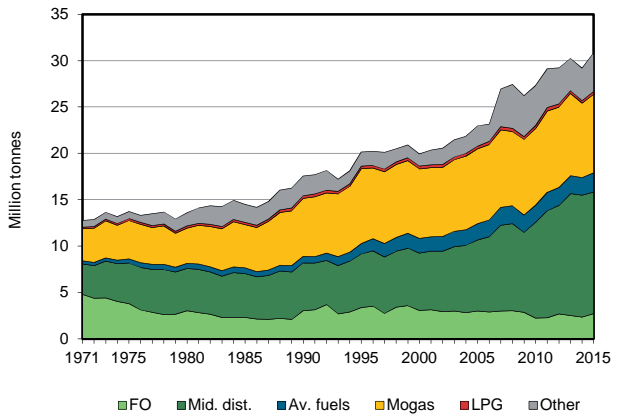
**Figure 2. Total primary energy supply<sup>2</sup>**



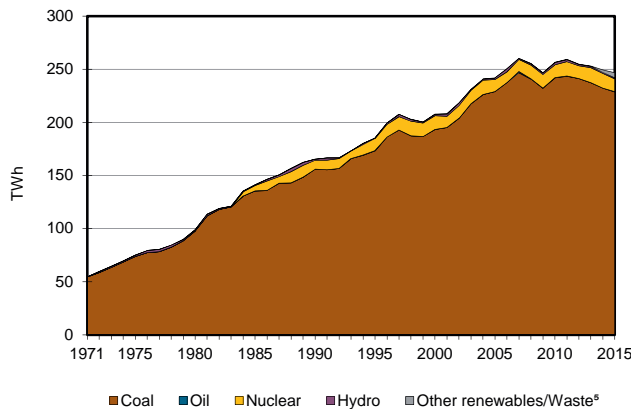
**Figure 3. Energy self-sufficiency<sup>3</sup>**



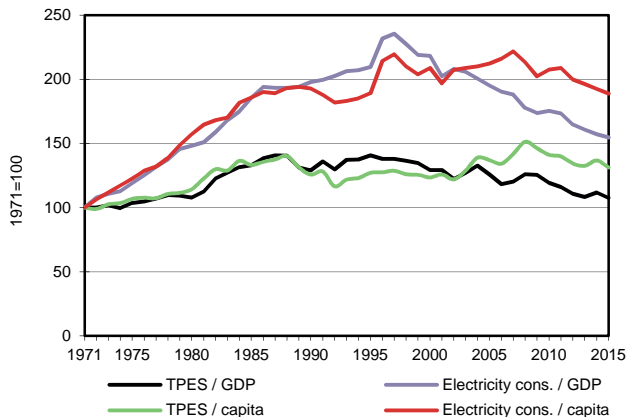
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

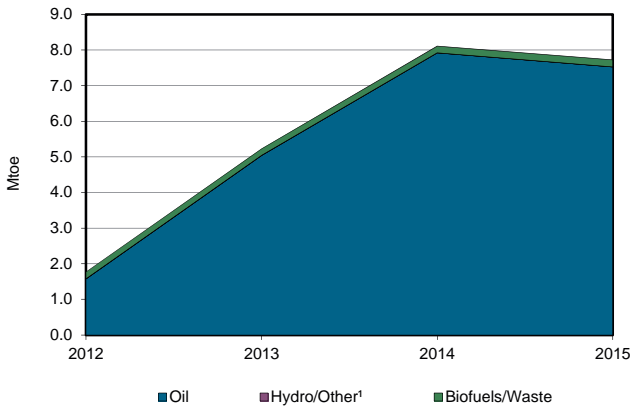
## South Africa

2015

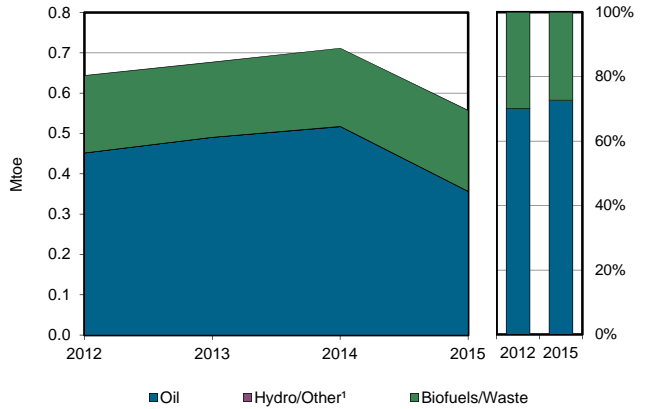
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	146246	308	-	1025	3189	69	496	16078	-	-	167410
Imports	584	19757	10399	3228	-	-	-	-	1123	-	35091
Exports	-50509	-	-3834	-	-	-	-	-296	-1256	-	-55895
Intl. marine bunkers	-	-	-3686	-	-	-	-	-	-	-	-3686
Intl. aviation bunkers	-	-	-911	-	-	-	-	-	-	-	-911
Stock changes	18	-	-	-	-	-	-	-	-	-	18
<b>TPES</b>	<b>96339</b>	<b>20065</b>	<b>1967</b>	<b>4253</b>	<b>3189</b>	<b>69</b>	<b>496</b>	<b>15782</b>	<b>-133</b>	<b>-</b>	<b>142026</b>
Transfers	-	-5096	5454	-	-	-	-	-	-	-	357
Statistical differences	4825	-	13	-	-	-	-	-	-	-	4838
Electricity plants	-61659	-	-45	-	-3189	-69	-383	-107	21219	-	-44232
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-763	-	-	-	-	-	-	-	-	-	-763
Gas works	-4121	-	-	-	-	-	-	-	-	-	-4121
Coke/pat.fuel/BKB/PB plants	-744	-	-	-	-	-	-	-	-	-	-744
Oil refineries	-	-20065	19584	-	-	-	-	-	-	-	-481
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-5172	5096	-	-2510	-	-	-	-	-	-	-2586
Other transformation	-	-	-	-	-	-	-	-4118	-	-	-4118
Energy industry own use	-10416	-	-952	-	-	-	-	-	-2307	-	-13676
Losses	-	-	-	-	-	-	-	-	-1711	-	-1711
<b>TFC</b>	<b>18290</b>	<b>-</b>	<b>26021</b>	<b>1742</b>	<b>-</b>	<b>-</b>	<b>113</b>	<b>11557</b>	<b>17068</b>	<b>-</b>	<b>74791</b>
<b>INDUSTRY</b>	<b>11369</b>	<b>-</b>	<b>2318</b>	<b>1741</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2002</b>	<b>10454</b>	<b>-</b>	<b>27884</b>
Iron and steel	2818	-	-	221	-	-	-	-	315	-	3355
Chemical and petrochemical	842	-	-	978	-	-	-	-	966	-	2786
Non-ferrous metals	1477	-	-	10	-	-	-	-	1433	-	2920
Non-metallic minerals	1091	-	-	326	-	-	-	-	216	-	1633
Transport equipment	-	-	-	14	-	-	-	-	4	-	18
Machinery	33	-	-	25	-	-	-	-	4	-	61
Mining and quarrying	140	-	1656	-	-	-	-	-	2613	-	4409
Food and tobacco	20	-	-	66	-	-	-	-	61	-	147
Paper pulp and printing	44	-	-	16	-	-	-	-	138	-	198
Wood and wood products	-	-	-	-	-	-	-	-	24	-	24
Construction	-	-	116	-	-	-	-	-	9	-	125
Textile and leather	-	-	-	0	-	-	-	-	11	-	11
Non-specified	4905	-	546	83	-	-	-	2002	4662	-	12198
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>17878</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>296</b>	<b>-</b>	<b>18175</b>
Domestic aviation	-	-	1124	-	-	-	-	-	-	-	1124
Road	-	-	16636	0	-	-	-	-	2	-	16639
Rail	-	-	116	-	-	-	-	-	245	-	361
Pipeline transport	-	-	-	-	-	-	-	-	6	-	6
Domestic navigation	-	-	2	-	-	-	-	-	-	-	2
Non-specified	-	-	-	-	-	-	-	-	42	-	42
<b>OTHER</b>	<b>5628</b>	<b>-</b>	<b>2617</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>113</b>	<b>9555</b>	<b>6317</b>	<b>-</b>	<b>24231</b>
Residential	3463	-	572	-	-	-	-	9555	3222	-	16811
Comm. and public services	1745	-	193	2	-	-	-	-	2342	-	4282
Agriculture/forestry	340	-	1272	-	-	-	-	-	474	-	2087
Fishing	-	-	98	-	-	-	-	-	-	-	98
Non-specified	80	-	481	-	-	-	113	-	279	-	953
<b>NON-ENERGY USE</b>	<b>1293</b>	<b>-</b>	<b>3207</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4501</b>
in industry/transf./energy	1293	-	3207	-	-	-	-	-	-	-	4501
of which: chem./petrochem.	1293	-	-	-	-	-	-	-	-	-	1293
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>228752</b>	<b>-</b>	<b>183</b>	<b>-</b>	<b>12237</b>	<b>801</b>	<b>4453</b>	<b>310</b>	<b>-</b>	<b>-</b>	<b>246736</b>
Electricity plants	228752	-	183	-	12237	801	4453	310	-	-	246736
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## South Sudan

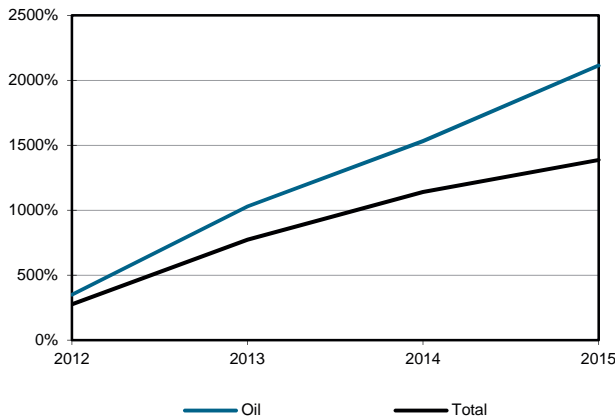
**Figure 1. Energy production**



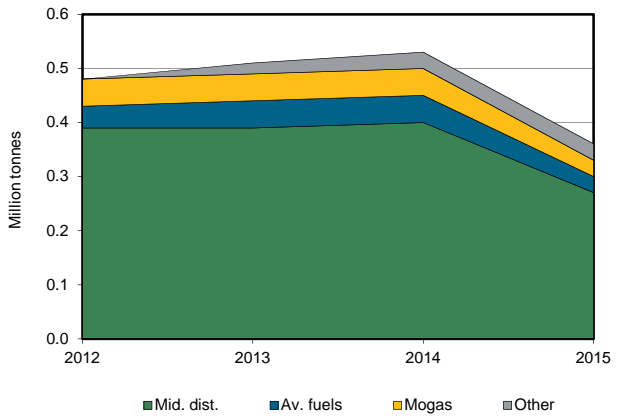
**Figure 2. Total primary energy supply<sup>2</sup>**



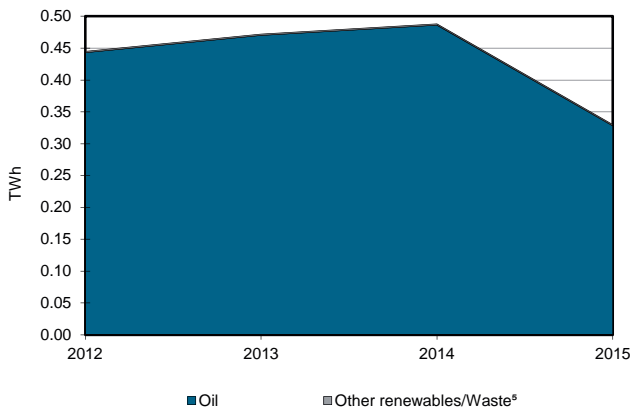
**Figure 3. Energy self-sufficiency<sup>3</sup>**



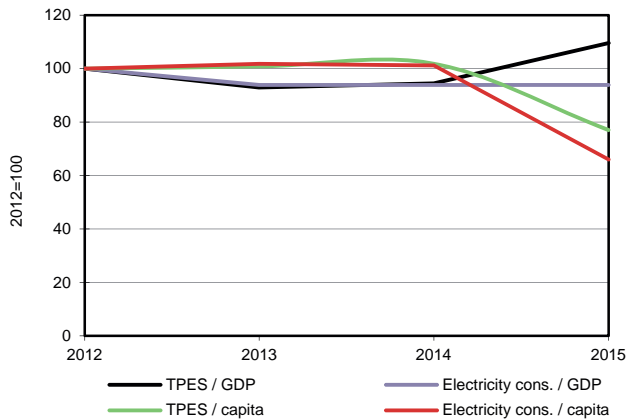
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

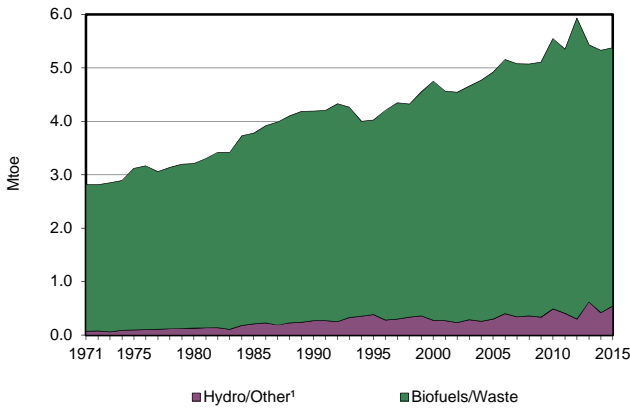
## South Sudan

2015

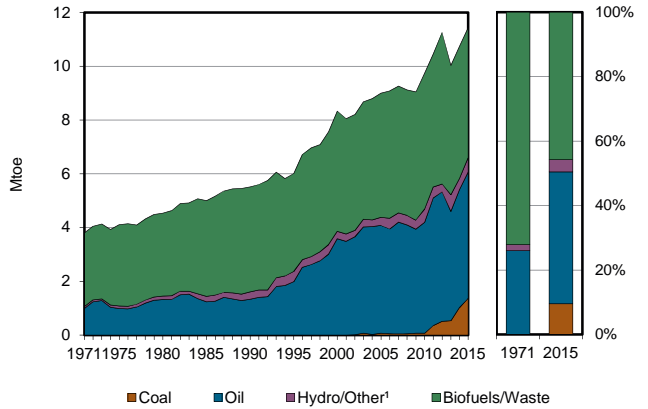
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	7521	-	-	-	-	0	201	-	-	7723
Imports	-	-	357	-	-	-	-	-	-	-	357
Exports	-	-7496	-	-	-	-	-	-	-	-	-7496
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-27	-	-	-	-	-	-	-	-27
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>25</b>	<b>330</b>	-	-	-	<b>0</b>	<b>201</b>	-	-	<b>557</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-7	-	-	-	-	-1	-1	-	-9
Electricity plants	-	-	-91	-	-	-	-0	-	28	-	-63
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-35	-	-	-35
Energy industry own use	-	-23	-	-	-	-	-	-0	-1	-	-25
Losses	-	-2	-	-	-	-	-	-0	-2	-	-4
<b>TFC</b>	-	-	<b>232</b>	-	-	-	-	<b>165</b>	<b>25</b>	-	<b>422</b>
<b>INDUSTRY</b>	-	-	<b>2</b>	-	-	-	-	-	-	-	<b>2</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2	-	-	-	-	-	-	-	2
<b>TRANSPORT</b>	-	-	<b>219</b>	-	-	-	-	-	-	-	<b>219</b>
Domestic aviation	-	-	6	-	-	-	-	-	-	-	6
Road	-	-	212	-	-	-	-	-	-	-	212
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>12</b>	-	-	-	-	<b>165</b>	<b>25</b>	-	<b>201</b>
Residential	-	-	2	-	-	-	-	154	12	-	168
Comm. and public services	-	-	-	-	-	-	-	10	9	-	19
Agriculture/forestry	-	-	8	-	-	-	-	1	4	-	13
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	1	-	-	-	-	-	-	-	1
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>328</b>	-	-	-	<b>2</b>	-	-	-	<b>330</b>
Electricity plants	-	-	328	-	-	-	2	-	-	-	330
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Sri Lanka

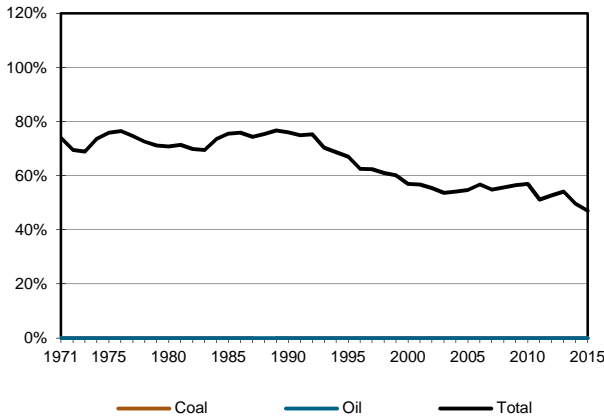
**Figure 1. Energy production**



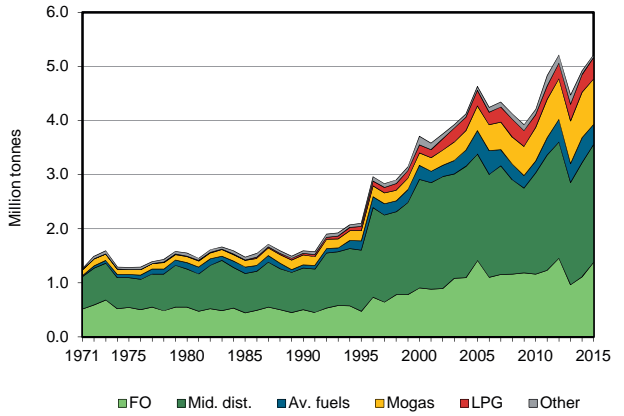
**Figure 2. Total primary energy supply²**



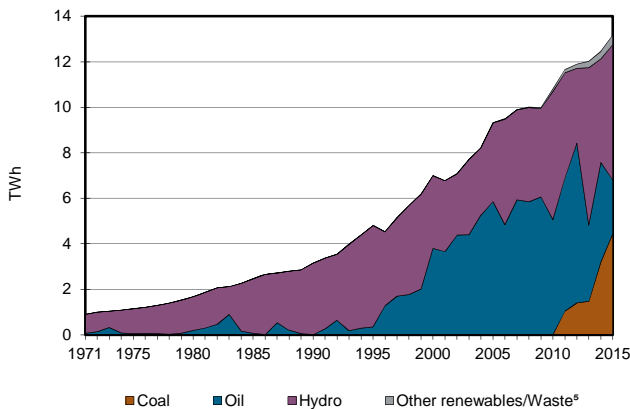
**Figure 3. Energy self-sufficiency³**



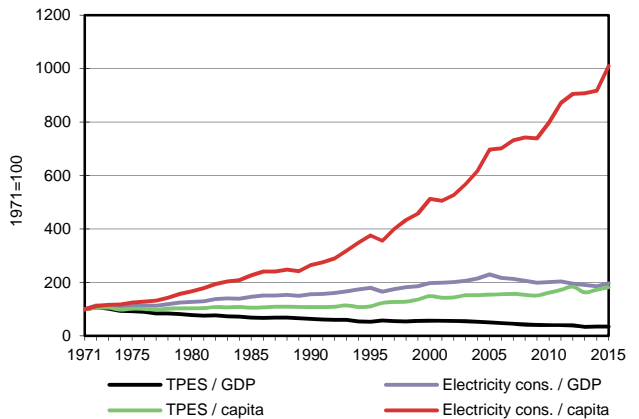
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Sri Lanka

2015

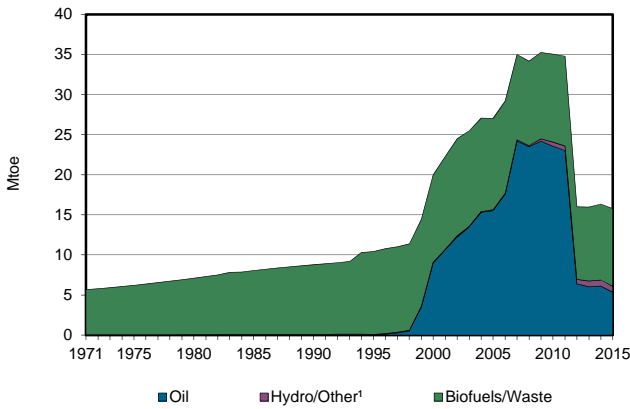
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	513	31	4830	-	-	5374
Imports	1317	1727	3140	-	-	-	-	-	-	-	6184
Exports	-	-	-205	-	-	-	-	-	-	-	-205
Intl. marine bunkers	-	-	-403	-	-	-	-	-	-	-	-403
Intl. aviation bunkers	-	-	-390	-	-	-	-	-	-	-	-390
Stock changes	60	15	799	-	-	-	-	-	-	-	873
<b>TPES</b>	<b>1376</b>	<b>1743</b>	<b>2941</b>	-	-	<b>513</b>	<b>31</b>	<b>4830</b>	-	-	<b>11434</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	1	-	14	-	-	-	-	-0	4	-	18
Electricity plants	-1316	-	-491	-	-	-513	-31	-38	1134	-	-1256
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1743	1671	-	-	-	-	-	-	-	-72
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-42	-	-	-42
Energy industry own use	-	-	-16	-	-	-	-	-	-48	-	-64
Losses	-	-	-	-	-	-	-	-	-80	-	-80
<b>TFC</b>	<b>61</b>	-	<b>4119</b>	-	-	-	-	<b>4750</b>	<b>1010</b>	-	<b>9939</b>
<b>INDUSTRY</b>	<b>61</b>	-	<b>855</b>	-	-	-	-	<b>1759</b>	<b>334</b>	-	<b>3009</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	61	-	-	-	-	-	-	-	-	-	61
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	855	-	-	-	-	1759	334	-	2948
<b>TRANSPORT</b>	-	-	<b>2857</b>	-	-	-	-	-	-	-	<b>2857</b>
Domestic aviation	-	-	3	-	-	-	-	-	-	-	3
Road	-	-	2769	-	-	-	-	-	-	-	2769
Rail	-	-	40	-	-	-	-	-	-	-	40
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	46	-	-	-	-	-	-	-	46
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>376</b>	-	-	-	-	<b>2990</b>	<b>676</b>	-	<b>4042</b>
Residential	-	-	199	-	-	-	-	2863	408	-	3470
Comm. and public services	-	-	49	-	-	-	-	127	268	-	444
Agriculture/forestry	-	-	-	-	-	-	-	-	0	-	0
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	128	-	-	-	-	-	-	-	128
<b>NON-ENERGY USE</b>	-	-	<b>31</b>	-	-	-	-	-	-	-	<b>31</b>
in industry/transf./energy	-	-	30	-	-	-	-	-	-	-	30
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	1	-	-	-	-	-	-	-	1
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>4443</b>	-	<b>2349</b>	-	-	<b>5969</b>	<b>364</b>	<b>57</b>	-	-	<b>13182</b>
Electricity plants	4443	-	2349	-	-	5969	364	57	-	-	13182
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

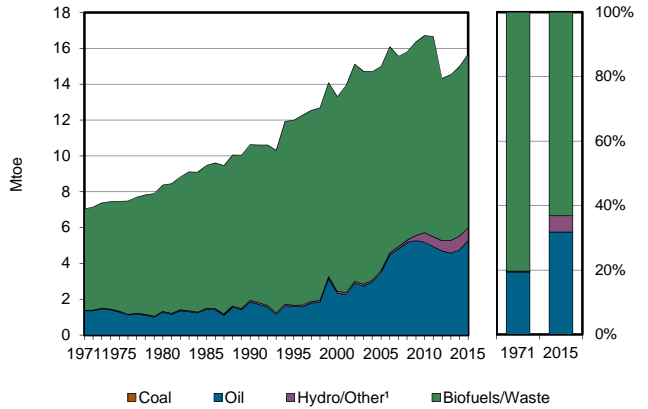


## Sudan

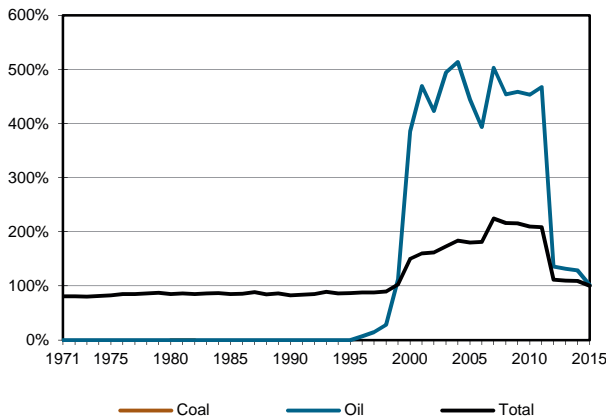
**Figure 1. Energy production**



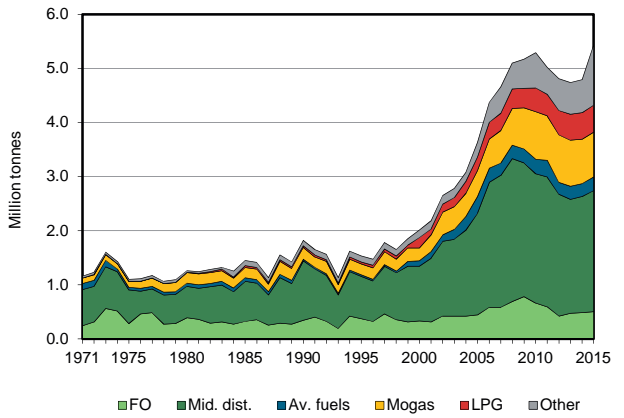
**Figure 2. Total primary energy supply<sup>2</sup>**



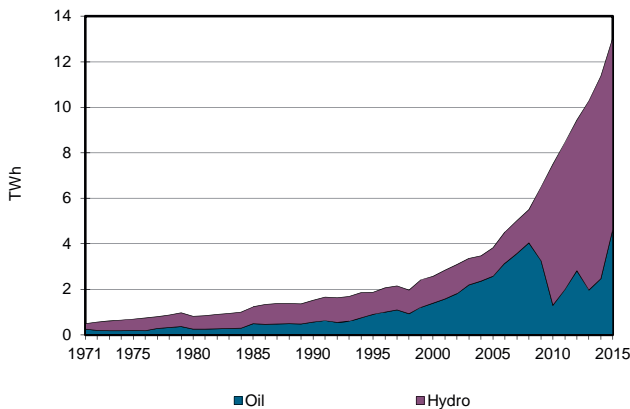
**Figure 3. Energy self-sufficiency<sup>3</sup>**



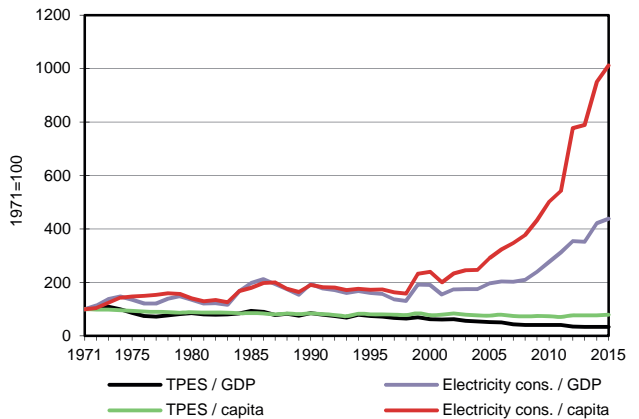
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Sudan

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	5345	-	-	-	724	-	9683	-	-	15752
Imports	-	481	1113	-	-	-	-	-	-	-	1593
Exports	-	-995	-392	-	-	-	-	-	-	-	-1387
Intl. marine bunkers	-	-	-22	-	-	-	-	-	-	-	-22
Intl. aviation bunkers	-	-	-266	-	-	-	-	-	-	-	-266
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>4830</b>	<b>433</b>	-	-	<b>724</b>	-	<b>9683</b>	-	-	<b>15670</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-15	-	-	-	-	-	-	-	-15
Electricity plants	-	-481	-780	-	-	-724	-	-	1122	-	-863
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-4350	4349	-	-	-	-	-	-	-	-1
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-3855	-	-	-3855
Energy industry own use	-	-	-64	-	-	-	-	-	-4	-	-68
Losses	-	-	-	-	-	-	-	-	-208	-	-208
<b>TFC</b>	-	-	<b>3922</b>	-	-	-	-	<b>5828</b>	<b>910</b>	-	<b>10660</b>
<b>INDUSTRY</b>	-	-	<b>489</b>	-	-	-	-	<b>851</b>	<b>130</b>	-	<b>1470</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	21	-	-	-	-	-	-	-	21
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	120	-	-	-	-	-	-	-	120
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	34	-	-	-	-	-	-	-	34
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	315	-	-	-	-	851	130	-	1295
<b>TRANSPORT</b>	-	-	<b>2612</b>	-	-	-	-	-	-	-	<b>2612</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2592	-	-	-	-	-	-	-	2592
Rail	-	-	18	-	-	-	-	-	-	-	18
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	2	-	-	-	-	-	-	-	2
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>577</b>	-	-	-	-	<b>4978</b>	<b>780</b>	-	<b>6334</b>
Residential	-	-	200	-	-	-	-	3842	514	-	4555
Comm. and public services	-	-	130	-	-	-	-	1136	217	-	1483
Agriculture/forestry	-	-	42	-	-	-	-	-	49	-	91
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	204	-	-	-	-	-	-	-	204
<b>NON-ENERGY USE</b>	-	-	<b>245</b>	-	-	-	-	-	-	-	<b>245</b>
in industry/transf./energy	-	-	245	-	-	-	-	-	-	-	245
of which: chem./petrochem.	-	-	18	-	-	-	-	-	-	-	18
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	<b>1676</b>	<b>2951</b>	-	-	<b>8420</b>	-	-	-	-	<b>13047</b>
Electricity plants	-	1676	2951	-	-	8420	-	-	-	-	13047
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Suriname

Figure 1. Energy production

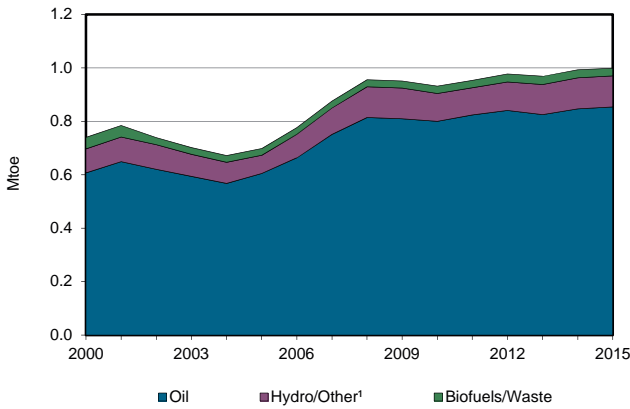


Figure 2. Total primary energy supply²

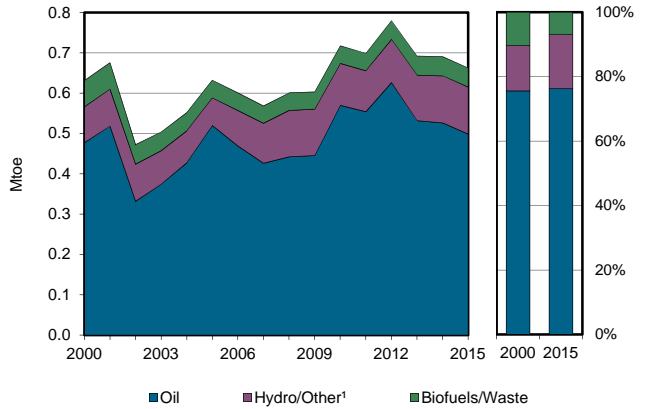


Figure 3. Energy self-sufficiency³

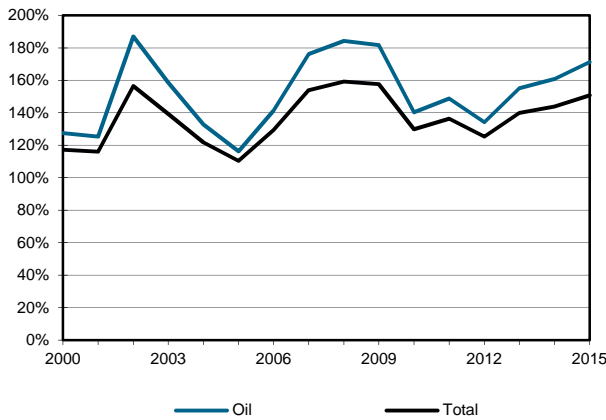


Figure 4. Oil products demand⁴

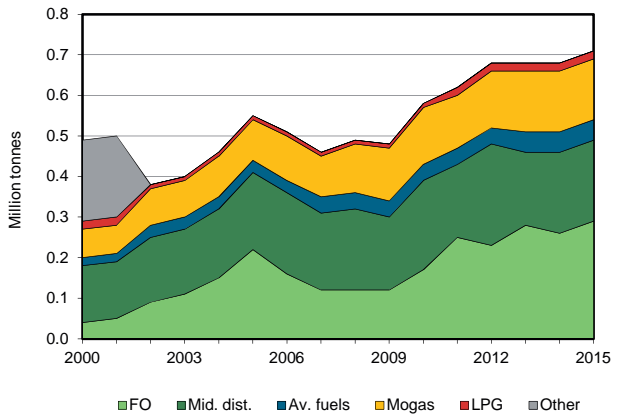


Figure 5. Electricity generation by source

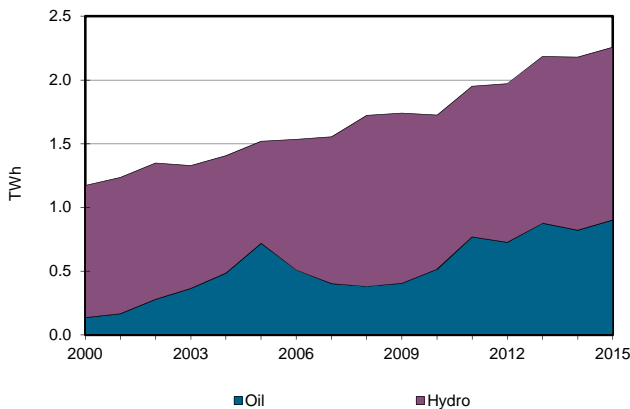
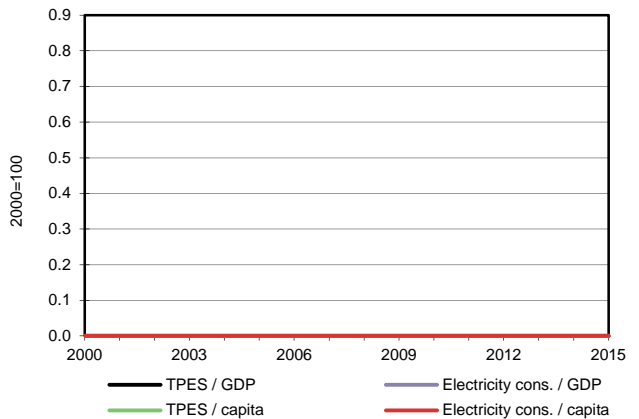


Figure 6. Selected indicators⁵



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Suriname

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	853	-	-	-	117	-	29	-	-	999
Imports	-	-	516	-	-	-	-	18	-	-	534
Exports	-	-	-818	-	-	-	-	-	-	-	-818
Intl. marine bunkers	-	-	-52	-	-	-	-	-	-	-	-52
Intl. aviation bunkers	-	-	-	-	-	-	-	-	-	-	-
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>853</b>	<b>-355</b>	-	-	<b>117</b>	-	<b>48</b>	-	-	<b>662</b>
Transfers	-	-486	609	-	-	-	-	-	-	-	123
Statistical differences	-	70	-2	-	-	-	-	-	-	-	68
Electricity plants	-	-	-277	-	-	-117	-	-	194	-	-199
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-434	412	-	-	-	-	-	-	-	-22
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-3	-4	-	-	-	-	-	-3	-	-10
Losses	-	-	-	-	-	-	-	-	-21	-	-21
<b>TFC</b>	-	-	<b>383</b>	-	-	-	-	<b>48</b>	<b>170</b>	-	<b>601</b>
<b>INDUSTRY</b>	-	-	<b>23</b>	-	-	-	-	<b>5</b>	<b>82</b>	-	<b>109</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	9	-	-	-	-	-	-	-	9
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	14	-	-	-	-	5	82	-	100
<b>TRANSPORT</b>	-	-	<b>227</b>	-	-	-	-	-	-	-	<b>227</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	147	-	-	-	-	-	-	-	147
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	81	-	-	-	-	-	-	-	81
<b>OTHER</b>	-	-	<b>133</b>	-	-	-	-	<b>43</b>	<b>88</b>	-	<b>264</b>
Residential	-	-	16	-	-	-	-	37	57	-	110
Comm. and public services	-	-	9	-	-	-	-	6	32	-	46
Agriculture/forestry	-	-	109	-	-	-	-	-	-	-	109
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>902</b>	-	-	<b>1356</b>	-	-	-	-	<b>2258</b>
Electricity plants	-	-	902	-	-	1356	-	-	-	-	2258
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Syrian Arab Republic

Figure 1. Energy production

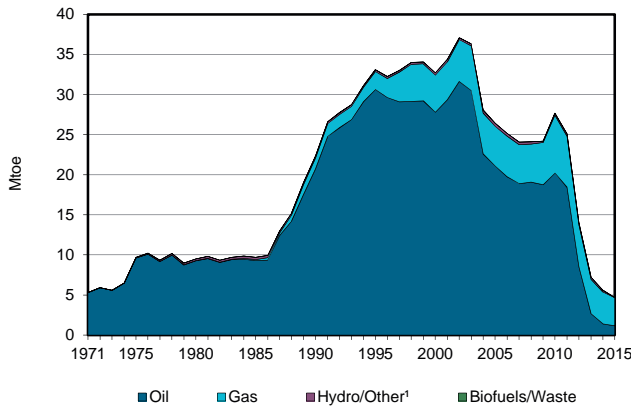


Figure 2. Total primary energy supply<sup>2</sup>

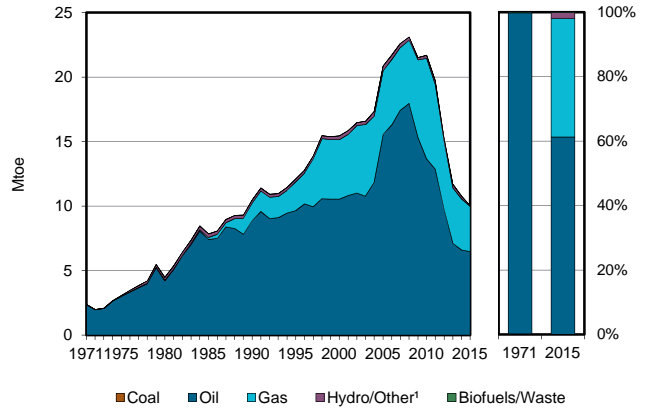


Figure 3. Energy self-sufficiency<sup>3</sup>

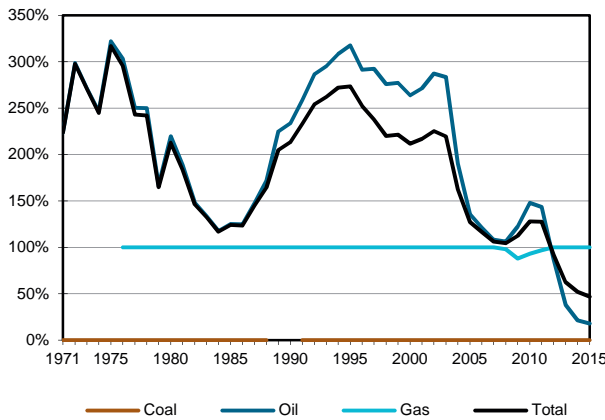


Figure 4. Oil products demand<sup>4</sup>

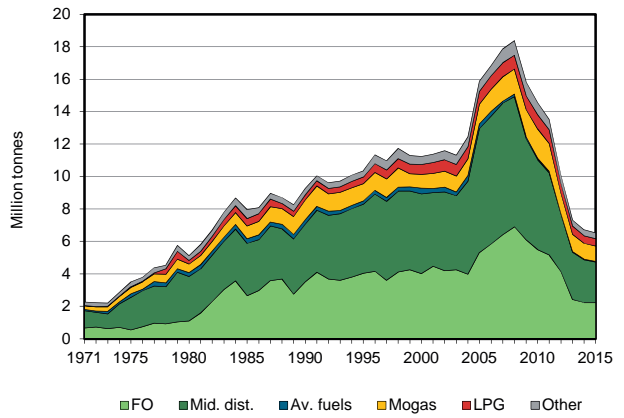


Figure 5. Electricity generation by source

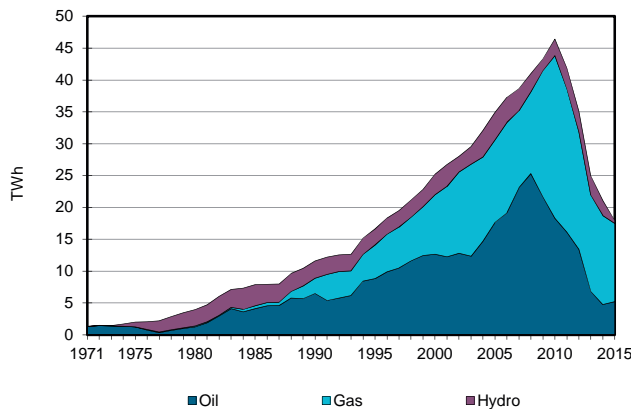
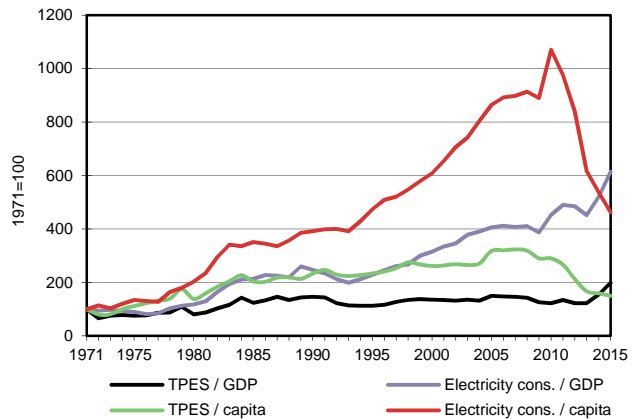


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Syrian Arab Republic

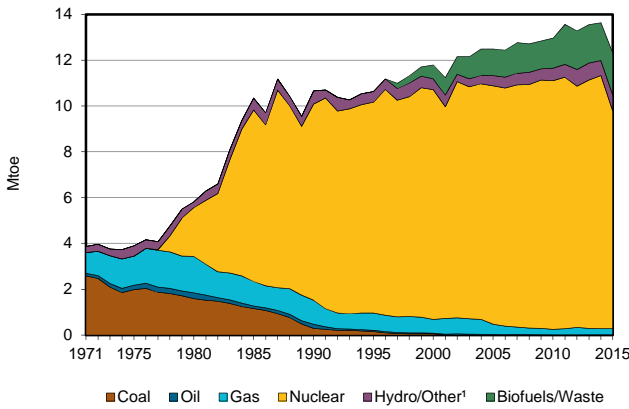
2015

Thousand tonnes of oil equivalent

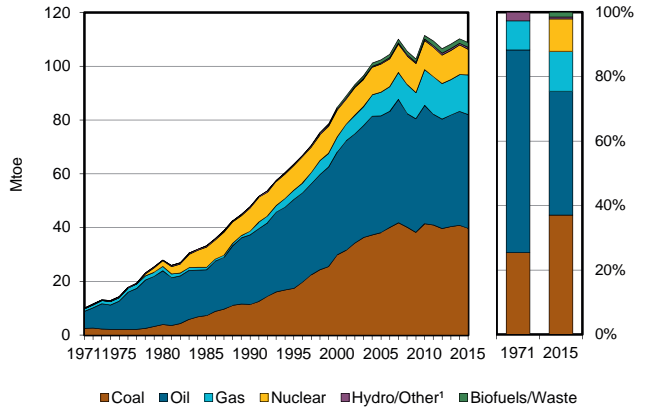
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	1155	-	3484	-	36	-	6	-	-	4680
Imports	1	4400	1717	-	-	-	-	-	-	-	6118
Exports	-	-	-601	-	-	-	-	-	-23	-	-623
Intl. marine bunkers	-	-	-179	-	-	-	-	-	-	-	-179
Intl. aviation bunkers	-	-	-17	-	-	-	-	-	-	-	-17
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>1</b>	<b>5555</b>	<b>920</b>	<b>3484</b>	<b>-</b>	<b>36</b>	<b>-</b>	<b>6</b>	<b>-23</b>	<b>-</b>	<b>9978</b>
Transfers	-	-76	86	-	-	-	-	-	-	-	10
Statistical differences	-	-	-	1	-	-	-	-	-	-	1
Electricity plants	-	-	-1385	-2851	-	-36	-	-	1538	-	-2734
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-1	-	-	-	-	-	-	-	-	-	-1
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-5479	5437	-	-	-	-	-	-	-	-42
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0	-	-	-0
Energy industry own use	-	-	-160	-52	-	-	-	-	-176	-	-388
Losses	-	-	-	-	-	-	-	-	-225	-	-225
<b>TFC</b>	<b>0</b>	<b>-</b>	<b>4897</b>	<b>582</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>1115</b>	<b>-</b>	<b>6600</b>
<b>INDUSTRY</b>	<b>0</b>	<b>-</b>	<b>966</b>	<b>205</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>375</b>	<b>-</b>	<b>1546</b>
Iron and steel	0	-	-	-	-	-	-	-	-	-	0
Chemical and petrochemical	-	-	-	205	-	-	-	-	-	-	205
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	966	-	-	-	-	-	375	-	1341
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>2132</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2132</b>
Domestic aviation	-	-	33	-	-	-	-	-	-	-	33
Road	-	-	2099	-	-	-	-	-	-	-	2099
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1530</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>740</b>	<b>-</b>	<b>2275</b>
Residential	-	-	823	-	-	-	-	-	510	-	1333
Comm. and public services	-	-	178	-	-	-	-	-	116	-	294
Agriculture/forestry	-	-	258	-	-	-	-	-	-	-	258
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	271	-	-	-	-	5	114	-	390
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>270</b>	<b>377</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>646</b>
in industry/transf./energy	-	-	261	377	-	-	-	-	-	-	637
of which: chem./petrochem.	-	-	1	377	-	-	-	-	-	-	378
in transport	-	-	9	-	-	-	-	-	-	-	9
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>5197</b>	<b>12271</b>	<b>-</b>	<b>413</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17881</b>
Electricity plants	-	-	5197	12271	-	413	-	-	-	-	17881
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Chinese Taipei

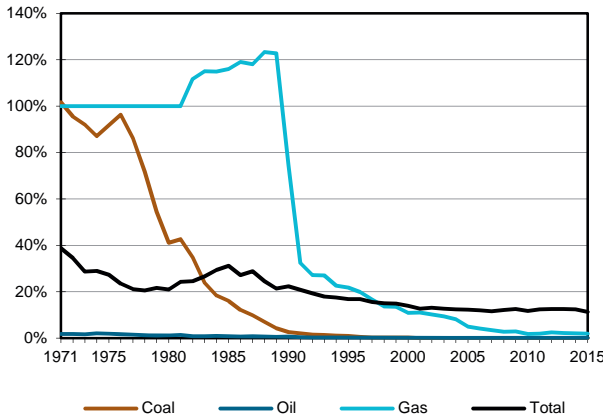
**Figure 1. Energy production**



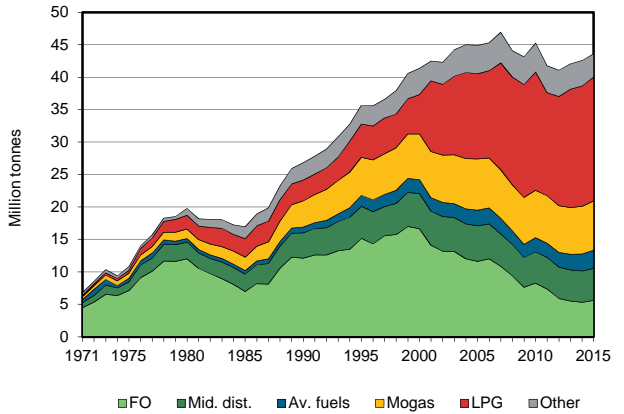
**Figure 2. Total primary energy supply<sup>2</sup>**



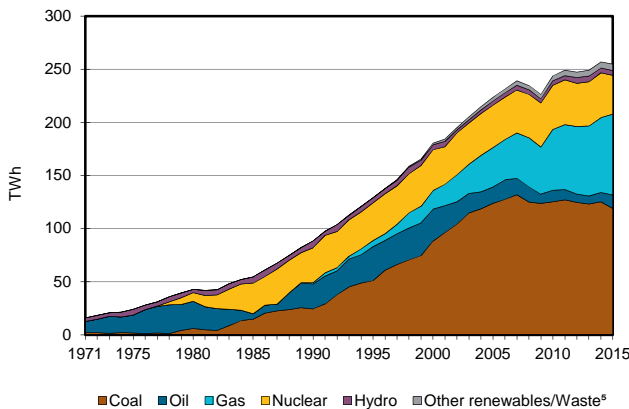
**Figure 3. Energy self-sufficiency<sup>3</sup>**



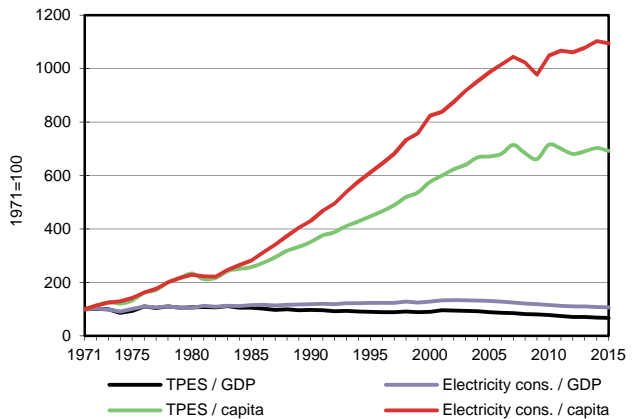
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Chinese Taipei

2015

Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	8	-	269	9505	384	311	1836	-	-	12313
Imports	40217	44727	17933	15343	-	-	-	-	-	-	118220
Exports	-	-	-16732	-	-	-	-	-	-	-	-16732
Intl. marine bunkers	-	-	-1052	-	-	-	-	-	-	-	-1052
Intl. aviation bunkers	-	-	-2721	-	-	-	-	-	-	-	-2721
Stock changes	-532	-227	368	-824	-	-	-	4	-	-	-1211
<b>TPES</b>	<b>39685</b>	<b>44508</b>	<b>-2205</b>	<b>14788</b>	<b>9505</b>	<b>384</b>	<b>311</b>	<b>1839</b>	-	-	<b>108816</b>
Transfers	-	530	-446	-	-	-	-	-	-	-	84
Statistical differences	-1863	38	461	777	-	-	-0	-3	-1	-	-590
Electricity plants	-18973	-	-2381	-12377	-9505	-384	-206	-1634	18873	-	-26588
CHP plants	-7155	-	-357	-56	-	-	-	-	3056	-	-4512
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-2420	-	-	-	-	-	-	-	-	-	-2420
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-352	-	-	-	-	-	-	-	-	-	-352
Oil refineries	-	-45077	44329	-	-	-	-	-	-	-	-748
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-1135	-	-1457	-305	-	-	-	-4	-1382	-	-4284
Losses	-140	-	-	-	-	-	-	-	-701	-	-841
<b>TFC</b>	<b>7647</b>	-	<b>37944</b>	<b>2827</b>	-	-	<b>104</b>	<b>198</b>	<b>19846</b>	-	<b>68566</b>
<b>INDUSTRY</b>	<b>7451</b>	-	<b>1819</b>	<b>1593</b>	-	-	-	<b>197</b>	<b>11464</b>	-	<b>22524</b>
Iron and steel	1472	-	193	217	-	-	-	-	1278	-	3160
Chemical and petrochemical	4226	-	612	358	-	-	-	9	3129	-	8335
Non-ferrous metals	-	-	31	44	-	-	-	-	104	-	179
Non-metallic minerals	1336	-	247	177	-	-	-	-	478	-	2239
Transport equipment	-	-	27	601	-	-	-	-	213	-	842
Machinery	-	-	104	139	-	-	-	-	4659	-	4902
Mining and quarrying	-	-	32	0	-	-	-	-	40	-	72
Food and tobacco	-	-	192	10	-	-	-	13	344	-	559
Paper pulp and printing	357	-	41	15	-	-	-	107	329	-	849
Wood and wood products	-	-	5	-	-	-	-	-	34	-	38
Construction	-	-	51	-	-	-	-	-	54	-	106
Textile and leather	60	-	197	28	-	-	-	-	481	-	766
Non-specified	0	-	87	3	-	-	-	68	320	-	477
<b>TRANSPORT</b>	-	-	<b>12345</b>	-	-	-	-	<b>1</b>	<b>116</b>	-	<b>12462</b>
Domestic aviation	-	-	92	-	-	-	-	-	-	-	92
Road	-	-	12103	-	-	-	-	1	-	-	12105
Rail	-	-	23	-	-	-	-	-	116	-	139
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	127	-	-	-	-	-	-	-	127
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>2380</b>	<b>1234</b>	-	-	<b>104</b>	-	<b>8266</b>	-	<b>11984</b>
Residential	-	-	1055	652	-	-	101	-	3860	-	5668
Comm. and public services	-	-	826	579	-	-	3	-	2518	-	3926
Agriculture/forestry	-	-	3	-	-	-	-	-	167	-	170
Fishing	-	-	357	-	-	-	-	-	84	-	441
Non-specified	-	-	139	3	-	-	-	-	1637	-	1779
<b>NON-ENERGY USE</b>	<b>196</b>	-	<b>21400</b>	-	-	-	-	-	-	-	<b>21596</b>
in industry/transf./energy	196	-	21400	-	-	-	-	-	-	-	21596
of which: chem./petrochem.	-	-	19153	-	-	-	-	-	-	-	19153
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>119064</b>	-	<b>12688</b>	<b>76108</b>	<b>36471</b>	<b>4470</b>	<b>2401</b>	<b>3788</b>	-	-	<b>254990</b>
Electricity plants	84961	-	11575	75790	36471	4470	2401	3788	-	-	219456
CHP plants	34103	-	1113	318	-	-	-	-	-	-	35534
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-



## Tajikistan

Figure 1. Energy production

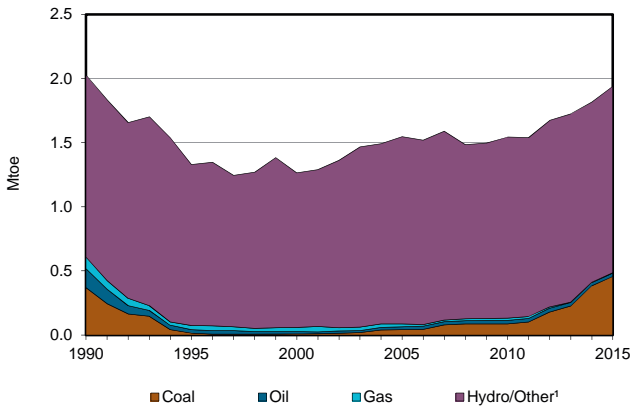


Figure 2. Total primary energy supply<sup>2</sup>

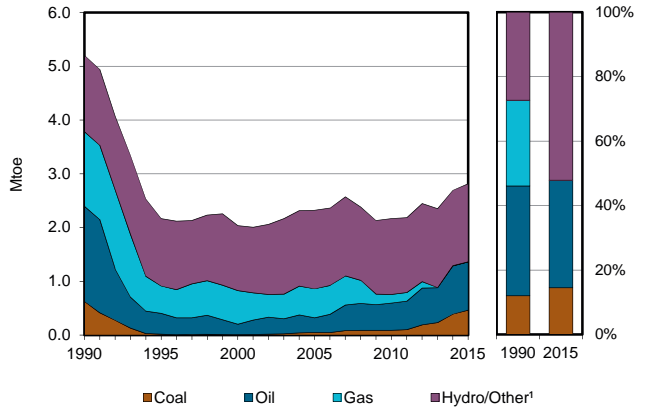


Figure 3. Energy self-sufficiency<sup>3</sup>

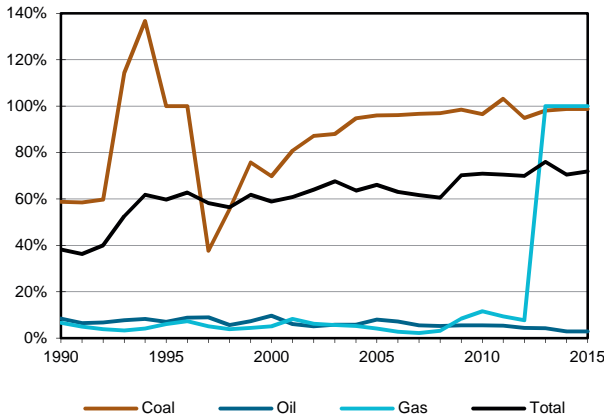


Figure 4. Oil products demand<sup>4</sup>

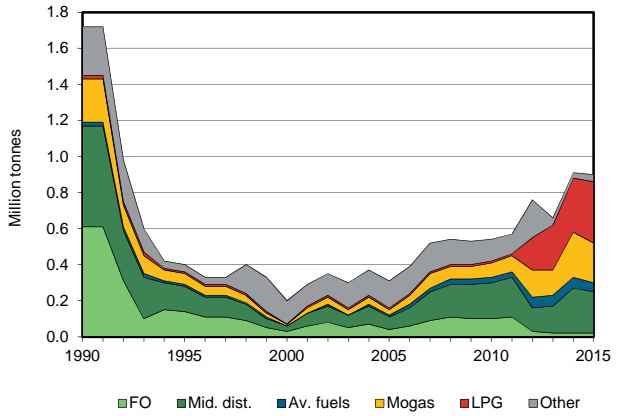


Figure 5. Electricity generation by source

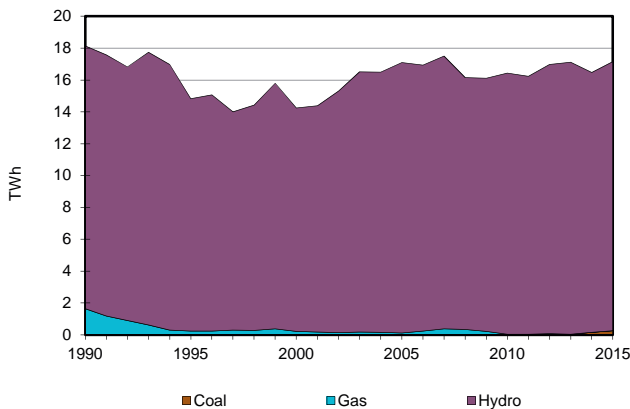
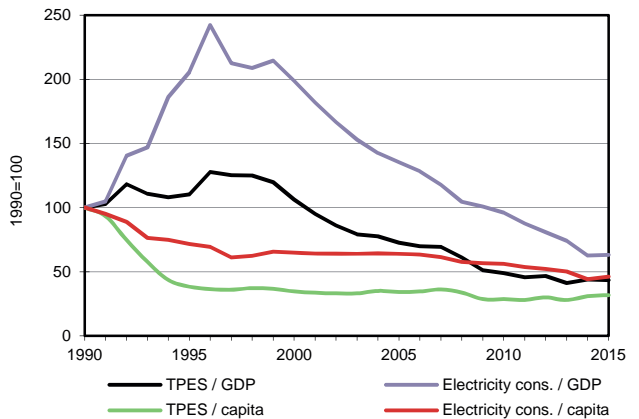


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

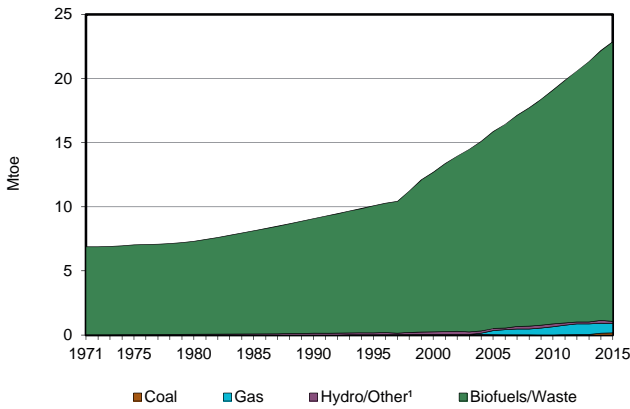
## Tajikistan

2015

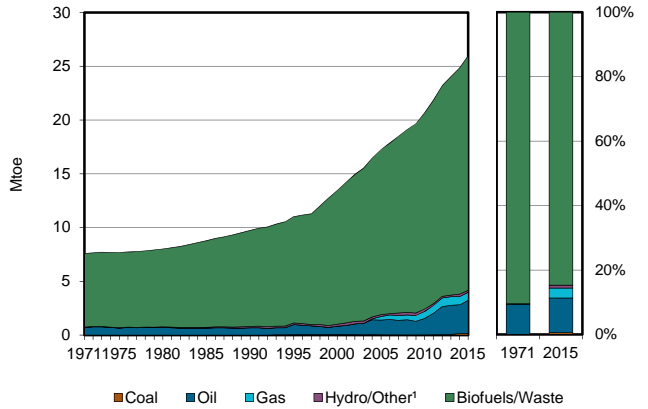
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	457	25	-	3	-	1453	-	-	-	-	1939
Imports	6	-	927	-	-	-	-	-	5	-	938
Exports	-	-	-	-	-	-	-	-	-120	-	-120
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-55	-	-	-	-	-	-	-	-55
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>463</b>	<b>25</b>	<b>872</b>	<b>3</b>	<b>-</b>	<b>1453</b>	<b>-</b>	<b>-</b>	<b>-115</b>	<b>-</b>	<b>2701</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-51	-	-51
Electricity plants	-	-	-	-	-	-1453	-	-	1453	-	-
CHP plants	-73	-	-	-	-	-	-	-	23	36	-14
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-25	9	-	-	-	-	-	-	-	-16
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-7	-	-	-	-	-	-8	-	-14
Losses	-	-	-	-	-	-	-	-	-232	-	-232
<b>TFC</b>	<b>390</b>	<b>-</b>	<b>874</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1070</b>	<b>36</b>	<b>2373</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>360</b>	<b>-</b>	<b>362</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	6	-	6
Non-ferrous metals	-	-	-	-	-	-	-	-	333	-	333
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	1	-	1
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	3	-	3
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	0	-	0
Construction	-	-	2	-	-	-	-	-	8	-	9
Textile and leather	-	-	-	-	-	-	-	-	9	-	9
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>813</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>817</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	813	-	-	-	-	-	-	-	813
Rail	-	-	-	-	-	-	-	-	4	-	4
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>390</b>	<b>-</b>	<b>46</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>706</b>	<b>36</b>	<b>1181</b>
Residential	-	-	-	-	-	-	-	-	258	-	258
Comm. and public services	-	-	-	-	-	-	-	-	78	-	78
Agriculture/forestry	-	-	-	-	-	-	-	-	370	-	370
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	390	-	46	3	-	-	-	-	-	36	475
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13</b>
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	13	-	-	-	-	-	-	-	13
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>262</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16900</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17162</b>
Electricity plants	-	-	-	-	-	16900	-	-	-	-	16900
CHP plants	262	-	-	-	-	-	-	-	-	-	262
<b>Heat generated - TJ</b>	<b>1499</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1499</b>
CHP plants	1499	-	-	-	-	-	-	-	-	-	1499
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Tanzania

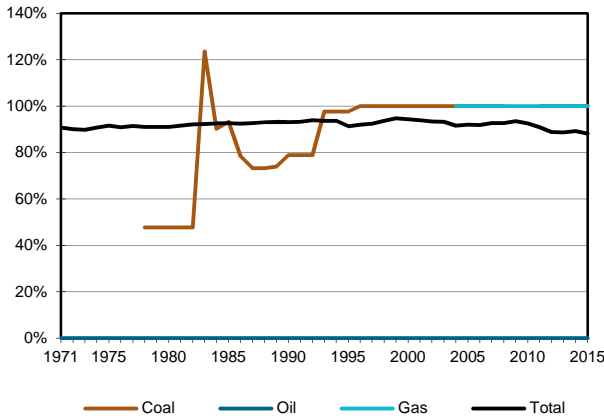
**Figure 1. Energy production**



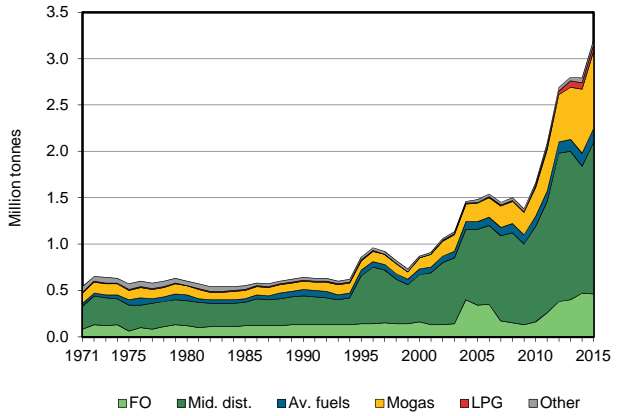
**Figure 2. Total primary energy supply<sup>2</sup>**



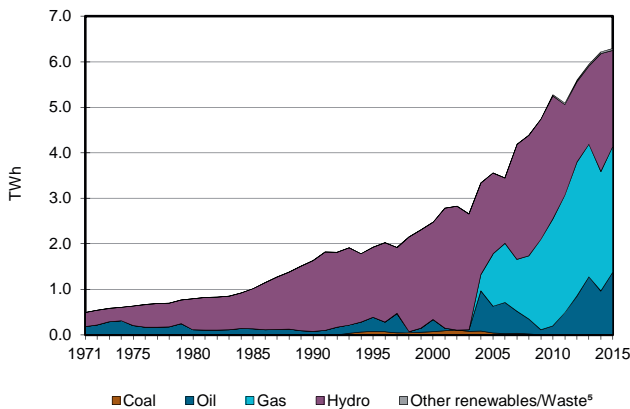
**Figure 3. Energy self-sufficiency<sup>3</sup>**



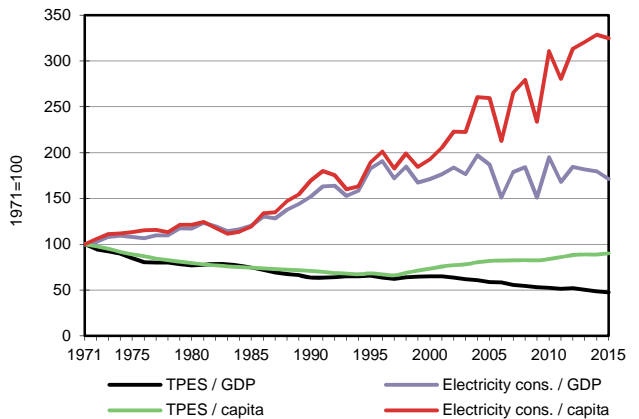
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

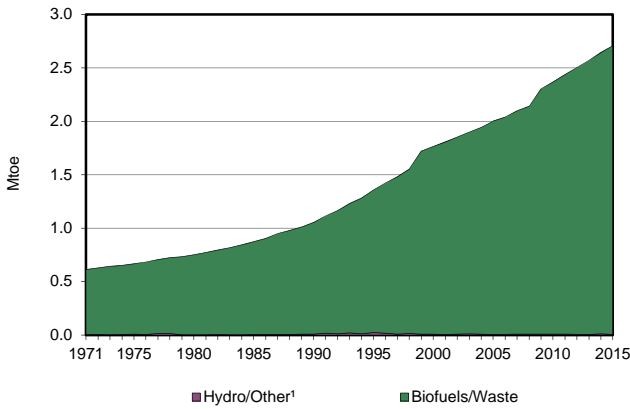
## Tanzania

2015

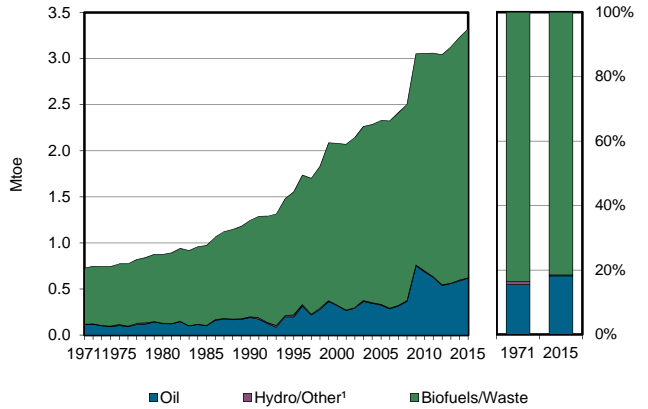
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	158	-	-	731	-	181	2	21801	-	-	22873
Imports	-	-	3309	-	-	-	-	-	6	-	3315
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-62	-	-	-	-	-	-	-	-62
Intl. aviation bunkers	-	-	-158	-	-	-	-	-	-	-	-158
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>158</b>	<b>-</b>	<b>3089</b>	<b>731</b>	<b>-</b>	<b>181</b>	<b>2</b>	<b>21801</b>	<b>6</b>	<b>-</b>	<b>25968</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-0	-	-	-	-	2	-	2
Electricity plants	-	-	-433	-593	-	-181	-2	-9	541	-	-677
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-2730	-	-	-2730
Energy industry own use	-	-	-	-	-	-	-	-	-2	-	-2
Losses	-	-	-	-	-	-	-	-	-96	-	-96
<b>TFC</b>	<b>158</b>	<b>-</b>	<b>2655</b>	<b>138</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>19062</b>	<b>452</b>	<b>-</b>	<b>22465</b>
<b>INDUSTRY</b>	<b>158</b>	<b>-</b>	<b>152</b>	<b>138</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2794</b>	<b>117</b>	<b>-</b>	<b>3359</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	41	-	-	-	-	-	-	41
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	158	-	152	97	-	-	-	2794	117	-	3318
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>2327</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2327</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2327	-	-	-	-	-	-	-	2327
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>131</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16268</b>	<b>334</b>	<b>-</b>	<b>16734</b>
Residential	-	-	110	-	-	-	-	14786	204	-	15099
Comm. and public services	-	-	-	-	-	-	-	-	102	-	102
Agriculture/forestry	-	-	22	-	-	-	-	881	15	-	918
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	601	13	-	614
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>46</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46</b>
in industry/transf./energy	-	-	46	-	-	-	-	-	-	-	46
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>1381</b>	<b>2764</b>	<b>-</b>	<b>2108</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>6295</b>
Electricity plants	-	-	1381	2764	-	2108	21	21	-	-	6295
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Togo

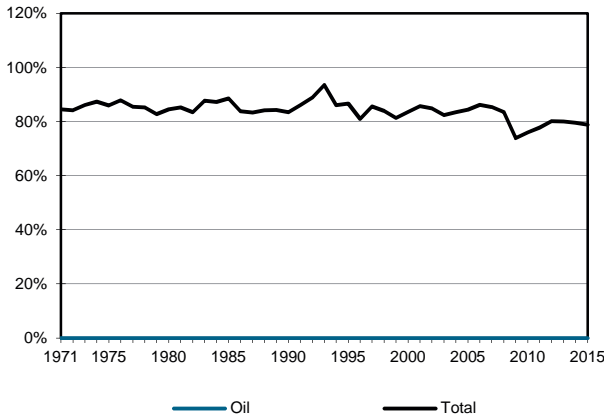
**Figure 1. Energy production**



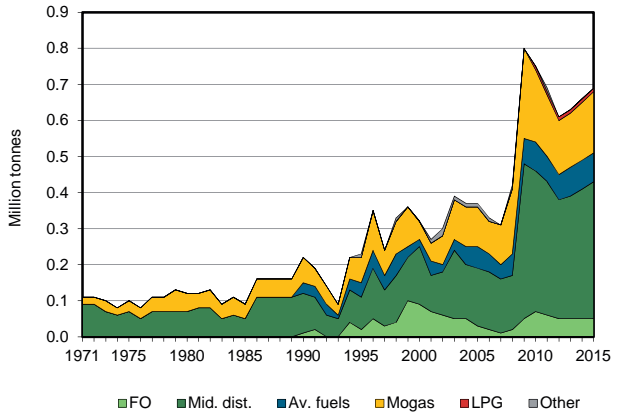
**Figure 2. Total primary energy supply<sup>2</sup>**



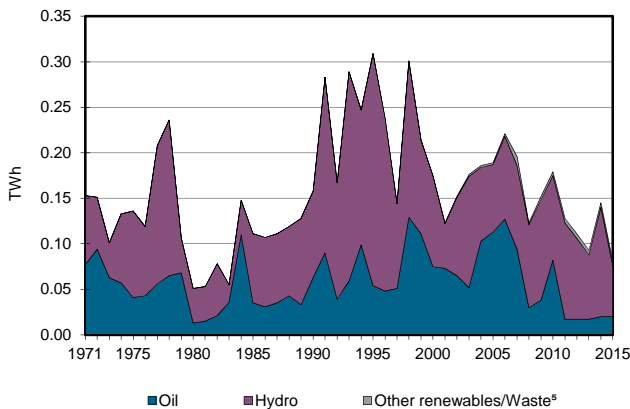
**Figure 3. Energy self-sufficiency<sup>3</sup>**



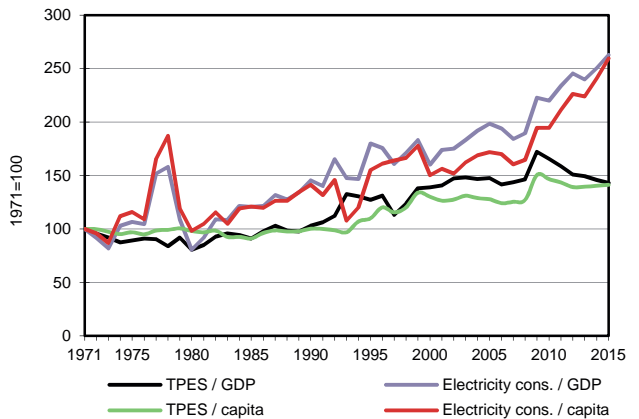
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Togo

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	5	-	2702	-	-	2707
Imports	-	-	642	-	-	-	-	-	107	-	749
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-19	-	-	-	-	-	-	-	-19
Intl. aviation bunkers	-	-	-87	-	-	-	-	-	-	-	-87
Stock changes	-	-	82	-	-	-	-	-	-	-	82
<b>TPES</b>	-	-	<b>618</b>	-	-	<b>5</b>	-	<b>2702</b>	<b>107</b>	-	<b>3431</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	1	-	-	-	-	12	-	-	12
Electricity plants	-	-	-6	-	-	-5	-	-2	7	-	-6
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1214	-	-	-1214
Energy industry own use	-	-	-	-	-	-	-	-	-0	-	-0
Losses	-	-	-	-	-	-	-	-	-9	-	-9
<b>TFC</b>	-	-	<b>612</b>	-	-	-	-	<b>1497</b>	<b>104</b>	-	<b>2214</b>
<b>INDUSTRY</b>	-	-	<b>53</b>	-	-	-	-	<b>3</b>	<b>34</b>	-	<b>90</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	51	-	-	-	-	-	16	-	66
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	11	-	11
Food and tobacco	-	-	2	-	-	-	-	-	0	-	2
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	3	-	3
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	3	4	-	7
<b>TRANSPORT</b>	-	-	<b>484</b>	-	-	-	-	-	-	-	<b>484</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	484	-	-	-	-	-	-	-	484
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>73</b>	-	-	-	-	<b>1494</b>	<b>71</b>	-	<b>1637</b>
Residential	-	-	73	-	-	-	-	1295	52	-	1419
Comm. and public services	-	-	-	-	-	-	-	199	13	-	212
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	6	-	6
<b>NON-ENERGY USE</b>	-	-	<b>3</b>	-	-	-	-	-	-	-	<b>3</b>
in industry/transf./energy	-	-	3	-	-	-	-	-	-	-	3
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>20</b>	-	-	<b>56</b>	-	<b>5</b>	-	-	<b>81</b>
Electricity plants	-	-	20	-	-	56	-	5	-	-	81
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Trinidad and Tobago

Figure 1. Energy production

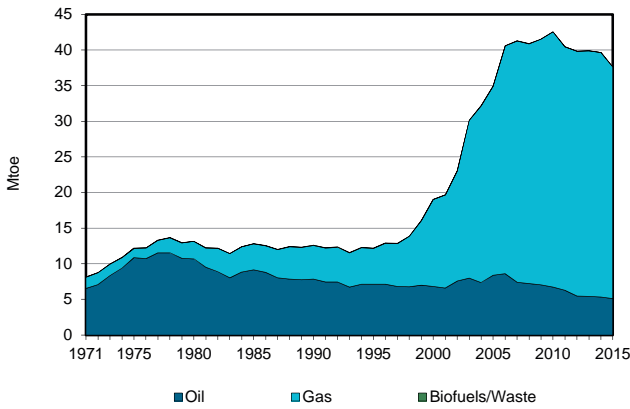


Figure 2. Total primary energy supply<sup>1</sup>

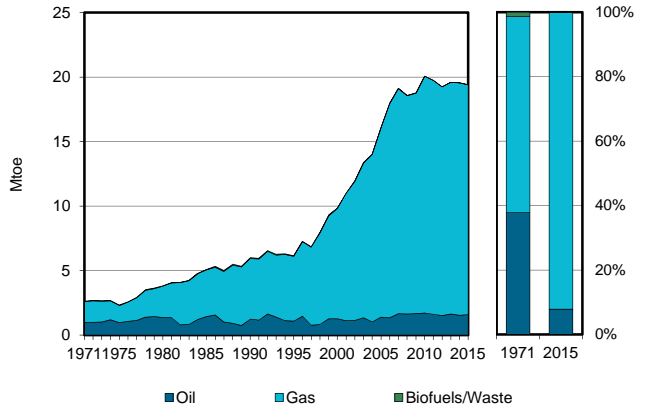


Figure 3. Energy self-sufficiency<sup>2</sup>

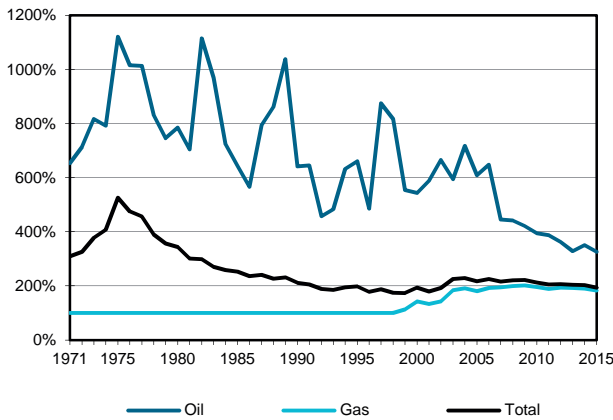


Figure 4. Oil products demand<sup>3</sup>

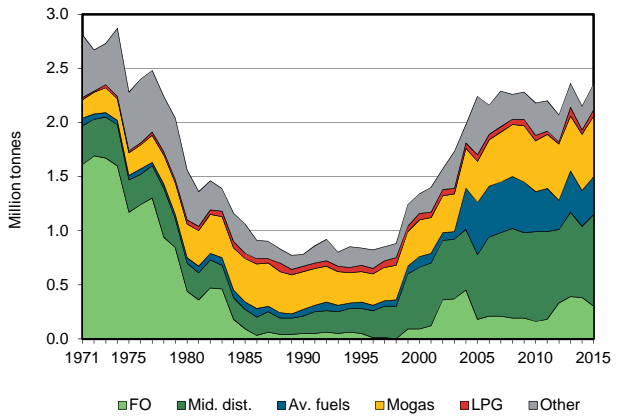


Figure 5. Electricity generation by source

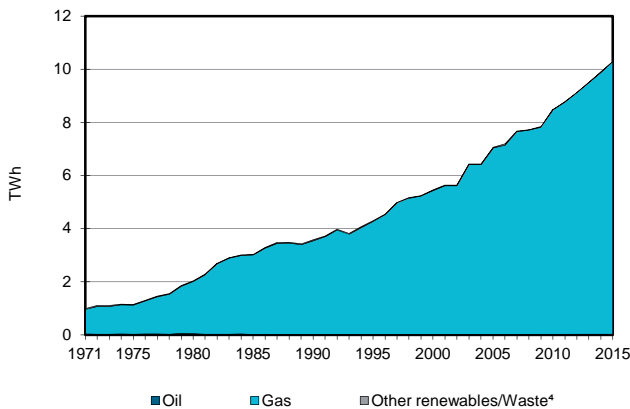
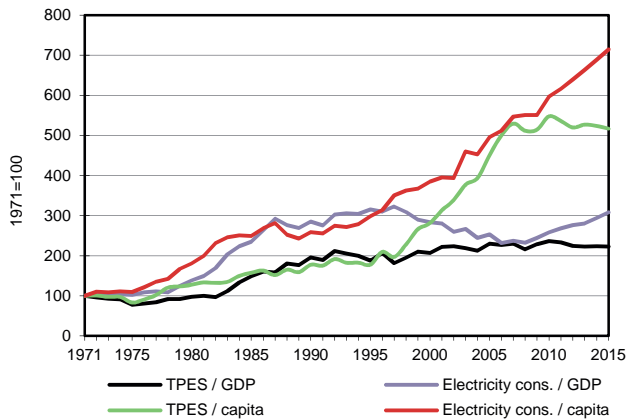


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
5. GDP in 2010 USD.

## Trinidad and Tobago

2015

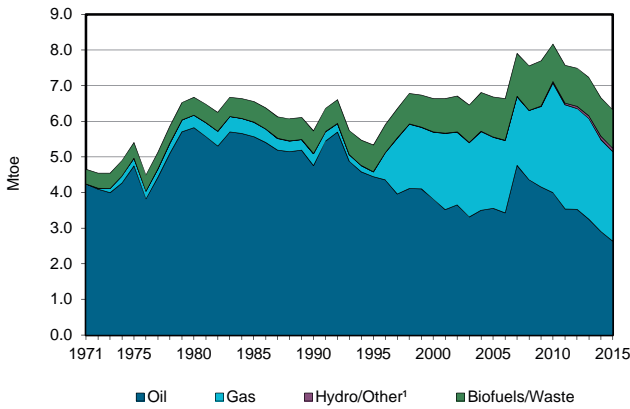
Thousand tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	5124	-	32466	-	-	-	13	-	-	37603
Imports	-	4079	-	-	-	-	-	-	-	-	4079
Exports	-	-1613	-5010	-14653	-	-	-	-	-	-	-21277
Intl. marine bunkers	-	-	-538	-	-	-	-	-	-	-	-538
Intl. aviation bunkers	-	-	-255	-	-	-	-	-	-	-	-255
Stock changes	-	-35	-178	-	-	-	-	-	-	-	-213
<b>TPES</b>	-	<b>7554</b>	<b>-5981</b>	<b>17813</b>	-	-	-	<b>13</b>	-	-	<b>19399</b>
Transfers	-	-1074	1185	-	-	-	-	-	-	-	111
Statistical differences	-	42	12	-	-	-	-	-	-0	-	54
Electricity plants	-	-	-7	-2551	-	-	-	-	886	-	-1673
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-6522	6453	-	-	-	-	-	-	-	-69
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-2	-	-	-2
Energy industry own use	-	-	-247	-3251	-	-	-	-	-32	-	-3530
Losses	-	-	-	-497	-	-	-	-	-19	-	-516
<b>TFC</b>	-	-	<b>1415</b>	<b>11513</b>	-	-	-	<b>12</b>	<b>834</b>	-	<b>13774</b>
<b>INDUSTRY</b>	-	-	<b>166</b>	<b>1801</b>	-	-	-	-	<b>504</b>	-	<b>2471</b>
Iron and steel	-	-	-	683	-	-	-	-	-	-	683
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	112	-	-	-	-	-	-	112
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	166	1005	-	-	-	-	504	-	1676
<b>TRANSPORT</b>	-	-	<b>1130</b>	-	-	-	-	-	-	-	<b>1130</b>
Domestic aviation	-	-	123	-	-	-	-	-	-	-	123
Road	-	-	1007	-	-	-	-	-	-	-	1007
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>85</b>	<b>78</b>	-	-	-	<b>12</b>	<b>330</b>	-	<b>505</b>
Residential	-	-	77	78	-	-	-	12	239	-	405
Comm. and public services	-	-	8	-	-	-	-	-	91	-	99
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>34</b>	<b>9634</b>	-	-	-	-	-	-	<b>9669</b>
in industry/transf./energy	-	-	34	9634	-	-	-	-	-	-	9669
of which: chem./petrochem.	-	-	-	9634	-	-	-	-	-	-	9634
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>24</b>	<b>10276</b>	-	-	-	-	-	-	<b>10300</b>
Electricity plants	-	-	24	10276	-	-	-	-	-	-	10300
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

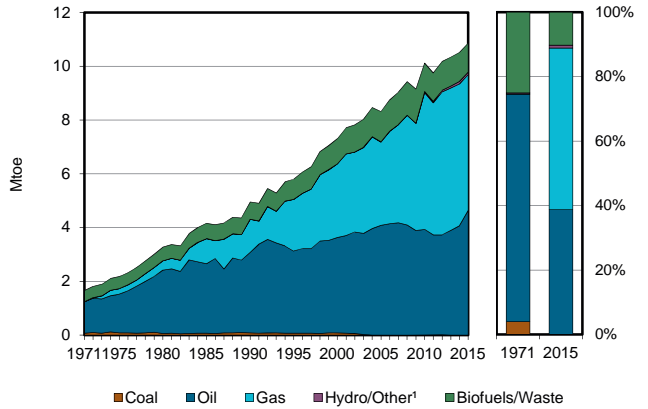


## Tunisia

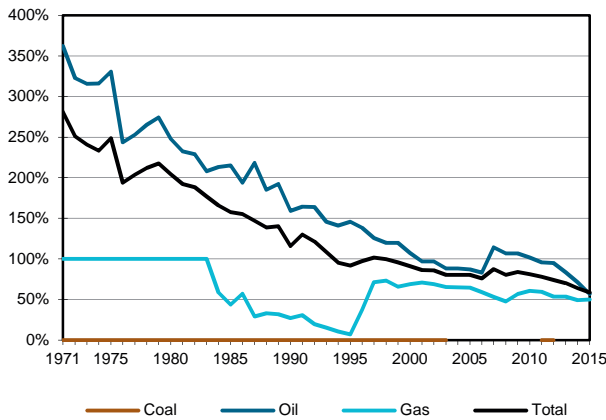
**Figure 1. Energy production**



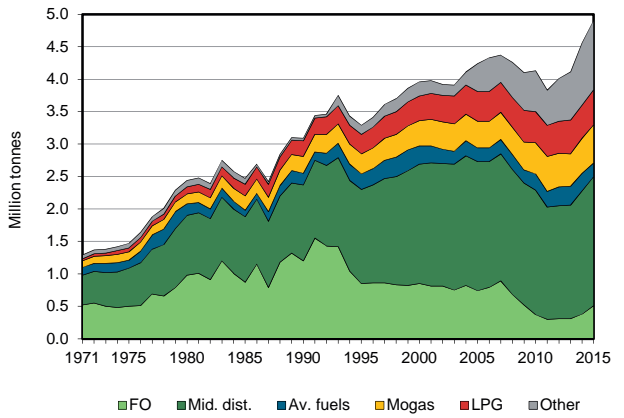
**Figure 2. Total primary energy supply<sup>2</sup>**



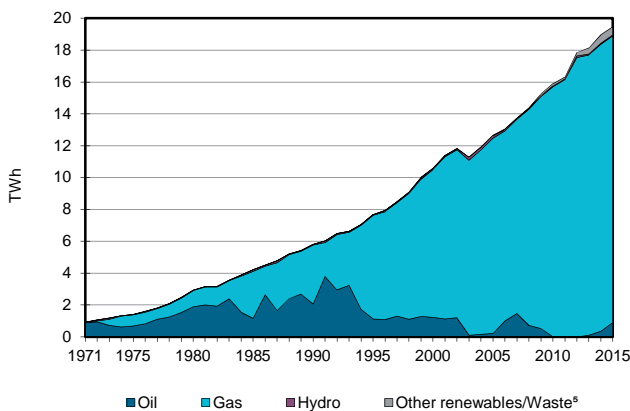
**Figure 3. Energy self-sufficiency<sup>3</sup>**



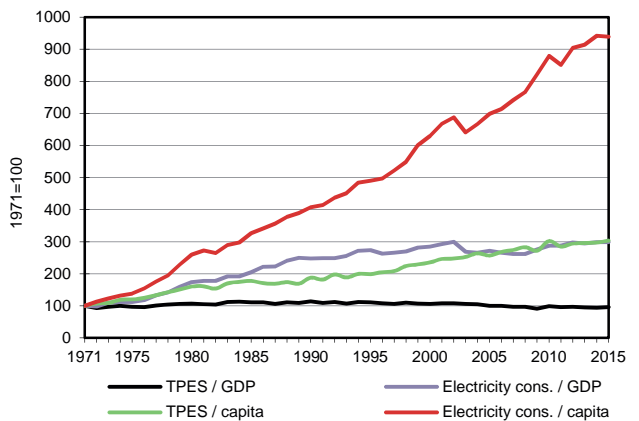
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Tunisia

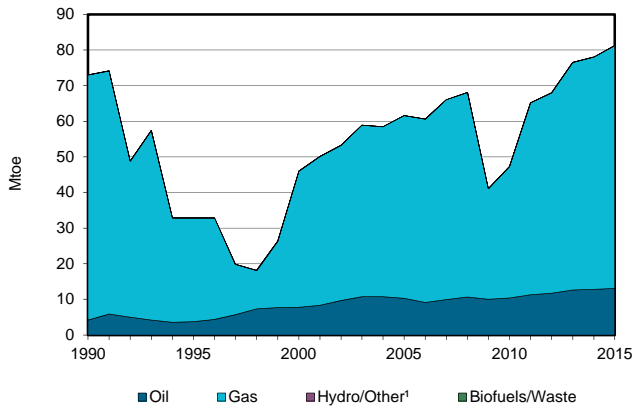
2015

Thousand tonnes of oil equivalent

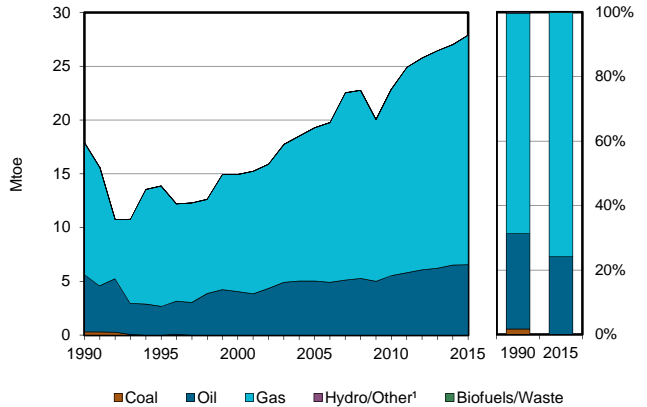
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	2628	-	2516	-	6	89	1076	-	74	6388
Imports	-	905	4096	2539	-	-	-	-	35	-	7575
Exports	-	-1928	-688	-	-	-	-	-	-43	-	-2659
Intl. marine bunkers	-	-	-3	-	-	-	-	-	-	-	-3
Intl. aviation bunkers	-	-	-210	-	-	-	-	-	-	-	-210
Stock changes	-	-18	-146	-	-	-	-	-	-	-	-163
<b>TPES</b>	-	<b>1587</b>	<b>3050</b>	<b>5055</b>	-	<b>6</b>	<b>89</b>	<b>1076</b>	<b>-8</b>	<b>74</b>	<b>10928</b>
Transfers	-	-136	157	-	-	-	-	-	-	-	21
Statistical differences	-	-92	89	-24	-	-	0	-0	-4	-	-30
Electricity plants	-	-	-234	-3578	-	-6	-42	-	1667	-74	-2267
CHP plants	-	-	-	-25	-	-	-	-	25	-	0
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1354	1331	-	-	-	-	-	-	-	-24
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-205	-	-	-205
Energy industry own use	-	-5	-48	-140	-	-	-	-	-80	-	-273
Losses	-	-	-	-	-	-	-	-	-272	-	-272
<b>TFC</b>	-	-	<b>4345</b>	<b>1289</b>	-	-	<b>47</b>	<b>871</b>	<b>1328</b>	-	<b>7879</b>
<b>INDUSTRY</b>	-	-	<b>922</b>	<b>797</b>	-	-	-	-	<b>471</b>	-	<b>2190</b>
Iron and steel	-	-	-	7	-	-	-	-	24	-	31
Chemical and petrochemical	-	-	-	108	-	-	-	-	58	-	166
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	623	456	-	-	-	-	148	-	1227
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	8	-	-	-	-	26	-	35
Food and tobacco	-	-	-	72	-	-	-	-	67	-	139
Paper pulp and printing	-	-	-	46	-	-	-	-	18	-	64
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	57	-	-	-	-	41	-	98
Non-specified	-	-	299	43	-	-	-	-	88	-	430
<b>TRANSPORT</b>	-	-	<b>2146</b>	<b>85</b>	-	-	-	-	<b>8</b>	-	<b>2239</b>
Domestic aviation	-	-	3	-	-	-	-	-	-	-	3
Road	-	-	2124	-	-	-	-	-	-	-	2124
Rail	-	-	18	-	-	-	-	-	6	-	25
Pipeline transport	-	-	-	85	-	-	-	-	2	-	87
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1002</b>	<b>406</b>	-	-	<b>47</b>	<b>871</b>	<b>848</b>	-	<b>3174</b>
Residential	-	-	543	216	-	-	45	858	400	-	2063
Comm. and public services	-	-	102	170	-	-	2	12	358	-	644
Agriculture/forestry	-	-	357	20	-	-	-	-	90	-	467
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>276</b>	-	-	-	-	-	-	-	<b>276</b>
in industry/transf./energy	-	-	207	-	-	-	-	-	-	-	207
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	57	-	-	-	-	-	-	-	57
in other	-	-	11	-	-	-	-	-	-	-	11
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>912</b>	<b>17992</b>	-	<b>69</b>	<b>489</b>	-	-	<b>214</b>	<b>19676</b>
Electricity plants	-	-	912	17702	-	69	489	-	-	214	19386
CHP plants	-	-	-	290	-	-	-	-	-	-	290
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	<b>3084</b>	<b>3084</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	3084	3084

## Turkmenistan

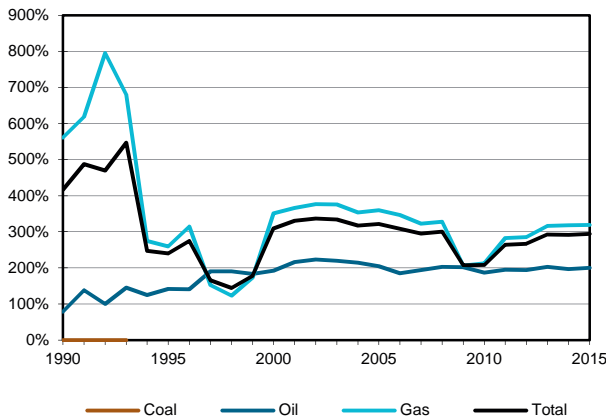
**Figure 1. Energy production**



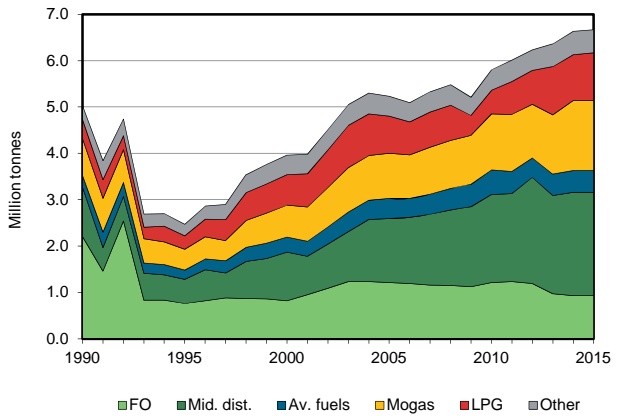
**Figure 2. Total primary energy supply<sup>2</sup>**



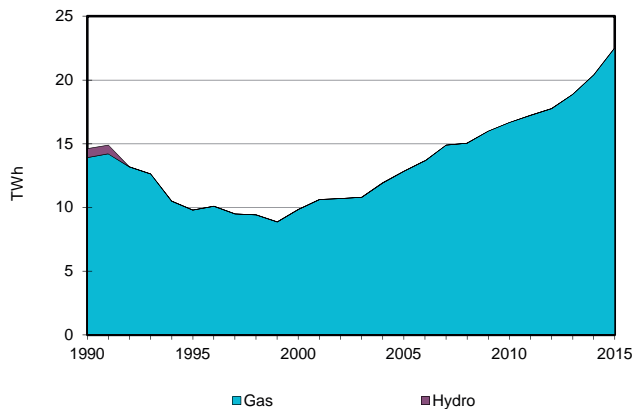
**Figure 3. Energy self-sufficiency<sup>3</sup>**



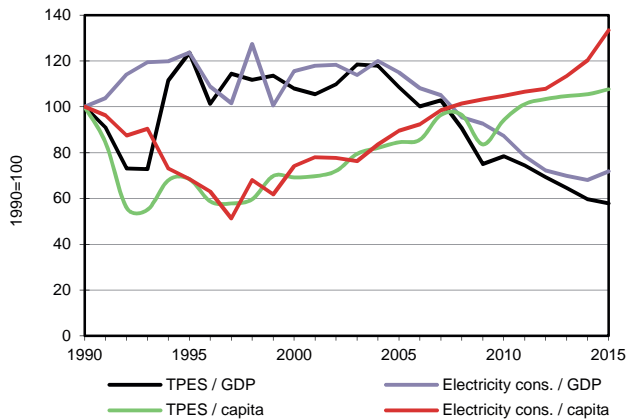
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Turkmenistan

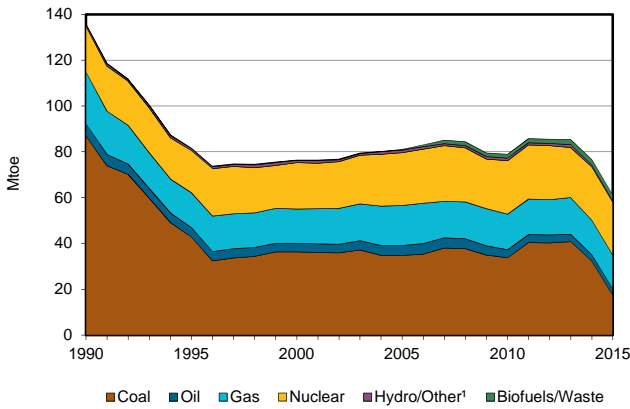
2015

Thousand tonnes of oil equivalent

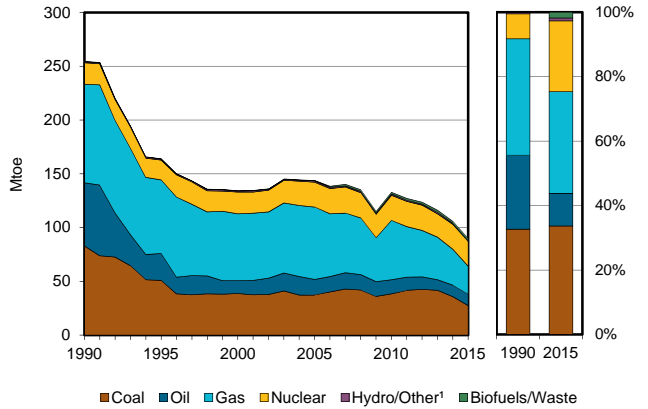
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	13091	-	68151	-	-	-	-	-	-	81243
Imports	-	-	-	-	-	-	-	7	-	-	7
Exports	-	-3467	-2588	-46807	-	-	-	-	-275	-	-53138
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-483	-	-	-	-	-	-	-	-483
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	<b>9624</b>	<b>-3071</b>	<b>21344</b>	-	-	-	<b>7</b>	<b>-275</b>	-	<b>27629</b>
Transfers	-	-675	741	-	-	-	-	-	-	-	66
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-8827	-	-	-	-	1938	235	-6654
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-8949	8715	-	-	-	-	-	-	-	-234
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-154	-2073	-	-	-	-	-341	-	-2567
Losses	-	-	-	-	-	-	-	-	-249	-	-249
<b>TFC</b>	-	-	<b>6231</b>	<b>10444</b>	-	-	-	<b>7</b>	<b>1073</b>	<b>235</b>	<b>17991</b>
<b>INDUSTRY</b>	-	-	-	<b>1001</b>	-	-	-	-	<b>387</b>	-	<b>1388</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	126	-	126
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	1001	-	-	-	-	261	-	1262
<b>TRANSPORT</b>	-	-	<b>2640</b>	<b>1657</b>	-	-	-	-	<b>28</b>	-	<b>4325</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2640	-	-	-	-	-	-	-	2640
Rail	-	-	-	-	-	-	-	-	28	-	28
Pipeline transport	-	-	-	1657	-	-	-	-	-	-	1657
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>3591</b>	<b>7786</b>	-	-	-	<b>7</b>	<b>658</b>	<b>235</b>	<b>12278</b>
Residential	-	-	154	-	-	-	-	7	225	-	387
Comm. and public services	-	-	-	7172	-	-	-	-	-	-	7172
Agriculture/forestry	-	-	-	-	-	-	-	-	341	-	341
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	3437	615	-	-	-	-	91	235	4378
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	-	<b>22534</b>	-	-	-	-	-	-	<b>22534</b>
Electricity plants	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	22534	-	-	-	-	-	-	22534
<b>Heat generated - TJ</b>	-	-	-	<b>9846</b>	-	-	-	-	-	-	<b>9846</b>
CHP plants	-	-	-	9846	-	-	-	-	-	-	9846
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Ukraine

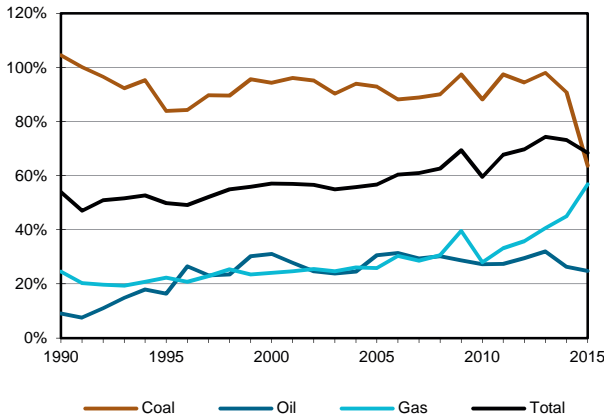
**Figure 1. Energy production**



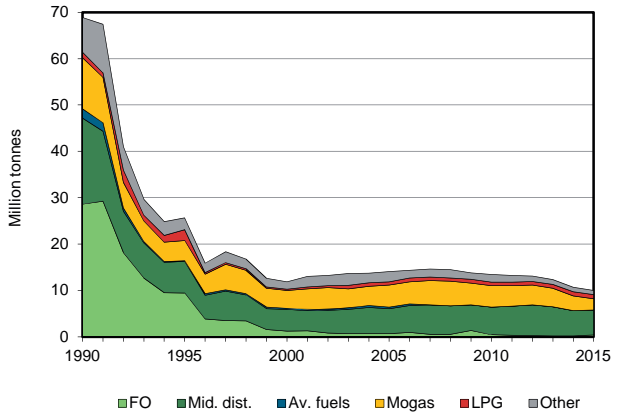
**Figure 2. Total primary energy supply<sup>2</sup>**



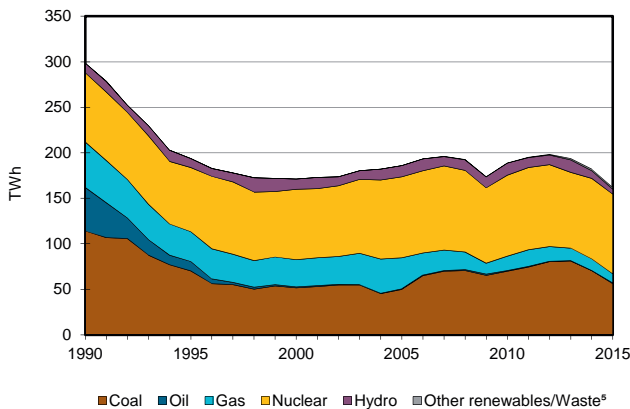
**Figure 3. Energy self-sufficiency<sup>3</sup>**



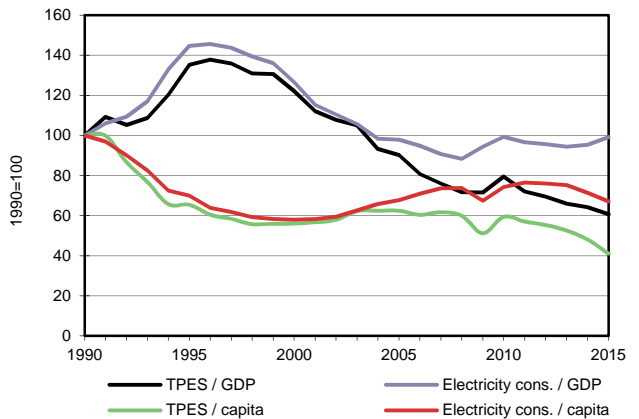
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>6</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Ukraine

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	17423	2618	-	14814	22985	464	134	2606	-	571	61614
Imports	9940	238	7887	13288	-	-	-	30	193	-	31575
Exports	-487	-22	-90	-	-	-	-	-539	-309	-	-1447
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-124	-	-	-	-	-	-	-	-124
Stock changes	469	17	27	-2047	-	-	-	5	-	-	-1529
<b>TPES</b>	<b>27344</b>	<b>2851</b>	<b>7700</b>	<b>26055</b>	<b>22985</b>	<b>464</b>	<b>134</b>	<b>2102</b>	<b>-116</b>	<b>571</b>	<b>90090</b>
Transfers	-	168	-147	-	-	-	-	-	-	-	21
Statistical differences	127	-	-281	-42	-	-	-	-	-502	179	-519
Electricity plants	-14566	-	-127	-104	-22836	-464	-134	-15	12920	-179	-25506
CHP plants	-1686	-	-158	-3532	-149	-	-	-523	1021	3251	-1776
Heat plants	-658	-	-141	-4933	-	-	-	-37	-	5210	-558
Blast furnaces	-3480	-	-	-	-	-	-	-	-	-	-3480
Gas works	-31	-3	-	-	-	-	-	-	-	-	-34
Coke/pat.fuel/BKB/PB plants	758	-	-	-	-	-	-	-	-	-	758
Oil refineries	-	-3051	2856	-	-	-	-	-	-	-	-195
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-182	56	-	-	-	-	-	-243	-	-	-370
Energy industry own use	-908	-5	-246	-957	-	-	-	-1	-1590	-599	-4306
Losses	-416	-7	-1	-466	-	-	-	-	-1500	-905	-3295
<b>TFC</b>	<b>6302</b>	<b>8</b>	<b>9455</b>	<b>16022</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1283</b>	<b>10233</b>	<b>7527</b>	<b>50831</b>
<b>INDUSTRY</b>	<b>5569</b>	<b>-</b>	<b>814</b>	<b>2762</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>86</b>	<b>4297</b>	<b>2880</b>	<b>16409</b>
Iron and steel	4930	-	101	1463	-	-	-	9	1503	827	8832
Chemical and petrochemical	2	-	22	151	-	-	-	1	265	560	1001
Non-ferrous metals	105	-	5	137	-	-	-	-	143	245	635
Non-metallic minerals	505	-	51	355	-	-	-	18	203	49	1180
Transport equipment	-	-	13	15	-	-	-	0	86	41	156
Machinery	2	-	36	119	-	-	-	1	229	80	466
Mining and quarrying	1	-	276	293	-	-	-	1	844	75	1490
Food and tobacco	21	-	114	165	-	-	-	7	350	740	1397
Paper pulp and printing	-	-	8	18	-	-	-	2	76	117	221
Wood and wood products	1	-	16	12	-	-	-	47	52	80	209
Construction	2	-	155	25	-	-	-	1	64	16	263
Textile and leather	-	-	3	3	-	-	-	-	26	18	50
Non-specified	1	-	14	5	-	-	-	1	457	32	509
<b>TRANSPORT</b>	<b>4</b>	<b>-</b>	<b>6554</b>	<b>1572</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>34</b>	<b>585</b>	<b>-</b>	<b>8750</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	6364	25	-	-	-	34	-	-	6423
Rail	4	-	138	-	-	-	-	-	516	-	658
Pipeline transport	-	-	3	1546	-	-	-	-	33	-	1582
Domestic navigation	-	-	48	-	-	-	-	-	-	-	48
Non-specified	1	-	-	1	-	-	-	-	37	-	38
<b>OTHER</b>	<b>379</b>	<b>-</b>	<b>1408</b>	<b>9406</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1163</b>	<b>5351</b>	<b>4647</b>	<b>22353</b>
Residential	303	-	14	9083	-	-	-	1097	3184	2874	16554
Comm. and public services	67	-	92	195	-	-	-	46	1878	1560	3838
Agriculture/forestry	9	-	1300	129	-	-	-	19	287	212	1957
Fishing	-	-	2	-	-	-	-	-	2	0	4
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>349</b>	<b>8</b>	<b>679</b>	<b>2281</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3318</b>
in industry/transf./energy	349	8	607	2281	-	-	-	-	-	-	3245
of which: chem./petrochem.	-	1	105	2193	-	-	-	-	-	-	2298
in transport	-	-	8	-	-	-	-	-	-	-	8
in other	-	-	65	-	-	-	-	-	-	-	65
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>56062</b>	<b>-</b>	<b>746</b>	<b>10102</b>	<b>87627</b>	<b>5397</b>	<b>1561</b>	<b>145</b>	<b>-</b>	<b>468</b>	<b>162108</b>
Electricity plants	54182	-	480	475	87627	5397	1561	47	-	-	149769
CHP plants	1880	-	266	9627	-	-	-	98	-	468	12339
<b>Heat generated - TJ</b>	<b>59285</b>	<b>-</b>	<b>7843</b>	<b>269008</b>	<b>6234</b>	<b>-</b>	<b>-</b>	<b>11946</b>	<b>-</b>	<b>23894</b>	<b>378210</b>
CHP plants	36177	-	4021	78733	6234	-	-	10960	-	18556	154681
Heat plants	23108	-	3822	190275	-	-	-	986	-	5338	223529

1. Includes peat.

## United Arab Emirates

Figure 1. Energy production

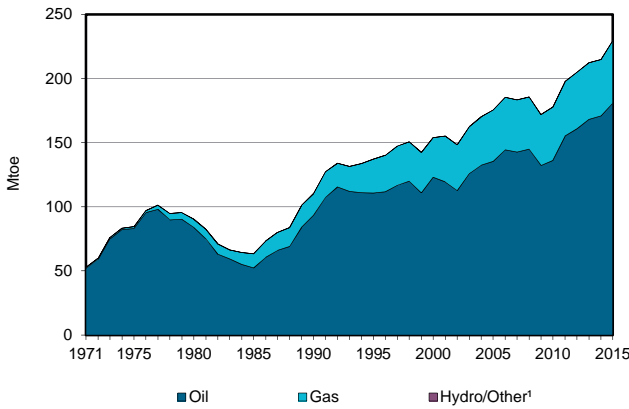


Figure 2. Total primary energy supply<sup>2</sup>

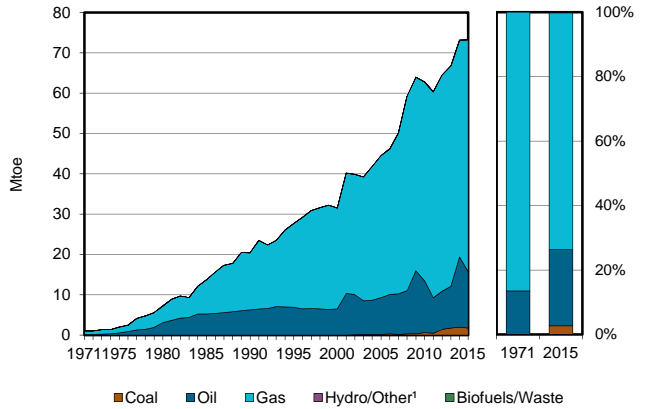


Figure 3. Energy self-sufficiency<sup>3</sup>

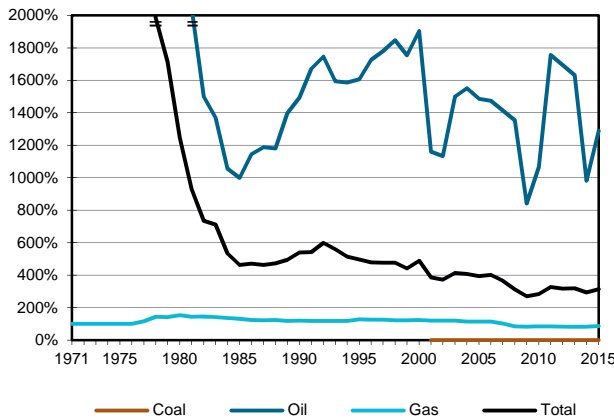


Figure 4. Oil products demand<sup>4</sup>

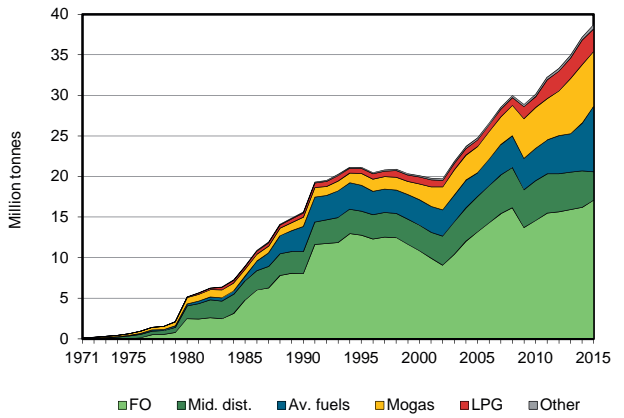


Figure 5. Electricity generation by source

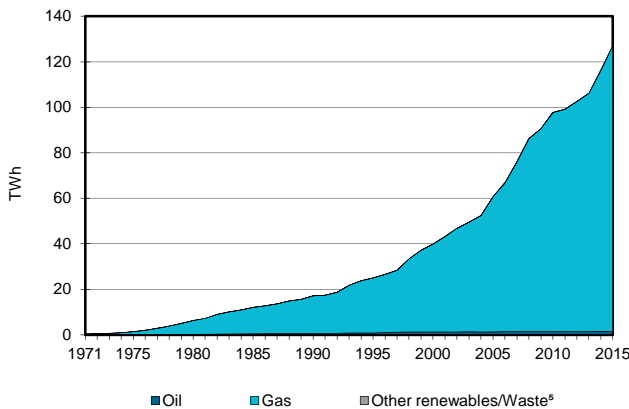
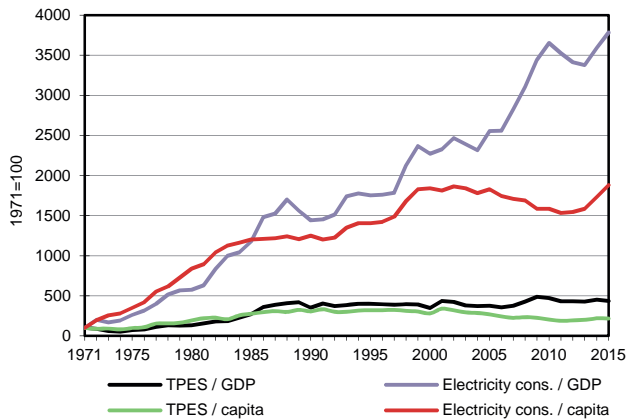


Figure 6. Selected indicators<sup>6</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency. Maximum scale refers to values greater than or equal to 2000%.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## United Arab Emirates

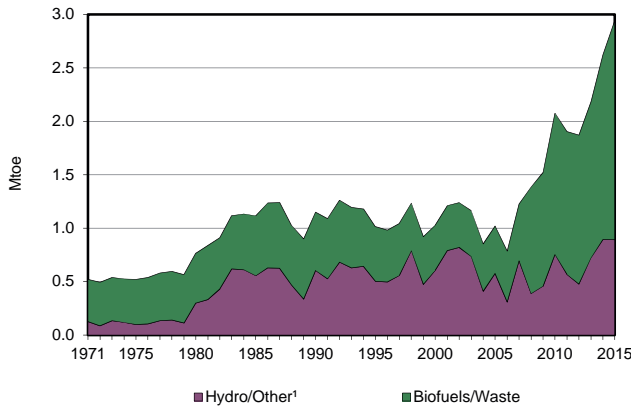
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	180833	-	48730	-	-	68	-	-	-	229631
Imports	1715	-	19980	14835	-	-	-	46	4	-	36579
Exports	-	-126781	-36452	-6154	-	-	-	-	-	-	-169387
Intl. marine bunkers	-	-	-15234	-	-	-	-	-	-	-	-15234
Intl. aviation bunkers	-	-	-8303	-	-	-	-	-	-	-	-8303
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>1715</b>	<b>54052</b>	<b>-40009</b>	<b>57411</b>	<b>-</b>	<b>-</b>	<b>68</b>	<b>46</b>	<b>4</b>	<b>-</b>	<b>73287</b>
Transfers	-	-14233	15591	-	-	-	-	-	-	-	1359
Statistical differences	-	4848	-3252	-	-	-	-	-	-	-	1596
Electricity plants	-	-	-614	-29983	-	-	-68	-	10953	-	-19712
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-44667	43786	-	-	-	-	-	-	-	-881
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-472	-615	-	-	-	-	-618	-	-1706
Losses	-	-	-	-	-	-	-	-	-786	-	-786
<b>TFC</b>	<b>1715</b>	<b>-</b>	<b>15031</b>	<b>26812</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46</b>	<b>9553</b>	<b>-</b>	<b>53156</b>
<b>INDUSTRY</b>	<b>1715</b>	<b>-</b>	<b>1330</b>	<b>26551</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1116</b>	<b>-</b>	<b>30711</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	44	171	-	-	-	-	-	-	215
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	251	-	-	-	-	-	-	-	-	-	251
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1464	-	1286	26380	-	-	-	-	1116	-	30245
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>10433</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10433</b>
Domestic aviation	-	-	338	-	-	-	-	-	-	-	338
Road	-	-	10096	-	-	-	-	-	-	-	10096
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>367</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46</b>	<b>8437</b>	<b>-</b>	<b>8850</b>
Residential	-	-	367	-	-	-	-	-	3269	-	3636
Comm. and public services	-	-	-	-	-	-	-	-	3196	-	3196
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	46	1972	-	2019
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>2901</b>	<b>261</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3162</b>
in industry/transf./energy	-	-	2891	261	-	-	-	-	-	-	3152
of which: chem./petrochem.	-	-	2780	261	-	-	-	-	-	-	3041
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	10	-	-	-	-	-	-	-	10
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>1582</b>	<b>125488</b>	<b>-</b>	<b>-</b>	<b>296</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>127366</b>
Electricity plants	-	-	1582	125488	-	-	296	-	-	-	127366
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

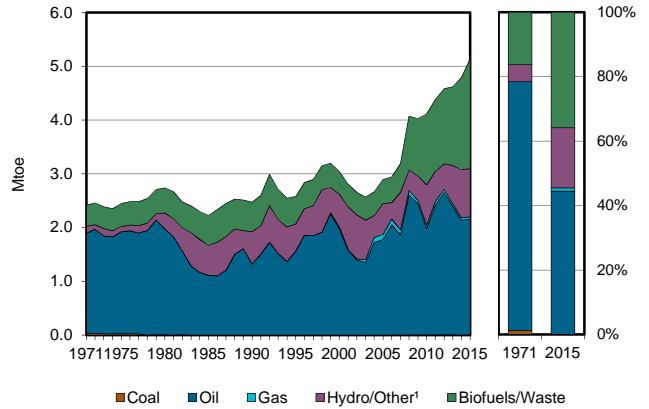


## Uruguay

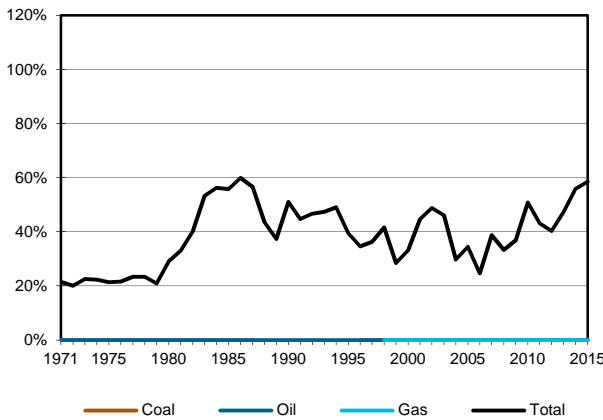
**Figure 1. Energy production**



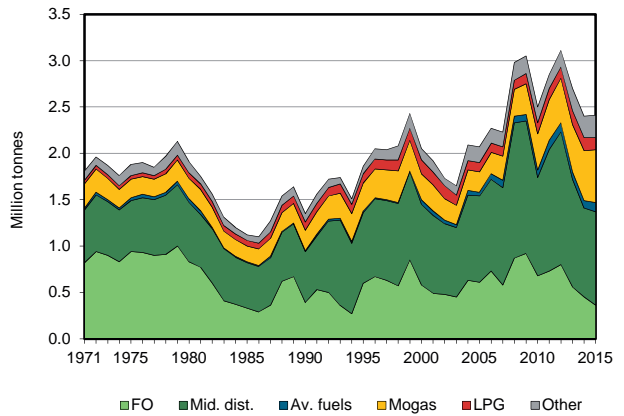
**Figure 2. Total primary energy supply²**



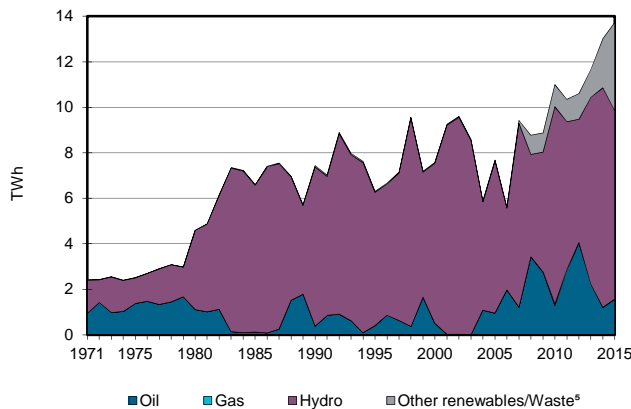
**Figure 3. Energy self-sufficiency³**



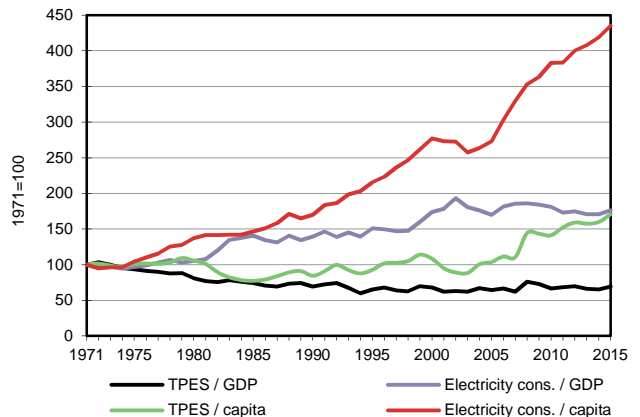
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

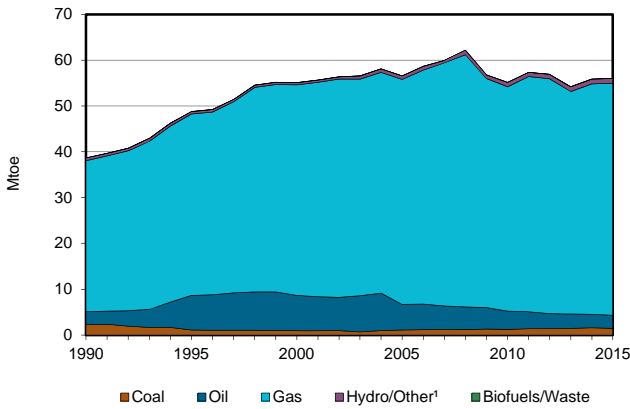
## Uruguay

2015

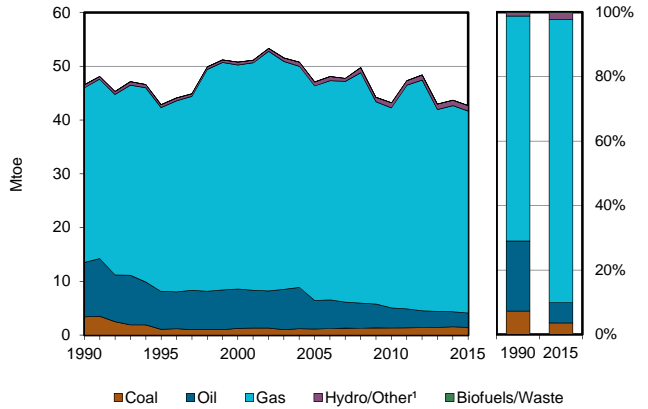
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	711	182	2047	-	-	2940
Imports	2	2027	446	46	-	-	-	2	0	-	2523
Exports	-	-	-	-	-	-	-	-	-114	-	-114
Intl. marine bunkers	-	-	-162	-	-	-	-	-	-	-	-162
Intl. aviation bunkers	-	-	-96	-	-	-	-	-	-	-	-96
Stock changes	-	-118	59	-	-	-	-	-4	-	-	-64
<b>TPES</b>	<b>2</b>	<b>1909</b>	<b>246</b>	<b>46</b>	<b>-</b>	<b>711</b>	<b>182</b>	<b>2044</b>	<b>-113</b>	<b>-</b>	<b>5027</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	10	-22	-0	-	-	-	-2	-1	-	-14
Electricity plants	-	-	-226	-	-	-711	-182	-112	1045	-	-185
CHP plants	-	-	-	-	-	-	-	-176	136	-	-40
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-1919	1932	-	-	-	-	-	-	-	13
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-134	-2	-	-	-	-	-33	-	-169
Losses	-	-1	-16	-	-	-	-	-1	-128	-	-146
<b>TFC</b>	<b>2</b>	<b>-</b>	<b>1781</b>	<b>44</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1754</b>	<b>906</b>	<b>-</b>	<b>4487</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>228</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1328</b>	<b>280</b>	<b>-</b>	<b>1847</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	8	1	-	-	-	4	67	-	80
Non-ferrous metals	-	-	1	-	-	-	-	-	-	-	1
Non-metallic minerals	-	-	19	2	-	-	-	5	10	-	37
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	40	6	-	-	-	128	74	-	247
Paper pulp and printing	-	-	87	1	-	-	-	973	95	-	1155
Wood and wood products	-	-	1	-	-	-	-	0	9	-	10
Construction	-	-	24	0	-	-	-	1	18	-	44
Textile and leather	-	-	2	1	-	-	-	12	7	-	22
Non-specified	-	-	47	-	-	-	-	204	-	-	251
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1169</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>69</b>	<b>-</b>	<b>-</b>	<b>1238</b>
Domestic aviation	-	-	6	-	-	-	-	-	-	-	6
Road	-	-	1162	-	-	-	-	69	-	-	1231
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1	-	-	-	-	-	-	-	1
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>305</b>	<b>32</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>357</b>	<b>627</b>	<b>-</b>	<b>1321</b>
Residential	-	-	135	21	-	-	-	293	357	-	806
Comm. and public services	-	-	20	11	-	-	-	22	246	-	300
Agriculture/forestry	-	-	134	-	-	-	-	43	23	-	200
Fishing	-	-	15	-	-	-	-	-	0	-	15
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>2</b>	<b>-</b>	<b>79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>81</b>
in industry/transf./energy	2	-	76	-	-	-	-	-	-	-	78
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	3	-	-	-	-	-	-	-	3
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>1572</b>	<b>-</b>	<b>-</b>	<b>8266</b>	<b>2114</b>	<b>1788</b>	<b>-</b>	<b>-</b>	<b>13740</b>
Electricity plants	-	-	1572	-	-	8266	2114	202	-	-	12154
CHP plants	-	-	-	-	-	-	-	1586	-	-	1586
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Uzbekistan

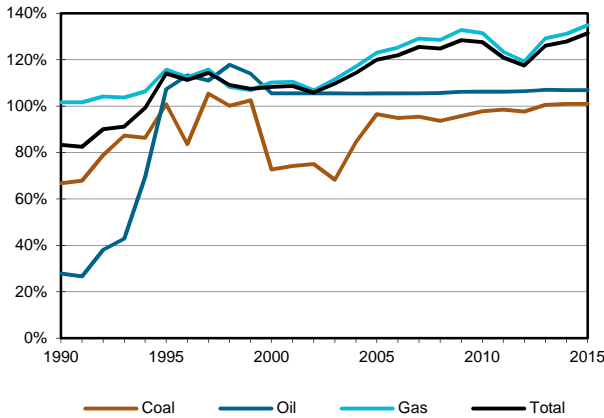
**Figure 1. Energy production**



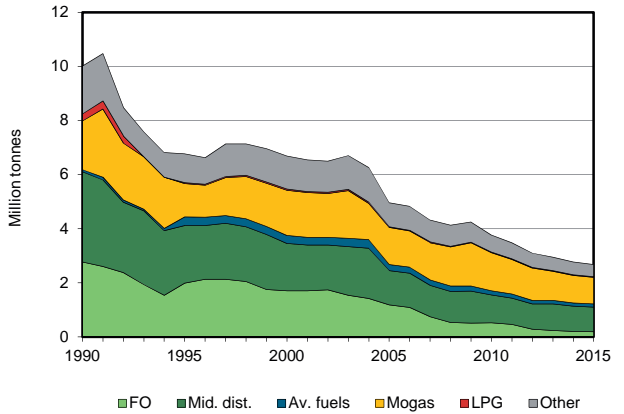
**Figure 2. Total primary energy supply<sup>2</sup>**



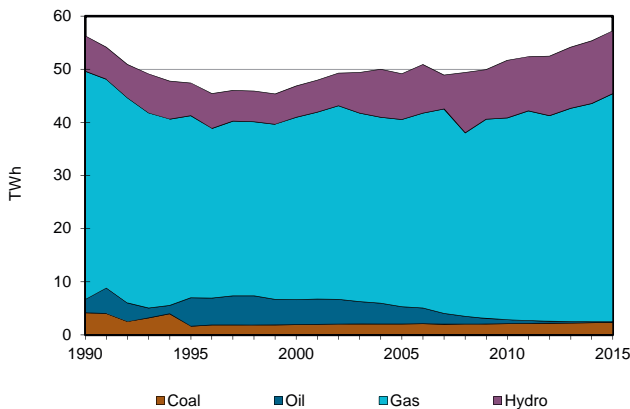
**Figure 3. Energy self-sufficiency<sup>3</sup>**



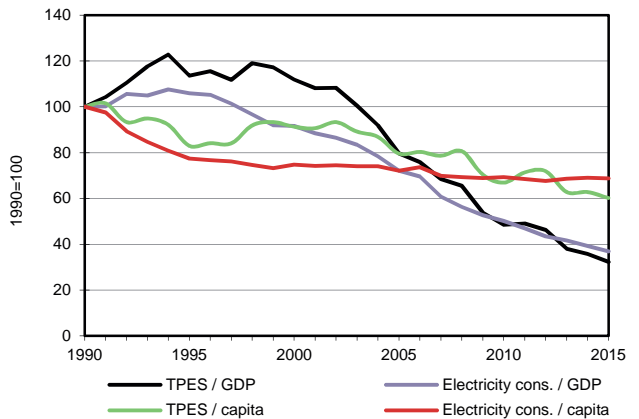
**Figure 4. Oil products demand<sup>4</sup>**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators<sup>5</sup>**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Uzbekistan

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	1419	2886	-	50642	-	1017	-	4	-	-	55968
Imports	-	13	-	-	-	-	-	-	975	-	987
Exports	-13	-	-198	-13096	-	-	-	-	-1065	-	-14371
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-	-	-	-	-	-	-	-	-
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>1406</b>	<b>2898</b>	<b>-198</b>	<b>37546</b>	<b>-</b>	<b>1017</b>	<b>-</b>	<b>4</b>	<b>-90</b>	<b>-</b>	<b>42585</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	0	-	-	-	-	-	-	-	0
Electricity plants	-546	-	-18	-6480	-	-1017	-	-	3154	-	-4908
CHP plants	-470	-	-24	-6624	-	-	-	-	1772	1405	-3941
Heat plants	-2	-	-4	-1838	-	-	-	-	-	986	-858
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-2817	2846	-	-	-	-	-	-	-	29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-2	-5	-107	-1282	-	-	-	-	-414	-	-1810
Losses	-12	-30	-	-1203	-	-	-	-	-426	-	-1671
<b>TFC</b>	<b>374</b>	<b>46</b>	<b>2496</b>	<b>20118</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>3997</b>	<b>2391</b>	<b>29425</b>
<b>INDUSTRY</b>	<b>223</b>	<b>-</b>	<b>155</b>	<b>4777</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1531</b>	<b>-</b>	<b>6685</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	1	-	-	-	-	-	-	-	1
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	3	-	-	-	-	-	-	-	3
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	127	-	-	-	-	-	-	-	127
Textile and leather	-	-	9	-	-	-	-	-	-	-	9
Non-specified	223	-	15	4777	-	-	-	-	1531	-	6545
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1347</b>	<b>1050</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>131</b>	<b>-</b>	<b>2528</b>
Domestic aviation	-	-	118	-	-	-	-	-	-	-	118
Road	-	-	1177	46	-	-	-	-	-	-	1223
Rail	-	-	52	-	-	-	-	-	16	-	68
Pipeline transport	-	-	-	1003	-	-	-	-	84	-	1088
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	31	-	31
<b>OTHER</b>	<b>150</b>	<b>-</b>	<b>743</b>	<b>13090</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>2335</b>	<b>2391</b>	<b>18713</b>
Residential	15	-	145	10812	-	-	-	-	724	-	11696
Comm. and public services	-	-	-	2163	-	-	-	-	310	-	2472
Agriculture/forestry	4	-	476	116	-	-	-	-	1301	-	1897
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	131	-	123	-	-	-	-	-	-	2391	2648
<b>NON-ENERGY USE</b>	<b>-</b>	<b>46</b>	<b>251</b>	<b>1202</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1499</b>
in industry/transf./energy	-	46	200	1202	-	-	-	-	-	-	1448
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	51	-	-	-	-	-	-	-	51
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>2340</b>	<b>-</b>	<b>147</b>	<b>42963</b>	<b>-</b>	<b>11830</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57280</b>
Electricity plants	1536	-	72	23237	-	11830	-	-	-	-	36675
CHP plants	804	-	75	19726	-	-	-	-	-	-	20605
<b>Heat generated - TJ</b>	<b>5191</b>	<b>-</b>	<b>330</b>	<b>94591</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100112</b>
CHP plants	5135	-	259	53448	-	-	-	-	-	-	58842
Heat plants	56	-	71	41143	-	-	-	-	-	-	41270

## Venezuela

Figure 1. Energy production

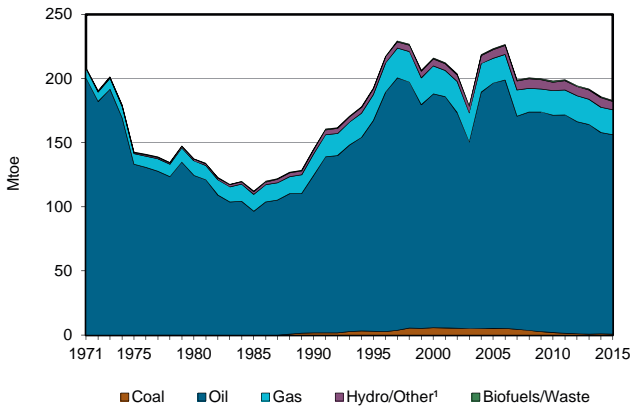


Figure 2. Total primary energy supply<sup>2</sup>

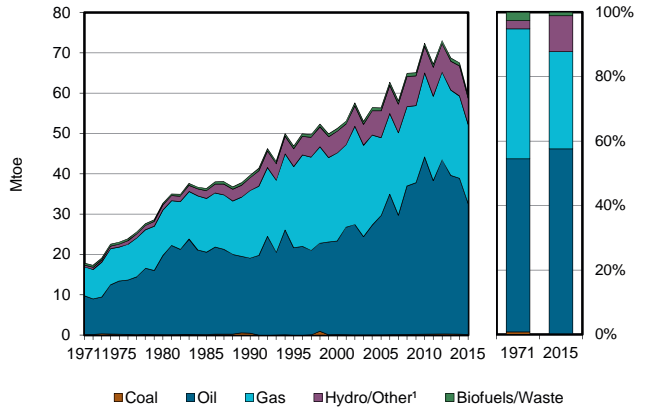


Figure 3. Energy self-sufficiency<sup>3</sup>

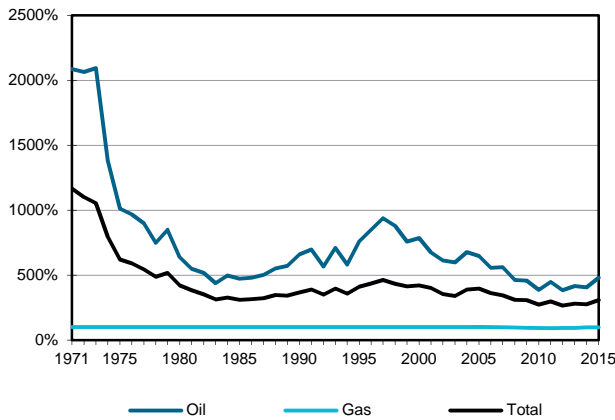


Figure 4. Oil products demand<sup>4</sup>

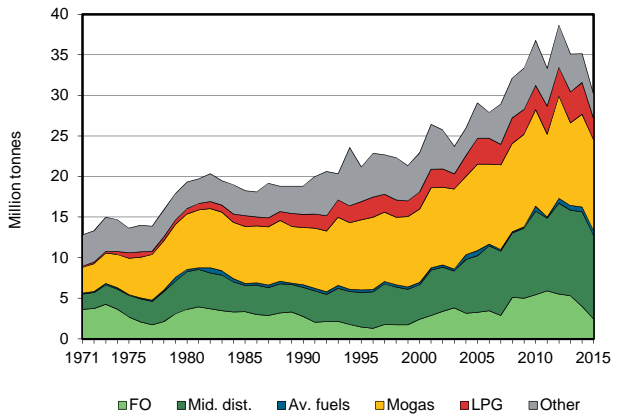


Figure 5. Electricity generation by source

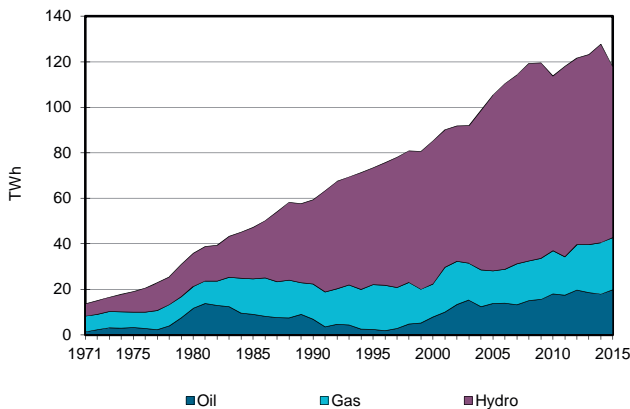
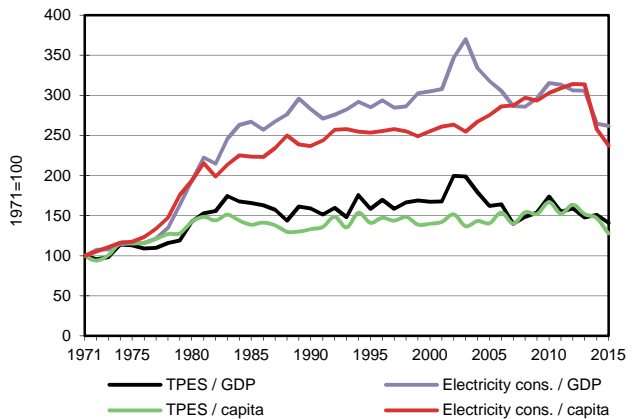


Figure 6. Selected indicators<sup>5</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

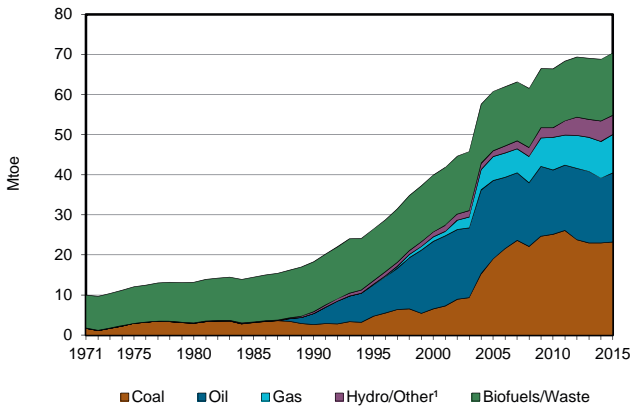
## Venezuela

2015

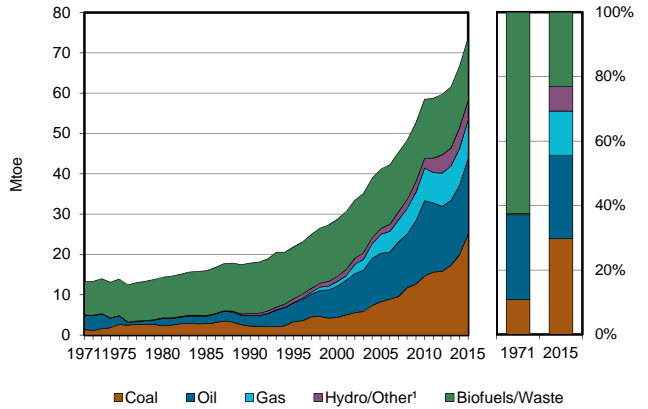
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	606	155558	-	19363	-	6441	-	742	-	-	182711
Imports	-	-	1091	307	-	-	-	-	-	-	1399
Exports	-469	-105224	-17428	-	-	-	-	-	-84	-	-123205
Intl. marine bunkers	-	-	-851	-	-	-	-	-	-	-	-851
Intl. aviation bunkers	-	-	-730	-	-	-	-	-	-	-	-730
Stock changes	-	-	50	-	-	-	-	-	-	-	50
<b>TPES</b>	<b>137</b>	<b>50335</b>	<b>-17867</b>	<b>19671</b>	<b>-</b>	<b>6441</b>	<b>-</b>	<b>742</b>	<b>-84</b>	<b>-</b>	<b>59374</b>
Transfers	-	-2633	3089	-	-	-	-	-	-	-	456
Statistical differences	-	-	-143	-	-	-	-	-	-145	-	-288
Electricity plants	-	-	-6187	-5926	-	-6441	-	-	10113	-	-8442
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-47702	46532	-	-	-	-	-	-	-	-1170
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-5	-	-	-5
Energy industry own use	-	-	-3062	-5865	-	-	-	-	-239	-	-9166
Losses	-	-	-	-	-	-	-	-	-3473	-	-3473
<b>TFC</b>	<b>137</b>	<b>-</b>	<b>22362</b>	<b>7879</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>738</b>	<b>6172</b>	<b>-</b>	<b>37288</b>
<b>INDUSTRY</b>	<b>137</b>	<b>-</b>	<b>4787</b>	<b>6702</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>464</b>	<b>2667</b>	<b>-</b>	<b>14757</b>
Iron and steel	-	-	-	2370	-	-	-	-	217	-	2587
Chemical and petrochemical	-	-	1995	2093	-	-	-	-	254	-	4341
Non-ferrous metals	-	-	-	326	-	-	-	-	639	-	965
Non-metallic minerals	137	-	57	513	-	-	-	-	-	-	706
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	464	-	-	464
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2736	1401	-	-	-	-	1557	-	5694
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>15464</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>15490</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	15464	-	-	-	-	-	-	-	15464
Rail	-	-	-	-	-	-	-	-	20	-	20
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	6	-	-	-	-	-	-	6
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1180</b>	<b>1170</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>274</b>	<b>3485</b>	<b>-</b>	<b>6110</b>
Residential	-	-	865	937	-	-	-	223	1943	-	3968
Comm. and public services	-	-	315	233	-	-	-	51	1505	-	2105
Agriculture/forestry	-	-	-	-	-	-	-	-	37	-	37
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>932</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>932</b>
in industry/transf./energy	-	-	932	-	-	-	-	-	-	-	932
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>-</b>	<b>-</b>	<b>19856</b>	<b>22835</b>	<b>-</b>	<b>74899</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>117590</b>
Electricity plants	-	-	19856	22835	-	74899	-	-	-	-	117590
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Viet Nam

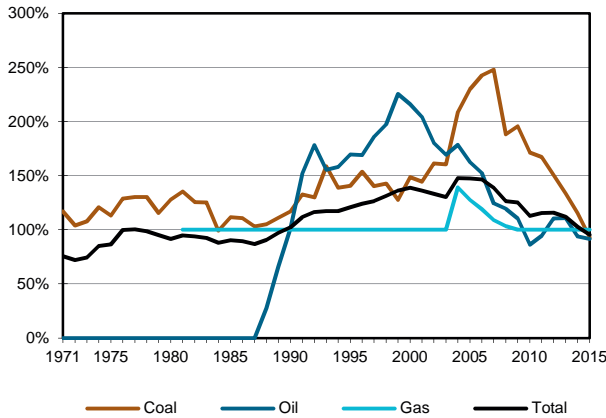
**Figure 1. Energy production**



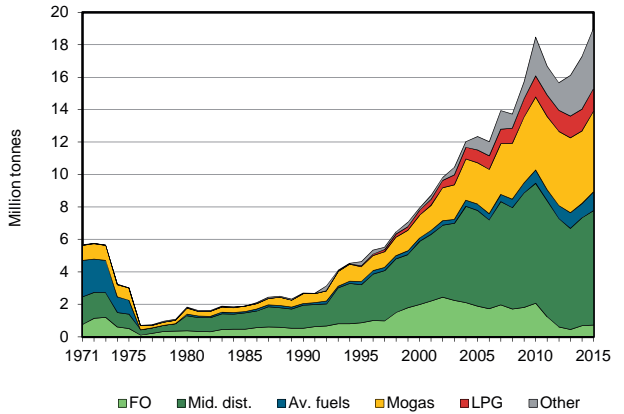
**Figure 2. Total primary energy supply²**



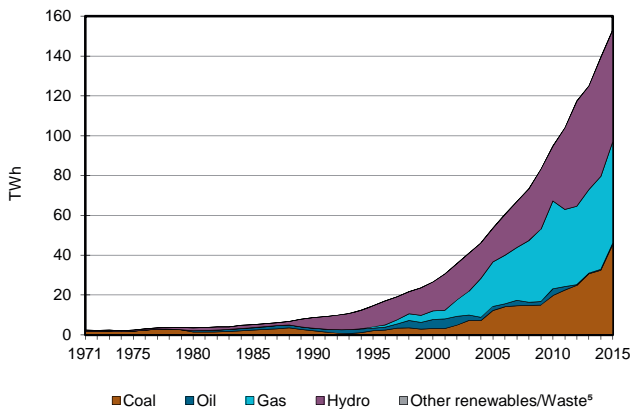
**Figure 3. Energy self-sufficiency³**



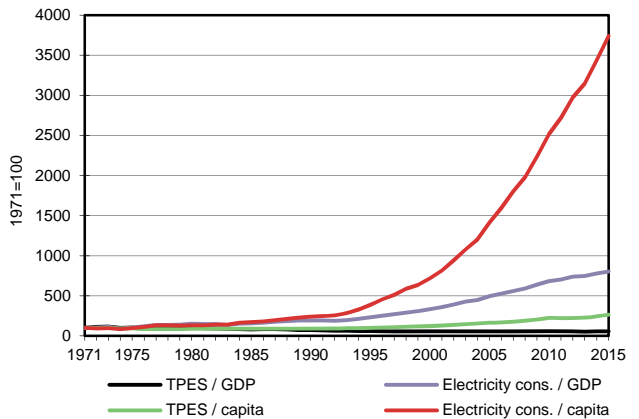
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Viet Nam

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal <sup>1</sup>	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	23231	17221	-	9549	-	4827	10	15514	-	-	70352
Imports	3882	-	13627	-	-	-	-	-	206	-	17715
Exports	-1095	-9660	-1239	-	-	-	-	-	-70	-	-12063
Intl. marine bunkers	-	-	-162	-	-	-	-	-	-	-	-162
Intl. aviation bunkers	-	-	-968	-	-	-	-	-	-	-	-968
Stock changes	-1064	-	-6	-	-	-	-	-	-	-	-1070
<b>TPES</b>	<b>24954</b>	<b>7561</b>	<b>11252</b>	<b>9549</b>	<b>-</b>	<b>4827</b>	<b>10</b>	<b>15514</b>	<b>136</b>	<b>-</b>	<b>73804</b>
Transfers	-	-182	191	-	-	-	-	-	-	-	9
Statistical differences	-	-	2	-173	-	-	-	-1	745	-	573
Electricity plants	-13200	-	-255	-7885	-	-4827	-10	-16	13182	-	-13010
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-7380	6825	-	-	-	-	-	-	-	-555
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-918	-	-	-918
Energy industry own use	-	-	-	-	-	-	-	-	-507	-	-507
Losses	-	-	-	-	-	-	-	-	-1216	-	-1216
<b>TFC</b>	<b>11754</b>	<b>-</b>	<b>18015</b>	<b>1491</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14579</b>	<b>12340</b>	<b>-</b>	<b>58180</b>
<b>INDUSTRY</b>	<b>10255</b>	<b>-</b>	<b>1685</b>	<b>1491</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2725</b>	<b>6629</b>	<b>-</b>	<b>22785</b>
Iron and steel	431	-	69	60	-	-	-	-	475	-	1036
Chemical and petrochemical	224	-	79	610	-	-	-	-	420	-	1333
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	5405	-	103	-	-	-	-	-	1405	-	6913
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	735	-	224	72	-	-	-	-	711	-	1742
Paper pulp and printing	379	-	44	33	-	-	-	-	637	-	1094
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	1635	-	95	25	-	-	-	-	613	-	2367
Non-specified	1447	-	1072	691	-	-	-	-	2725	2366	8302
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>10672</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10672</b>
Domestic aviation	-	-	241	-	-	-	-	-	-	-	241
Road	-	-	10390	-	-	-	-	-	-	-	10390
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	41	-	-	-	-	-	-	-	41
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>1499</b>	<b>-</b>	<b>2086</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11854</b>	<b>5712</b>	<b>-</b>	<b>21151</b>
Residential	1112	-	852	-	-	-	-	11851	4333	-	18148
Comm. and public services	371	-	816	-	-	-	-	3	1179	-	2369
Agriculture/forestry	17	-	417	-	-	-	-	-	200	-	634
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>3572</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3572</b>
in industry/transf./energy	-	-	3572	-	-	-	-	-	-	-	3572
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>45328</b>	<b>-</b>	<b>745</b>	<b>50906</b>	<b>-</b>	<b>56123</b>	<b>121</b>	<b>60</b>	<b>-</b>	<b>-</b>	<b>153283</b>
Electricity plants	45328	-	745	50906	-	56123	121	60	-	-	153283
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

1. Includes peat.



## Yemen

Figure 1. Energy production

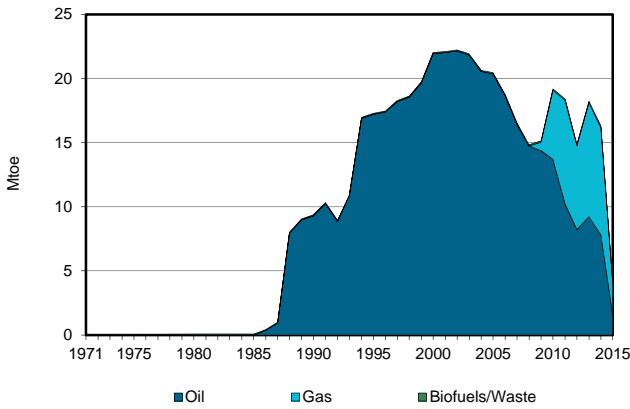


Figure 2. Total primary energy supply<sup>1</sup>

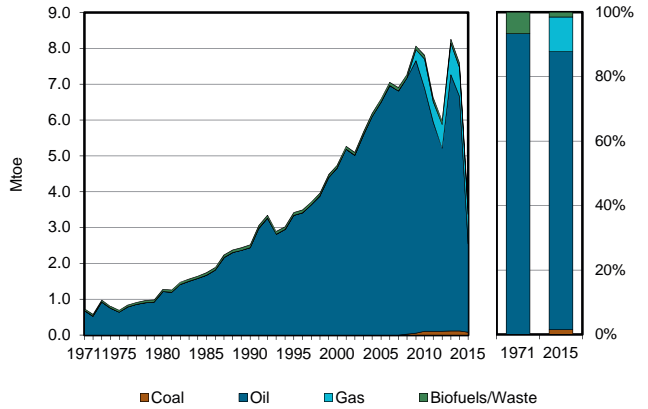


Figure 3. Energy self-sufficiency<sup>2</sup>

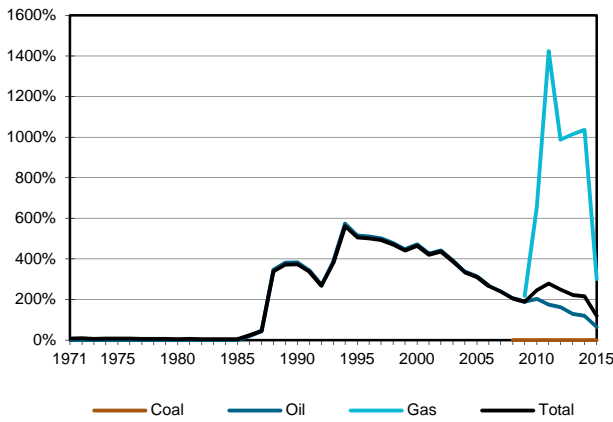


Figure 4. Oil products demand<sup>3</sup>

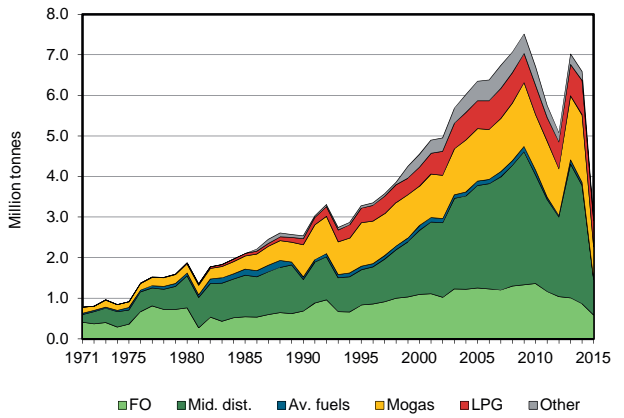


Figure 5. Electricity generation by source

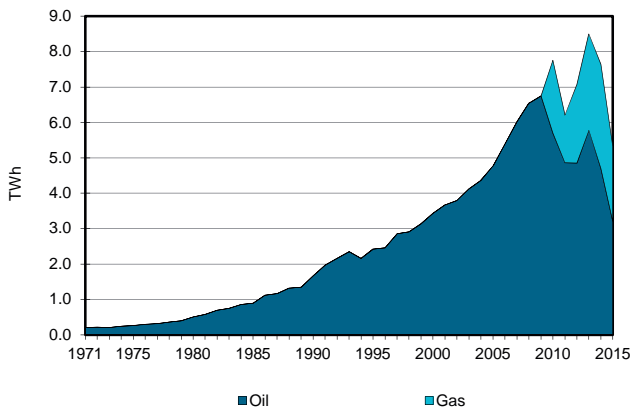
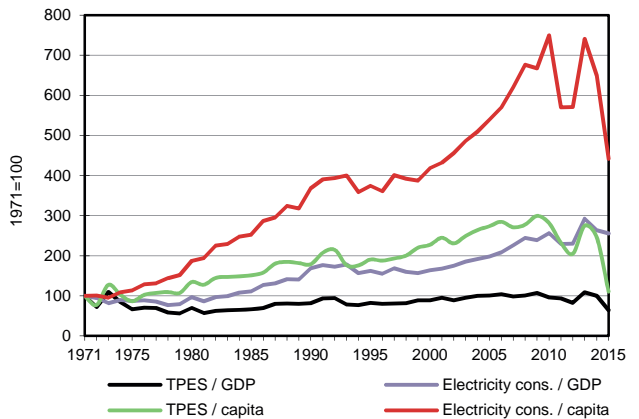


Figure 6. Selected indicators<sup>4</sup>



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Excluding electricity trade.
2. Production divided by TPES. 100% represents full self-sufficiency.
3. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
4. GDP in 2010 USD.

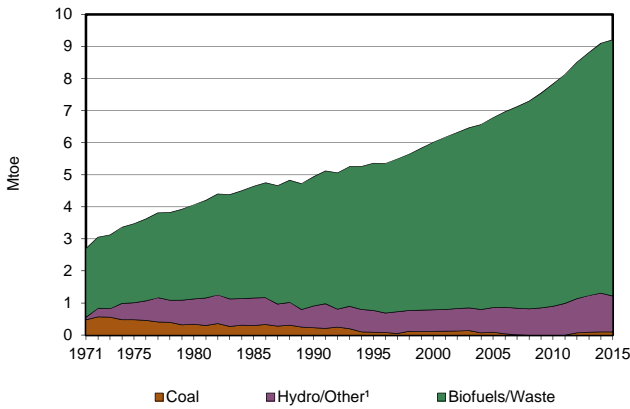
## Yemen

2015

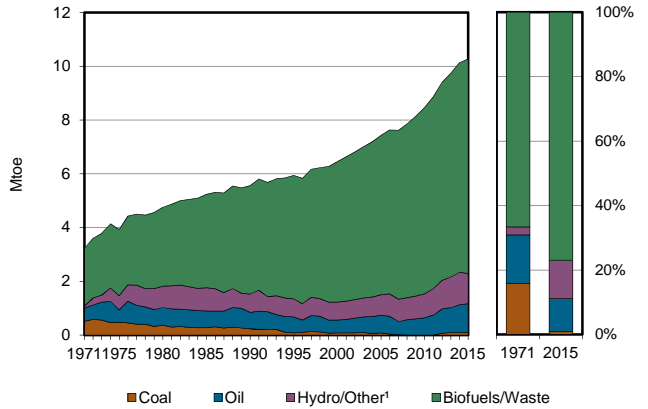
Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	1560	-	2455	-	-	-	117	-	-	4132
Imports	82	-	2041	-	-	-	-	-	-	-	2123
Exports	-	-442	-617	-1637	-	-	-	-	-	-	-2696
Intl. marine bunkers	-	-	-65	-	-	-	-	-	-	-	-65
Intl. aviation bunkers	-	-	-13	-	-	-	-	-	-	-	-13
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>82</b>	<b>1118</b>	<b>1346</b>	<b>818</b>	-	-	-	<b>117</b>	-	-	<b>3481</b>
Transfers	-	-109	705	-	-	-	-	-	-	-	596
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-804	-579	-	-	-	-	458	-	-925
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-967	923	-	-	-	-	-	-	-	-44
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-59	-	-	-59
Energy industry own use	-	-42	-18	-239	-	-	-	-	-72	-	-372
Losses	-	-	-	-	-	-	-	-	-118	-	-118
<b>TFC</b>	<b>82</b>	-	<b>2152</b>	-	-	-	-	<b>58</b>	<b>268</b>	-	<b>2559</b>
<b>INDUSTRY</b>	<b>82</b>	-	<b>261</b>	-	-	-	-	-	<b>10</b>	-	<b>353</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	82	-	-	-	-	-	-	-	-	-	82
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	261	-	-	-	-	-	10	-	271
<b>TRANSPORT</b>	-	-	<b>1053</b>	-	-	-	-	-	-	-	<b>1053</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1053	-	-	-	-	-	-	-	1053
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>831</b>	-	-	-	-	<b>58</b>	<b>258</b>	-	<b>1147</b>
Residential	-	-	681	-	-	-	-	-	188	-	869
Comm. and public services	-	-	97	-	-	-	-	-	46	-	143
Agriculture/forestry	-	-	54	-	-	-	-	-	-	-	54
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	58	24	-	82
<b>NON-ENERGY USE</b>	-	-	<b>7</b>	-	-	-	-	-	-	-	<b>7</b>
in industry/transf./energy	-	-	7	-	-	-	-	-	-	-	7
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>3206</b>	<b>2120</b>	-	-	-	-	-	-	<b>5326</b>
Electricity plants	-	-	3206	2120	-	-	-	-	-	-	5326
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Zambia

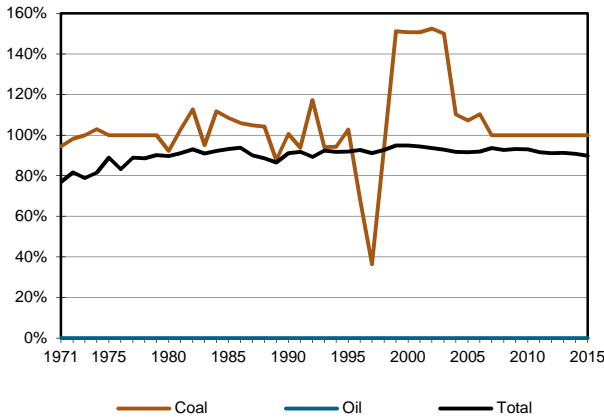
**Figure 1. Energy production**



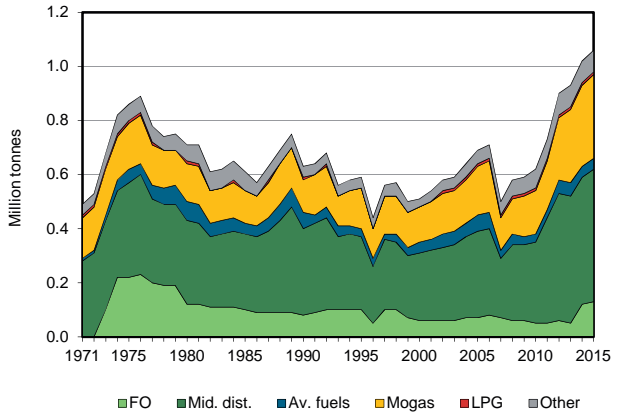
**Figure 2. Total primary energy supply²**



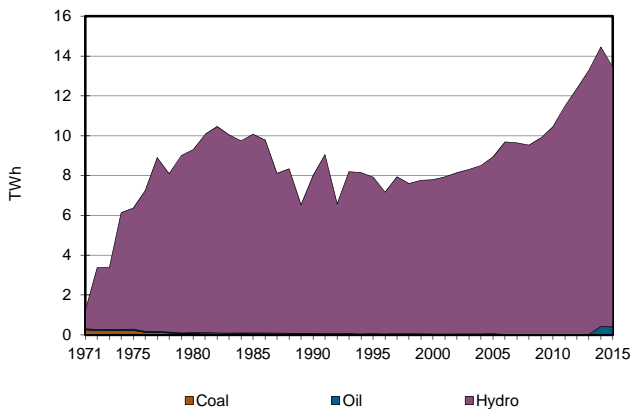
**Figure 3. Energy self-sufficiency³**



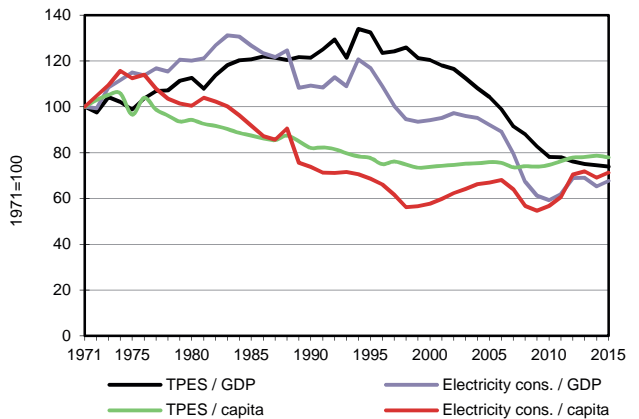
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Zambia

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	94	-	-	-	-	1121	-	7991	-	-	9205
Imports	-	656	473	-	-	-	-	-	68	-	1196
Exports	-	-	-18	-	-	-	-	-	-101	-	-119
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-39	-	-	-	-	-	-	-	-39
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>94</b>	<b>656</b>	<b>416</b>	-	-	<b>1121</b>	-	<b>7991</b>	<b>-34</b>	-	<b>10243</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-	-	-	-	-	-	-	-	-
Electricity plants	-	-	-89	-	-	-1121	-	-	1156	-	-55
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-656	617	-	-	-	-	-	-	-	-39
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-1740	-	-	-1740
Energy industry own use	-	-	-15	-	-	-	-	-	-28	-	-43
Losses	-	-	-	-	-	-	-	-	-110	-	-110
<b>TFC</b>	<b>94</b>	-	<b>929</b>	-	-	-	-	<b>6250</b>	<b>985</b>	-	<b>8258</b>
<b>INDUSTRY</b>	<b>94</b>	-	<b>375</b>	-	-	-	-	<b>1605</b>	<b>590</b>	-	<b>2663</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	43	-	-	-	-	-	537	-	580
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	263	-	-	-	-	2	6	-	271
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	52	-	-	-	-	-	1	-	53
Textile and leather	-	-	-	-	-	-	-	62	-	-	62
Non-specified	94	-	17	-	-	-	-	1540	46	-	1697
<b>TRANSPORT</b>	-	-	<b>390</b>	-	-	-	-	-	<b>3</b>	-	<b>393</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	375	-	-	-	-	-	-	-	375
Rail	-	-	15	-	-	-	-	-	3	-	18
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>96</b>	-	-	-	-	<b>4646</b>	<b>392</b>	-	<b>5133</b>
Residential	-	-	9	-	-	-	-	4646	299	-	4954
Comm. and public services	-	-	28	-	-	-	-	-	62	-	89
Agriculture/forestry	-	-	30	-	-	-	-	-	22	-	52
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	30	-	-	-	-	-	9	-	38
<b>NON-ENERGY USE</b>	-	-	<b>68</b>	-	-	-	-	-	-	-	<b>68</b>
in industry/transf./energy	-	-	68	-	-	-	-	-	-	-	68
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>404</b>	-	-	<b>13035</b>	-	-	-	-	<b>13439</b>
Electricity plants	-	-	404	-	-	13035	-	-	-	-	13439
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

## Zimbabwe

Figure 1. Energy production

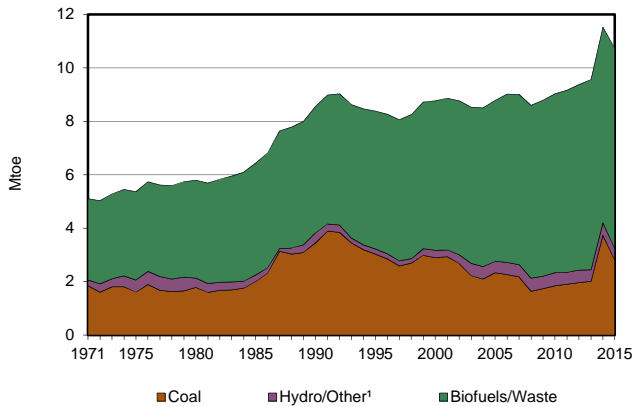


Figure 2. Total primary energy supply²

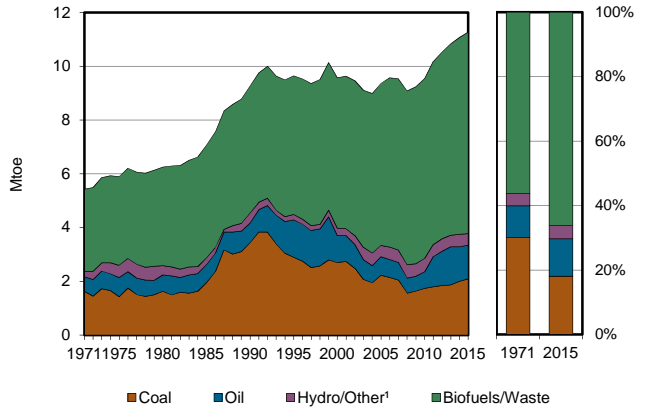


Figure 3. Energy self-sufficiency³

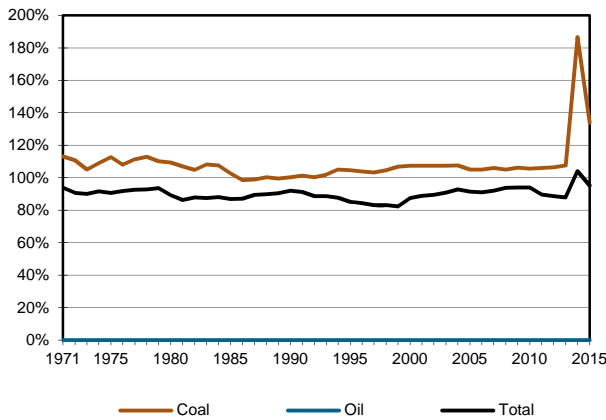


Figure 4. Oil products demand⁴

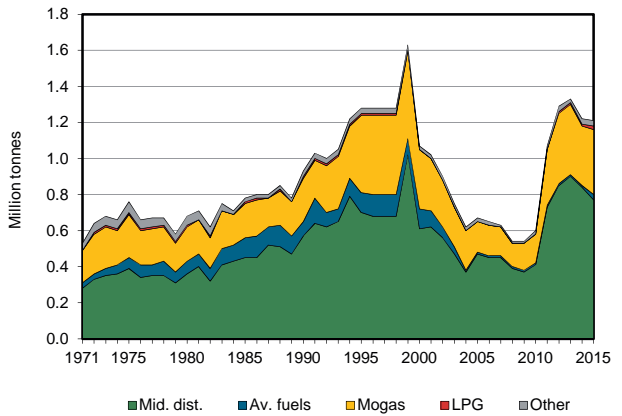


Figure 5. Electricity generation by source

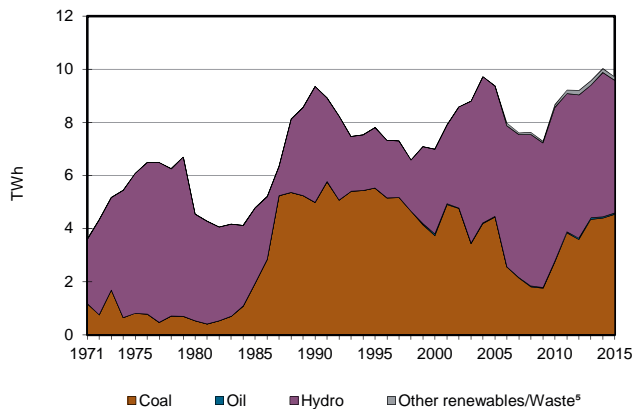
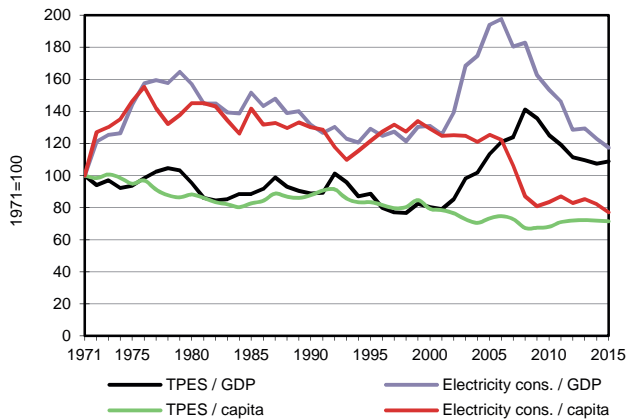


Figure 6. Selected indicators⁶



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Zimbabwe

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	2796	-	-	-	-	429	-	7498	-	-	10723
Imports	15	-	1279	-	-	-	-	-	98	-	1392
Exports	-141	-	-	-	-	-	-	-	-107	-	-247
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-27	-	-	-	-	-	-	-	-27
Stock changes	-580	-	-	-	-	-	-	-	-	-	-580
<b>TPES</b>	<b>2090</b>	-	<b>1252</b>	-	-	<b>429</b>	-	<b>7498</b>	<b>-9</b>	-	<b>11261</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	20	-	-18	-	-	-	-	-	-77	-	-74
Electricity plants	-1774	-	-17	-	-	-429	-	-44	835	-	-1428
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-58	-	-	-	-	-	-	-	-	-	-58
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-17	-	-	-17
Energy industry own use	-16	-	-17	-	-	-	-	-	-16	-	-49
Losses	-	-	-	-	-	-	-	-	-142	-	-142
<b>TFC</b>	<b>263</b>	-	<b>1201</b>	-	-	-	-	<b>7437</b>	<b>591</b>	-	<b>9492</b>
<b>INDUSTRY</b>	<b>233</b>	-	<b>51</b>	-	-	-	-	<b>138</b>	<b>217</b>	-	<b>638</b>
Iron and steel	59	-	2	-	-	-	-	-	-	-	61
Chemical and petrochemical	1	-	2	-	-	-	-	-	-	-	3
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	53	-	6	-	-	-	-	-	-	-	59
Transport equipment	1	-	-	-	-	-	-	-	-	-	1
Machinery	1	-	2	-	-	-	-	-	-	-	3
Mining and quarrying	1	-	18	-	-	-	-	-	146	-	165
Food and tobacco	64	-	7	-	-	-	-	-	-	-	71
Paper pulp and printing	12	-	2	-	-	-	-	-	-	-	14
Wood and wood products	20	-	1	-	-	-	-	-	-	-	21
Construction	-	-	5	-	-	-	-	-	-	-	5
Textile and leather	2	-	1	-	-	-	-	-	-	-	3
Non-specified	19	-	4	-	-	-	-	138	71	-	232
<b>TRANSPORT</b>	<b>12</b>	-	<b>819</b>	-	-	-	-	<b>28</b>	-	-	<b>858</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	780	-	-	-	-	28	-	-	807
Rail	12	-	39	-	-	-	-	-	-	-	51
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>19</b>	-	<b>312</b>	-	-	-	-	<b>7272</b>	<b>374</b>	-	<b>7977</b>
Residential	-	-	67	-	-	-	-	6893	191	-	7151
Comm. and public services	6	-	-	-	-	-	-	-	95	-	101
Agriculture/forestry	12	-	134	-	-	-	-	378	84	-	608
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	112	-	-	-	-	-	4	-	116
<b>NON-ENERGY USE</b>	-	-	<b>19</b>	-	-	-	-	-	-	-	<b>19</b>
in industry/transf./energy	-	-	19	-	-	-	-	-	-	-	19
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	<b>4542</b>	-	<b>48</b>	-	-	<b>4990</b>	-	<b>129</b>	-	-	<b>9709</b>
Electricity plants	4542	-	48	-	-	4990	-	129	-	-	9709
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-



# NET CALORIFIC VALUES



## OECD country-specific net calorific values

2015

<i>kJ/kg</i>	Australia	Austria	Belgium	Canada	Chile	Czech Republic	Denmark	Estonia	Finland
<b>Crude oil</b>									
Production	43985	42500	-	42790	43203	42401	43000	-	-
Imports	42655	42500	42176	42790	43203	42400	43000	-	42660
Exports	43985	-	-	42790	-	42400	43000	-	-
Average	43282	42500	42176	42790	43203	42400	43000	-	42660
<b>NGL</b>	45410	42500	45200	45220	48127	-	-	-	44000
<b>Refinery feedstocks</b>	43282	42259	42176	42500	44799	40200	42700	-	42500
<b>Additives</b>	-	-	-	25120	22651	39500	-	-	42500
<b>Other hydrocarbons</b>	41868	-	-	41868	-	-	-	39353	42500
<b>Biogasoline</b>	26800	27959	28800	26800	-	27000	-	26800	28306
<b>Biodiesels</b>	36800	37087	37700	36800	-	37000	37500	-	43271
<b>Other liquid biofuels</b>	-	37087	37700	-	-	-	37200	-	48525
<b>Anthracite</b>									
Production	26700	-	-	-	-	-	-	-	-
Imports	26700	26700	28425	26381	-	28476	-	-	27550
Exports	26700	-	28425	-	-	30982	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	26700	-	28425	26381	-	28476	-	-	-
Other uses	26700	26700	28425	26381	-	28756	-	-	27550
<b>Coking coal</b>									
Production	28500	-	-	24781	-	28660	-	-	-
Imports	28000	28971	29250	28400	28638	28265	-	-	29300
Exports	28500	-	-	24781	-	28730	-	-	-
Coke ovens	28500	28971	29250	28400	28638	29536	-	-	29300
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	29250	24781	-	-	-	-	-
Other uses	28500	29206	29250	24781	28638	28709	-	-	29300
<b>Other bituminous coal</b>									
Production	25700	-	22664	27302	27843	25320	-	-	-
Imports	-	27414	26292	27302	23732	22491	22890	27150	24708
Exports	25700	27414	26292	27302	27843	26991	22911	-	-
Coke ovens	-	-	-	-	-	-	-	-	-
Main activity elec. generation	25700	26992	25889	27172	24554	22588	24097	27154	24553
Industry	25700	27414	26292	27302	26938	22749	24700	27150	24708
Other uses	25700	27414	26292	27302	25216	26999	24099	27150	24708
<b>Sub-bituminous coal</b>									
Production	18478	-	-	17897	-	-	-	-	-
Imports	-	22082	-	17897	-	-	-	-	-
Exports	-	-	-	17897	-	-	-	-	-
Main activity elec. generation	18478	-	-	17897	-	-	-	-	-
Industry	19195	22082	-	17897	-	-	-	-	-
Other uses	18478	21914	-	17897	-	-	-	-	-
<b>Lignite</b>									
Production	9800	-	-	14019	-	12623	-	-	-
Imports	-	9700	-	14019	-	10678	-	-	-
Exports	-	-	-	14019	-	17536	-	-	-
Main activity elec. generation	9800	-	-	14018	-	11140	-	-	-
Industry	9800	9700	-	14019	-	13478	-	-	-
Other uses	9800	9700	-	14019	-	15738	-	-	-
<b>Patent fuel</b>	-	31000	30480	-	-	-	-	-	-
<b>Coke oven coke</b>	27000	28595	29308	27457	28452	28638	29300	28500	29300
<b>Coal tar</b>	35714	36912	38519	-	40561	36801	-	-	37000
<b>BKB</b>	20995	19800	20682	-	-	19793	-	-	-
<b>Peat</b>	-	8800	-	-	-	-	-	10192	10050
<b>Peat products</b>	-	-	-	-	-	-	-	15200	16900
<b>Oil shale</b>	-	-	-	-	-	-	-	8840	-
<b>Charcoal</b>	-	30000	29300	-	27822	-	-	-	-

## OECD country-specific net calorific values

2015

<i>kJ/kg</i>	France	Germany	Greece	Hungary	Iceland	Ireland	Israel	Italy	Japan
<b>Crude oil</b>									
Production	41855	42505	38158	41800	-	-	42538	41868	42474
Imports	41855	42505	41540	41800	-	42814	42538	41868	42474
Exports	41855	42505	41860	41800	-	-	-	41868	-
Average	41855	42505	41228	41800	-	42814	42538	41868	42474
<b>NGL</b>	42000	-	-	43000	-	-	-	-	46038
<b>Refinery feedstocks</b>	41855	42496	41318	41800	-	44589	44799	42500	42500
<b>Additives</b>	25120	25121	41318	-	-	-	-	37000	-
<b>Other hydrocarbons</b>	-	-	-	40000	-	46650	-	-	-
<b>Biogasoline</b>	26800	26541	-	26600	26800	26500	-	34613	-
<b>Biodiesels</b>	36800	37530	37980	37500	42800	37273	-	37000	-
<b>Other liquid biofuels</b>	-	25243	-	-	-	-	-	36612	-
<b>Anthracite</b>									
Production	-	29700	-	-	-	-	-	-	-
Imports	26700	29700	-	-	28050	29877	-	-	27246
Exports	-	29700	-	-	-	31991	-	-	-
Main activity elec. generation	-	29700	-	-	-	-	-	-	-
Industry	26700	29700	-	-	28050	-	-	-	-
Other uses	26700	29700	-	-	28050	29477	-	-	27246
<b>Coking coal</b>									
Production	-	29000	-	-	-	-	-	-	-
Imports	30500	29000	-	29785	-	-	-	30984	28076
Exports	-	-	-	-	-	-	-	-	-
Coke ovens	30500	29000	-	29785	-	-	-	30984	28076
Main activity elec. generation	-	29305	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	28076
Other uses	30500	29000	-	29411	-	-	-	30984	28076
<b>Other bituminous coal</b>									
Production	-	27753	-	-	-	-	-	26587	-
Imports	26000	26702	25921	25864	-	25552	24961	25454	24625
Exports	-	29700	-	-	-	-	-	25454	25056
Coke ovens	-	-	-	-	-	-	-	-	25056
Main activity elec. generation	24500	25962	-	24534	-	25016	24997	25454	24697
Industry	26000	31704	25921	25500	-	27838	-	25454	25056
Other uses	26000	27905	27216	23761	-	27838	25002	25454	25056
<b>Sub-bituminous coal</b>									
Production	-	-	-	-	-	-	-	-	-
Imports	-	-	-	19328	-	-	-	18832	-
Exports	-	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	19020	-	-	-	18843	-
Industry	-	-	-	21392	-	-	-	-	-
Other uses	-	-	-	18749	-	-	-	18853	-
<b>Lignite</b>									
Production	-	9030	5138	6864	-	-	-	-	-
Imports	17000	18688	-	15990	-	-	-	10468	-
Exports	-	10613	-	7046	-	-	-	-	-
Main activity elec. generation	-	8882	5110	6769	-	-	-	-	-
Industry	17000	10513	9590	9300	-	-	-	10468	-
Other uses	17000	10652	5138	7763	-	-	-	10468	-
<b>Patent fuel</b>	32000	31400	-	-	-	-	-	-	-
<b>Coke oven coke</b>	28000	28650	-	29500	26670	-	-	29000	29400
<b>Coal tar</b>	37883	-	-	38000	-	-	-	-	35393
<b>BKB</b>	20097	19511	-	19103	-	19816	-	-	-
<b>Peat</b>	-	-	-	-	-	13105	-	-	-
<b>Peat products</b>	-	-	-	-	-	18548	-	-	-
<b>Oil shale</b>	-	-	-	-	-	-	2931	-	-
<b>Charcoal</b>	-	-	31000	-	-	-	30800	30800	29300

## OECD country-specific net calorific values

2015

<i>kJ/kg</i>	Korea	Latvia	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal
<b>Crude oil</b>									
Production	42700	-	-	43509	42700	43649	43600	42650	-
Imports	42700	-	-	-	42700	42753	43600	42497	43040
Exports	-	-	-	43509	42700	43648	43600	42300	-
Average	42700	-	-	43509	42700	43123	43600	42504	43040
<b>NGL</b>	-	-	-	41232	44000	45772	43795	-	-
<b>Refinery feedstocks</b>	44800	-	-	42350	44000	44029	42300	43234	42600
<b>Additives</b>	41868	-	-	37029	44000	-	36800	34463	37000
<b>Other hydrocarbons</b>	-	39350	-	41868	-	-	-	42500	120000
<b>Biogasoline</b>	-	26800	26803	-	27000	29657	26800	27000	27000
<b>Biodiesels</b>	42390	37200	38133	-	37000	-	36800	37000	37000
<b>Other liquid biofuels</b>	36800	-	-	-	-	-	36800	36002	37000
<b>Anthracite</b>									
Production	18631	-	-	25500	-	-	-	-	-
Imports	20599	-	26700	27510	29300	-	-	-	25680
<b>Exports</b>	-	-	-	25500	29300	-	-	-	-
Main activity elec. generation	20377	-	-	-	-	-	-	-	-
Industry	20599	-	26700	26455	29300	-	-	-	25680
Other uses	18631	-	29300	26700	29300	-	-	-	30353
<b>Coking coal</b>									
Production	-	-	-	29335	-	30170	-	29518	-
Imports	28219	-	-	28954	28671	-	-	29610	-
Exports	-	-	-	-	-	30170	-	29610	-
Coke ovens	28219	-	-	28498	28671	-	-	29540	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	28219	-	-	28340	28671	30170	-	29596	-
Other uses	28219	-	-	29335	28671	30170	-	29597	-
<b>Other bituminous coal</b>									
Production	-	-	-	-	-	28111	28100	22731	-
Imports	24660	23910	24400	25875	24676	28111	28100	22519	24736
Exports	-	23910	-	-	24676	-	28100	25820	-
Coke ovens	-	-	-	-	-	-	-	-	-
Main activity elec. generation	24660	26220	-	24741	25182	-	28100	21780	24737
Industry	24660	23910	24400	-	-	28111	28100	22897	-
Other uses	24660	23910	24400	23483	24676	28111	28100	25932	24765
<b>Sub-bituminous coal</b>									
Production	-	-	-	20374	-	20562	-	-	-
Imports	21353	-	-	18615	-	20562	-	-	-
Exports	-	-	-	-	-	20562	-	-	-
Main activity elec. generation	21353	-	-	22548	-	20061	-	-	-
Industry	-	-	-	19920	-	20562	-	-	-
Other uses	21353	-	-	19405	-	20562	-	-	-
<b>Lignite</b>									
Production	-	-	-	11146	-	14493	-	8157	-
Imports	-	-	-	13860	20000	-	-	8157	-
Exports	-	-	-	-	20000	-	-	8157	-
Main activity elec. generation	-	-	-	-	-	-	-	8139	-
Industry	-	-	-	11261	20000	14493	-	11348	-
Other uses	-	-	-	11261	20000	14493	-	8170	-
<b>Patent fuel</b>	18631	-	28200	-	-	-	-	23529	-
<b>Coke oven coke</b>	28889	-	28500	26521	28500	29500	28500	27410	29567
<b>Coal tar</b>	37000	-	-	37970	41900	-	-	37667	-
<b>BKB</b>	-	-	22200	18000	20000	-	-	17670	-
<b>Peat</b>	-	10050	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-	-
<b>Oil shale</b>	-	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	30000	-	-	30000	-	-	-	29500

## OECD country-specific net calorific values

2015

<i>kJ/kg</i>	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
<b>Crude oil</b>								
Production	41200	41200	42665	-	-	44220	44220	42731
Imports	41993	41993	42665	42161	43225	44350	44350	43777
Exports	41200	41200	-	-	-	-	-	42470
Average	41997	41997	42665	42161	43225	44285	44285	42870
<b>NGL</b>	37000	37000	-	-	-	-	-	46891
<b>Refinery feedstocks</b>	42000	42000	42500	44244	43700	42500	42500	40930
<b>Additives</b>	42065	42065	-	-	41325	25120	25120	25121
<b>Other hydrocarbons</b>	41500	41500	-	-	-	41868	41868	51004
<b>Biogasoline</b>	20000	20000	26995	26886	26524	26800	26800	32021
<b>Biodiesels</b>	37800	37800	36990	37512	32040	39500	39500	45006
<b>Other liquid biofuels</b>	-	-	-	38159	-	-	-	21583
<b>Anthracite</b>								
Production	-	-	20747	-	-	-	-	29776
Imports	26422	26422	25840	-	25500	-	-	30327
Exports	-	-	25300	-	-	-	-	29083
Main activity elec. generation	25869	25869	21698	-	-	-	-	25559
Industry	26422	26422	24700	-	25500	-	-	29711
Other uses	26422	26422	26400	-	25500	-	-	13854
<b>Coking coal</b>								
Production	-	-	-	-	-	27632	27632	28982
Imports	29800	29800	29250	30000	-	30145	30145	28224
Exports	-	-	-	-	-	-	-	27589
Coke ovens	29800	29800	29250	30000	-	30564	30564	32205
Main activity elec. generation	-	-	-	-	-	25428	25428	-
Industry	29670	29670	-	-	-	-	-	-
Other uses	29800	29800	29300	30000	-	28030	28030	28532
<b>Other bituminous coal</b>								
Production	-	-	18992	-	-	23153	23153	26548
Imports	26216	26216	23350	27400	25500	25958	25958	24801
Exports	-	-	24011	-	-	25539	25539	28048
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	23506	23506	22377	27900	-	22910	22910	25557
Industry	26215	26215	24050	26860	25500	27549	27549	27447
Other uses	26215	26215	27050	27400	25500	27594	27594	26897
<b>Sub-bituminous coal</b>								
Production	-	-	13405	-	-	20410	20410	19006
Imports	-	-	-	-	-	-	-	19967
Exports	-	-	-	-	-	-	-	19722
Main activity elec. generation	-	-	13751	-	-	20689	20689	19251
Industry	-	-	-	-	-	20410	20410	20678
Other uses	-	-	8621	-	-	20410	20410	19191
<b>Lignite</b>								
Production	10695	10695	-	-	-	8583	8583	13905
Imports	14941	14941	-	-	23600	-	-	13845
Exports	-	-	-	-	-	-	-	11777
Main activity elec. generation	11186	11186	-	-	-	7038	7038	14479
Industry	11248	11248	-	-	23600	17100	17100	13908
Other uses	11248	11248	-	-	23600	17100	17100	15031
<b>Patent fuel</b>	28000	28000	-	-	-	-	-	-
<b>Coke oven coke</b>	28194	28194	26795	28080	25500	27214	27214	28865
<b>Coal tar</b>	33490	33490	38519	-	-	37429	37429	-
<b>BKB</b>	18005	18005	-	-	-	-	-	-
<b>Peat</b>	-	-	-	12500	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	-	30800	-	-	-	-	-

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Albania	Algeria	Angola	Argentina	Armenia	Azerbaijan	Bahrain	Bangladesh
<b>Crude oil</b>								
Production	41868	43292	42747	41868	-	42077	42705	-
Imports	-	42370	-	41868	-	-	42705	42161
Exports	41868	43292	42747	41868	-	42077	-	-
Average	41868	43292	42747	41868	-	42077	42705	42161
<b>NGL</b>	-	46725	41868	42496	-	41910	42705	42705
<b>Refinery feedstocks</b>	-	-	-	44799	-	-	44799	-
<b>Additives</b>	-	-	-	41868	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	-	26800	-	-	-	-
<b>Biodiesels</b>	36800	-	-	36800	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	25163	-	-	-	24793	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	25163	-	-	-	-	-	-	-
Other uses	25163	-	-	-	24793	-	-	-
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	30145	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	28200	-	30145	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	28200	-	24702	-	-	-	-
<b>Other bituminous coal</b>								
Production	14285	-	-	24702	-	-	-	20926
Imports	-	-	-	27000	-	-	-	20926
Exports	-	-	-	24702	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	27000	-	-	-	20926
Industry	14285	-	-	30145	-	-	-	20926
Other uses	14285	-	-	24702	-	-	-	20926
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	11900
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	11900
Other uses	-	-	-	-	-	-	-	11900
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	28200	-	28458	-	-	-	-
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	9760	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	-	30800	27214	-	30800	-	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Belarus	Benin	Bolivia	Bosnia and Herzegovina	Botswana	Brazil	Brunei Darussalam	Bulgaria
<b>Crude oil</b>								
Production	42077	-	43333	-	-	42634	42747	40721
Imports	42077	-	-	42747	-	42634	-	42538
Exports	42077	-	43333	-	-	42634	42747	-
Average	42077	-	43333	42747	-	42634	42747	42538
<b>NGL</b>	-	-	43333	-	-	45217	42747	-
<b>Refinery feedstocks</b>	44799	-	-	-	-	44506	-	42500
<b>Additives</b>	-	-	-	-	-	-	41868	23027
<b>Other hydrocarbons</b>	-	-	-	-	-	119960	-	41868
<b>Biogasoline</b>	-	-	-	-	-	28261	-	26800
<b>Biodiesels</b>	36800	-	-	-	-	42267	-	36800
<b>Other liquid biofuels</b>	-	-	-	-	-	26377	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	28811
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	24567
Industry	-	-	-	-	-	-	-	29408
Other uses	-	-	-	-	-	-	-	23200
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	30685	-	30982	-	-
Exports	-	-	-	30132	-	-	-	-
Coke ovens	-	-	-	30308	-	30982	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	26544	-	-	-	-
Other uses	-	-	-	25946	-	30982	-	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	23597	23865	-	16287
Imports	25615	25800	-	-	-	23865	-	27615
Exports	25615	-	-	-	23597	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	23597	23865	-	24662
Industry	25615	25800	-	-	23597	23865	-	27656
Other uses	25615	25800	-	-	23597	23865	-	29224
<b>Sub-bituminous coal</b>								
Production	-	-	-	17999	-	18216	-	-
Imports	-	-	-	17999	-	18216	-	-
Exports	-	-	-	17999	-	-	-	-
Main activity elec. generation	-	-	-	17999	-	18216	-	-
Industry	-	-	-	17999	-	18216	-	-
Other uses	-	-	-	17999	-	18216	-	-
<b>Lignite</b>								
Production	-	-	-	8893	-	12861	-	6809
Imports	-	-	-	8893	-	-	-	-
Exports	-	-	-	8893	-	-	-	17139
Main activity elec. generation	-	-	-	8893	-	12861	-	6764
Industry	-	-	-	8893	-	12861	-	17400
Other uses	-	-	-	8893	-	12861	-	7290
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	29015	-	-	26900	-	28889	-	28500
<b>Coal tar</b>	-	-	-	-	-	35797	-	-
<b>BKB</b>	-	-	-	-	-	-	-	18153
<b>Peat</b>	10100	-	-	-	-	-	-	-
<b>Peat products</b>	14361	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	29308	30354	30800	-	27047	-	26000

## Non-OECD country-specific net calorific values

2015

<i>kJ/kg</i>	Cambodia	Cameroon	PR of China	Colombia	Congo	Costa Rica	Côte d'Ivoire	Croatia
<b>Crude oil</b>								
Production	-	42454	41868	42245	42915	-	42622	42600
Imports	-	42454	41868	-	-	-	42622	42600
Exports	-	42454	41868	42245	42915	-	42622	-
Average	-	42454	41868	42245	42915	42161	42622	42700
<b>NGL</b>	-	-	42705	41868	45217	-	42622	46059
<b>Refinery feedstocks</b>	-	-	44799	-	-	-	42622	42700
<b>Additives</b>	-	-	-	-	-	-	-	42700
<b>Other hydrocarbons</b>	-	-	41868	-	-	-	-	48750
<b>Biogasoline</b>	-	-	26800	26800	-	-	-	-
<b>Biodiesels</b>	-	-	36800	36800	-	-	-	36800
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	20934	-	-	-	-	27619
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	18899	-	-	-	-	27619
Other uses	-	-	22659	-	-	-	-	24501
<b>Coking coal</b>								
Production	-	-	26745	27214	-	-	-	-
Imports	-	-	26745	-	-	-	-	-
Exports	-	-	26745	27214	-	-	-	-
Coke ovens	-	-	26745	27214	-	-	-	-
Main activity elec. generation	-	-	26745	-	-	-	-	-
Industry	-	-	26745	27214	-	-	-	-
Other uses	-	-	26745	27214	-	-	-	-
<b>Other bituminous coal</b>								
Production	-	-	21701	27214	-	-	-	-
Imports	-	-	20934	-	-	25800	-	25141
Exports	-	-	27214	27214	-	-	-	-
Coke ovens	-	-	22155	-	-	-	-	-
Main activity elec. generation	-	-	20963	27214	-	-	-	25000
Industry	-	-	21246	27214	-	25800	-	26700
Other uses	-	-	21246	27214	-	25800	-	24220
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	19887	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	19887	-	-	-	-	-	-	-
Industry	18900	-	-	-	-	-	-	-
Other uses	18900	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	15974
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	15974
Other uses	-	-	-	-	-	-	-	15974
<b>Patent fuel</b>	-	-	17752	-	-	-	-	-
<b>Coke oven coke</b>	-	-	26796	20097	-	28200	-	29310
<b>Coal tar</b>	-	-	33494	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	28889	16957	-	30800	30800	30800	30800	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Cuba	Curaçao <sup>1</sup>	Cyprus <sup>1</sup>	DPR of Korea	DR of the Congo	Dominican Republic	Ecuador	Egypt
<b>Crude oil</b>								
Production	42559	-	-	-	42161	-	41868	42538
Imports	42559	42161	-	42161	-	42161	-	42538
Exports	-	-	-	-	42161	-	41868	42538
Average	42559	42161	-	42161	42161	42161	41868	42538
<b>NGL</b>	41701	42705	-	-	-	-	42454	42538
<b>Refinery feedstocks</b>	-	44799	-	-	-	-	-	-
<b>Additives</b>	-	-	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	25101	-	-	-	-	-	26800	-
<b>Biodiesels</b>	-	-	36800	-	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	26700	-	-	-	-
Imports	26700	-	-	26700	-	-	-	-
Exports	-	-	-	26700	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	26700	-	-	-	-	-	-	-
Other uses	26700	-	-	26700	-	-	-	-
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	25749
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	25749
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	25749
<b>Other bituminous coal</b>								
Production	-	-	-	25800	-	-	-	-
Imports	-	-	25675	25800	-	25800	-	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	25800	-	25800	-	-
Industry	-	-	25675	25800	-	25800	-	-
Other uses	-	-	25675	25800	-	25800	-	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	17585	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	17585	-	-	-	-
Industry	-	-	-	17585	-	-	-	-
Other uses	-	-	-	17585	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	28200	-	-	28200	-	28200	-	27214
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30229	-	30800	30800	30800	30800	-	-

1. Please refer to section 'Geographical coverage'.



## Non-OECD country-specific net calorific values

2015

<i>kJ/kg</i>	El Salvador	Eritrea	Ethiopia	FYR of Macedonia	Gabon	Georgia	Ghana	Gibraltar
<b>Crude oil</b>								
Production	-	-	-	-	42622	42077	42622	-
Imports	-	-	-	-	-	42077	42622	-
Exports	-	-	-	-	42622	42077	42622	-
Average	-	-	-	-	42622	42077	42622	-
<b>NGL</b>	-	-	-	-	-	-	-	-
<b>Refinery feedstocks</b>	-	-	-	-	-	-	-	-
<b>Additives</b>	-	-	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	26800	-	-	-	-	-
<b>Biodiesels</b>	-	-	-	36800	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	26399	-	29000	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	26399	-	27550	-	-
Other uses	-	-	-	25052	-	27550	-	-
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	25800	26107	-	25000	-	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	25800	26107	-	25000	-	-
Other uses	-	-	25800	27891	-	25000	-	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	22320	-	-	-	-
Exports	-	-	-	22238	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	22238	-	-	-	-
Other uses	-	-	-	21204	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	6182	-	17000	-	-
Imports	-	-	-	7525	-	-	-	-
Exports	-	-	-	-	-	17000	-	-
Main activity elec. generation	-	-	-	6321	-	-	-	-
Industry	-	-	-	9143	-	17000	-	-
Other uses	-	-	-	9143	-	17000	-	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	-	-	25764	-	25121	-	-
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	30800	30800	-	-	-	30800	-

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Guatemala	Haiti	Honduras	Hong Kong, China	India	Indonesia	Islamic Rep. of Iran	Iraq
<b>Crude oil</b>								
Production	42454	-	-	-	42789	42663	42663	42831
Imports	-	-	-	-	42789	42663	-	-
Exports	42454	-	-	-	-	42663	42663	42831
Average	42454	-	-	-	42789	42663	42663	42831
<b>NGL</b>	-	-	-	-	42998	42768	42538	42831
<b>Refinery feedstocks</b>	-	-	-	-	40000	44799	-	-
<b>Additives</b>	-	-	-	-	-	-	41868	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	-	-	26800	-	-	-
<b>Biodiesels</b>	-	-	-	36800	36800	36800	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Coking coal</b>								
Production	-	-	-	-	20533	28200	28200	-
Imports	-	-	-	-	27089	28200	28200	-
Exports	-	-	-	-	20533	28200	28200	-
Coke ovens	-	-	-	-	25916	-	28200	-
Main activity elec. generation	-	-	-	-	20533	-	-	-
Industry	-	-	-	-	25916	28200	-	-
Other uses	-	-	-	-	25916	28200	28200	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	16357	25800	25800	-
Imports	25800	-	25800	25800	25800	-	25800	-
Exports	-	-	-	-	16357	25800	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	25800	-	25800	25800	15815	-	-	-
Industry	-	-	25800	25800	20476	25800	25800	-
Other uses	25800	-	25800	25800	20476	25800	25800	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	21119	-	-
Imports	-	-	-	-	16747	-	-	-
Exports	-	-	-	-	-	22000	-	-
Main activity elec. generation	-	-	-	-	16747	18780	-	-
Industry	-	-	-	-	-	18780	-	-
Other uses	-	-	-	-	9797	18780	-	-
<b>Lignite</b>								
Production	-	-	-	-	9546	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	9546	-	-	-
Main activity elec. generation	-	-	-	-	9546	-	-	-
Industry	-	-	-	-	9546	-	-	-
Other uses	-	-	-	-	9546	-	-	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	-	-	-	28200	-	28200	-
<b>Coal tar</b>	-	-	-	-	-	-	38000	-
<b>BKB</b>	-	-	-	-	20000	20000	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	30800	30800	30800	30800	30800	30800	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Jamaica	Jordan	Kazakhstan	Kenya	Kosovo	Kuwait	Kyrgyzstan	Lebanon
<b>Crude oil</b>								
Production	-	-	42876	-	-	42538	42077	-
Imports	42161	42705	42673	42077	-	-	42077	-
Exports	-	-	42920	-	-	42538	-	-
Average	42161	42705	42823	42077	-	42538	42077	-
<b>NGL</b>	-	-	46000	-	-	42622	-	-
<b>Refinery feedstocks</b>	-	-	-	-	-	-	-	-
<b>Additives</b>	-	-	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	26800	-	-	-	-	-	-	-
<b>Biodiesels</b>	-	-	-	-	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	18581	-
Imports	-	26700	-	-	-	-	18581	-
Exports	-	-	-	-	-	-	18581	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	26700	-	-	-	-	18581	-
Other uses	-	26700	-	-	-	-	18581	-
<b>Coking coal</b>								
Production	-	-	18581	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	18581	-	-	-	-	-
Coke ovens	-	-	18581	-	-	-	-	-
Main activity elec. generation	-	-	19226	-	-	-	-	-
Industry	-	-	18581	-	-	-	-	-
Other uses	-	-	18581	-	-	-	-	-
<b>Other bituminous coal</b>								
Production	-	-	18581	-	-	-	18581	-
Imports	25800	-	18581	25800	22525	-	20882	27675
Exports	-	-	18581	-	-	-	18581	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	18581	-	-	-	18581	-
Industry	25800	-	18581	25800	22525	-	18581	27675
Other uses	25800	-	18581	25800	22880	-	20882	27675
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	14654	-	7802	-	14654	-
Imports	-	-	-	-	7802	-	14654	-
Exports	-	-	14654	-	7802	-	14654	-
Main activity elec. generation	-	-	14654	-	7802	-	14654	-
Industry	-	-	14654	-	7802	-	14654	-
Other uses	-	-	14654	-	7802	-	14654	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	28200	25121	-	-	-	-	-
<b>Coal tar</b>	-	-	38000	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	-	30800	30800	-	-	-	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Libya	Lithuania	Malaysia	Malta	Mauritius	Moldova	Mongolia	Montenegro
<b>Crude oil</b>								
Production	42998	42780	43300	-	-	42077	42161	-
Imports	-	42780	42613	-	-	-	-	-
Exports	42998	42780	43333	-	-	-	42161	-
Average	42998	42780	43333	-	-	42077	42161	-
<b>NGL</b>	42998	46090	44413	-	-	-	-	-
<b>Refinery feedstocks</b>	-	43955	42538	-	-	44799	-	-
<b>Additives</b>	-	41860	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	42119	-	-	-	-	-
<b>Biogasoline</b>	-	27000	-	-	-	-	-	-
<b>Biodiesels</b>	-	37000	36800	36800	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	24770	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	24770	-	-
Other uses	-	-	-	-	-	24770	-	-
<b>Coking coal</b>								
Production	-	-	-	-	-	-	28200	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	28200	-
Coke ovens	-	-	-	-	-	-	28200	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	28200	-
<b>Other bituminous coal</b>								
Production	-	-	26394	-	-	-	28596	-
Imports	-	25120	26394	-	25800	22655	28596	-
Exports	-	-	26394	-	-	-	28596	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	25120	26394	-	-	-	28596	-
Industry	-	25120	26394	-	25800	22655	28596	-
Other uses	-	25120	26394	-	25800	22655	28596	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	-	-	14403	9210
Imports	-	-	-	-	-	-	-	9210
Exports	-	-	-	-	-	-	14403	9210
Main activity elec. generation	-	-	-	-	-	-	14403	9210
Industry	-	-	-	-	-	-	14403	9210
Other uses	-	-	-	-	-	-	14403	9210
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	29300	-	-	-	-	28200	-
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>								
<b>Peat</b>	-	11720	-	-	-	9760	-	-
<b>Peat products</b>	-	13300	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	30800	28889	-	30800	30800	30800	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Morocco	Mozambique	Myanmar	Namibia	Nepal	Nicaragua	Niger	Nigeria
<b>Crude oil</b>								
Production	38937	-	42245	-	-	-	42161	42747
Imports	42460	-	-	-	-	40863	-	-
Exports	-	-	42245	-	-	-	-	42747
Average	42460	-	42245	-	-	40863	42161	42747
<b>NGL</b>	-	-	42705	-	-	-	-	42747
<b>Refinery feedstocks</b>	44799	-	-	-	-	-	-	44799
<b>Additives</b>	-	-	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	-	-	-	-	-	-
<b>Biodiesels</b>	-	-	-	-	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Coking coal</b>								
Production	-	28200	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	28200	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	28200	-	-	-	-	-	-
<b>Other bituminous coal</b>								
Production	-	24995	25800	-	25121	-	-	25800
Imports	27633	-	-	-	25121	-	-	-
Exports	-	24995	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	27633	-	25800	22692	-	-	-	-
Industry	27633	-	25800	-	25121	-	-	25800
Other uses	27633	24995	25800	22692	25121	-	-	25800
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	11900	-	-	-	11900	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	11900	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	11900	-	-	-	11900	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	-	-	-	-	-	-	-
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	20000	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	30019	30800	30800	29730	30800	30800	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Oman	Pakistan	Panama	Paraguay	Peru	Philippines	Qatar	Romania
<b>Crude oil</b>								
Production	42705	41990	-	-	42747	41471	42873	40639
Imports	-	43415	-	-	42161	41471	-	41857
Exports	42705	41990	-	-	42747	41471	42873	40645
Average	42705	42937	-	-	42747	41471	42873	41430
<b>NGL</b>	42705	42873	-	-	42747	-	44800	49458
<b>Refinery feedstocks</b>	44799	-	-	-	-	-	-	44799
<b>Additives</b>	41868	25121	-	-	-	-	-	36792
<b>Other hydrocarbons</b>	-	-	-	-	-	-	41868	49457
<b>Biogasoline</b>	-	-	-	26800	26800	29655	-	26800
<b>Biodiesels</b>	-	-	-	-	36800	39423	-	36800
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	25533
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	25533
Other uses	-	-	-	-	-	-	-	25533
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	27545	-	-	-	-	-	27500
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	27545	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	27500
Other uses	-	18732	-	-	-	-	-	27500
<b>Other bituminous coal</b>								
Production	-	18810	-	-	29308	-	-	-
Imports	-	27645	25800	-	29308	25121	-	-
Exports	-	-	-	-	29308	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	24379	25800	-	29308	24325	-	-
Industry	-	24379	-	-	29308	-	-	-
Other uses	-	24379	25800	-	29308	24325	-	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	22098	-	22873
Imports	-	-	-	-	-	22098	-	24603
Exports	-	-	-	-	-	22098	-	-
Main activity elec. generation	-	-	-	-	-	22098	-	24585
Industry	-	-	-	-	-	22098	-	24416
Other uses	-	-	-	-	-	22098	-	24416
<b>Lignite</b>								
Production	-	11900	-	-	-	-	-	7853
Imports	-	-	-	-	-	11900	-	9234
Exports	-	-	-	-	-	-	-	7385
Main activity elec. generation	-	-	-	-	-	-	-	7785
Industry	-	11900	-	-	-	11900	-	8519
Other uses	-	11900	-	-	-	11900	-	8519
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	28200	-	-	28200	28200	-	26370
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	8790
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	30800	30800	28889	27214	25104	-	-

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Russian Federation	Saudi Arabia	Senegal	Serbia	Singapore	South Africa	South Sudan	Sri Lanka
<b>Crude oil</b>								
Production	42077	42538	-	44194	-	40520	42622	-
Imports	42077	-	42622	44194	42705	40520	-	43124
Exports	42077	42538	-	-	42705	-	42622	-
Average	42077	42538	42622	44194	42705	40520	42622	43124
<b>NGL</b>	41910	44924	-	46000	-	42743	-	-
<b>Refinery feedstocks</b>	-	-	-	43324	42833	-	-	-
<b>Additives</b>	-	-	-	35109	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	119960	-	40520	-	-
<b>Biogasoline</b>	-	-	-	-	-	-	-	-
<b>Biodiesels</b>	-	-	-	-	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	29000	-	-	-	-	23597	-	-
Imports	29000	-	-	25104	-	-	-	-
Exports	29000	-	-	-	-	27993	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	25439	-	26996	-	-
Other uses	29000	-	-	24725	-	26996	-	-
<b>Coking coal</b>								
Production	28500	-	-	-	-	30995	-	-
Imports	28500	-	-	-	-	30995	-	-
Exports	28500	-	-	-	-	30995	-	-
Coke ovens	28500	-	-	-	-	30995	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	28500	-	-	-	-	30995	-	-
<b>Other bituminous coal</b>								
Production	24901	-	-	-	-	23597	-	-
Imports	25000	-	25916	25743	25800	-	-	29308
Exports	26107	-	-	26455	-	27993	-	-
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	24009	-	-	-	25800	20097	-	29308
Industry	24009	-	25916	25490	25800	26996	-	29308
Other uses	24009	-	25916	25472	25800	26996	-	25800
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	14918	-	-	7970	-	-	-	-
Imports	14918	-	-	8093	-	-	-	-
Exports	14918	-	-	8093	-	-	-	-
Main activity elec. generation	14918	-	-	7693	-	-	-	-
Industry	14918	-	-	18512	-	-	-	-
Other uses	14918	-	-	12496	-	-	-	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	29015	-	-	28090	28200	26498	-	-
<b>Coal tar</b>	38000	-	-	38000	-	-	-	-
<b>BKB</b>	-	-	-	17990	-	-	-	-
<b>Peat</b>	9965	-	-	-	-	-	-	-
<b>Peat products</b>	17585	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	30800	28889	30800	-	30800	30145	30800

## Non-OECD country-specific net calorific values

2015

<i>kJ/kg</i>	Sudan	Suriname	Syrian Arab Republic	Chinese Taipei	Tajikistan	Tanzania	Thailand	Togo
<b>Crude oil</b>								
Production	42622	42161	42035	42370	42077	-	42226	-
Imports	42622	-	42035	42370	-	-	42226	-
Exports	42622	-	-	-	-	-	42226	-
Average	42622	42161	42035	42370	42077	-	42226	-
<b>NGL</b>	-	-	42035	-	-	-	46850	-
<b>Refinery feedstocks</b>	-	-	-	43961	-	-	44799	-
<b>Additives</b>	-	-	-	41868	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	-	26800	-	-	26800	-
<b>Biodiesels</b>	-	-	-	-	-	-	36800	-
<b>Other liquid biofuels</b>	-	-	-	36800	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	27424	-	-	26377	-
Exports	-	-	-	-	-	-	26377	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	26377	-	-	26377	-
Other uses	-	-	-	26796	-	-	26377	-
<b>Coking coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	27424	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	28889	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	26796	-	-	-	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	18581	25800	-	-
Imports	-	-	-	27424	18581	-	26377	-
Exports	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	28889	-	-	-	-
Main activity elec. generation	-	-	-	26796	18581	-	26377	-
Industry	-	-	-	26377	-	25800	26377	-
Other uses	-	-	-	26796	18581	25800	26377	-
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	18900	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	18900	-	-	-	-
Industry	-	-	-	18900	-	-	-	-
Other uses	-	-	-	18900	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	14654	-	10726	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	10372	-
Industry	-	-	-	-	-	-	18250	-
Other uses	-	-	-	-	14654	-	12142	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	-	28200	28200	-	-	28200	-
<b>Coal tar</b>	-	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Peat products</b>	-	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30145	30800	30800	-	-	30800	30800	30800



## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Trinidad and Tobago	Tunisia	Turkmenistan	Ukraine	United Arab Emirates	Uruguay	Uzbekistan	Venezuela
<b>Crude oil</b>								
Production	42245	43124	42077	42077	42622	-	42077	44736
Imports	42245	43124	-	42077	-	42223	-	-
Exports	42245	43124	42077	42077	42622	-	-	44736
Average	42245	43124	42077	42077	42622	42462	42077	44736
<b>NGL</b>	41868	43124	41910	41910	42622	-	-	41994
<b>Refinery feedstocks</b>	-	-	-	44799	-	-	-	-
<b>Additives</b>	-	-	-	41868	-	-	25121	-
<b>Other hydrocarbons</b>	-	-	-	41868	-	-	41868	-
<b>Biogasoline</b>	-	-	-	26800	-	26796	-	-
<b>Biodiesels</b>	-	-	-	-	-	39775	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	-	-
<b>Anthracite</b>								
Production	-	-	-	24093	-	-	-	-
Imports	-	-	-	24093	26700	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	24093	-	-	-	-
Industry	-	-	-	24093	26700	-	-	-
Other uses	-	-	-	24093	26700	-	-	-
<b>Coking coal</b>								
Production	-	-	-	28604	-	-	-	-
Imports	-	-	-	28604	28200	-	-	-
Exports	-	-	-	28604	-	-	-	-
Coke ovens	-	-	-	28604	-	-	-	-
Main activity elec. generation	-	-	-	28604	-	-	-	-
Industry	-	-	-	-	28200	-	-	-
Other uses	-	-	-	28604	28200	-	-	-
<b>Other bituminous coal</b>								
Production	-	-	-	22450	-	-	18581	30564
Imports	-	-	-	22450	25800	25800	-	-
Exports	-	-	-	-	-	-	-	30564
Coke ovens	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	22686	-	-	-	-
Industry	-	-	-	22450	25800	-	18581	30564
Other uses	-	-	-	22450	25800	25800	18581	30564
<b>Sub-bituminous coal</b>								
Production	-	-	-	-	-	-	-	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-
Other uses	-	-	-	-	-	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	-	-	14654	-
Imports	-	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	14654	-
Main activity elec. generation	-	-	-	-	-	-	14654	-
Industry	-	-	-	-	-	-	14654	-
Other uses	-	-	-	-	-	-	14654	-
<b>Patent fuel</b>	-	-	-	-	-	-	-	-
<b>Coke oven coke</b>	-	-	-	25121	28200	-	-	-
<b>Coal tar</b>	-	-	-	38000	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	9703	-	-	-	-
<b>Peat products</b>	-	-	-	14655	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	30800	30800	30800	30800	31401	-	30800

## Non-OECD country-specific net calorific values

2015

<i>KJ/kg</i>	Viet Nam	Yemen	Zambia	Zimbabwe	Other Africa	Other non-OECD Amer.	Other non-OECD Asia
<b>Crude oil</b>							
Production	42622	42998	-	-	42161	42161	42161
Imports	-	-	42702	-	-	42161	42161
Exports	42622	42998	-	-	42161	42161	42161
Average	42622	42998	42702	-	42161	42161	42161
<b>NGL</b>	42705	42538	-	-	42705	-	42705
<b>Refinery feedstocks</b>	-	-	-	-	-	-	-
<b>Additives</b>	-	-	-	-	-	-	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-
<b>Biogasoline</b>	-	-	-	26800	-	-	-
<b>Biodiesels</b>	-	-	-	-	-	-	-
<b>Other liquid biofuels</b>	-	-	-	-	-	-	36800
<b>Anthracite</b>							
Production	23446	-	-	-	-	-	-
Imports	23446	-	-	-	-	-	-
Exports	23446	-	-	-	-	-	-
Main activity elec. generation	23446	-	-	-	-	-	-
Industry	23446	-	-	-	-	-	-
Other uses	23446	-	-	-	-	-	-
<b>Coking coal</b>							
Production	-	-	-	26996	-	-	-
Imports	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-
Coke ovens	-	-	-	26996	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-
Other uses	-	-	-	26996	-	-	-
<b>Other bituminous coal</b>							
Production	-	-	24706	26996	25800	-	25800
Imports	23446	25800	-	26996	25800	25800	25800
Exports	-	-	-	-	25800	-	25800
Coke ovens	-	-	-	-	-	-	25800
Main activity elec. generation	23446	-	-	26996	25800	-	25800
Industry	23446	25800	24706	26996	25800	-	25800
Other uses	23446	25800	24706	26996	25800	25800	25800
<b>Sub-bituminous coal</b>							
Production	-	-	-	-	-	-	-
Imports	18900	-	-	-	-	-	-
Exports	-	-	-	-	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-
Industry	18900	-	-	-	-	-	-
Other uses	18900	-	-	-	-	-	-
<b>Lignite</b>							
Production	-	-	-	-	-	-	14403
Imports	-	-	-	-	-	-	-
Exports	-	-	-	-	-	-	14403
Main activity elec. generation	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	14403
Other uses	-	-	-	-	-	-	14403
<b>Patent fuel</b>	-	-	-	-	-	29000	-
<b>Coke oven coke</b>	28200	-	-	25121	-	-	28200
<b>Coal tar</b>	-	-	-	-	-	-	-
<b>BKB</b>	-	-	-	-	-	-	-
<b>Peat</b>	9760	-	-	-	9760	9760	-
<b>Peat products</b>	-	-	-	-	-	-	-
<b>Oil Shale</b>	-	-	-	-	-	-	-
<b>Charcoal</b>	30800	30800	32594	30800	30800	30800	30800

## Regional and country-specific net calorific values for oil products

2015

kJ/kg	OECD Europe <sup>1</sup>	OECD Americas	OECD Asia Oceania	Non- OECD <sup>2</sup>	Algeria	Argen- tina	Brazil	Cam- bodia	PR of China	Colombia	Cuba
Refinery gas	49500	48100	48100	48100	-	-	35008	-	46055	-	-
Ethane	49500	49400	49400	49400	-	-	-	-	-	-	-
Liquefied petroleum gases	46000	47300	47700	47300	49404	46055	46473	49404	50242	46139	47650
Motor gasoline	44000	44800	44600	44800	-	43543	43543	42488	43124	43570	44945
Aviation gasoline	44000	44800	44600	44800	-	43543	46473	-	43124	-	44945
Gasoline type jet fuel	43000	44800	44600	44800	-	43543	-	-	43124	-	-
Kerosene type jet fuel	43000	44600	44500	44600	-	43124	43543	43015	43124	44158	44150
Other kerosene	43000	43800	42900	43800	-	43124	43543	42643	43124	43100	44150
Gas/diesel oil	42600	42600	42600	43300	-	42705	42267	43158	42705	43102	43155
Fuel oil	40000	40200	42600	40200	-	41031	40068	41868	41868	41268	40570
Naphtha	44000	45000	43200	45000	-	43333	44506	-	43124	-	44945
White spirit	43600	43000	43000	43000	-	-	47060	-	38519	-	44945
Lubricants	42000	42000	42900	42000	-	-	41372	41064	38519	-	40968
Bitumen	39000	40000	38800	39000	-	-	40828	-	-	-	40968
Paraffin waxes	40000	40000	40000	40000	-	-	-	-	-	-	-
Petroleum coke	32000	32000	33800	32000	-	30145	35007	-	-	-	-
Non-specified oil products	40000	40000	40000	40000	-	-	40763	-	38519	-	-

	Egypt	Iran	Jordan	Lebanon	Malaysia	Mozam- bique	Namibia	Nepal	Nica- ragua	Oman	Pakistan
Refinery gas	-	-	58615	-	-	-	-	-	-	-	-
Ethane	-	-	-	-	-	-	-	-	-	-	-
Liquefied petroleum gases	-	-	46557	-	45544	45594	-	49240	47018	-	45427
Motor gasoline	-	43546	43543	-	43961	-	46892	47270	44129	-	-
Aviation gasoline	-	-	43543	-	43961	-	51498	-	-	-	43752
Gasoline type jet fuel	-	-	-	-	-	-	-	-	-	-	-
Kerosene type jet fuel	45636	-	43585	44673	43199	-	44213	46600	42915	-	43292
Other kerosene	45469	-	43292	-	43208	-	-	46060	42915	-	43292
Gas/diesel oil	44631	-	42663	45217	42496	-	45427	45890	42747	-	44087
Fuel oil	40696	-	40486	-	41500	-	41742	44210	41324	-	40863
Naphtha	44799	-	-	-	44129	-	-	-	-	-	44841
White spirit	-	-	-	-	43208	-	-	-	-	-	-
Lubricants	-	-	-	-	42140	-	-	-	-	-	-
Bitumen	-	-	-	-	41800	-	-	-	-	-	-
Paraffin waxes	-	-	-	-	43333	-	-	-	-	-	-
Petroleum coke	-	-	-	-	36400	-	-	-	-	-	-
Non-specified oil products	-	-	-	39775	42496	-	-	-	-	46880	-

	Paraguay	Philip- pines	Senegal	South Africa	Sri Lanka	Thailand	Tunisia	Uruguay	Vene- zuela	Viet Nam	Zambia
Refinery gas	-	-	-	-	-	-	-	-	-	-	-
Ethane	-	-	-	-	-	46892	-	-	-	-	-
Liquefied petroleum gases	45845	45050	-	46767	44380	49296	46306	46055	49271	45552	45421
Motor gasoline	-	44254	-	44045	45636	43196	43878	43899	46942	43961	43002
Aviation gasoline	-	44254	-	45552	45636	-	43878	44162	47107	-	-
Gasoline type jet fuel	-	44254	-	40738	45636	-	43878	-	47156	-	-
Kerosene type jet fuel	40528	41688	43961	41073	43961	-	43333	43528	46092	43208	43332
Other kerosene	-	41261	43961	43250	43961	43703	43208	43214	45928	43208	43332
Gas/diesel oil	42873	42073	43543	42915	43961	42331	42998	41780	45245	42496	42772
Fuel oil	41031	41110	-	41826	41031	42304	40989	-	43286	41491	40892
Naphtha	39942	46185	44799	44924	45636	-	44129	44568	47090	-	43951
White spirit	-	-	-	42496	-	-	43585	-	-	-	-
Lubricants	-	-	-	-	-	-	42705	-	44852	-	-
Bitumen	-	38720	-	-	-	-	42705	40361	44158	-	42702
Paraffin waxes	-	-	-	-	-	-	-	-	-	-	-
Petroleum coke	-	-	-	-	-	-	-	-	28889	-	-
Non-specified oil products	-	41299	-	-	-	-	42705	42262	41868	-	-

1. Defaults for Europe were applied to non-OECD Europe and Eurasia.

2. Unless country-specific net calorific values are available.

# COUNTRY NOTES AND SOURCES

## OECD COUNTRIES

### General notes

The notes given in this document refer to data for the years 1960 to 2015 published in the book, as well as on CD-ROM and in the on-line data service. In general, more detailed notes are available for data starting in 1990.

Data are obtained through annual submission of five fuel questionnaires from national administrations, as indicated for each country in the section on sources.

In some instances it has been necessary for the IEA Secretariat to estimate some data; explanations of the estimates are provided in the country notes. For more information on fuel-specific methodologies, please refer to the various IEA information books. Energy data reported for 2016 (shown as 2016p) in the final release are provisional supply data based on submissions received in early 2017 and on monthly submissions to the IEA from member countries.

This section lists a few specific notes that apply to all countries, and it is followed by a time series of comprehensive country-specific notes by fuel and flow.

Prior to 1974, most fuel inputs and electricity and heat outputs for autoproducers are included in main activity producers. The figures for the quantities of fuels used for the generation of electricity and heat and the corresponding outputs in CHP and heat plants should be used with caution. Despite estimates introduced by the IEA Secretariat, inputs and outputs are not always consistent. Please refer to notes below under *Electricity and heat*.

Data for anthracite, coking coal, other bituminous coal, sub-bituminous coal and lignite are available separately from 1978. Prior to 1978, only data for hard

coal and brown coal (lignite/sub-bituminous coal) are available.

In 1996, the IEA Secretariat extensively revised data on coal and coke use in blast furnaces, and in the iron and steel industry (for those countries with blast furnaces), based on data provided to the OECD Steel Committee and other sources. The quantities of fuels transformed into blast furnace gas have been estimated by the IEA Secretariat based on its blast furnace model.

For biofuels and waste (i.e. solid biofuels, biogases, liquid biofuels, industrial waste and municipal waste), there may be breaks in time series between 1988 and 1989, as in 1997 the IEA Secretariat extensively revised these data based on data from Eurostat (for the EU-15 member countries) and on other national sources for other OECD member countries, and data from Eurostat were generally available from 1989. Generally, data on biofuels and waste are reported in non-specified prior to 1989.

## Australia

### Source

Department of Environment and Energy, Canberra.

### General notes

All data refer to the fiscal year (e.g. July 2014 to June 2015 for 2015).

Starting with the 2013 edition and following, data for Australia were revised back to 2003 due to the adoption of the National Greenhouse and Energy Reporting (NGER) as the main energy consumption data source for the Australian Energy Statistics. As a result, there are breaks in the time series for many data between 2002 and 2003. The revisions have also introduced some methodological issues, including

identifying inputs and outputs to certain transformation processes such as gas works plants, electricity plants and CHP plants. Energy industry own use and inputs to the transformation processes are sometimes not reported separately in the correct categories. More detail is given in the notes below.

## Coal

### General notes

- In the 2017 edition, the Australian administration revised data on **coal tar** back to 2010 resulting in breaks in time series between 2009 and 2010.
- In the 2016 edition, extensive revisions were made to 2010 to 2013 data for many primary and manufactured products causing breaks in production, trade and consumption between 2009 and 2010. Time series which begin in 2010 may be reported in other flows until 2009. 2014 data were reported on the same basis as 2010 to 2013.
- In the 2015 edition, increases of production and consumption of **other bituminous coal** for 2013 are due to both new mine capacity and improved classification data. In the 2016 edition, these revisions were extended back to 2010. Apparent switching between **sub-bituminous coal** and **other bituminous coal** between 2009 and 2010 suggests that some **other bituminous coal** was reported as **sub-bituminous coal** prior to this, across several flows.
- In the 2013 edition, production data for all **manufactured gases** were revised downwards as part of the new national methodology, leading to significant statistical differences.
- Reclassification of some **coal** types in the 2013 edition were calculated on an energy basis and resulted in a net increase of quantities of primary coal from 2003 to 2011.
- Breaks in the time series for **gas works gas** between 2008 and 2009 are due to a change of survey, while reduced production and consumption between 2006 and 2008 are due to the removal of some **natural gas** inputs.
- Data on **blast furnace gas** for electricity production by autoproducers begins in 1986.
- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.

### Supply

- Only **anthracite** exports are reported separately; the remainder that is consumed domestically is included with **other bituminous coal**.

- Export trade in **coke oven coke** between 2005 and 2011 exists, but data are unavailable for reasons of confidentiality.

### Transformation

- In 2015, a new plant within the mining sector started its operations increasing the consumption of **coke oven coke**.
- The one company producing **BKB** closed its operation during 2015. As such, production and consumption declined significantly.
- For 2003 to 2012, **coke oven gas** reported as energy industry own-use in electricity or CHP plants is used for generation purposes, while **natural gas** used for own-use plant support is reported in the transformation sector.
- **Natural gas** consumed to fuel the distribution of **natural gas** in natural gas networks is reported as transformation for **gas works gas** production until 2005.
- The drop in **BKB** production in 2004 was due to a fire in the main production plant.

### Consumption

- In the 2016 edition, revisions for 2010 onwards have increased the quantities of **sub-bituminous coal** and decreased the quantities of **other bituminous coal** being used in the non-metallic minerals industry as more accurate information has become available.
- Consumption in wood and wood products is included in paper, pulp and print from 2001 onwards.

## Oil

### General notes

- In the 2016 edition, the Australian administration revised oil supply/demand data from 2010, resulting in breaks in time series between 2009 and 2010. In particular, crude oil production for selected companies, previously estimated, was replaced by actual data. Transport consumption data (gas/diesel, motor gasoline, LPG) were revised to better align with data from the Australian Petroleum Statistics and the Bureau of Infrastructure, Transport and Regional Economics. A new method was adopted to split gas/diesel inputs between main-activity and autoproducer plants. Finally, data for production *from other sources* (*natural gas*) of **other hydrocarbons**

corresponding to hydrogen used in refineries are now reported. They are also represented as the output of non-specified transformation processes in the balances format.

- An in-depth review of Australian oil statistics, in particular investigation of amounts currently reported under recycled products as well as statistical differences for motor gasoline and bitumen, is on-going and may result in further improvements in the next editions.

### Supply

- Crude oil production and imports continued to decline in 2015 in line with the closure of domestic refining capacity in New South Wales (Kurnell Refinery) and Queensland (Bulwer Island Refinery). Refinery outputs also fell as a result. These two sites have been converted to import terminals helping Australia expanding its import capacity. Refined products imports increased considerably in 2015 with non-bio gasoline accounting for most of the increase.
- Imports of fuel oil have been estimated by the Australian administration.
- In the 2015 data, fuel oil imports dropped significantly due to the closure of the two large consumers of this product, the Gove alumina refinery and the Point Henry aluminium smelter
- There is a break in the time series for crude oil and NGL between 2001 and 2002.
- The drop in the production of crude oil in 1999 is due to a gas explosion at the Longford plant.
- Prior to 1992, part of the NGL production is included in crude oil.

### Natural gas

#### General notes

- In the 2016 edition, the Australian administration revised natural gas demand data for some flows back to 2010, resulting in breaks in time series between 2009 and 2010.
- In 2015, the Australian administration revised production and certain consumption data back to 2006. The production figures now include previously uncaptured flows.
- Prior to 1991 natural gas data include ethane.

### Supply

- 2016 is the first year when Australia reported stock changes. The stock change includes volumes

stored for the domestic market and in LNG terminals for exports.

- Around 30% of the production (mainly coal seam gas) is estimated by the Australian administration.

### Transformation

Until 2005, natural gas consumed to fuel the distribution of natural gas in natural gas networks was reported as transformation for gas works gas production.

### Consumption

- Consumption in the residential and agriculture sectors is estimated by the Australian administration based on models.
- Between 2009 and 2010 some breaks in time series may occur due to changes in methodologies and to improved data sources. Revisions to the consumption data include changes to energy use in liquefaction plants, and a shift of gas works gas (transformation) to non-specified energy from 2006 onwards. Revisions to previous years are pending.
- Between 2001 and 2002 there are breaks in time series for consumption data due to an industry structural shift and changes in methodology.
- Data for 1999 and 2000 end-use consumption are estimated by the Australian administration.

### Biofuels and waste

#### General notes

- The data for biogasoline and biodiesel are not available before 2003 and 2004 respectively.
- From 1996, a different industry consumption breakdown for biofuels and waste is available and leads to breaks in time series.

### Supply

- **Biogas** production data at sewage treatment works are not available.
- Indigenous production of **biodiesel** decreased a lot in 2016 because one of major **biodiesel** producers ceased production in January 2016.

### Consumption

- In the 2017 edition of this publication, there has been a revision to the time series of **solid biofuels** consumption in “Paper, pulp and printing” sector. This time series has been revised back to 2010 resulting in break in time series between 2009 and 2010.



- In the 2016 edition of this publication, the Australian administration revised **primary solid biofuels** back to 2010 which impact mostly final consumption in Food and Tobacco. This created breaks in time series.
- The consumption data of **biogases** in industry is not available before 2003.

## Electricity and heat

### General notes

- In the 2016 edition, several combustible fuel electricity production time series as well as some electricity consumption time series were revised by the Australian administration back to 2010 in order to limit the use of estimated data and are causing some breaks.
- From 1992 onwards, heat data are not available.

### Supply

- Data for production of electricity from **wind** are available from 1994.
- Data for electricity production from **solar photovoltaic** start in 1992 and from **solar thermal** in 2003.

### Transformation

- Fuels used for generation by autoproducers represent single fuel-fired units only. The use of fuel in multi-fired units operated by autoproducers is included in industry consumption.
- In the 2017 edition, following an extended review of past data, the Australian administration revised electricity outputs of **blast furnace gas** autoproducer electricity plants for the period 2003-2004 and of autoproducer CHP plants fuelled by **other oil products** for 2009, resulting in more realistic efficiency rates for these plants.
- In 2002, the Australian administration started to use a new survey methodology and reclassified the types of plants between main activity producers and autoproducers.
- Prior to 1995, electricity production from **biogases** is included in natural gas.
- Prior to 1986, inputs and outputs from autoproducer CHP plants are not available.

### Consumption

- Prior to 2006, **electricity** consumption in mining and quarrying includes consumption in liquefaction/regasification plants.

- From 1990 to 2008, **electricity** consumption in wood and wood products is included together with paper, pulp and printing.
- The direct use of **solar heat** (mostly domestic solar panels) is available from 1974.
- **Electricity** consumption in coke ovens has been estimated by the Australian administration from 1974 to 1999.
- Prior to 1974, the breakdown of **electricity** consumption in industry and energy sub-sectors is not available and energy industry consumption is included in industry.
- **Electricity** consumption in the *non-specified transport* sector represents support services for transport for mining operations.
- Prior to 1971 **electricity** consumption in the commercial and public services sector is included in industry.
- Reported **electricity** consumption in the oil and gas extraction section may include some consumption in LNG/regasification plants.

## Austria

### Source

Bundesanstalt Statistik Österreich, Vienna.

### General notes

- In the 2016 and 2017 edition, widespread data revisions were received due to enhanced reporting from 2005 onwards as a consequence of the Austrian Energy Efficiency Act (Bundes-Energieeffizienzgesetz). For some time series, these revisions were extrapolated back to 1990. As a consequence, there may be breaks between 2004 and 2005, and 1989 and 1990.

### Coal

#### General notes

- In the 2017 edition, revisions concerning the iron and steel industry were received for data since 2005. The revisions impacted the energy sector for **coke oven gas** and **blast furnace gas**.
- In the 2016 edition, revisions concerning the iron and steel industry were received for data since 1990. The following flows were impacted by these revisions: inputs to blast furnaces, the breakdown between transformation and own-use energy support, and calorific values.

- The last **lignite** mine closed in the second quarter of 2004 and **lignite** use for power generation ceased in 2006.
- Since 1996, **gas works gas** data are reported with **natural gas** because it is distributed in the same network. The amount of **gas works gas** is negligible and it is mostly consumed by households.
- “Trockenkohle” is included with **BKB** because of its high calorific value.
- LD gas, which should normally be reported as **other recovered gases**, is reported with **blast furnace gas**.

## Oil

### Supply

- Exports of **naphtha** are no longer reported from 2014, past values may refer to exports of petrochemical raw material.
- Deliveries of **gas/diesel** to international marine bunkers were revised back to 1990 after implementation of a new study results.
- Prior to 1990, a portion of **naphtha** is included with **other oil products**.

## Natural gas

### General notes

- In the 2017 edition of this publication, the Austrian administration revised data back to 1999 to reflect improvements in their data collection. Supply data were revised between 2002 and 2008. Transformation sector data were revised from 2014 back to 2002, energy own-use sector data back to 1999 and consumption data back to 2005.

### Supply

- Export amounts are calculated by the national administration by subtracting stock changes and domestic consumption from import figures.

### Transformation

- Between 1995 and 1996 there is a break in time series for autoproducer electricity and CHP plants due to the availability of more detailed data.

### Consumption

- There are inconsistencies in the time series for commercial/public services as this sub-sector is computed as a residual.

- The increase in pipeline transport consumption for 2013 is due to a new methodology of data collection. Historical revisions are pending. Prior to 2000, differences due to measurement are included with distribution losses.

## Biofuels and waste

### General notes

- Data for 1986 to 1989 for **solid biofuels**, **industrial waste**, **biogases** and **liquid biofuels** are IEA Secretariat estimates based on information published by OSTAT in *Energieversorgung Österreichs Endgültige Energiebilanz*.

### Consumption

- In the 2016 edition, improvement in the iron and steel industry data have allowed more precision in the consumption, among other for **industrial waste** in blast furnaces.
- In the 2016 edition, the consumption of **solid biofuels** in the residential sector was revised down from 2005 data.

## Electricity and heat

### Supply

- Amounts for both net electricity production and plant own use are calculated by the Austrian administration by applying a fixed percentage multiplier to the gross production of all plants in the public grid, regardless of plant type or fuel.

### Transformation

- Electricity plants data may include some CHP plants operating in **electricity** only mode.
- A large autoproducer electricity plant was reclassified as an autoproducer CHP plant and therefore creates a break in time series for **municipal waste** in 2011.
- In 2009, inputs of **other oil products** to autoproducer CHP plants were reclassified as **refinery gas** and **natural gas**.
- Due to a change in the survey methodology, the **heat** produced in small plants (capacity inferior to 1 MW) is not reported starting in 2002.
- **Heat from chemical processes** used for **electricity** production is available from 2004.
- Electricity generation from **geothermal** started in 2002.
- Prior to 2002, data for **biogases** only include plants of 1 MW or larger.



- Prior to 1981, inputs to main activity producer electricity plants include inputs to CHP plants. All electricity production by CHP plants is included in electricity plants, and only production from combustible fuel sources is taken into account. Auto-producer CHP heat production is included in main activity producer CHP plants. For heat, own use is included in distribution losses.

### Consumption

- **Electricity** consumption in oil refineries includes consumption in gas works plants prior to 1991.
- From 1990 to 2009, small amounts of **electricity** used in heat pumps have been included in the residential sector.
- Starting in 1990, consumption of **electricity** in the field of electricity supply, district heating and water supply are included in *other energy industry own use*, prior to that it was included in commercial/public services.
- Also prior to 1991, **electricity** consumption in the iron and steel industry includes consumption in coke ovens and blast furnaces.

## Belgium

### Source

Observatoire de l'Energie, Brussels.

### Coal

#### General notes

- In the 2016 edition, improved data collection has led to some breaks in time series. These revisions include **hard coal** classifications, products and processes in integrated iron and steel manufacture and may be extended further back in future editions.
- Data for **anthracite** prior to 2014 may include a small portion of **other bituminous coal**.
- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.
- **Other bituminous coal** and **sub-bituminous coal** data reported in *from other sources* refer to coal recuperated from coal dumps.

### Supply

- Supply-side data are obtained through surveying questionnaires instead of customs data.

- Conventional production of **other bituminous coal** ceased on 31 August 1992.

### Transformation

- In 2015, the decrease of **coke oven gas** inputs to autoproducer CHP plants is due to a power plant closure in 2015.
- In 2014 and 2015, **coking coal** inputs to coke ovens decreased due to a coke oven closure in June 2014.
- In 2014, the decrease of **other bituminous coal** inputs to main activity producer electricity plants is due to a power plant closure in 2014.

### Consumption

- The decrease of **other bituminous coal** and **coke oven coke** in the iron and steel industry in 2002 is due to the closure of several plants.
- The use of **coke oven gas** in chemical and petrochemical activities ceased in 1996.

### Oil

#### General notes

- In the 2016 edition, the Belgian administration reviewed and improved the methodology for reporting petrochemical consumption. Energy use of naphtha and LPG in the petrochemical sector, corresponding to recovered gases from the petrochemical process used for heating the installations, is now reported. Previously these amounts were allocated by default to non-energy use. Quantities reported under transformation in petrochemical plants have also been increased as it appeared that the petrochemical sector was returning more oil products to the market either for domestic consumption or exports. Revisions were applied back to 2009.
- Data on biofuels are not available before 2009.

### Supply

- The drop in international marine bunker consumption in 2014 can be at least partly explained by the bankruptcy of one of the major players in the bunkering market in the last quarter of 2014.
- Starting from 2013, a new data source was introduced for petroleum coke trade.

### Transformation

- In 2002, patent fuel plants used fuel oil to increase the calorific value of patent fuel.

### Consumption

- The decrease of fuel oil in industry consumption since 1993 is due to the introduction of an excise tax as well as increased use of natural gas.

### Natural gas

#### General notes

- In the 2017 edition, the Belgian administration revised consumption in the energy sector and the chemical industry since 1995; and consumption in the transport, industry and other sectors since 2010, to incorporate a new methodology.

#### Supply

- Since 2009 gas trade in Belgium includes imported LNG which is regasified and subsequently exported to other countries.

#### Transformation

- The Belgian administration is in the process of revising 2011 and 2010 transformation sector data. As such, an unusually high quantity of natural gas is reported under not elsewhere specified (transformation).
- Between 2008 and 2009, there is a break in efficiency of **natural gas** autoproducer CHP plants due to a change in methodology regarding the reporting of unsold heat.

### Consumption

- Consumption in the transport equipment sector decreased in 2015 due to the closure of a big industry of this sector in December 2014.
- In 2003, the large decrease in *non-specified industry* consumption is due to improvements in data collection.
- Since 2000, natural gas began to replace blast furnace gas in the iron and steel industry.

### Biofuels and waste

#### General notes

- Renewable **municipal waste** includes a share of renewable **industrial waste**.
- Data for **biodiesels** and **biogasoline** are available starting in 2009.

#### Supply

- Data on pure **biogasoline** and **biodiesels** trade are not available for 2009 and 2010.

### Consumption

- **Industrial waste** consumption in the chemical sector started in 2013.
- **Other liquid biofuels** consumed in power plants reported before 2011 can include **biodiesel**.
- New data on consumption cause breaks in time series for **primary solid biofuels** between 2011 and 2012.

### Electricity and heat

#### Supply

- The electricity production under **other sources** represents mainly production at a gas expansion station with heat recovery and at a hydraulic turbine in a waste water treatment plant.
- In 2013, reported **heat** distribution losses decreased due to a more precise estimation method.
- The production of electricity from **wind** is available from 1987.

#### Transformation

- In 2012, heat production from chemical sources has been estimated by the IEA Secretariat.
- Prior to 2009 some unsold heat was reported in natural gas autoproducer CHP plants, together with the associated natural gas input. This causes the drop in efficiency in 2009.
- In 2007 data, no information was available on heat production in main activity CHP plants for **industrial waste**.
- Heat from chemical processes used for electricity production is available from 2005.
- In 2003, combustion of **municipal waste** for electricity and heat generation purposes increased significantly. However, because a large portion of the heat produced is not used (sold), plant efficiencies dropped significantly between 2002 and 2003.
- In 2000, most autoproducer electricity plants using **combustible fuels** were reclassified as autoproducer CHP plants; the heat production from these plants was used for internal industrial processes and not sold to third parties until 2005.
- For 1998 and 1999, **electricity** production at main activity producer CHP plants with annual heat output below 0.5 TJ is reported with main activity producer electricity only plants.
- Prior to 1982, **electricity** production in main activity producer CHP plants is included in production from

electricity plants. Also, inputs of fuels for electricity generation in main activity producer electricity plants include inputs for heat production in CHP plants.

### Consumption

- For 2012, **electricity** consumption in the mining and quarrying sector has been estimated by the IEA Secretariat.
- For 2012, oil refineries **electricity** consumption has been estimated by the IEA Secretariat based on refinery activity data. Part of the estimated amount has been removed from consumption in the chemical and petrochemical sector.
- Breaks in time series may exist between 2007 and 2008 due to revisions of NACE classifications.
- There is no **heat** consumption starting in 2007 in the iron and steel industry because the installation concerned became an autoproducer in July 2006 and the heat is no longer sold.
- Breaks in time series exist between 1991 and 1992 for **heat** consumption in chemical and *non-specified industry*.

## Canada

### Source

Natural Resources Canada, Ottawa.

### General notes

- From the 2014 edition, the Canadian administration revised time series back to 2005, using additional data from the Annual Industrial Consumption of Energy, the Annual Survey of Secondary Distributors, the Report on Energy Supply and Demand and the Natural Resources Canada Office of Energy Efficiency. Breaks in time series also between appear 1989 and 1990, due to changes in methodology, incorporated in 2002.

### Coal

#### General notes

- Due to confidentiality constraints, the breakdown of **coal** by type has been estimated by Natural Resources Canada for 2016p.
- In the 2016 and 2017 edition, extensive revisions for the period 2005 to 2015 were received as more data became available due to improvements in data collection.

- In the 2014 and 2015 editions, some revisions to the 2004 to 2006 data were received in addition to some time series and products for 2007 to 2011.
- Due to a Canadian confidentiality law, it is not possible for the Canadian administration to submit disaggregated time series for all of the **coal** types. Between 2002 and 2006, the IEA Secretariat has estimated some of the missing time series. The data for 2007 onwards are given directly as reported, however data may be present in non-representative products, and additionally these ad hoc reclassification methodologies contribute significantly to larger than normal statistical differences across products.
- At this point in time, **oil shale and oil sands** data are not submitted, and this energy source is deemed to enter the supply stream as shale oil (**other hydrocarbons**).

### Supply

- Due to confidentiality constraints, from 2014 the breakdown of production by type of coal is estimated by the Canadian administration, while stock changes and statistical differences are estimated since 2001.

### Transformation

- Injection of pulverized coal into blast furnaces (**PCI**) occurs, but is not available for confidentiality reasons. Coals consumed in this manner are reported in the iron and steel industry along with other consumption.
- Before 1978, **lignite** inputs to main activity producer heat plants are included in final consumption. Starting in 1979, these inputs are included in main activity producer electricity plants.

### Consumption

- Since 2001, consumption of **anthracite** in non-energy use is estimated by the Canadian administration. Statistical differences include consumption in iron and steel.
- Due to the unavailability of data, non-energy use of **coke oven coke** and **hard coal** is included with final consumption sectors prior to 1978 and 1980, respectively.

### Oil

#### General notes

- In the 2016 edition, the Canadian administration was able to reconcile some historical inconsistencies

by reporting inputs and outputs to upgraders. In the supply side, these quantities are reported under Other Hydrocarbons. In the demand side, they are reported under the respective output products (Refinery Gas, Road Diesel, and Petroleum Coke).

- The Canadian administration is currently unable to provide a figure for the domestic production of additives, but is working on solutions which will make this possible. Meanwhile, significant statistical differences can be observed for several secondary oil products.

### Supply

- In the 2016 edition, the Canadian administration started using customs based trade data to report crude oil imports. In the 2017 edition, crude oil imports data have been revised back to 2005 following this methodology. Some revisions to imports of secondary products have already been made and further revisions are expected.
- In the 2015 edition, the Canadian administration revised the allocation of primary oil products back to 2005. Condensates and pentanes plus are included in crude oil from 2005, in NGL 1990 to 2004 and in LPG prior to 1990. Historical revisions are pending.
- In the 2017 edition, primary oil products imports have been revised back to 2005 to include direct imports of condensates by crude oil producers.
- Production of other hydrocarbons represents synthetic crude oil produced from tar sands.
- From 2005, other hydrocarbons from other sources natural gas corresponds to natural gas used for the upgrading of synthetic crude oil (reported under GTL transformation in the natural gas consumption data) and natural gas used to upgrade petroleum products (reported under non-specified transformation in the natural gas consumption data). From 1990 to 2005, these quantities are reported in indigenous production of other hydrocarbons. Prior to 1990, they are included in the natural gas supply.
- Imports of other hydrocarbons from 1994 to 2000 correspond to orimulsion imports from Venezuela.
- Refinery output from gas/diesel oil and petroleum coke includes output from oil sands and upgraders.
- Time series for other non-specified oil products may fluctuate as they have been computed as residuals.
- International marine bunkers are included with inland waterways prior to 1978.

### Consumption

- Due to confidentiality issues, consumption data for selected products and flows, such as fuel oil and gas/diesel consumption in iron and steel from 2009, are not available. For the same reason, selected products may include estimates provided by the Canadian administration, such as Fuel Oil and Bitumen data for 2014.

### Natural gas

#### General notes

- For the 2015 edition, revisions back to 2005 were submitted by the Canadian administration, creating a break in time series between 2004 and 2005. Amounts reported as transport equipment; machinery; food, beverages and tobacco; wood and wood products; textiles and leather were reported as *non-specified industry* prior to 2005. Further historical revisions are pending.

#### Supply

- Non-associated gas production data include colliery gas as well as associated gas produced in Alberta.

#### Transformation

- For 2000, the increase in main activity producer electricity is due to new generation plants in Alberta and Ontario.
- Gas-to-liquids (transformation) represents quantities of natural gas consumed in the production of synthetic crude oil.
- *Non-specified transformation* represents quantities of natural gas used for the upgrading of refined oil products.

#### Consumption

- Starting with 2014 data, natural gas distribution losses will no longer be reported by Canada as this flow was historically computed as a balancing variable.
- Due to confidentiality reasons, the Canadian administration estimated natural gas consumption in the following sectors: iron and steel manufacturing between 2011 and 2014; aluminum and non-ferrous metal manufacturing between 2011 and 2015; and refined petroleum products manufacturing for 2014-2015.
- *Non-specified transport* corresponds to retail pump sales of natural gas.



- For 2012, the increase consumption by non-metallic mineral production is due to switching from coal to natural gas in cement manufacturing.
- Prior to 1990 data for consumption of natural gas for construction are not available.
- Prior to 1978, consumption in *non-specified industry* includes gas used as fuel in oil refineries.
- Prior to 1978, agriculture is included in industry, and no detailed industry sub-sector data are available.

## Biofuels and waste

### General notes

- The split of **municipal waste** reported assumes 65% renewable and 35% non-renewable.
- The IEA Secretariat has estimated the data for **biogases, industrial and municipal waste** from 1990 to 2004, **biogasoline** (ethanol) from 1998 to 2004 based on information supplied by Natural Resources Canada.

### Supply

- Canadian **biodiesel** production increased significantly in 2014 because a large producer came online at the end of 2013. In 2016 again, there was big increase in production of **biodiesel** due to a large plant coming online in Alberta. This is also the reason for the increase in export, as Canada exports most of its **biodiesel** to the US.
- There were no exports of **biogasoline** since 2013.

### Consumption

- The **solid biofuels** consumption for the residential sector in 2015 equal to 2014 data because firewood data lag one year behind.

## Electricity and heat

### General notes

- The Canadian administration is currently undertaking revisions of the electricity time series back to 2005, based on the results of the Report on Energy Supply and Demand in Canada (RES-D). In particular, revisions were made on the inputs and outputs of power plants fuelled by combustible fuels and on the breakdown of final electricity consumption, resulting in possible breaks in time series.

### Supply

- In the 2017 edition, the production of **electricity** in the *from other sources* category, which refers to

electricity produced from waste heat and steam, was expanded, resulting in their metrics to rise based on reported data from a number of large respondents.

- Starting in 2009, a new source has been used for electricity production from **solar, wind, and tide**. This new source covers production from **solar** and **wind** only from plants with capacity higher than 500 kW.
- **Heat** production includes **heat** produced by **nuclear** power stations for distribution to other consumers up to 1997.

### Transformation

- The breakdown of electricity and heat generation from combustible fuels for 2016p was estimated by the IEA Secretariat.
- In the 2016 edition of this publication, there was a reclassification from autoproducer to main activity producer for plants fuelled by **biogases** and **municipal waste**.
- For autoproducers generating electricity with process steam produced from biofuels and waste, the energy required to produce the initial steam is not taken into account by the Canadian administration and as a result the efficiencies are overstated.
- Secretariat estimates have been made for certain inputs to CHP production based on output. However, incompatibility of data for inputs to and output from thermal production of autoproducers may result in variable efficiency rates.
- The breakdown of electricity and heat generation between natural gas and oil products in main activity producer CHP plants has been estimated by the Canadian administration starting in 1990. This may cause breaks in the time series between 1989 and 1990.
- Net electricity production by autoproducers prior to 1990 includes production from combustible fuel sources only.
- Inputs of fuels to heat plants are not available for 1979 to 1987.

### Consumption

- **Electricity** transmission and distribution losses could include statistical difference for certain years.
- Starting from 2012, **heat** consumption in the chemical and petrochemical sector became confidential and is included under the “not elsewhere specified industry” sector.

- The Canadian administration revised the **electricity** consumption for the commercial and public services sector from 2012 according to a new methodology. This causes a break in the time series between 2011 and 2012.
- Consumption of **electricity** in oil and gas extraction is not available prior to 1987.
- Consumption of **electricity** in coal mines is not available between 1982 and 1986.
- Breaks in the time series occur between 1973 and 1974 in agriculture, and between 1987 and 1988 in the industry sector.

## Chile

### Source

Energía Abierta, Comisión Nacional de Energía, Ministerio de Energía, Santiago.

### General notes

- Data are available starting in 1971.
- In the 2017 edition, data for 2014 and 2015 were revised to replace figures previously estimated by the Secretariat.
- From 1990, consumption in paper and pulp includes forestry and consumption in agriculture is included in *non-specified industry*. In general, a new methodology has been applied for data since 1990, leading to other breaks in time series between 1989 and 1990.

### Coal

#### General notes

- **Other bituminous coal** data includes **sub-bituminous coal** for all years, if present.

### Oil

#### General notes

- There are breaks in time series between 2008 and 2009 due to a change in methodology by the Chilean administration.

### Natural gas

#### General notes

- In the 2017 edition, data for 2014 and 2015 were revised to replace figures previously estimated by the IEA Secretariat.

### Supply

- Data representing LPG injected into the natural gas distribution network are available starting in 2009. They are reported in *from other sources - oil*. This process ended in 2015.

### Transformation

- For 2009 and 2010, inputs of natural gas to auto-producer CHP plants were estimated by the Chilean administration. For other years, these inputs are included in autoproducer electricity consumption
- Natural gas used for oil and gas extraction is included in gas consumption for energy use in refineries.
- *Non-specified transport* corresponds to marine transport.

### Biofuels and waste

#### Supply

- Production of **landfill gas** ceased in 2001 as landfill sites stopped producing adequate gas to continue collection.

#### Transformation

- A new survey on primary **solid biofuels** causes breaks in production and input to autoproducer CHP between 2011 and 2012.

#### Consumption

- **Charcoal** production and consumption have been estimated by the IEA Secretariat until 2013. From 2014 data, only **solid biofuels** input to **charcoal** production plant is estimated.
- The Chilean administration applied a new revised methodology for *final consumption* of **primary solid biofuels**. This may lead to data breaks in time series between 2013 and 2014.

### Electricity and heat

#### General notes

- Data for net electricity production for all plant types is estimated by the Chilean administration on the assumption that plant efficiencies remain constant from the previous year.

#### Supply

- In 2014, the Chilean administration applied a new methodology in the reporting of electricity generation from **solar PV** and **wind**, resulting in breaks

in time series between 2013 and 2014. Revisions for previous years are pending.

- The majority of electricity generation *from other sources* is from a conveyor belt transporting crushed rock from high altitude to lower altitude in a mine. A small amount from waste heat is also included.
- **Solar thermal heat** production has been estimated by the IEA Secretariat using data published by Chilean ministry of energy.

### Transformation

- In 2014 data, input to transformation was taken from the published energy balance, and the output was estimated based on the efficiency reported in previous years.
- Electricity production from **other bituminous coal** includes sub-bituminous coal.
- Production of **chemical heat** used for electricity generation started in 2013. Besides chemical heat data for heat production in CHP and heat plants are not available.
- Increases in electricity from **natural gas** in 2010 are due to the openings of new LNG terminals.
- The split of **electricity** generation by main activity and autoproducer by fuel was estimated by the Chilean administration for the period 1990 to 2003.

### Consumption

- **Solar thermal** consumption data are not available so all consumption data are allocated to the *non-specified other* sector.
- Prior to 2009, statistical differences are included in distribution losses.

## Czech Republic

### Source

- Czech Statistical Office, Prague.
- Ministry of Industry and Trade, Prague.

### General notes

- Due to ongoing review of energy data for 2010-2014, revisions have been made in the 2017 edition. Full details are given under each fuel.
- Data are available starting in 1971.

## Coal

### General notes

- **Other bituminous coal** data includes **sub-bituminous coal** for all years, if present.
- In the 2017 edition, data for the Czech Republic were revised back to 2010 based on administrative data causing breaks in time series between 2009 and 2010. Additionally, due to the new survey in households made by Czech Statistical Office, coal consumption in the residential sector has been revised back to 2010 creating breaks in time series between 2009 and 2010.
- Increased production and consumption of other recovered gases in 2014 is due to improved tracking of by-products from various transformation processes. Tail gases from the production of carbon black from coal tar are reported here, as are off gases from the manufacture and cleaning of syngas from lignite for an IGCC plant.
- Coal which had been previously classified as **sub-bituminous coal** until the 2008 edition is now reported under **lignite** for all years.
- Revisions by the Czech administration have resulted in some breaks in time series between 2001 and 2002.
- Data for 1990 to 1995 were estimated based on the Czech publication Energy Economy Year Book.
- In 1995, town gas production (included in **gas works gas**) ceased.

### Supply

- **Other recovered gases** are combustible gases obtained during the production of **gas works gas** and as a result of chemical processes.
- Production *from other sources* of **other bituminous coal** is from coal slurries, and these data are not available for 2016p.
- A portion of **other bituminous coal** reported under *from other sources* for the period 2010-2015 correspond to reclassified **coking coal**.
- Statistical differences for **coking coal** for the period 2010-2015 are partly due to the reclassification of coking coal to **other bituminous coal**.

### Consumption

- In the 2015 edition, improved reporting enabled revisions to be made for certain primary **coal** consumption flows between 2010 and 2012.

- In the 2014 edition, residential consumption for the period 1990 through 2011 was revised for **other bituminous coal, lignite, coke oven coke and BKB**, as more accurate consumption data became available.
- Due to economic restructuring in consumption in the late 1990s (big state enterprises subdividing and/or privatising and the utilisation of new technologies by businesses), there may be breaks in time series in these sectors.

## Oil

### General notes

- Data prior to 1994 are estimated by the IEA Secretariat.
- In the 2017 edition, revisions have been made to the transformation and industry sectors for **LPG, fuel oil and other oil products**. In addition, there are revisions to other sectors and non-energy use in industry for **LPG**. In most cases revisions cover the period 2010 to 2014. For **LPG** some revisions start from 2008 and further revisions are expected in the 2018 edition.

### Supply

- In 2016 temporary closures of both Czech refineries led to a large decrease in imports of crude oil offset by increased imports of finished products.

### Transformation

- From 2002 data onwards, some amounts of **fuel oil** have been reclassified under **other products**. This change mainly affects the transformation sector.

### Consumption

- Between 1998 and 1999, breaks in **gas/diesel** final consumption time series are due to a new data management system implemented by the Czech administration.

## Natural gas

### General notes

- Between 1993 and 1994 there are some breaks in time series due to a change in the energy balance methodology between former Czechoslovakia and the Czech Republic. Since 1993, data have been officially submitted by the Czech Statistical Office.

### Supply

- From 2013 all non-associated gas production was reclassified as colliery gas production.

- Starting with 2008 data, hydrogen production is reported in petrochemical feedstocks as non-energy use.

### Transformation

- In 1996 natural gas inputs into gas works ended.

### Consumption

- Prior to 1994 data in transport are for former Czechoslovakia.
- In the 2017 edition, new data from distribution companies were included, creating a break in time series in the industry and transformation sectors between 2009 and 2010.

## Biofuels and waste

### General notes

- The restructuring of the Czech electricity market leads to breaks in the time series in all sectors between 1998 and 1999.
- Data for **municipal waste** and **solid biofuels** are not available prior to 1990 and **liquid biofuels** data are not available prior to 1992.

### Consumption

- In the 2017 edition, due to a new survey in households made by the Czech Statistical Office in 2015 (ENERGO 2015), **solid biofuels** consumption in residential sector has been considerably revised upwards since 1990.
- Hospital waste previously reported as **municipal waste** is reported under **industrial waste** since 2008.
- New survey systems cause breaks in final consumption in 1999 and in 2002. Breaks in both supply and consumption of biofuels and waste occur again in 2003.

## Electricity and heat

### General notes

- In the 2017 edition, data for the Czech Republic were revised back to 2010 due to the acquisition of new administrative data, allowing access to more accurate and detailed data sources. As a result, there are breaks in several time series between 2009 and 2010.
- Data from 1990 onwards have been officially submitted by the Czech administration. This may lead to breaks in time series between 1989 and 1990.



- Electricity statistics from 1971 to 1989 have been estimated by the IEA Secretariat except for final consumption and trade which were submitted by the Czech administration.

### Supply

- The amount of heat reported under **other sources** is waste heat from the glass industry.
- From 1999 onwards, small amounts of **heat** have been exported to Slovak Republic.

### Transformation

- Electricity generated from **waste heat** in CHP plants is included with the total production from **combustible fuels**.
- In the 2017 edition, a revision of the methodology for reporting the production of autoproducer plants running on **combustible fuels** causes multiple breaks in time series between 2009 and 2010 for CHP and electricity only plants.
- Data on **heat** own use and **heat** imports start in 2010 and 2009 respectively, following extensive revisions by the Czech administration in the 2017 edition due to the acquisition of new administrative data. Prior to this period, data are not available due to lack of sources.
- The production of electricity reported in the category **other fuel sources** refers to electricity produced from turbines driven by the mixture of air, ammonia and other non-coal gases derived from the petrochemical industry.
- From 2014, some autoproducer **heat** plants production figures became too small to appear in data collected.
- From 2012 data, new autoproducer **heat** plants were added to the data collection, causing a break in time series.
- In 2012, a main activity producer electricity plant using **solid biofuels** started to produce also heat and was reclassified as main activity CHP plant.
- A different reporting methodology used by the Czech administration for **biofuels and waste** causes some breaks in time series between 2002 and 2003.
- In 1999 and 2000, various big enterprises have been divided, sold and merged. This causes breaks in the time series of all types of plants.
- **Industrial waste** use in main activity producer electricity plants is included with **solid biofuels** from 1996.

- Data on **biogases** and waste used in main activity producer CHP and autoproducer heat plants start in 1993.
- Prior to 1990, electricity production in main activity producer CHP and autoproducer CHP plants is included in main activity producer electricity plants.
- Prior to 1990, heat production excludes heat sold by industry. In addition, heat production prior to 1990 is reported under main activity heat plants because the breakdown by producer and plant type is not available before then.
- The breakdown of net **electricity** production by source is not available prior to 1990.
- Data on **heat** production, and the corresponding fuel inputs, have been estimated from 1980 to 1989 based on consumption in residential and commercial/public services. Prior to that, inputs are included in industry.

### Consumption

- Data for direct use of **solar energy** are available from 2003.
- Prior to 2000, the split of *rail transport* and *non-specified transport* is not available.

## Denmark

### Source

Danish Energy Agency, Copenhagen.

### General notes

- In the 2004 edition, major revisions were made by the Danish administration for the 1990 to 2001 data, which may cause breaks in time series between 1989 and 1990.

### Coal

#### Supply

- A large increase of **steam coal** imports in 2003 was related to a drought in Scandinavia. Thermal power plants were operated more intensively to replace hydro-generated electricity that was consumed in the country. Additionally, more coal-generated electricity was exported to other countries in the region. Significant fluctuations in demand are also evident for other years for similar reasons, including 2006 and 2013, but exist to a lesser extent.

- Declines in stocks of **steam coal** stem from extensive deployment of renewable generation technologies and policy to further reduce Denmark's utilisation of coal-fired power and implement co-firing with renewable fuels as a part of their *Energy Strategy 2050*.

## Oil

### General notes

- In the 2015 data the Danish administration has reported products transferred to refinery feedstocks. In previous years refinery output is reported net of product transfers. This change in methodology is responsible for the large increase in refinery throughput in 2015. Revisions to 2013 and 2014 data are expected in the 2018 edition.
- From 1990 onwards, Greenland and the Danish Faroes are not included in the oil data.
- From 2012, due to confidentiality issues, all liquid biofuels are reported under **biodiesel**
- Between 1995 and 2004, **other hydrocarbon** imports and inputs to main activity producer CHP plants represent orimulsion.
- Information on waste oil recycling and final consumption begins in 1989 and is reported in other oil products.
- In 1988, consumption of **gasoline type jet fuel** ceased.
- As of 1987, separate data for **paraffin waxes** are no longer available.
- Prior to 1975, **refinery gas** is reported net of consumption in refineries.

### Transformation

- Due to improved survey methods, inputs to electricity and heat generation have been reclassified, causing a break in time series between 1993 and 1994. The oil inputs used in industrial sub-sectors for producing surplus heat, which is delivered to district heating networks, are allocated to these industrial sub-sectors.
- In 1994, the marked increase in inputs to CHP production is due to increased electricity exports to Norway.
- From 1974 to 1979, consumption of fuel oil for the CHP production by autoproducers has been estimated.

### Consumption

- Consumption data are based on a detailed survey sent to companies in Denmark every other year.

For non-survey years, the consumption figures are estimated by the Danish Energy Agency

- **White spirit** and **lubricants** deliveries are estimated by Denmark.
- For 1994 and 1995, industry detail is based on a new survey.
- Prior to 1990, **gas/diesel oil** and **fuel oil** consumption for fishing are included in domestic navigation

## Natural gas

### Consumption

- The breakdown for industrial consumption for the latest year is estimated by the Danish administration using the previous year's industry sector sub-sectoral shares and updated the following year.

## Biofuels and waste

### Transformation

- From 2012, biogasoline trade designated to be blended with motor gasoline is included under biodiesels, for confidentiality reasons.
- From 2012, biodiesel production was confidential and gathered with imports.

### Consumption

- In the 2017 edition of this publication, the Danish administration used the 2014 figures of **municipal waste** consumption in industrial sector for the 2015 figures. These figures will be revised in the 2018 edition.
- In the 2016 edition, the Danish statistics have revised energy consumption in industry sectors causing some breaks in **solid biofuels** consumption between 2010 and 2011.

## Electricity and heat

### General notes

- **Heat** data are not available prior to 1976.

### Supply

- The amount of **heat** reported under *other sources* is heat recovered from industrial processes and sold for district heating.
- **Heat** produced for sale by heat pumps starts in 1994.

- **Geothermal** and **solar heat** production for sale is available from 1989.
- From 1984 onwards, small amounts of **heat** have been imported from Germany.
- The production of electricity from **wind** is available from 1978.

### Transformation

- Fish oil used in main activity producer heat plants is included with **solid biofuels**.
- Due to the high number of heating companies burning wood chips that are equipped with boilers with flue-gas condensation, the **solid biofuels** heat plants show a high efficiency.
- For some years heat plants for **natural gas** and **biogases** show efficiencies larger than 100%, on a net calorific value basis, due to the use of condensing boilers that recover the latent heat of vaporisation.
- **Biodiesels** and **biogasoline** consumption for electricity and heat production are reported under **other liquid biofuels**, for confidentiality reasons.
- Data for **other liquid biofuels** main activity heat plants are available back to 1994.

### Consumption

- In the 2016 edition, the Danish administration has revised **electricity** and **heat** consumption in the industry sector from 1990.
- For 2015 data, the breakdown of **electricity** and **heat** total final consumption is estimated by the Danish administration and will be revised in the following reporting cycle.
- The direct use of **solar thermal** energy is available from 1978.
- **Electricity** consumption in *non-specified industry* includes consumption in district heating plants and for the distribution of electricity.

## Estonia

### Source

Statistics Estonia, Tallinn.

### General notes

- Data for Estonia are available starting in 1990. Prior to that, they are included in Former Soviet.

## Coal

### General notes

- Fuels reported as **coke oven coke** and **gas works gas** are the solid and gaseous by-products of oil shale liquefaction. Inputs of **oil shale** to “gas works”, “coke ovens” and for coal liquefaction plants, while reported separately, combined, are the inputs for retorting in liquefaction plants.
- In the 2013 edition, data for **oil shale** production for the period 1991 to 1997 were revised to match Estonian GHG National Inventory values. Consumption data remained unchanged.

## Oil

### General notes

- In 2012 data, breaks in time series occur for trade figures, now including re-exports, and for international bunkers.
- For 1990 to 2007, oil data are based on direct communication with Statistics Estonia and UNECE.

## Natural gas

### Consumption

- There are inconsistencies in the time series for residential consumption as this sector is computed as a residual.
- In 2014 Estonia’s main company in the chemical and petrochemical sector ceased activity, resulting in no non-energy use of natural gas.
- In 2009 Estonia’s main producer of fertilisers ceased activity, resulting in a sharp decrease in the non-energy use of natural gas. The plant reopened in 2012.

## Biofuels and waste

### General notes

- Data for **biogases** include **landfill gas** starting in 2005.

## Electricity and heat

### Transformation

- Inputs of fuel oil and gas works gas to transformation processes include shale oil.
- From 1990 to 1999, some of the electricity and heat production are reported under *other oil products* while the inputs are reported under the individual fuels.

## Finland

### Source

Statistics Finland, Helsinki.

### General notes

- In 2014, a new survey system and a reclassification of the data lead to breaks in the time series between 1999 and 2000 for most products and sectors. The new survey system is more detailed and has better product coverage, especially in electricity, CHP and heat production, as well as in industry.

### Coal

#### General notes

- **Coal tar** used for non-energy purposes or exported is not reported in either production or consumption.
- In the 2015 edition, revisions were received for some consumption flows of **other bituminous coal** and **coke oven coke**, while **other recovered gases** (from ferrochromium manufacture) were reported separately for the first time, with revisions back to 2000. Prior to 2000, off-gases from ferrochromium manufacture are included in blast furnace gas, and inputs of **coke oven coke** for ferrochromium manufacture in inputs to blast furnaces instead of *non-specified transformation*.
- Prior to 2008, **peat products** are included with peat data.
- A large increase of steam coal imports in 2003 is related to a drought in Scandinavia. Thermal power plants were operated more intensively to replace hydro-generated electricity that is consumed in the country. Additionally, more coal-generated electricity was exported to other countries in the region.
- The increase of **other bituminous coal** inputs into main activity producer electricity plants from 1993 to 1994 was due to coal replacing imported electricity and hydro power.
- Production of **gas works gas** ceased in April 1994.
- Hard coal data prior to 1978 may include sub-bituminous coal.

#### Transformation

- In the 2017 edition, fuel inputs and heat production from **peat** main activity heat plants have

been revised from 2000 as a result of new data access for smaller peat heat plant units.

- The significant increases and decreases of **other bituminous coal** inputs into main activity producer electricity plants from year to year are due to coal replacing imported electricity and hydro power.
- Likewise, **peat** production is highly dependent upon favourable weather conditions and the pricing of other fuels. The decrease in **peat** and **other bituminous coal** usage in main activity electricity plants in 2008 was due to record electricity generation from hydro plants. A similar circumstance occurred in 2012.
- The first coking plant started operation in 1987, hence imports of **coking coal** and production of **coke oven coke** and **coke oven gas** started in that year.

### Oil

#### General notes

- In spring 2015, the Porvoo refinery had the largest shut down in its history for maintenance works. This is the reason for the large decrease in refinery throughput in 2015.
- In 2014, the Finnish administration revised the time series for **refinery gas** from 2000 and included flaring of petrochemical gases under *distribution losses*.
- Prior to 2002, **petroleum coke** used as *refinery fuel* was included with refinery gas.
- In 1995, there is a break in time series for **oil products** trade due to the aligning of the National Board of Customs trade data collection system with the European Union's Intrastat system.
- **Other hydrocarbons** reported under *from other sources natural gas* correspond to hydrogen used in refineries, also represented as the output of *non-specified transformation* in the balances format.

#### Consumption

- Due to a new calculation model, there is a break in **fuel oil other consumption** between 1998 and 1999.

### Natural gas

#### General notes

- Between 1999 and 2000 there are some breaks in the time series due to a new survey system and a reclassification of the data.

### Transformation

- *Non-specified transformation* data represent natural gas used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization and hydrocracking in oil refineries

### Consumption

- In the 2017 edition, the Finnish administration revised consumption data back to 2007 to include new information based on a sample data survey, and to harmonised with the national figures.
- Since 1995 data, the breakdown between residential and commercial/public services is available due to a new system of data collection.
- Prior to 1989, **natural gas** consumption in residential and agriculture/forestry has been estimated by the Finnish administration.

### Biofuels and waste

#### General notes

- Prior to 2004, **industrial waste** also included other energy forms such as hydrogen, heat from chemical processes, natural gas and blast furnace gas.
- Data for **biogases** and **industrial waste** are available from 1996.

#### Supply

- Due to confidentiality, the **biodiesel** production includes trade figures and stock changes for 2015. Regarding **biogasoline**, import covers production, exports and stock changes.

### Electricity and heat

#### Supply

- **Electricity** production in Finland is affected by the connection to the Nord Pool. In period of high waterfalls, importing electricity from other Nordic countries is more economic than producing it. This can cause breaks in the time series.
- **Other sources** include hydrogen and purchased steam.
- The increasing heat production from **heat pumps** in 2007 and 2008 is from the new Katri Vala district heating and cooling plant.
- **Heat from chemical processes** and associated electricity generation are available from 2000.

### Transformation

- Electricity plants data may include some CHP plants operating in electricity only mode. Likewise, heat plants data may include some CHP plants operating in heat only mode.
- In the 2017 edition, fuel inputs and heat production from **peat** main activity heat plants have been revised since 2000 as new data became available for small peat heat plant units.
- In the 2016 edition, the allocation of **solar photovoltaic** between main activity and autoproducer plants was revised.
- From 2014 data, an autoproducer in the field of iron and steel industry running on **coke oven gases** and **blast furnace gases** was sold and is now reported as main-activity producer.
- The increase in heat production from **municipal waste** in 2014 is due to the opening of a new plant.
- In 2014, the new consumption of **other liquid biofuels** in main activity electricity plant corresponds to biopyrolysis oil made from wood chips.
- Data on **peat products** electricity and heat generation are available since 2008. Prior to that, they are included in **peat**.
- **Heat** output from autoproducer CHP plants is available starting in 1996 and from autoproducer heat plants starting in 2000; corresponding inputs may be under-reported.
- Before 1999, all electricity production from autoproducers running on **fuelwood** is allocated to CHP plants.
- Electricity and heat production from **biogases** are available from 1996.
- Prior to 1992, outputs from the use of **combustible renewables and waste** to generate electricity and/or heat were included in peat. Therefore, the IEA Secretariat estimated the breakdown of outputs from **municipal waste** and **solid biofuels** based on reported inputs.
- Inputs of **liquid fuels** and **natural gas** to CHP plants are included with the inputs of these fuels to main activity producer electricity only and heat only plants prior to 1978.
- Electricity production from **biofuels and waste** is not available between 1974 and 1976.

#### Consumption

- In the 2017 edition, an extended review of NACE sector encoding by the Finnish administration



resulted in the revision of the sectoral heat consumption time series back to 2007, leading to breaks in time series between 2006 and 2007 in some heat consumption sectors.

- A new survey of the agriculture and forestry sector leads to breaks in the **electricity** consumption between 2007 and 2008.
- The split of **heat** consumption in the different industry sectors is available starting from 2007. Prior to that, it is aggregated in *non-specified industry*.
- Prior to 2000, consumption of **heat** in *residential* includes consumption in *agriculture/forestry* and *commercial/public services*.
- Consumption of **electricity** in the industry sub-sector *machinery* includes consumption in transport equipment prior to 1995.

## France

### Source

Ministère de la Transition Écologique et Solidaire, Paris.

### General notes

- From 2012, the energy consumption is more detailed due to a more precise national survey.

### Coal

#### General notes

- In the 2017 edition, the French administration undertook comprehensive revisions on sectoral coal consumption back to 2011. Starting this edition, new information became available for **anthracite**, **BKB** and **other recovered gases**. Breaks in time series for **coke oven gas** and **blast furnace gas** consumption between 2010 and 2011 are due to a change in the methodology, impacting significantly consumption in the iron and steel sector.
- From 2012, the energy consumption is more detailed due to a more precise national survey.
- Prior to 2011, **other manufactured gases** (oxygen steel furnace gas) are included in **blast furnace gas**.
- For 1989 to 1998, the IEA Secretariat has estimated industry consumption based on *Consommations d'Énergie dans l'Industrie*, SESSI.

- Prior to 1985, consumption of colliery gas is included with the use of **coke oven gas** by autoproducers.
- Hard coal data prior to 1978 may include **sub-bituminous coal**.

### Consumption

- **Blast furnace gas** and **coke oven gas** used for energy purposes in blast furnaces prior to 2011 are reported under the iron and steel industry.
- Final consumption in industry is estimated by the Secretariat from 1986 to 2001 for some products.

### Oil

#### General notes

- Statistical differences observed for motor gasoline and naphtha are partly due to the absence of a specific naphtha category in the customs classification.
- Statistical differences appear for other products as a result of different definitions used for this residual category between the customs, refineries, power plants and petrochemical industry.
- From 2013, information is available for imports of condensates used by the petrochemical sector. These are reported under imports of NGL, inter-product transfers of NGL to other oil products, and consumption of other products.
- From 1991, **additives and oxygenates** data are available.

### Supply

- From 2009, transfers of **kerosene type jet fuel** to **white spirit** correspond to kerosene used as a base for making white spirit.
- From 2008 data, refinery intake of **refinery feedstock** and refinery output of **refinery gas** output figures exclude natural gas used in the steam reformer of the Gonfreville refinery.
- From 2008 data, **ethane** refinery output is reported
- From 2002 data onwards, ethylene produced in Lacq is not included in NGL.
- From 1998 data, a different treatment of transfers was adopted. Imported oil products needing further refinery processing are no longer reported as **refinery feedstock** imports but as oil product imports and products transferred. **Fuel oil** includes part of the amounts previously reported in **other oil products** from 1999 and various other products from 2001.

## Transformation

- Starting in 2012, separate data on main activity heat plants inputs are available.

## Consumption

- The breakdown between international and domestic marine bunkers is estimated by the French administration.
- Between 2005 and 2006, a break is visible in **LPG** time series, as consumption from one chemical company was re-classified from energy use to non-energy use. Breaks in **LPG** time series also appear in 2001 due to improved data collection.
- From 2000 data, **petroleum coke** consumption in the non-ferrous metals industry is no longer available separately. Prior to 1982, no breakdown between energy and non-energy use is available for this product.
- From 1998 data, military consumption of **kerosene type jet fuel** is reported separately from domestic aviation.
- Prior to 1988, **LPG** includes ethane consumption.
- Prior to 1985, the residential sector consumption of **gas/diesel oil** is reported under the commerce/public services sector, as no separate data were available.

## Natural gas

### General notes

- Between 2008 and 2009, there are some breaks in time series due to improvements in the data collection.
- Until 2007, some statistical differences reported by the French utilities were included in distribution losses. Since 2008, these amounts are included under statistical differences.
- Between 1999 and 2000, there are some breaks in time series due to a new methodology for preparing the natural gas balances.

### Supply

- The total imports and exports data include transit amounts.
- From 1990 to 1998, statistical difference includes gas consumption which is not broken down by sector.

### Consumption

- The increase in natural gas consumption in 2016 is mainly driven by the transformation sector. Gas

fired power plants compensated the decrease in nuclear generation due to maintenance operations.

- In 2017 edition, the non-energy use gas consumption was revised back to 2005, to include the results of a Citepa study on the non-energy uses of natural gas.
- Between 2013 and 2014 there are breaks in the time series in some consumption sub-sectors due to a change in the methodology. Revisions back to 2011 are expected in the 2018 edition.
- Gas for pipelines is included in distribution losses.
- Between 2005 and 2006, there is a break in the time series of the industry sub-sectors.

## Biofuels and waste

### Transformation

- Plants using **municipal waste** were reclassified as autoproducer CHP plants from 1995, which leads to a break in time series. Breaks in time series in 2005 for **municipal waste** and **solid biofuels** are caused by sectoral reclassifications.

### Consumption

- In 2014, a new survey on **solid biofuels** and **biogases** causes breaks in time series between 2013 and 2014. **biogas** was previously reported under **solid biofuels**.
- Production and consumption of **industrial waste** are reported from 2013. Prior to that, they were included in **municipal waste**.
- A revision of the **solid biofuels** and **biogases** time series created breaks in the direct use time series between 2004 and 2005.
- The breakdown of the final energy consumption of **biogases** was estimated by the French administration from 1970 to 2003.

## Electricity and heat

### Supply

- All **photovoltaic** plants with capacity above 100 kWp are considered as main activity producers, while all plants with capacity below that value are considered autoproducers.
- Heat production from **heat pumps** is available starting from 2013.
- Electricity production from *other sources* is available starting in 2012, representing production of electricity from purchased steam. The input is shown under *non-specified transformation*.

- Data on electricity production from **wind** is available from 1990.

### Transformation

- Data for heat produced from **combustible fuels** in heat only plants are available starting from 2012.
- Electricity production from **geothermal** started in 2011 and stopped in 2012 due to the maintenance of the only plant.
- The amount of heat not sold in autoproducer plants is included in total heat production up to 2010.
- In 2005, autoproducer CHP efficiencies for **biogases** drop due to the opening of a larger, less efficient plant.
- From 2000 several plants have been reclassified from electricity only to CHP plants. This causes breaks in the time series between 1999 and 2000.
- Prior to 2000, inputs and outputs of **oil products** are not available separately and are reported together under **other oil products**. From 2000 to 2008, there are further classification problems for inputs and outputs of electricity and heat from oil products. The French administration is working to reconcile their data collection methods for the inputs and the outputs for electricity generation.
- A new method of survey and a reclassification between main activity producer electricity plants and autoproducer electricity plants may cause breaks in the time series for **other bituminous coal** between 1998 and 1999.
- There was re-classification on auto producer plants using **municipal waste** in 1995, which leads to a break in the time series.
- Net electricity production by autoproducer CHP plants is available from 1989.
- Net **electricity** production by autoproducers prior to 1983 includes production from combustible fuel sources only.

### Consumption

- In the 2017 edition, the French administration undertook comprehensive revisions on sectoral electricity consumption time series, for some sectors revising back to 1990. **Electricity** consumption at railway and bus stations, shipping piers and airports is no longer included in the transport sector but in the commercial and public services sector. Road **electricity** consumption has also been revised back to 1990, following an extended review of NACE sector encoding by the administration. These revisions created breaks in

time series for several sectors, which the administration anticipates to address in subsequent reporting cycles.

- For the 2014 edition of this publication, the French administration revised **electricity** consumption data in the agriculture sector back to 2004, resulting in breaks in time series.
- Prior to 2014, **electricity** consumption in the iron and steel sector includes consumption in blast furnaces. Consumption in blast furnaces has since been decoupled in subsequent years.
- Until 2013, a large part of energy industry **electricity** consumption in not elsewhere specified is consumption in uranium treatment plants; this electricity consumption is not available prior to 1980.
- Data on **heat** distribution losses are available only starting from 2012. Prior to that, they were included in final consumption.
- Prior to 2005, all the **geothermal** heat consumption was reported as direct use. From 2005 data, some quantities are reported as output of heat plants, resulting in breaks in time series for production, transformation and consumption.
- Consumption of **electricity** for oil and gas extraction includes that used in oil refineries from 1988 to 2000.
- *Non-specified other* consumption includes exports to Monaco prior to 1992 and defence-related activities, among others.
- The industry classifications used by the French administration were changed in 1986.
- There are major breaks in the time series in 1965 when more detailed breakdown of data on **electricity** consumption became available.

## Germany

### Source

Federal Ministry for Economic Affairs and Energy, Berlin.

### General notes

- Data starts in 1960. German data include the new federal states of Germany from 1970 onwards.
- The German administration has changed the methodology for reporting heat over time:
- Starting in 2007, more information is available on main activity heat plants and additional inputs



started to be reported for this category. This causes breaks in time series between 2006 and 2007.

- Between 2003 and 2006, autoproducer heat output was provided, but no inputs.
- Between 2002 and 2003 and between 2003 and 2004, breaks in time series occur, due to the implementation of the Energy Statistics Act, collection concerning heat produced in heat plants and district heating plants became more efficient and more complete.

## Coal

### General notes

- Comprehensive official data are only collected for the aggregate of hard coal. Due to the unavailability of detailed data, the split into **anthracite**, **coking coal** and **other bituminous coal** is partly estimated by the national administration.
- Due to the unavailability of detailed information, imports of **other bituminous coal** and **coking coal** have been estimated by the IEA Secretariat for 2016p.
- In the 2014 edition, significant revisions were submitted for all primary coal types, derived products and manufactured gases for the period 2003 to 2011 as previous estimations were updated with more accurate information. Revisions primarily affected consumption, including industry and other sectors; but also supply, statistical differences and weighted calorific values.
- Up to 2002, **other bituminous coal** includes **anthracite**.
- Between 1998 and 2005, breaks in time series may occur for **coke oven gas** and **blast furnace gas**.
- Between 1990 and 1992, breaks in time series may occur due to earlier reclassification of several sectors by the German administration; this particularly affects **BKB**, **lignite** and **coke oven coke**.

### Transformation

- Breaks in time series between 2014 and 2015 for **coke oven gas** and **blast furnace gas** are due to a reclassification of main activity producers and autoproducers.
- In 1997, **BKB** inputs to gas works plants stopped.

### Consumption

- Consumption of **non-renewable municipal waste** and **other solid biofuels** as a reductant occurs in

German blast furnaces, but is not currently quantified. Likewise, **coal tar** is a by-product of coke ovens, but not currently reported.

## Oil

### General notes

- From 2000 data, part of the product *Andere Rückstände* (other residues) is included with fuel oil instead of other oil products.
- Starting from 1994 data, there has been a reclassification of jet gasoline to kerosene type jet fuel.
- Prior to 1979 data, **other products** include **par. affin waxes**, **bitumen**, **white spirit & SBP** and **lubricants** for eastern Germany.
- The methodology to determine net calorific values has been changed for 2015 data. The values for crude oil and refinery feedstocks were revised back to 2003.

### Consumption

- The data for the sectors of construction, agriculture/forestry and fishing is subsumed within the commercial and public services sector.
- Between 2002 and 2003, breaks in time series in consumption data are due to structural changes in energy statistics following the newly introduced Energy Statistics Act.
- In 1995 data, a break in **gas/diesel oil** consumption occurs as a result of an alignment with the Classification of the Economic Activities in the European Community (NACE).
- Beginning in 1994, final consumption by individual sector has been improved due to new survey methods instituted by the *Minerölwirtschaftsverband*.
- In 1989, end-use consumption of **gas/diesel oil** decreased due to an exceptionally warm winter and a lowering of consumer stocks.
- Prior to 1980 data, consumption of **fuel oil** in blast furnaces was included in the iron and steel sector
- Prior to 1970 data, consumption of **refinery gas** in the chemical industry is included with refineries' own consumption.

## Natural gas

### General notes

- Between 2009 and 2010, there is a break in time series due to a new, more comprehensive legal

framework that resulted in methodological changes for production and new calorific values for natural gas.

### Supply

- Imports include all the gas purchased by German companies, whether it is finally consumed in Germany or not.
- Exports include all the gas sold by German companies (these are mainly re-exports).

### Transformation

- In 2003, there is a break in time series for input to electricity and CHP plants (both autoproducers and main activity producers).
- Prior to 1995, inputs of natural gas for main activity producer heat plants are included with main activity producer CHP plants.

### Consumption

- Since 2003, there are no official data for the construction sector.
- Since 2003, consumption in agriculture and *non-specified other*, which were previously estimated, are no longer shown, and losses data have been included in statistical differences.
- Since 2003, gas consumption in coke ovens was negligible.
- Between 2002 and 2003, there are breaks in time series for some sectors due to modifications in reporting methodology.
- Between 1994 and 1995, there are some breaks in time series due to the fact that the industry sub-sector breakdown is based on the 1995 NACE classification.
- Also, prior to 1995, end-use consumption data are based on *Arbeitsgemeinschaft Energiebilanzen*.
- Before 1970 there is no detailed breakdown available for the industry sector with the exception of iron and steel and chemical industries.

## Biofuels and waste

### General notes

- In 2011, numerous changes to methodology and classifications have caused many breaks in time series.
- Starting in 2008, **municipal waste** and **industrial waste** data were collected separately. This leads to breaks in the time series between 2007 and 2008.

- Between 1996 and 1997, a new survey for renewables causes breaks in the time series.

### Supply

- Trade data for **biogasoline** are available from 2004 and for **biodiesels** from 2003.

### Consumption

- For **solid biofuels** consumption in the commercial and public services sector, new data were derived in cooperation with the Federal Research Institute for Rural Areas, Forestry and Fisheries by applying a different calculation approach based on the total demand for material and energy use of the resource wood in Germany. This had resulted in break in time series between 2013 and 2014.

## Electricity and heat

### General notes

- In the 2014 edition, the German administration performed some major revisions back to 2003. This led to breaks in the time series between 2002 and 2003.
- Prior to 1970, **heat** production and consumption have been estimated by the Secretariat based on *Energie-bilanz der Bundesrepublik für das Jahr 1990* provided by the German Institute for Economic Research.

### Supply

- In some instances, electricity generation from nuclear, hydro, solar, wind and biogases in auto-producer electricity plants is confidential or not available and therefore is included in main activity producer electricity plants.
- Since 2011, due to a reclassification of wind energy and solar photovoltaic in the official data of the German Federal Statistical Office, the production is now only reported under main activity producer plants.
- Electricity production **from other sources** is available starting in 2003. This refers to the production of electricity from turbines which are located at pressure drops in fluid transport and from purchased waste heat.
- Prior to 1991, **electricity** trade data includes only trade of the Former Federal Republic of Germany.
- Data on electricity production from **wind** and **solar** are available from 1986 and 1990, respectively.

- Starting in 1984, small amounts of **heat** have been exported to Denmark.

### Transformation

- Detailed data by fuel are not available for total **heat** production. The non-allocated part is reported as heat production from **non-specified combustible fuels**.
- In 2015, a reclassification of some main activity producer electricity and CHP plants to autoproducer **CHP plants** powered by **coke oven gas** results in a break in time series for this period. Similarly, a reclassification of **blast furnace gas** main activity **electricity plants** into autoproducer plants results in a break in time series for the same period.
- From 2003 onwards, all **heat** production in auto-producers is considered as non-sold (i.e. for self-use) and, therefore, not reported. Inputs for this heat production are no longer reported in the transformation sector.
- For 2002 and 2003, the German administration did not submit the breakdown of electricity and heat production from **combustible fuels**. The data were estimated as follows: renewables and waste were taken from the Renewables and Waste Questionnaire and the other combustible fuels were estimated pro rata based on 2001 estimates.
- Prior to 2003, **electricity** production in electricity plants includes production from CHP plants and heat production in CHP plants includes production from heat plants.
- Due to the implementation of the Energy Statistics Act, collection concerning heat produced in **heat** plants and district heating plants became more efficient and more complete. This leads to breaks in time series between 2002 and 2003 and between 2003 and 2004.
- A new survey for the renewable products can cause breaks in the time series between 1998 and 1999.
- Prior to 1993, all heat production from **BKB/peat briquettes** is included in main activity producer CHP plants.

### Consumption

- More information on district heat became available, causing breaks in the time series between 2006 and 2007.
- Data on **geothermal heat** production and direct consumption are only available starting in 2003.

- From 2002, **electricity** consumption in the commercial and public sector includes the construction sector, and the fishing, agriculture and forestry sectors for the whole time series.
- In 2000, revisions from the German administration to the **electricity** consumption data may cause breaks in the time series.
- In 1995, the German Federal Statistics Office reclassified some industrial branches which may cause a break in time series in industry sub-sectors.
- Between 1971 and 1980 **electricity** consumption in coal mines includes consumption in coke ovens and BKB plants.

## Greece

### Source

Ministry for Environment and Energy, Athens.

### Oil

#### General notes

- In the 2016 edition, the Greek administration reclassified gasoline-type jet fuel as aviation gasoline starting from 2009 data.
- Between 2012 and 2013, breaks time in time series for biodiesel, lubricants and stocks appear due to the introduction of a new reporting system.

### Supply

- **Crude oil** production stopped on 30 November 1998 and started again in December 1999.
- From 1986 data onwards, information on **refinery feedstocks** is available

### Transformation

- From 1990 onwards, there has been an increased use of **refinery gas** in electricity generation, replacing **fuel oil**.

### Consumption

- In 2013 data, the drop of **gas/diesel oil** residential consumption is linked with changes in the taxation of heating oil.
- From 1993 data onwards, more information is available on the allocation of **fuel oil** to specific industrial sub-sectors. Fuel oil consumption in the agriculture and residential sectors has been replaced by **gas/diesel oil** starting in 1993.

- Prior to 1987 data, consumption in the commerce/public services sector is included with residential. Peaks in residential sector consumption in 1978 and 1982 are due to unusually cold winters.

## Natural gas

### General notes

- Natural gas produced in Greece has a higher than average gross calorific value due to a high content of C<sub>2</sub>/C<sub>4</sub> hydrocarbons.

### Supply

- In November 1998 the production of natural gas stopped in and started again in December 1999.
- In 1997, Greece started importing natural gas as a result of a new operational pipeline between Russia and Greece.

### Consumption

- In 2011 there is a break in time series for the non-ferrous metals due to a new methodology for measuring gas consumption in this sub-sector.
- In 1998, consumption in the residential sector is included with commercial/public services.

## Biofuels and waste

### General notes

- New information on **solid biofuels** is available from 1996 and leads to breaks between 1995 and 1996.
- Data for **biogases** are available from 1990 and data for **industrial waste** from 1992.

### Transformation

- The big increase in delivery of **industrial waste** to autoproducer CHP plant in 2010 is mainly due to the opening of a new plant.
- Inputs of **solid biofuels** to **charcoal** production are estimated for 2007 to 2010 by the IEA Secretariat assuming an efficiency of 40%.
- **Industrial waste** used in autoproducer CHP plants decreased substantially in 2006 because a plant closed.

### Consumption

- **Solid biofuels** consumption in commercial/public services is included in residential until 2011.

- The consumption of **solid biofuels** in the paper, pulp and printing industry is not available from 2003 to 2012.

## Electricity and heat

### Supply

- No production of **solar heat** is reported.

### Transformation

- In 2008 a new plant using refinery gas started operating in an experimental phase, causing a low efficiency.
- Production and consumption of distributed heat (heat sold) that is produced from lignite is available from 1997.
- Data for **biofuels and waste** input and output to transformation are available from 1992.

### Consumption

- Electricity consumption in road is available from 2013.
- A break in time series exists between 1991 and 1992 for electricity consumption in transport.
- Direct use of **geothermal** heat in residential is available starting in 2004.
- Electricity consumption in iron and steel and in the non-ferrous metals industry prior to 1971 has been estimated by the Secretariat.

## Hungary

### Source

Hungarian Energy and Public Utility Regulatory Authority, Budapest.

### General notes

- Data are available starting in 1965.
- The Hungarian administration submitted questionnaires to the IEA Secretariat for the first time with 1993 data.

### Coal

#### General notes

- From 1992, the production of **sub-bituminous** coal has been included with **lignite** due to the low quality of the coal. For 1990 to 1999, the use of this domestic coal in main activity producer electricity

and CHP plants has also been reclassified to **lignite**.

### Transformation

- Autoproducer heat and power plants using **coke oven gas** and **blast furnace gas** were reclassified in 1998 as main activity power plants.

## Oil

### General notes

- From 2010, *from other sources - natural gas of other hydrocarbons* correspond to hydrogen used in refineries, also represented as the output of *non-specified transformation* in the balances format.
- Starting from 1998, data for additives and aviation gasoline are available.
- From 1994 onwards, other products include aromatics and other products that were previously included mainly under white spirit. Prior to 1993, **white spirit** is included in motor gasoline. Data for **refinery gas**, **paraffin waxes** and **lubricants** are partly estimated by the Secretariat.

### Supply

- In 2016 the closure of the Val d'Agri oil centre between April and August led to a decrease in production of crude oil.

### Consumption

- In the 2016 and 2017 editions, revisions to consumption data back to 2010 were provided by the Hungarian administration following a survey introduced in 2014. This results in breaks in time series between 2009 and 2010.

## Natural gas

### General notes

- Between 2012 and 2013 there are some breaks in time series for energy sector, transport and industry consumption due to a new methodology. Historical revisions are pending.
- Between 1996 and 1997 some breaks in time series exist due to a new methodology applied by the Hungarian administration.

### Transformation

- Since 2010, data reported for *non-specified transformation* represent natural gas used for hydrogen manufacture used in refineries for

hydrodesulphurization. Prior to this year, these quantities are reported under oil refineries.

- Since 1997 two autoproducer heat plants have been reclassified to main activity producer heat plants.

### Consumption

- Prior to 2004 iron and steel consumption includes transformation of natural gas in blast furnaces.

## Biofuels and waste

### General notes

- Data for **biogases** are available from 2000; for **industrial waste** from 2003; for **biodiesel** production from 2007.

### Supply

- A 2012 change in **biogasoline** reporting methodology results in break in time series between 2011 and 2012.

### Consumption

- In the 2017 edition, the Hungarian administration has revised **solid biofuels** consumption in other sectors back to 2010 based on the new survey from Hungarian Central Statistical Office (HCSO). This resulted in break in time series between 2009 and 2010.
- A new reporting methodology for the direct use of **geothermal** energy was applied from 2014 resulting in break in time series between 2013 and 2014.

## Electricity and heat

### Supply

- Other sources* electricity and heat production is available from 2013 and represents generation from residual tail gases from the manufacturing of soot as well as from hydrogen.
- Geothermal** heat production from main activity producer heat plants is available from 1995.
- Nuclear** electricity production in main activity producer electricity plants is available from 1983.

### Transformation

- From 2014 data, more data suppliers were involved in the process, causing new autoproducer time series to appear for **geothermal** and **industrial waste** plants.



- In 2014 data, some CHP plants running on **solid biofuels** produced only heat and were reclassified to heat plants.
- The Hungarian administration reclassified some of their plants between 1996 and 2000, which may lead to breaks in the time series.
- Prior to 2000, electricity output from sub-bituminous coal is included with lignite.
- Data on electricity and heat production from **solid biofuels** in autoproducer CHP plants are available from 1995.
- Autoproducer electricity, CHP, and heat plants using coke oven gas and blast furnace gas were reclassified as main activity power plants in 1998.

### Consumption

- Data for direct use of **solar thermal** heat are available from 2001 and from 1990 for **geothermal** heat.

## Iceland

### Source

National Energy Authority, Reykjavik.

### General notes

- Prior to 1970, final consumption includes inputs and outputs to heat production.
- The industrial classifications used by the Icelandic administration were changed in 1987.

### Coal

#### General notes

- Hard coal data prior to 1978 may include sub-bituminous coal.

#### Consumption:

- Final consumption increased in 2000 as a new iron and steel plant came on-line.

### Oil

#### General notes

- In 2014, the Icelandic administration revised petroleum coke data from 1990 to exclude imports of anodes for the aluminium industry.

- Oil supply and consumption data for 2008 and 2009 are estimated by the IEA Secretariat.

### Biofuels and waste

#### Consumption

- **Biodiesel** consumption data for 2014 are estimated by the Icelandic administration based on 2013.
- **Biogases** used for transport purposes were reported for the first time in 2007.
- Revisions in direct use of **geothermal heat** starting in 2013 create breaks in time series between 2012 and 2013.

### Electricity and heat

#### Supply

- The increase in **hydro** and **geothermal** electricity production from 2007 is due to the expansion of the aluminium industry.

#### Transformation

- For 2016, access to improved data revealed considerably better heat plant efficiencies than previously inferred, with increases in heat production seen during this period. The Icelandic administration plans to revise previous years' figures in succeeding editions.
- From 2013 data, the Hellisheidi **geothermal** power plant, previously reported under main activity electricity plant, was categorised as main activity CHP plant.
- Heat production from **municipal waste** is available from 1993 and stops in 2010.
- In 1998, 60 MW of generating capacity was installed in the **geothermal** CHP plant at Nesjavellir. Since the plant was inoperable for four months, production of **geothermal** heat decreased compared to 1997. The extra electricity capacity caused electricity production from **geothermal** to almost double over the same period.
- Electricity production from **geothermal** sources in main activity producer CHP plants is available from 1992.

#### Consumption

- In the 2017 edition, the **heat** consumption breakdown by sector for the years 1990 to 2013 has become available following reviews by the Icelandic administration.

- The **geothermal** consumption in the industrial sector is reported under *non-specified industry*, as the Icelandic administration decided not to estimate the allocation amongst the sub-sectors of industry.
- There were reclassifications in the direct use of **geothermal** heat in 2014 which create breaks in time series between 2013 and 2014.
- **Electricity** consumption in *non-specified transport* includes consumption for ferries and cruise lines.
- Energy industry consumption of **electricity** refers mainly to the use of electricity by the **geothermal** industry to pump hot water from underground sources.
- The increase of **electricity** consumption in the construction sector from 2004 to 2007 is due to the drilling of tunnels for the Kárahnjúkar power plant.
- The consumption of **electricity** reported in *non-specified other* corresponds to a NATO base at Keflavik airport which closed in 2005.
- From 1991, energy industry consumption includes **electricity** used for the transport by pipeline of hot water from Nesjavellir to Reykjavik.
- Prior to 1990, all **heat** for space heating was reported in residential.
- The industrial classifications used by the Icelandic administration changed in 1987.
- Residential sector includes agriculture prior to 1983.
- Prior to 1970, total final consumption includes inputs to and outputs from **heat** production and non-energy use. After 1970, data on inputs and outputs in CHP plants and in main activity producer heat plants (district heat plants) and for non-energy use are separately specified.

## Ireland

### Sources

- Department of Communications, Energy and Natural Resources, Dublin.
- Sustainable Energy Authority of Ireland, Cork.

### Coal

#### General notes

- Due to confidentiality reasons, inputs of **anthracite**, **other bituminous coal** and **peat briquettes**

for patent fuel transformation are reported with residential consumption, while production and consumption of **patent fuel** is not reported.

- Prior to 1990, any imports of **BKB** were included with imports of **peat products**, as is the case for consumption.

### Supply

- Rainfall in 2012 led to the lowest **peat** harvest since IEA records began in 1960, requiring large stock drawdown and increased use of **biofuels** for electricity generation. In 2013, production targets were met before the end of the year however production continued in order to further build stocks to alleviate the potential impacts of future weather events.
- Low production of **peat** in 1985 was due to a poor “harvest”, due to an unusually wet summer.
- Production data for **peat products** (briquettes) are available from 1975.

### Transformation

- A reclassification caused a break in the time series for peat consumption in the energy industry own use in BKB/peat product plants from 1989 to 1990.
- The production of gas works gas ceased in 1987 due to fuel switching to natural gas.
- Other bituminous coal inputs to main activity producer electricity plants increased from 1986 due to three new generating units at Moneypoint coming on-line.

### Oil

#### General notes

- *From other sources* - natural gas of **other hydrocarbons** correspond to natural gas blended with refinery gas.
- For confidentiality reasons, inputs of **petroleum coke** into patent fuel transformation are reported with residential consumption.

### Consumption

- In 2014, the drop of fuel oil consumption in non-metallic minerals sector is linked with the replacement of HFO boilers by natural gas boilers as the primary source of steam for alumina production.
- In 2013 and 2014, bitumen consumption data are not available and calculated as residual.

- Between 2008 and 2009, there is a break in time series for **gas/diesel oil**, **LPG**, **kerosene-type jet fuel** and **petroleum coke** due to a new methodology being applied to sectoral demand by Sustainable Energy Ireland (SEI). This change also explains breaks between 2006 and 2007 for **bitumen**, **lubricants**, **white spirit**, and **paraffin waxes**.
- Between 1989 and 1990, breaks in time series appear for consumption of **gas/diesel oil**, **LPG**, **other kerosene** and **fuel oil** as a result of a detailed consumption survey done for 1993. Data for historical years back to 1990 were revised by the national administration based on the results of this survey.
- From 1986, **gas/diesel oil** consumption in the agricultural sector is available.
- From 1970 to 1977, the split between commercial and public services and agricultural use of **other kerosene** has been estimated by the Secretariat. Consumption in commercial/public services includes quantities used by state-owned agricultural companies.

## Natural gas

### Supply

- Natural gas production increased in 2016 since the Corrib Gas field began production at the end of 2015 and continued through 2016.
- Since 1996, the increase in imports is due to the depletion of the Kinsale gas field and the availability of a new pipeline system to the United Kingdom.

### Transformation

- Since 2006, a different methodology for allocating unsold steam from autoproducer CHP is used.
- *Non specified transformation* corresponds to natural gas blended with refinery gas.

### Consumption

- In 2011 the increase in non-ferrous metals consumption is due to a fuel switch to natural gas.
- Since 2009, the disaggregation of consumption into all the industry sub sectors excluding non-ferrous metals is done according to data from the Census of Industrial Production (CIP). The last energy consumption data available from the CIP are from 2009 and therefore the 2009-2015 sub-sector breakdown is the same every year.

- In 2007 the increase in machinery consumption is due to changes in industry sub-sector structure and fuel usage.
- In 2004, there is a break in the time series in food, beverages and tobacco consumption due to a change in methodology.
- In 2003, feedstock use in the petrochemical industry stopped due to the shutdown of a fertiliser plant.
- In 2001, natural gas consumption in the iron and steel industry stopped due to the shutdown of Ireland's main steel plant.
- Prior to 1986, detailed consumption figures for the use of natural gas in industry and other sectors are not available.

## Biofuels and waste

### General notes

- Data for **municipal waste** are available from 2009.
- Data for **solid biofuels** and **biogases** are available from 1990.

### Supply

- Prior to 2011, production and trade of **biogasoline** and **biodiesels** cannot be distinguished due to confidentiality issues.

### Transformation

- In 2012 and 2013, the renewable fraction of tyre-derived fuel (12%) used by a cement plant was reported by the administration under **renewable municipal waste**; the non-renewable fraction (88%) was reported under **industrial waste**.

### Consumption

- The consumption of pure **biodiesel** in the industry sector and in road transport refers to one site, which is no longer in operation since 2014.

## Electricity and heat

### Supply

- Electricity production from **wind** begins in 1992 and from **biogases** in 1996.

### Transformation

- In the 2016 edition, revisions were introduced in the **electricity** generation by fuel from 2010 due to improved data available from the transmission system operator.



- In 2015, a new combined cycle gas turbine plant began commercial operations at Great Island power station, replacing the existing heavy fuel oil power plant.
- In 2012, a new main activity electricity plant burning **municipal waste** (the Meath plant) started operation.
- In 2011, very little electricity was produced from **pumped hydro** following Turlough Hill, Ireland's pumped storage station, being taken offline in late 2010 up until February 2012. The 2011 values appear as zero due to rounding.
- From 1984 to 1989, inputs of **hard coal** in auto-producer CHP plants have been estimated by the Secretariat.

### Consumption

- In 2004, the increase of **electricity** consumption is due to the new light rail transit system in Dublin.
- The decrease of **electricity** consumption in the iron and steel industry from 2001 onwards is due to Ireland's main steel plant ceasing production.
- Prior to 1990, **electricity** consumption in agriculture is included with residential.
- **Electricity** consumption in the iron and steel industry includes consumption in the non-ferrous metals industry prior to 1990.
- Data for direct use of **geothermal heat** and **solar thermal heat** are available from 1989 and 1990, respectively.

## Israel

### Source

Israel Central Bureau of Statistics, Jerusalem.

### General notes

- Data are available starting in 1971.
- The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli administration. The use of such data by the OECD and/or the IEA is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
- Due to the unavailability of data for certain fuels, IEA estimations are also present in Israel data. In particular this is valid for oil data in 2014 and

2015, **natural gas** data from 2012 onwards, **renewables and waste** data in 2013.

### Coal

#### Supply

- Due to confidentiality constraints, imports of **other bituminous coal** have been estimated by the IEA Secretariat for 2016p.

### Oil

#### General notes

- Oil data for 2015 are estimated by the IEA Secretariat based on Israel's energy balance and the fuel consumption report from the Ministry of National Infrastructures, Energy and Water Resources.
- In 2014 the detailed breakdown of consumption is estimated by the IEA Secretariat based on the fuel consumption report from the Ministry of National Infrastructures, Energy and Water Resources.
- Due to a change in the methodology used to calculate the Israeli energy balance, there are breaks in time series between 2013 and 2014. Revisions to 2013 are pending.
- Supply and consumption of kerosene type jet fuel for 2011 and 2012 have been estimated by the IEA Secretariat.
- From 2007 to 2009, oil data are estimated by the IEA Secretariat based on information from the Ministry of National Infrastructures.

#### Supply

- From 2010 onwards, white spirit is included in other products.

#### Consumption

- From 2013, consumption data are based on a new and detailed classification system and on estimations made by the Israeli administration.

### Natural gas

#### General note

- From 2012, all natural gas data, except inputs to electricity production, were estimated by the IEA Secretariat.

#### Supply

- Imports of natural gas began in 2008.

## Transformation

- In the 2017 edition, the Israeli administration revised transformation data back to 2013.

## Biofuels and waste

### Consumption

- Data on imports and consumption of **charcoal** were estimated since 2012 based on figures for 2011.

## Electricity and heat

### Supply

- Electricity production from **wind** begins in 2001.

### Transformation

- For 2013 and 2014, **other oil products** inputs to autoproducer electricity plants were estimated by the IEA Secretariat.
- **Biogas** input to transformation sector was estimated by the IEA Secretariat from 2013 data point.

### Consumption

- In the 2017 edition, **solar thermal** production and direct consumption were revised and are now estimated by the IEA Secretariat from 2012 onwards, using data published in the IEA-Solar Heating and Cooling Programme Annual Report. These estimations may create breaks in time series between 2011 and 2012.
- For 2013, the split of **electricity** consumption in industry is estimated by the IEA Secretariat.
- **Electricity** own use, as well as transmission and distribution losses were estimated by the IEA Secretariat from 2010 to 2012.

## Italy

### Source

- Ministry of Economic Development, Rome.
- Terna, Rome.

### General notes

- A change in methodology lead to breaks in time series for industry and transformation between 2003 and 2004.

## Coal

### General notes

- The increase in production of **coke oven gas** in 2012 was the consequence of improvements in scope of reporting. As such, coke oven gas data in prior years should be viewed as under-representing production and consumption, and coke oven efficiencies will likewise appear lower than actual.
- Due to a change in the survey system, breaks in time series may occur between 1997 and 1998 for final consumption.
- From 1986 onwards, figures from **lignite** are given using the same methodology as in the *Bilancio Energetico Nazionale*.

### Transformation

- Reported production of **blast furnace gas** and **other recovered gases** are inputs for electricity generation or CHP. Production of **blast furnace gas** and **other recovered gases** used elsewhere in the iron and steel industry are not reported. As such, reported production and consumption data are lower than actual. Normalisation of blast furnace efficiencies will result in inputs of **coke oven coke** and **other bituminous coal** (PCI) to blast furnaces being lower than reported, with these relocated portions reported alongside generic consumption in the iron and steel industry instead.
- Breaks in the time series between 2014 and 2015 for **coke oven gas**, **blast furnace gas** and **other recovered gases** are due to a reclassification of main activity producers and autoproducers.
- Prior to 2009, sub-bituminous coal used in main activity electricity plants was included with other bituminous coal consumption.
- For data since 2001, calorific values for imports of **other bituminous coal** and **sub-bituminous coal** are derived from inputs to main activity electricity generation.

### Consumption

- In 1991, all industrial activities were reclassified on the basis of ISTAT/NACE 91. This has implied some transfers of activities which may result in some anomalies between 1991 and earlier years.

## Oil

### General notes

- For **crude oil**, statistical difference may arise as trade corresponding to stock held for Austria and Germany in the Port of Trieste are not included.

- Inputs to electricity and heat generation have been estimated by the IEA Secretariat for the years 1984 to 1997 based on submissions of the Electricity and heat Questionnaire. All other data for the years 1992 to 1997 and the detailed consumption breakdown for other years have been estimated by the IEA Secretariat based on *Bilancio Energetico Nazionale*.

### Supply

- From 2009 onwards, transfers of **lubricants** could not be disaggregated from refinery output data.
- From 2004 onwards, increased production of **non-specified oil** products is due to methodological changes.
- A new survey to determine the split between international marine bunkers and domestic navigation caused a break in time series for **gas/diesel oil** in 1999 and **fuel oil** in 1996.

### Consumption

- For **gas/diesel oil**, non-specified use is included in commercial/public services.
- Between 1998 and 1999, due to new surveys, breaks appear in the consumption time series.

## Natural gas

### Transformation

- Prior to 2008, inputs of natural gas to all heat production in industry were reported in final consumption.
- Between 2003 and 2004 there are breaks in time series in industry and transformation due to a new data reporting methodology
- From 2000 to 2002, for confidentiality reasons, autoproducers are included in main activity producer plants.
- In 1996 the production of gas works gas from natural gas ceased.

### Consumption

- Since 2007, a more detailed breakdown of consumption for energy industry own use is available.

## Biofuels and waste

### Supply

- **Biogasoline** includes **bio-ETBE**.

- From 2014, a distinction between trade and production became available for **other liquid biofuels**.

### Transformation

- In 2008, data for **biofuels and waste** were reclassified, which results in several breaks in the time series for transformation.

### Consumption

- The final consumption of **biogas** has been constant from 2013 to 2015, as these figures are the result of a survey which is not carried out annually. Figures are expected to be revised after the next survey.
- In the 2016 edition, the methodology used to calculate **solid biofuels** consumption in the residential sector for 2002 to 2014 was updated and this created a break in time series between 2001 and 2002. This also affects the indigenous production of **solid biofuels**. The revisions were limited backwards to 2002 because of reliability issues.

## Electricity and heat

### Supply

- The production of electricity reported in the category *other fuel sources* refers to electricity produced from turbines which are located at pressure drops in fluid transport.
- The methodology of data collection for **photo-voltaic** electricity production changed in 2009 and the distinction between main activity and auto-producer plants could not be determined, causing a break in the time series.
- **Electricity** trade with Malta commenced in 2015, following the opening of the Malta-Sicily interconnector submarine power cable in the same year.

### Transformation

- The methodology of data collection for the **geothermal** sector changed in 2010, causing a break in time series between 2009 and 2010.
- Prior to 2009, sub-bituminous coal used in main activity electricity plants was included under other bituminous coal.
- With the introduction of a new survey in 2008, amounts of naphtha and other kerosene that were previously included in *other oil products* have been reported separately in autoproducer CHP plants.

- Prior to 2004, electricity production from orimulsion is confidential and is included with fuel oil.
- Heat production is reported starting in 2004 and includes self-generation in industry.
- From 2000 onwards, the Italian administration defines electricity and heat production from auto-producers as generation from producers that consume more than 70% of their own electricity production. However, for the 2000 to 2002 period, all electricity production from autoproducers is reported with main activity producers.
- The breakdown of renewables and waste inputs into electricity, heat and CHP plants is available from 1989 only. Prior to that year, the total of the different fuels involved is reported as non-specified renewables.
- Prior to 1984, net electricity production by auto-producers includes production from combustible fuel sources only.

### Consumption

- *Non specified energy industry own use* includes electricity consumption for blast furnaces. From 2000, it also includes consumption for the distribution of gas and prior to 1989 consumption for uranium extraction.
- The breakdown of heat consumption by sector is estimated by the Italian administration.
- Revisions of the final consumption of **heat** by the Italian administration led to breaks between 2010 and 2011.
- From 1981, consumption of electricity in transport includes electricity used for pumping in oil pipelines.

## Japan

### Source

The Institute of Energy Economics Japan, Tokyo.

### General notes

- From 1990, data are reported on a fiscal year basis (e.g. April 2015 to March 2016 for 2015).
- Between 2004 and 2007, a time series of revisions were received from the Japanese administration. These changes were mainly due to the government of Japan's efforts to improve the input-output balances in the production of oil products and coal

products in response to inquiries from the UNFCCC Secretariat. To cope with this issue, the Japanese administration established a working group in March 2004. The working group completed its work in April 2006. Many of its conclusions were incorporated in the 2006 edition, but some further revisions to the time series (especially in industry and other) were submitted for the 2007 edition.

- Consumption data for commercial/public services may include consumption in small and medium-sized industries. The Japanese administration expects that this shortcoming will be corrected in the near future.

## Coal

### General notes

- **Other bituminous coal** includes sub-bituminous coal.
- The net calorific values for **coal** and **coal products** have been recalculated by the IEA Secretariat based upon gross values submitted by Japan.
- In the past three editions, imports of **other bituminous coal** and **coking coal** – total and by partner country - have been estimated by the IEA Secretariat for data from 1990 to the provisional year, based on customs data and total imports by coal type.
- In the 2014 edition, further supply-side revisions to data from 1990 through 2011 were received, primarily to imports of **other bituminous coal**, in order to reconcile differences between submissions to the IEA and UNFCCC.
- **Hard coal** data prior to 1978 may include sub-bituminous coal.

### Supply

- Statistical differences for **hard coal** include stock changes since 2001. Large positive differences for several years since 2004 are partly due to stock build by final consumers.

### Transformation

- The inputs of **coke oven coke** to blast furnaces as well as the final consumption of **coke oven coke** in the iron and steel industry have been estimated by the IEA Secretariat since 1990.
- From 1998, inputs of **coke oven gas**, **blast furnace gas** and **other recovered gases** into auto-producer electricity plants include the amount used to produce electricity with TRT technology (Top

pressure Recovery Turbines) which was previously included in industry.

- Inputs of manufactured gases (**coke oven gas**, **blast furnace gas** and **other recovered gases**) to main activity electricity and heat plants are calculated based on outputs and using efficiencies of main activity producers from other fuels. For auto-producers, the specific inputs are known, however the specific electricity production by each gas is estimated based on a pro-rata of the total electricity generation from all gas types.
- Coal injected in blast furnaces (PCI) is classified as **coking coal** in order to be consistent with Japanese trade statistics.

## Oil

### General notes

- In the 2016 edition, the Japanese administration revised several NCVs of both primary and secondary **oil products** back to 1990. The Japanese administration reviews calorific values every five years, with the other most recent revisions occurring in 2005 and in 2013.
- In the 2016 edition, the Japanese administration revised several consumption flows. Based on publicly available information, final consumption data in the Energy Balance Table are now based on a new annual survey. From 2005, consumption data are derived from this new survey, while prior to 2005 data are estimated based on the 2005 data.

### Supply

- The high statistical difference for **crude oil** in 2013 and 2014 is explained by large amount of stocks held on board incoming vessels in port or at mooring in March 2014 (end of Japan's 2013 financial year). These amounts are included in the stock change but not in the imports in 2013 annual data.
- Orimulsion was imported for electricity generation between 1991 and 2006.

### Transformation

- Other hydrocarbons in *non-specified transformation* represents orimulsion burnt for power generation. Historical revisions are pending.

### Consumption

- In the 2016 edition, the Japanese administration revised road consumption, which is now based on

the "Automobile fuel consumption survey" from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). In the past, the "Statistical report on motor vehicle transport" (from the same Ministry) was used.

- **Lubricants** consumption is estimated by the Japanese administration since 2000.

## Natural gas

### General notes

- In the 2017 edition, there are breaks in the time series for LNG imports between 2012 and 2013 due to a change in the methodology of the Japanese administration to calculate the gross calorific values.
- Since 1990 most of the gas works gas production and consumption has been included with natural gas.

### Supply

- In the 2017 edition, import data were revised back to 2013.

### Transformation

- In 2017 edition, the Japanese administration revised transformation data for the period 1990-1999.

### Consumption

- Some consumption data for the latest year are estimated by the Japanese administration based on previous year's information until final data become available. Revisions are expected in the following year.
- Due to a change in the methodology, there are breaks in time series for industrial sub-sectoral consumption between 2013 and 2014. Revisions of historical data are expected in the coming years.

## Biofuels and waste

### General notes

- Due to the lack of data, some parts of **solid biofuels** data for 2016 are missing. Revision is expected in the 2018 edition.
- There was a large revision in **municipal waste** data in the 2016 edition of this publication. This revision has removed data for **municipal waste** for the entire time series up to 2010, which create breaks in time series between 2009 and 2010.



- For **municipal waste** data, the breakdown between renewable and non-renewable **municipal waste** is estimated by the IEA Secretariat.

### Transformation

- Input data of solid biofuels to charcoal production are estimated by the IEA Secretariat assuming an efficiency of 40%.
- The industrial waste consumption in the *non-specified transformation* sector surged in 2013, because of the increase in use of waste plastics for coke production.

## Electricity and heat

### Supply

- Due to the events related to the March 2011 tsunami, the Japanese administration decided to scale back the level of their **nuclear** programme. As a consequence, there was no nuclear electricity generation in 2014. The nuclear electricity generation started again in 2015.
- Other sources electricity represents electricity generated with purchased steam. Other sources heat represents heat derived from waste heat.
- Production of electricity from **solar photovoltaic** and **wind** in autoproducer electricity plants is understated as it covers only plants with capacity higher than 1000 kW.
- The Japanese administration estimate the electricity input of **electric boilers** based on 100% efficiency.
- The IEA Secretariat estimated the **photovoltaic** (PV) electricity generation from autoproducers from 1992 to 2016p based on an average capacity factor of 12% and capacity data for autoproducers. Autoproducer PV capacity is derived from data from the Japanese administration as well as the IEA Photovoltaic Power Systems Programme (IEA-PVPS) report, “Trends in Photovoltaic Applications” published in 2016. The capacity factor was based on the report “National survey report of PV Power Applications in Japan”, published by IEA-PVPS. The corresponding electricity consumption has been included with *non-specified other* consumption.
- Data on electricity production from **wind** began in 1993.
- Heat produced for sale in main activity producer heat plants from **waste heat** and from **electric boilers** is available from 1977 and 1983, respectively.

### Transformation

- **Electricity** production from **pumped storage** includes production from both mixed hydro and pure pumped storage.
- Data on **heat** produced for sale by autoproducer heat plants are not available.
- Fuels used and corresponding electricity and heat produced in CHP plants are not included in the CHP data time series, but instead are reported as separate **electricity** or **heat** components, leading to some plant efficiency figures not to be accurately calculated.
- Heat production from **geothermal** and **solar thermal** sources in Japan is not reported by the Japanese administration.
- Prior to 1998, the **electricity** produced using TRT technology (Top pressure Recovery Turbines) was included with electricity generated from solid biofuels. Starting in 1998, it is included with electricity generated from **coal gases**.
- Inputs of **biofuels and waste** for electricity production and related outputs are available from 1982.
- Net electricity production by autoproducers prior to 1982 includes production from **combustible fuel** sources only.
- Between 1972 and 1976, the use of **combustible fuels** in main activity producer heat plants is included in non-specified.

### Consumption

- In the 2017 edition, the consumption of **electricity** in the *wood* and *wood products* sector was entirely reviewed from 1990 due to the revision of the “*General Energy Statistics (Energy Balance Table)*” published by the Ministry of Economy, Trade and Industry, which replaced the previous method using statistical surveys. As a result of this review, some of the consumption amounts listed under *wood* and *wood products* sector were reclassified to the *non-specified industry* sector, representing consumption related to the manufacture of rubber products.
- The **electricity** consumption in the *non-specified industry* sector is estimated by the Japanese administration as residual item to include the non-assigned industry consumption. For this reason, the trend in this category could behave erratically.
- The consumption data of **electricity** prior to 2005 in the *industry* and *other sectors* was estimated by the Japanese administration based on 2005 figures.

- Consumption of **electricity** in *non-specified industry* includes wood and wood products and construction prior to 1982.

## Korea

### Sources

- Korea Energy Economics Institute, Ulsan.
- Korea National Oil Corporation, Ulsan.

### General notes

- Data are available starting in 1971.
- Data for 2002 onwards have been reported on a different basis, causing breaks in time series between 2001 and 2002, especially for inputs and outputs to electricity generation and consumption in the iron and steel industry. The Korean administration is planning to revise the historical time series as time and resources allow.

## Coal

### General notes

- Data for **coal** and **coal products** from 1971 to 2001 are based on information provided by the Korean administration, as well as information from the *Yearbook of Energy Statistics 2002*, the *Yearbook of Coal Statistics 2001* (both from the Ministry of Commerce, Industry and Energy), and *Statistics of Electric Power in Korea 2001* (from the Korea Electric Power Corporation). During this period, import data by coal type were estimated by the IEA Secretariat, based on statistics of the exporting countries.
- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.

### Transformation

- For 2015, **coking coal** inputs to coke ovens decreased while **coke oven coke** production increased, impacting efficiency trends. To cope with this issue, the Korean administration is working to improve data collection. Revisions on these data are expected in future editions.
- Statistical differences for **manufactured gases** for 2012 are partly the result of classification issues. The Korean administration is working to improve reporting of coal-derived gases production and consumption.

### Consumption

- Data on **blast furnace gas** used for energy purposes in blast furnaces prior to 2007 are reported in the iron and steel industry.
- Consumption of imported **coke oven coke** starting in 2002 is reported under *non-specified industry*.
- Consumption of **manufactured gases** in the iron and steel industry starting in 2002 includes the consumption in blast furnaces, oxygen steel furnaces and other iron and steel processing plants.

## Oil

### Consumption

- Inputs of **fuel oil** to autoproducer electricity and autoproducer CHP are included with final consumption.

## Natural gas

### Supply

- Korea reports production of natural gas since 2005. The production is decreasing and the reservoir is expected to be depleted by the end of 2017.

### Consumption

- Energy industry own use in liquefaction plants includes losses and measuring errors.
- Prior to 2007, consumption of natural gas in machinery was included with transport equipment.
- From 1987 to 1991, the breakdown of final consumption has been estimated by the IEA Secretariat, as well as the residential subsector for 1992.

## Biofuels and waste

### General notes

- Due to the change of reporting methodology, breaks in time series may occur between 2013-2014 and 2014-2015.
- Electricity statistics from 1971 to 1993 have been estimated by the IEA Secretariat based on the Korean National Statistics. Data from 1994 have been submitted by the Korean administration. This leads to breaks in time series between 1993 and 1994.
- Heat data are available starting in 1993.

### Transformation

- Inputs to *autoproducer* heat plants have been estimated by the IEA Secretariat because of efficiency

issues for municipal waste prior to 2011 and in 2012 and for biogas in 2008, 2011 and 2012.

- New plants were included in the Korean survey creating breaks in time series in 2011.
- In 2007, some main activity heat plants and auto-producers in the commercial/public services sector were reclassified as main activity CHP plants, resulting in a break in the time series between 2006 and 2007 for **biogases**.

## Electricity and heat

### Supply

- The own use of **heat** in heat plants is very irregular due to a lack of data.
- Electricity generation reported under *other sources* is from fuel cells.
- Production of electricity from **tides** began in 2013.
- Data for **heat from chemical processes** that is sold is available from 2008.
- Data for electricity production using **heat from chemical processes** in copper and zinc plants is available from 2005. The corresponding heat inputs were estimated until 2013 data. In 2014 the corresponding company switched to diesel oil for electricity generation.

### Transformation

- Prior to 2009, autoproducer **heat** production includes amounts of unsold heat.
- Data for electricity and heat production by auto-producers using **natural gas** and **liquid fuels** are available from 2000.
- In 2000, the Korean administration started to report **heat** statistics for some heat plants which were not reported before.
- Between 1993 and 1999, the breakdown of **heat** output by type of fuel was estimated by the IEA Secretariat.
- Before 1994, **electricity** production from main activity producer CHP plants is included with main activity producer electricity only plants.

### Consumption

- Data for direct use of **geothermal heat** are available from 2002. **Geothermal** direct use data are overstated as it refers to heat production by geothermal heat pumps, which include inputs of electricity and/or gas in the transformation process.

- **Heat** consumption by subsector was reclassified in 2010 due to new information available on heat sales from autoproducers to end-users by sector.
- Prior to 2008, sales of **electricity** by Korea's main electricity distributor, KEPCO, to the *non-ferrous metals* sector are included in *iron and steel* consumption.
- Data on production and consumption of **electricity** and **heat** in oil refineries and LNG liquefaction/regasification plants are included in the industry sector. From 2007, oil refinery **electricity** and **heat** production and consumption started to be reported under the correct energy sector.
- Data for **heat** consumption by sector are available from 2000.
- Data for **electricity** consumption in the transport equipment sector are included in machinery from 1994 to 1999.

## Latvia

### Source

Central Statistical Bureau, Riga.

### General notes

Data for Latvia are available starting in 1990. Prior to that, they are included in Former Soviet Union in the publication of *World Energy Statistics*.

### Coal

#### Supply

- The increase of distribution losses for **peat** in 2003 is due to a fire in one of the warehouses.

#### Consumption

- The drop in the iron and steel industry in 2014 is due to the bankruptcy of the major company in the market.

### Oil

#### Supply

- **Other hydrocarbons** data represent shale oil.

### Natural gas

#### Consumption

- The fall in the iron and steel industry in 2014 can be explained by the bankruptcy of the major company



in the market, which resumed its activities in 2015 and declare insolvency again in 2016.

## Biofuels and waste

### Transformation

- Due to a reclassification in 2004, there was break in time series of electricity production from autoproducer electricity plant fuelled by biogas between 2003 and 2004.

## Electricity and heat

### Transformation

- From 2012 onwards, the increase in electricity production from **solid biofuels** is due to the deployment of six new main activity producer CHP plants running on wood chips.

### Consumption

- For 2012, the increase in electricity consumption in the iron and steel sector is due to switching from open earth furnace to electricity furnace of a factory.

# Luxembourg

## Source

STATEC, Institut national de la statistique et des études économiques du Grand-Duché du Luxembourg, Luxembourg.

## Coal

### General notes

- For the 2011 edition, the Luxembourgian administration revised the time series from 2000 for most **coal** and coal products. Time series for **BKB** consumption were revised from 1990.
- Prior to 1978, some **sub-bituminous coal** may be included in **hard coal**.
- Steel production from blast furnaces ceased at the end of 1997.

## Oil

### Consumption

- In the late 1970s, the reduction in consumption of **fuel oil** in the iron and steel industry was due to substitution by coal.

## Natural gas

### General notes

- In 1982 there is a break in the time series in transformation and industry due to a change in methodology.

### Transformation

- In the 2017 edition a main CHP plant was reclassified as one main electricity plant and one main heat plant. Data were revised back to 2014.
- Since 2002, the increase in the transformation sector is due to a new 350-MW combined cycle power plant.

### Consumption

- In 2015, Luxembourg integrated supplementary data from ETS companies and industrial consumption was revised back to the year 2000.
- The breakdown of total final consumption for the latest year is preliminary and will be finalised in the 2018 edition of the book.
- Since 2012, the methodology to determine final consumption was changed in order to integrate basic data from National Accounts.
- Since 2000, a more detailed breakdown of final consumption data is available due to a change in methodology.
- Since 2000, consumption in the non-ferrous metals sub-sector is included in iron and steel for reasons of confidentiality.
- Since 2000 consumption in not elsewhere specified (Industry) includes activity of companies reclassified to preserve the confidentiality.
- Prior to 2000, residential consumption includes consumption in commercial/public services and agriculture/forestry.

## Biofuels and waste

### General notes

- The Luxembourgian administration started including trade figure of wood chips in trade figure of **solid biofuels** from 2015 data. This creates breaks in time series between 2014 and 2015.
- Data on **solid biofuels** are available from 1992.

### Transformation

- In 2011, the blending of **biogases** with **natural gas** started.

## Electricity and heat

### General notes

- Data for **solar thermal** are available starting in 2001 and for **solar PV** starting in 2000.
- A revision in the classification of power plants by type and the production and consumption data for both **electricity** and **heat** back to 2000 causes breaks in the time series.

### Supply

- Most of the **hydro** production shown for Luxembourg is from the Vianden pumped storage plant and is exported directly to Germany.
- Starting in 2005, data for **electricity** transmission and distribution losses were obtained from the network operator. Prior to that, they were estimated by the Luxembourgian administration.
- In the 2017 edition, following plant reclassification, **heat** production by main activity plants were revised from 2011 onwards.

### Transformation

- The production of electricity from **solid biofuels** from 2013 corresponds to the opening of a new plant burning wood wastes.
- Data on electricity production from biogases are available from 1998 and heat production from 2010.
- In 2002, the increase in electricity production is due to a new **natural gas** combined cycle power plant.
- At the end of 1997, the iron and steel industry stopped production of **electricity**.
- Electricity data for **natural gas** autoproducer CHP plants are available starting in 1995, and for main activity CHP plants starting in 1996.
- Prior to 1990, **net electricity** production by auto-producers includes production from combustible fuel sources only.

### Consumption

- In 2015, the observed declines in the **heat** used in the textiles and leather sector and the chemical and petrochemical sector lead to the closure of two industrial main CHP plants. The heating needs of these sectors were met through direct purchase of natural gas, due in part to attractive pricing during this period.

- In 2015, following the procurement of new information, data for **heat** distribution losses and **heat** consumption in industry and energy sectors were revised from 2000 onwards.
- A change in the data source caused some breaks in the industry **electricity** consumption time series between 2010 and 2011.
- The breakdown of **electricity** consumption in industry is not available from 1990 to 1999.

## Mexico

### Source

Secretaría de Energía, Mexico City.

### General notes

- Data are available starting in 1971.
- The Mexican administration submitted data directly by questionnaire for the first time with 1992 data. As a result, some breaks in time series may occur between 1991 and 1992. For prior years, data are partly estimated based on the publication *Balance Nacional - Energía*.
- In the 2016 edition, the Mexican administration completed a major work on revisions of the time series back to 1990. More revisions to historical data are pending.

### Coal

#### General notes

- The Mexican administration is currently undertaking major work on revisions of the time series back to 1990. For several products, only revisions back to 2003 have been provided. Some of these revisions could not be implemented in the 2016 edition. Further revisions to historical data are pending. Revisions for some products include reporting of new consumption flows, increased quantities of coal and higher calorific values, resulting in increases of total primary energy supply.
- The time series for **blast furnace gas** and inputs of **coke oven coke** to blast furnaces start in 1991.
- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.

#### Consumption

- Use of pulverised coal injection in blast furnaces occurs in Mexico, but is not currently reported.

- Oxygen steel furnace gas production and production of other **other recovered gases** occur as by-products of heavy industry, but are not reported.

### IEA estimations

- Trade of **coking coal** and **other bituminous coal** were estimated by the IEA Secretariat based on partner data for 2016p. Consumption data were also estimated for these coal types.
- For **coking coal**, amounts reported for consumption in main activity electricity generation and associated imports for the years 2003 to 2015 have been reallocated to **other bituminous coal** by the IEA Secretariat.
- **Blast furnace gas** production and consumption have been estimated by the IEA for 1990 to 2015 based on inputs of **coke oven coke** to blast furnaces in a ratio provided by Mexico, as are the proportions of **blast furnace gas** consumed in autoproducer electricity production, energy support for blast furnaces and consumption elsewhere in the iron and steel industry.
- **Coke oven coke** production was estimated by the IEA for some years between 1999 and 2012 based off historical and commodities data, as were inputs of **coking coal** to coke ovens between 1990 and 2012.
- The methodology currently used by Mexico to estimate production of **coal tar** and **coke oven gas** for recent years uses **coke oven coke** production as a guide. This was extended to the time series from 1990 to 2001, and to the years where **coke oven coke** production was estimated by the IEA.

## Oil

### General notes

- In the 2016 edition, major revisions were carried by the Ministry of Energy on the time series back to 1990 based on updated information available from PEMEX, the Mexican Institute of Petroleum and the Federal Electricity Commission (CFE). Revisions include notably crude production, refinery output, gas separation plant production, autoproducer generation and road consumption.
- New data reported in **additives** from 1990 corresponds to methyl tertiary butyl ether.
- From 1993 data, production *from other sources (natural gas)* of **other hydrocarbons** correspond to hydrogen used at the Minatitlan refinery, also represented as the output of *non-specified transformation* in the balances format.

- The split between domestic and international aviation consumption of **kerosene-type jet fuel** is not available. By default, all **kerosene-type jet fuel** consumption is reported under international aviation.

### Supply

- In the 2017 edition, refinery output of gas/diesel oil was revised downwards from 2005 onwards. These revisions result in large increases to refinery losses from 2005 onwards.
- NGL production reported in the IEA publications may be different from what is reported in the Mexican energy publications as the IEA includes in its oil data liquids produced in conjunction with natural gas.
- In the 2016 edition, **crude oil** production was revised from 2000 to 2004 based on updated information from PEMEX.
- In the 2016 edition, main revisions were carried to **NGL, LPG, naphtha, ethane** supply. New data became available on input of NGL to refineries prior to 2011. Data on ethane production from gas separation plants (positive transfers from NGL) was revised upwards for 1990 to 1998. LPG gas separation plant production was revised down. Naphtha refinery output was revised upwards from 1990.

### Transformation

- In the 2016 edition, data for crude oil refinery input and refinery output of **gas/diesel, naphtha, refinery gas, bitumen, paraffin wax and other products** were revised back to 1990 (see general note).
- Data for **fuel oil** and **gas/diesel** inputs to autoproducer CHP generation are available from 1999.
- In 2003, a new facility was added to a refinery to produce **petroleum coke**.

### Consumption

- In the 2016 edition, **naphtha** non-energy use consumption in the chemical/industry was revised significantly revised down from 1990 to 2008 based on PEMEX information.
- In the 2016 edition, **gas/diesel** and **motor gasoline** road consumption data were revised back to 1990 based on updated information from the Mexican Institute of Petroleum and PEMEX.
- Consumption of **lubricants, bitumen and paraffin waxes** are available from 1990 and **petroleum coke** from 1993.

- Prior to 1987, the split of **LPG** consumption between residential and commercial/public services has been estimated by the IEA Secretariat.

## Natural gas

### General note

- **Natural gas** reported in the IEA publications may be different from what is reported in the Mexican energy publications, as IEA includes only dry gas and excludes natural gas liquids, which are considered as part of oil.

### Transformation

- The split of natural gas used for hydrogen manufacture and used in refineries is not currently available and it will be provided in the 2018 edition of this publication.

### Consumption

- Losses and pipeline transport have been included in oil and gas extraction.
- From 1993 to 1999, part of energy industry own use and *non-specified industry* data were estimated.
- Since 1993, the breakdown of the energy sector and of other sectors is available.

## Biofuels and waste

### Supply

- Data for **bagasse** production are available from 2008.

### Consumption

- Data for **solid biofuels** used in autoproducer electricity plants from 1991 to 2005 have been estimated by the Mexican administration.
- Data on **biogases** consumption are available from 1997.

## Electricity and heat

### General notes

- The Mexican administration is currently undertaking revisions of the **electricity** time series back to 1996. Revisions include changes on inputs and outputs on power plants fuelled mainly by **combustible fuels** and the reclassification of main electricity plants previously reporting **sub-bituminous coal** as fuel to **other bituminous coal** for the period 2003-2015.

### Supply

- Production of main activity producer electricity plants from **wind** is available from 1994.
- Electricity production from **wind** and **solar photovoltaic** is available from 1990.

### Transformation

- New autoproducer electricity plants fuelled with **coke oven gases** were put on-line in 1999.
- Electricity production from **solid biofuels** and **biogases** data are available respectively from 1991 and 1997.

### Consumption

- Some electricity consumption in energy industry is included in the industry sub-sector where it was generated (e.g. the chemical industry, as well as in *non-specified industry*).
- Direct use of **solar thermal** heat is available from 1990.

## Netherlands

### Source

The Netherlands Central Bureau of Statistics, The Hague.

### General notes

- The Netherlands Central Bureau of Statistics has conducted reviews and revisions of their energy balance three times; in 2005, 2011 and 2015. The 2005 revisions were to improve basic energy statistics, particularly with respect to carbon and CO<sub>2</sub> reporting, while the 2011 revisions were part of a harmonization program with international energy statistics. The 2015 revisions were the result of increased data collection, availability of new source information, and further alignment with international energy definitions. More details are available here: [www.cbs.nl](http://www.cbs.nl).

### Coal

#### General notes

- International trade into and through the hub ports of Amsterdam and Rotterdam is complicated by the capacity to purchase coal directly at these points. The majority of coal passing through these ports is intended for consumption in European

countries other than the Netherlands, which is neither the country of origin or destination, therefore these data have been removed where possible.

- Following revisions made in the previous edition to data for 1995 onwards, this edition includes further revisions made by the Dutch administration for the period 1990 to 1994. These revisions are the result of increased data collection, availability of new source information, and further alignment with international energy standards.

### Supply

- From 2013 onwards, trade reported by the Central Bureau of Statistics includes **coal** in transit, to align more closely with gross trade data.
- In the 2013 edition, non-specified exports for 2011 were estimated by the Central Bureau of Statistics due to a lack of information from key market players.
- For data prior to 2011, stock changes for primary coal types were estimated by the Dutch administration based on trade and consumption data.
- For 1984 to 1986, production *from other sources* of **other bituminous coal** represents a stock of “smalls” washed for re-use.

### Consumption

- Prior to 1989, non-energy use is included with industry consumption.

## Oil

### General notes

- Data for gas/diesel road consumption become more difficult to collect in 2013, as the distinction in taxation between road diesel and gasoil was abolished.
- Following revisions made in the previous edition to data for 1995 onwards, this edition includes further revisions made by the Dutch administration for the period 1990 to 1994. These revisions are the result of increased data collection, availability of new source information, and further alignment with international energy definitions
- Motor gasoline includes other light oils until 1990.
- Some breaks in time series occur in 1990 when the Dutch administration started to report the petrochemical industry according to IEA methodology.
- From 1990 onwards, naphtha includes aromatics, naphtha and other light oils.

### Consumption

- Refinery gas includes chemical gas and is included in chemical industry consumption.

## Natural gas

### General notes

- The Netherlands Central Bureau of Statistics conducted revisions of natural gas data in the 2017 edition for years 1990-1994. These revisions were the result of increased data collection, availability of new source information, and further alignment with international energy definitions.
- Between 1981 and 1982, and between 1983 and 1984 there are breaks in time series due to the introduction of more comprehensive surveys on end-use consumption.

### Supply

- Natural gas production in 2015 decreased due to a production cap set by the government.
- Dutch trade figures include transit volumes.
- In the past, the amounts reported under production also included quantities coming from stock changes. The reason was that the Dutch administration could not distinguish between quantities of **natural gas** falling under marketable production and amounts being moved from offshore fields to onshore fields without undergoing any purification and/or other necessary production processes. From 2015, the data reported distinguish between amounts to be reported as production and amounts that should be classified as stock changes.

### Transformation

- The 2009 increase in input to main activity electricity consumption is due to the opening of a new plant in the second half of 2008.
- The 2008 increase in input to autoproducer CHP plant is due to a new autoproducer CHP plant which came on-stream.

## Biofuels and waste

### Supply

- From 2009 to 2012, and again from 2014 the production and trade of pure **biogasoline** were confidential; net imports were estimated by the Dutch administration based on consumption.



### Transformation

- Trade data for **municipal waste** are available from 2011.

### Consumption

- From 2014, a better allocation of heat own use was available for **biogas** digester prewarming, and in **municipal waste** burning plants for flue gas cleaning.
- The final consumption of **solid biofuels** in the residential and agriculture sector increased in 2014 due to the results of new surveys and parameters.

## Electricity and heat

### General notes

- In the 2017 edition, following an extended review of old national publications, data for the Netherlands were revised for the years 1990-1994 to follow on the revisions entered in the previous edition, covering period 1995-2013. This revision endeavours to maintain data comparability throughout the entire time series. As part of these revisions, most of the time series for the consumption sectors in both **electricity** and **heat** were revised using newly obtained data from grid operators' client files by the Dutch administration.

### Supply

- The decrease of electricity produced from **nuclear** in 2013 data is due to a maintenance period of two and a half months of one nuclear power plant in this year.
- Heat used for electricity production represents waste heat bought from other industries that was generated from **combustible fuels**.
- Electricity **from other sources** represents generation from expansion gases and chemical waste gases (the latter up to 2007).
- The large increase in **electricity** trade in 1999 is due to the liberalisation of the Dutch electricity market. Until 2003, trade data are based on contracted quantities instead of physical flows.
- The decrease of electricity produced from **nuclear** in 1997 is due to the closure for five months of one nuclear power plant.
- The increase of heat produced in main heat plants in 1995 is due to a change in ownership of one large installation, resulting in its reclassification from being an autoproducer to a main activity plant.

- Electricity production from **solar photovoltaic** is available from 1990.

### Transformation

- **Heat** in *non-specified transformation* represents waste heat bought from other industries that was generated from combustible fuels. The corresponding electricity output is included with that of natural gas.
- Autoproducer heat plants using **refinery gases** are included with autoproducer CHP plants because data are considered confidential.
- **Heat** production in commercial and public services includes production in agriculture.
- All municipal waste autoproducer electricity and heat only plants have been reclassified by Statistics Netherlands as autoproducer CHP from 2012, causing breaks in the time series.
- Prior to 2008, a few small autoproducer electricity plants using **solid biofuels** were included with main activity plants for reasons of confidentiality.
- In 2006, some **municipal waste** plants changed ownership and were reclassified from electricity only to CHP plants as they started heat projects.
- A new main activity producer CHP plant fuelled by **refinery gas** started up in 1999 and there was a fuel reclassification in 2000.
- For **natural gas**, all electricity production prior to 1998 and all heat production prior to 1995 is included in CHP plants.
- For **biofuels and waste**, all electricity and heat produced prior to 1995 is included in CHP plants.
- Data for net **electricity** production by autoproducers in the energy industry are not available prior to 1993.
- Data for heat produced from **biofuels and waste** are available from 1990.
- Prior to 1990, all electricity and heat produced from **coal** is included in CHP plants.
- Inputs of **hard coal** for electricity production from 1981 to 1989 in terajoules (TJ) are estimated by the Secretariat based on data submitted in kilotonnes (kt) by the Dutch administration.
- Net electricity production by autoproducers prior to 1988 includes production from **combustible fuel** sources only.
- Data for **heat** production by fuel in heat plants prior to 1987 are estimated by the Secretariat based on fuel inputs submitted by the Dutch administration.

- Data for heat production from main activity producer CHP plants and heat plants are available from 1982.
- Prior to 1982, **electricity** production from and inputs to main activity producer CHP plants are included with main activity producer electricity plants.
- For 1970 to 1973, **electricity** output from auto-producer CHP plants has been included with main activity producer CHP plants.

### Consumption

- Increasing **electricity** consumption in agriculture/forestry is due to expansion of greenhouse farming.
- Direct use of **geothermal heat** in agriculture/forestry starting in 2008 is due to a new project extracting deep **geothermal** heat.
- A new reporting methodology starting in 2005 causes breaks in the heat consumption time series.
- Prior to 1979, **electricity** consumption in agriculture is included in commercial and public services.

## New Zealand

### Source

Ministry of Business, Innovation and Employment, Wellington.

### General notes

- Prior to 1994, data refer to fiscal year (April 1993 to March 1994 for 1993). From 1994, data refer to calendar year.

### Coal

#### General notes

- **Peat**, although produced in New Zealand, is not used as a fuel, and is used for agricultural purposes only.
- In the 2014 edition, the definition of **hard coal** was aligned with the International Recommendations for Energy Statistics. Prior to this, **hard coal** for New Zealand from 1960 to 1977 had contained **sub-bituminous coal**. The portion of **sub-bituminous coal** production and residential consumption has been estimated by the IEA Secretariat for this period and moved to **brown coal**.

- In the 2011 edition, the New Zealand administration has revised some of the **coal**, natural gas, oil, renewable and electricity time series back to 1990.

### Supply

- Breakdown of exports of **coking coal** by country of destination for 2016p has been estimated by the IEA Secretariat, based on partner data.
- The decrease of **other bituminous coal** production in 2015 is due to a temporary shutdown in one of the coal mines at the beginning of 2015 and another one at the end of 2015.
- A detailed breakdown of exports of **coking coal** by country of destination between 2001 and 2011 is estimated by the IEA, based on secondary sources and partner data.

### Transformation

- **Sub-bituminous coal** inputs into coke ovens refers to coal that is merged with iron sands and limestone to form the inputs for the multi-hearth-furnaces, kilns and melters that produce direct reduced iron (Glenbrook Steel Site), with off-gases and supplemental and natural gas driving CHP plants. This method, while not the typical iron and steel process, produces similar by-products. The **sub-bituminous coal** inputs are reported under coke oven coke transformation and the resulting off-gases are reported as production of **coke oven gas** and **blast furnace gas**.
- **Blast furnace gas** production and distribution losses prior to 1998 are IEA Secretariat estimates. Portions of this gas will have been used for energy purposes in the multi-hearth furnaces or elsewhere in the plant. Some transformation efficiencies will appear higher than normal due to non-reporting of certain inputs, including some confidential data.

### Consumption

- In final consumption, some industry data are reported in *non-specified industry* for confidentiality reasons.
- In 2014, the increase in consumption of **sub-bituminous coal** in mines included the combustion of some unsold coal fines for safety reasons.
- Prior to 2010, the construction sector is included with commercial/public services.
- Prior to 2009, mining and quarrying is included in agriculture.

## Oil

### General notes

- In 2015, the following data were estimated by the IEA Secretariat: stock changes and consumption of lubricants; consumption of bitumen, and all figures for petroleum coke and other oil products.
- From 1998, **gas/diesel oil** includes light fuel oil. Until 1997, light fuel oil is under fuel oil.
- Until 1997, other hydrocarbons from natural gas sources correspond to synthetic gasoline production (ceased in February 1997).
- For reasons of confidentiality, beginning in 1994, the New Zealand administration no longer reports data on the production of methanol.

### Supply

- Between 2013 and 2014, the jump in imports of **kerosene-type jet fuel** can be explained by an anticipated strike at the refineries.

### Consumption

- Between 2009 and 2010, a break in time series appears for demand of **gas/diesel** as the administration changed its methodology for commercial/public services
- For 1960 to 1973, Consumption data have been estimated by the Secretariat.

## Natural gas

### Transformation

- The large 1998 increase in input to autoproducer CHP plants is due to two new autoproducer CHP plants.
- In February 1997, production of synthetic gasoline from natural gas ended.

### Consumption

- In 2014, non-energy consumption in the Chemical sector ran at full production for the first time in several years (mainly methanol production). This increase approximately matches the increase in natural gas production.
- Between 2012 and 2013 there are breaks in time series for the final consumption breakdown due to the introduction of a new survey.
- In 2005, the decline in chemical industry consumption was due to the closure of the Motunui

methanol production plant, which was then reopened in late 2008.

- Prior to 2003, gas consumed in industry includes some gas for energy industry own-use. Since 1990, detailed consumption breakdown for industry is available. From 1977 to 1979 and from 1986 to 1989, losses are included in statistical differences.

## Electricity and heat

### General notes

- There are several breaks in the time series between 1987 and 1988 due to a reorganisation of government departments during 1987.

### Supply

- **Heat** outputs from main activity and autoproducer CHP plants are not available.

### Transformation

- **Electricity** and **heat** production from **other sources** represents waste heat recovered and used for electricity production.
- For 2002 and 2003, **natural gas** autoproducer electricity includes generation of **electricity** from on-site heat/steam recovery during the combustion of carbon monoxide (CO) gas from the iron making reduction and melting process.
- In 1999, a reclassification of autoproducer plants causes some breaks in the time series.
- Data for **geothermal** electricity production by autoproducers are available from 1990.
- The New Zealand administration has updated efficiencies for **electricity** production from **geothermal heat** from 10% to 15% from 1990 onwards; this causes a break in the time series between 1989 and 1990.
- Data for heat from chemical processes used for electricity production are available from 1990 and corresponds to acid plants in the fertiliser industry where sulphur is the main input.
- **Electricity** production by autoproducers from natural gas and from oil has been estimated by the Secretariat from 1970 to 1973.

### Consumption

- A new survey starting from the 2013 data can cause breaks in data for final consumption of **electricity**.



- Data on direct use of **geothermal heat** are available from 1990 and direct use of **solar thermal heat** from 2002.
- From 1974 to 1993 distribution losses include the statistical differences.
- The classifications used by the administration of New Zealand were changed in 1991.
- Electricity consumption in paper, pulp and printing is included in wood and wood products prior to 1990.

## Norway

### Source

Statistics Norway, Oslo.

### Coal

#### General notes

- Other bituminous coal includes lignite.
- Production of **coking coal**, **coke oven coke** and **coke oven gas** ceased in the late 1980s.

### Supply

- The decrease of **other bituminous coal** production in 2015 is due to a temporary shutdown in one of the coal mines.
- The decrease of **other bituminous coal** production in 2005 is due to a fire in one of the coal mines; this entailed a break in the production for a large part of the year.

### Oil

#### General notes

- A major project is being carried by Statistics Norway in order to reduce the statistical differences observed between calculated supply and demand of oil in Norway. Starting with 2014 data, new methodologies have been introduced for reporting **crude oil**, **NGL** and **naphtha** (see details below). Balances for **motor gasoline**, **gas/diesel oil**, **kerosene-type jet fuel** and **fuel oil** are also under investigation. Further improvements are expected in future editions.
- The IEA Secretariat estimates the net calorific value for Norwegian **crude oil** based on the oil product outputs of the oil refineries.
- Prior to 1990, **ethane** is included with **LPG**.

### Supply

- **Crude oil** production includes condensates.
- Starting with 2014 data, Statistics Norway has changed the source for annual **crude oil** exports to include shipping information collected by the National Petroleum Directorate. Due to data unavailability, monthly export data remain based exclusively on Customs Statistics are significantly lower for 2014.
- Starting from 2014 data, there is a break in **naphtha** supply time series due to a change in reporting methodology adopted by Statistics Norway.
- Prior to 2002 data, part of **LPG** exports was reported as **NGL** exports.
- Since 1986, imports of **refinery feedstocks** are reported under the relevant oil product imports.

### Transformation

- In 2014, the strong decrease in **crude oil** refinery intake is linked to heavy maintenance work carried in the refineries in fall 2014.
- Starting with 1990 data, **gas/diesel oil** used for autoproduced electricity on oil and gas platforms are reported under energy industry own use.
- From 1970 to 1975, **gas/diesel oil** for electricity generation has been estimated by the Secretariat.

### Consumption

- Data on **naphtha** consumption in Norway are currently unavailable.
- Consumption of lubricants is reported within industry, as no further breakdown is available.
- In 2005 data, breaks in **petroleum coke** consumption time series appear due to reallocation in the industry sector. Refinery fuel is reported from 2001 data.
- In 2003 and 1993 data, breaks in time series appear for consumption in the chemical/petrochemical industry due to newly available information.
- Prior to 2000, **gas/diesel oil** used in fishing is included in agriculture/forestry.

### Natural gas

#### General notes

- For Norway, the supply of **natural gas** is the residual of two very large and opposite amounts: production and exports. As a result, large statistical differences in some years may lead to discrepancies in the growth rates of supply and demand of natural gas.

## Supply

- Since 2008 data on stocks are available.

## Transformation

- Since 2007, gas inputs to all electricity and CHP plants are included in autoproducer electricity plants for confidentiality reasons.

## Consumption

- In the 2017 edition, consumption figures for the industry sector and other sectors were revised back to 2010.
- Prior to 2008, **natural gas** amounts used in gas extraction by offshore platforms were not included in production data.
- Since 2002 domestic navigation is included under *non-specified transport*.
- The 2007 increase in *non-specified transport* is due to the wider use of gas-powered sea vessels.
- Before 2000, energy use in oil and gas extraction also included some final consumption amounts.
- In 1992 the increase in oil and gas extraction is due to the start-up of new fields.
- Consumption for pipeline transport is included in energy industry own use.

## Biofuels and waste

### General notes

- Prior to 2007, equal shares of renewable and non-renewable **municipal waste** were estimated because the actual split was not known.
- Data for **industrial waste** and **biogases** are available from 1991.

## Supply

- In 2014, the **biodiesel** production facility closed.
- **Data for liquid biofuels** imports are available starting in 2006.

## Consumption

- Distribution losses for **biogases** are included in commercial/public services prior to 2003.

## Electricity and heat

### Supply

- No data on electricity production from **solar** energy are submitted separately to the IEA by the Norwegian administration. They were estimated

until 2008 based on IEA PVPS implementing agreement.

- The electricity generated from **other sources** represents electricity from waste heat.
- Distribution losses includes statistical differences.
- Heat produced by autoproducer heat plants from chemical processes and from *other sources* and used for electricity production has been estimated by the IEA Secretariat for the period 1990 to 2006.
- Electricity production from wind is available from 1993.
- Data for **heat** production from heat pumps and electric boilers (including the electricity used for this production) are available from 1989.
- Data for heat production are not available prior to 1983.

### Transformation

- In the 2016 edition, Norway corrected the **industrial waste** consumption in heat plants, and reclassified some the corresponding heat output under other sources.
- In 2014, the large increase in heat produced by autoproducer heat plants from chemical processes is due to the opening of a new plant.
- Starting in 2007, data for **natural gas** electricity and CHP plants are aggregated in autoproducer electricity plants for confidentiality reasons.
- Breaks in the time series between 1996 and 1997 and between 2001 and 2002 are due to a re-classification of main activity producers and autoproducers.
- Data for heat production from biogases are available from 1995.
- Prior to 1991, net **electricity** production by autoproducers by industry sub-sector was estimated by the Secretariat based on data submitted by the Norwegian administration.
- Data on inputs and outputs in **heat** plants are not available prior to 1983 for main activity heat plants and prior to 1988 for autoproducer heat plants.

### Consumption

- Consumption of **electricity** for pipeline transport is included in oil and gas extraction.
- The breakdown of **heat** consumption by industry sub-sector was expanded in 1992, reclassified in 1994 and collected by a new reporting system in 1997.

## Poland

### Source

Central Statistical Office, Warsaw.

### Coal

#### General notes

- **Other recovered gases** which appear in the balances as output from blast furnaces include off-gases from zinc and copper smelting, ceramics kilns and steel production.

#### Transformation

- In the past two editions, the Central Statistical Office has revised their methodology which accounts for sold heat produced from autoproducer heat plants using **coking coal** and **other bituminous coal**, resulting in lower, but more accurate data for 2007 onwards.

#### Consumption

- Consumption in agriculture/forestry for **BKB**, and own use in power stations for **lignite** are residual flows, so may contain statistical differences and other consumption not reported elsewhere. As a consequence, changes in these time series may not be wholly representative of the activities shown.
- Prior to 2010, own use in coal mines included workers' take home allowance, which should be included in residential consumption.

### Oil

#### General notes

- From 1997, production *from other sources (natural gas)* of **other hydrocarbons** corresponds to hydrogen used in refineries, also represented as the output of *non-specified transformation* in the balances format.

#### Consumption

- In 2015, a new flue-gas desulphurisation unit was installed. As this unit facilitates high sulphur fuel oil burning in place of natural gas, this explains the increase in **fuel oil** consumption in oil refineries.

### Natural gas

#### Supply

- Exports include all the gas sold by companies operating in Poland (these are mainly re-exports).

#### Transformation

- *Non-specified transformation* data represent natural gas used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization in oil refineries.
- In 2013 and 2014 some CHP plants were used as backup reserve plants, resulting in a decrease in consumption under main activity producers CHP plants.
- In 2004 and 2005 small amounts of gas were used to start up main activity electricity plants.

#### Consumption

- Natural gas reported in associated production contains some heavier hydrocarbons. This results in a high gross calorific value for production.
- Distribution losses may include some statistical differences. *Non-specified energy* includes gas used for heating and pumping operations in the distribution network.

### Biofuels and waste

#### General notes

- Several breaks in the **industrial waste** time series are caused by difficulties in the classification of wastes.
- Data on **biodiesels** are available from 2005; **bio-gasoline** data from 2003; and **other liquid bio-fuels** data from 2009.
- In 2008, a new questionnaire was launched which increased the coverage of renewable and waste data.

#### Supply

- Under current Polish law, only producers and importers of **biodiesel** are obliged to fulfil the National Indicative Target of share of biofuels in the total usage of transportation fuels. Since the regulation is currently not applied to retail distributors they, for economic reason, rather export the **biodiesel** than sell it domestically. This results in low domestic consumption and increase of exports in 2016.
- Production of **other liquid biofuels** increased in 2015 because new companies started to report their biofuels production to the Polish administration.

#### Transformation

- Before 2000, **industrial waste** was used interchangeably with **light fuel oil** in some plants, which might result in breaks in the time series.

### Consumption

- Data for **biogases** refer only to the gas from fermentation of biomass.
- Until 1998, data for **industrial waste** include **other recovered gases** which have to be reported in Coal questionnaire, causing a break between 1997 and 1998.
- Between 1992 and 1993, due to data availability, there is a large increase in **solid biofuels** for residential, commercial/public services and agriculture/forestry.

### Electricity and heat

#### General notes

- Prior to 2010, **heat** supply and consumption can include autoproducers unsold heat. Previous attempts to address such issue may have caused breaks for heat production and fuel in autoproducer heat plants (1993) and in autoproducer CHP plants, and for heat consumption in industry sub-sectors.

#### Supply

- Electricity and heat from **chemical heat** and other sources are available from 2011. Prior to that, these amounts could be included under different categories.
- **Heat** distribution losses are available from 2010 and prior to that they are included in consumption.
- Heat production from heat pumps is available from 2009.

#### Transformation

- In the 2017 edition, the Polish administration revised electricity production data from power plants run by combustible fuels, reclassifying those that were previously reported as main activity CHP as main activity electricity plants. These revisions mainly affected coal-fired power plants and created breaks in time series from 2004 onwards.
- State support for biomass co-firing was reduced in 2016, resulting in electricity production from **solid biofuels** falling during this period (2016p).
- Due to a reclassification of plant types, there is a break in time series in 2015 for the generation of heat in autoproducer CHP plants in the iron and steel sector.
- In 2008 and 2014, a number of CHP plants were reclassified from autoproducer to main activity producer due to an industry re-organisation.
- Data for electricity production in autoproducer electricity plants are available from 1986.

### Consumption

- **Heat** consumption in energy industry own use includes process heat not sold before 1995.
- Data for direct use of **geothermal heat** are available from 2000 and direct use of **solar thermal heat** in commercial/public services from 2002 and in residential from 2009.
- In the 2017 edition, the Polish administration reclassified some amounts of electricity consumption from the chemical and petrochemical sector to oil refineries, following access to improved survey methods.

## Portugal

### Source

Direcção-Geral de Energia e Geologia, Lisbon.

### Coal

#### General notes

- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.

#### Consumption

- Between 1997 and 2001 **gas works gas** was gradually replaced by **natural gas** in the commercial/public service and residential sectors.
- The production of pig iron ceased in the first quarter of 2001, leading to decreases in supply and consumption of **coking coal**, **coke oven coke**, **coke oven gas** and **blast furnace gas** in 2001.

### Oil

#### General notes

- The increase in refinery throughput in 2015 is a result of increased refinery capacity linked to the expansion of the Sines refinery.
- A new hydrocracking unit started operations in Sines Refinery in April 2013. This explains the 2013 increase in **refinery feedstock** imports, as well as middle distillate production.

#### Supply

- Production *from other sources (natural gas)* of **other hydrocarbons** correspond to hydrogen used in refineries, also represented as the output of *non-specified transformation* in the balances format.

### Consumption

- Consumption of **gas/diesel oil** in industry and commercial/public services represents diesel use in mobile fleets.

### Natural gas

#### Supply

- In February 1997, Portugal started to import natural gas.

#### Transformation

- Since 2012, data reported for *non-specified transformation* represent natural gas used for hydrogen manufacture. Prior to this year, these quantities are reported under oil refineries.
- The 2002 decrease in natural gas used for gas works is due to the closing of the Lisbon gas works plant in May 2001.

### Biofuels and waste

#### General notes

- Data for **solid biofuels** were revised by the National administration from 1990 to 2001, which may result in breaks in time series between 1989 and 1990.
- Data are available from 1994 for **biogases**, from 1999 for **municipal waste** and from 2003 for **industrial waste**.

#### Consumption

- Data for **solid biofuels** were further revised based on a new survey on industry, resulting in breaks in sub-sectoral consumption for 2012.
- Between 2009 and 2010 a new survey on energy consumption in households creates a break in time series in the **solid biofuels** consumption in residential time series.

### Electricity and heat

#### Supply

- Data for production of electricity from **solar photovoltaic** and **wind** are available from 1989.

#### Transformation

- Electricity production from **other oil products** refers to methanol.

- In the 2017 edition, the data for production of **electricity** by autoproducer hydro plants were revised between 1990 and 1999, according to a new national methodology.
- In 2007, some power plants that were previously reported as main activity CHP have been reclassified as autoproducer CHP.
- In 2007, the power station that burns **industrial waste** started to work as a CHP plant, whereas previously it was only producing electricity.
- New plants fuelled by **solid biofuels** and by **municipal waste** started in 1999.
- Prior to 1992, data for net electricity production by autoproducers include production from combustible fuel sources only.
- Data for production of **electricity** in main activity producer CHP plants and the associated fuel inputs are not available prior to 1980.

#### Consumption

- In the 2017 edition, the Portuguese administration reclassified some amounts of heat consumption from the residential to the commercial and public services sector for the period 1998 to 2014 following a new national methodology.
- Data for direct use of **solar thermal heat** is available from 1989 and direct use of **geothermal heat** from 1994.

## Slovak Republic

### Source

Statistical Office of the Slovak Republic, Bratislava.

### General notes

- Data are available starting in 1971.
- The Slovak Republic became a separate state in 1993 and harmonised its statistics to EU standards in 2000. These two facts lead to several breaks in time series between 1992 and 1993, and between 2000 and 2001.

### Coal

#### General notes

- Data for **anthracite**, **patent fuel** and **coal tar** all begin in 2005. Prior to this, **anthracite** was included with other hard coals, and **patent fuel** and **coal tar** data were not reported.



- Since 2005, data for **coal tar** and **patent fuel** are based solely on trade receipts. Production of **coal tar** which is consumed within the national boundary is not reported. Consumption of **patent fuel** adopts the residual methodology for statistical differences described above.
- Breaks in time series may exist between 2000 and 2001 as the result of the implementation of a new survey system.
- Commercial/public services also includes statistical differences for **other bituminous coal**, **lignite**, **patent fuel** and **coke oven coke** from 1980 onwards and **BKB** from 1989 onwards.

## Oil

### General notes

- From 2001 onwards, **kerosene type jet fuel** includes small amounts of **other kerosene**.

### Transformation

- Between 2008 and 2009, one of the companies changed its status from autoproducer CHP plant to main activity producer CHP plant, resulting in a decrease in **fuel oil** consumption for autoproducer CHP.

### Consumption

- For **gas/diesel** oil, road data include rail use.
- Small quantities of **kerosene-type jet fuel** used for domestic aviation are included in international aviation bunkers data.
- Data for energy use of **white spirit** are not available.

## Natural gas

### General notes

- Data for losses were not available between 2009 and 2013.
- Between 1970 and 1971 and between 1978 and 1979, there are breaks in time series due to a revision of data for 1968-1969 and 1979-92 made in 2003. Data for 1970 were estimated by the Secretariat.

### Supply

- In 2002 the gross calorific value (GCV) of production increased significantly as extraction from a field with a low GCV ended.

- Imports include gas used for pipeline compressor stations.

### Transformation

- In 2014, the decrease in autoproducer CHP plants consumption was due to a plant closure.
- Amounts in *non-specified transformation* mainly represent natural gas used for hydrogen manufacture. This hydrogen is used for hydrodesulphurization and for hydrocracking in oil refineries.

### Consumption

- In 2001, there is a break in time series for energy use in oil and gas extraction due to the application of the IEA's definition starting that year.
- There are inconsistencies in the time series of commerce/public services as this sub-sector was computed as a residual.

## Biofuels and waste

### General notes

- Prior to 2001, the data reported as **industrial waste** include **biogases** and **municipal waste**.

## Electricity and heat

### General note

- Data for **solar photovoltaic** are available from 2010.

### Transformation

- Electricity and heat production from combustible fuels from 1990 to 2003 have been estimated based on the data on fuel used for electricity and heat plants reported in the annual fuel questionnaires.
- Prior to 2001, electricity generation from primary **solid biofuels**, **municipal waste** and **biogases** are included with **industrial waste**.

### Consumption

- The low electricity consumption in oil refineries in 2003 and 2004 is due to a change in ownership and work carried out on a refinery.
- Data for direct use of **geothermal heat** are available from 2001 and direct use of **solar thermal heat** from 2005.

## Slovenia

### Source

Statistical Office of the Republic of Slovenia, Ljubljana.

### General notes

- A new energy data collection system was implemented in January 2001, causing some breaks in time series between 1999 and 2000.
- Data for Slovenia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.

### Coal

#### Transformation

- In 2015, one of the main activity electricity plants burning lignite ceased its operations.

### Oil

#### Supply

- Between 2013 and 2014, a break in imports and exports time series for **kerosene-type jet fuel** and **fuel oil** appears due to improvements in reporting methodology. New trade corresponds to imports that are first stocked on Slovenian territory and later re-exported.

#### Consumption

- Time series for **motor gasoline** and **gas/diesel** consumption in road fluctuate as they are computed by the Slovenian administration as residual between the supply and the total consumption of all other categories.

### Natural gas

#### Transformation

- In 2014, improvements in a CHP plant resulted in a substantial reduction of natural gas consumption in this sector.

#### Consumption

- In 2011 the decrease in the chemical sector consumption is due to minimal use of gas for production of methanol.
- There are inconsistencies in the time series for commercial/public services as this sub-sector is computed by the Slovenian administration as a residual.

## Biofuels and waste

### Consumption

- The break in time series between 2008 and 2009 for **solid biofuels** is due to revisions based on a new household survey which is to be carried out on an annual basis.
- Breaks in total final consumption for **industrial waste** prior to 2008 are a result of a sectoral reclassification.

## Electricity and heat

### Consumption

- Direct use of **solar thermal** and **geothermal heat** is available from 2009.
- Surveys for data on heat consumption are available from 2003 onwards for the residential, industry and energy sectors. Prior to 2003, the data have been estimated by the Slovenian administration.

## Spain

### Source

Ministerio de Energía, Turismo y Agenda Digital, Madrid.

### General notes

- Spain is currently working on improving its data collection system. Therefore breaks in time series are present in the data and historical revisions are expected in the 2018 edition.

### Coal

#### General notes

- The calorific values for **sub-bituminous coal** are correct on an as received basis, and comply with definitions of **sub-bituminous coal** on a moist, but ash free basis.

#### Supply

- **Lignite** mining ceased in 2008.

#### Transformation

- Data associated with the **coke oven coke** transformation process are under review by Spain and revised data are pending.

## Oil

### General notes

- A change in the reporting system occurred mid-1996 resulting in some breaks in time series.

### Supply

- The rise in crude production in 2013 is linked with the development of the Montanazo-Lubina deep off shore field.

### Consumption

- A more detailed breakdown in some consumption time series appears between 2012 and 2013 due to an update and improvement in the reporting methodology.

## Natural gas

### Transformation

- Due to the implementation of an updated tool for gathering information on electricity generation plants in 2013 many autoproducer electricity plants were reclassified as autoproducer CHP plants.
- In 1997, the increase in input to main activity producer electricity is due to two main activity producer electricity producers running on natural gas.
- Between 1993 and 1994 there is a break in time series in autoproducer CHP plants consumption, since a new survey revealed a large number of CHP autoproducers that were previously included in industry consumption.
- Since 1990 the decrease of natural gas inputs into gas works gas production is due to the substitution of natural gas by manufactured gas.

### Consumption

- Since 2001, the final consumption breakdown is estimated by the Spanish administration.
- Between 2005 and 2006 there are some breaks in time series for the energy industry own use and for final consumption due to a change in the estimation methodology.
- Since 1988 the increase of natural gas used as feedstock is due to a substitution of naphtha for the production of fertilisers.
- Prior to 1982 natural gas consumption in textiles and leather, transportation equipment and machinery has been included in *non-specified industry*.

## Biofuels and waste

### General notes

- The Spanish administration verifies that production and consumption of **industrial waste** do exist but data are not available after 2001.

### Transformation

- From 2013 data, a revision of the industry sector of some companies causes breaks in time series for **solid biofuels, municipal waste and biogases**.

### Consumption

- Prior to 2006, inputs of **biogases** used to generate process heat were erroneously included as inputs to transformation when they should have been reported in the appropriate industry in final consumption.
- The breakdown of **solid biofuels** direct use in the industry sector prior to 1999 is not available.

## Electricity and heat

### Supply

- Electricity reported under *other sources* is from waste heat.
- Transmission and distribution losses are estimated by the Spanish administration.
- Data for electricity from **solar thermal** plants are available from 2007.
- Starting in 2006, a new method was used to estimate the losses from final consumption, resulting in a break in time series between 2005 and 2006.
- From 2005, residential rooftop **solar photovoltaic** electricity production data, previously reported under autoproducer, are included in main activity electricity plants according to the Spanish administration classification.
- Electricity production from **wind** and **solar** are reported from 1989 when data became available.

### Transformation

- In the 2017 edition, a change in reporting methodology resulting in reclassification of plants from autoproducer **electricity** to autoproducer CHP has led to breaks in electricity production in auto-electricity plants between 2012 and 2013 and 2014 and 2015. The administration anticipates further revisions to the time series in subsequent cycles.



- In 2008, a reclassification of plants from main activity to autoproducer has led to breaks in electricity production between 2008 and 2009.
- The National Energy Commission reclassified plants that consume **biogases**, leading to breaks in time series between 2007 and 2008.
- In 2000 and 2006, many plants were reclassified from main activity producer to autoproducer or vice versa.
- For 2004 and 2005, electricity production from gas/diesel oil is included with fuel oil.
- The large increase in electricity output from main activity producer electricity plants fuelled by natural gas in 1997 is due to the opening of a new plant.
- Prior to 1989 inputs and outputs from the use of **biofuels and waste** to generate electricity and/or heat (i.e. comprising **solid** and **liquid biofuels**, **industrial waste**, **municipal waste** and **biogases**) are reported under non-specified **biofuels and waste**.
- Prior to 1987 **electricity** production in main activity producer CHP plants is included with production from main activity producer electricity plants.
- From 1983, net **electricity** production by auto-producers has been estimated by the Spanish administration, and includes production from combustible fuel sources only and net electricity production by autoproducer CHP plants is included in electricity plants.

### Consumption

- For 2012, the **electricity** consumption data are estimated by the Spanish administration.
- Data for direct use of **solar thermal heat** are available from 1994.
- Data for direct use of **geothermal heat** are available from 1990.
- **Electricity** consumption under the *non-specified industry* category includes the consumption for the manufacture of rubber and plastic products, furniture, repair and installation of machinery and equipment (except repair and maintenance of ships and boats) and other manufacturing. This aligns with the Classification of the Economic Activities in the European Community (NACE) group code 22 and 31 to 33 (excluding class 33.15).

## Sweden

### Sources

- Statistics Sweden, Örebro.
- Swedish Energy Agency (Energimyndigheten), Eskilstuna.

### Coal

#### General notes

- **Peat products** data may be reported under the category of **peat**, particularly for imports.
- Autoproducer inputs to waste heat production that are sold are reported in the respective final consumption sectors and not in transformation.
- Some mixture of LNG with air to form a lower calorie product is reported as **gas works gas** production replacing traditional gas works gas manufacture.

#### Supply

- **Other bituminous coal** production until 1992 is coal recovered during the quarrying of clay.

### Oil

#### General notes

- Swedish stock data include peacetime crisis stocks. Since these stocks may be held in **crude oil** instead of oil products, there may be occurrences of negative stock levels for products.
- Data are available from 2003 for **refinery gas** and from 2000 for **additives** and **ethane**.
- Beginning in 2002, Sweden has changed some of the conversion factors for some products. That explains the small breaks in time series between 2001 and 2002.

#### Transformation

- In 2014, **gas/diesel oil** inputs to main activity CHP electricity plants are confidential and aggregated with **fuel oil**.
- In 2013 data, the drop in **crude oil** refinery intake is related with maintenance in August and September 2013 at the Swedish refineries.
- From 2011, the country's gas works plants stopped using **naphtha**.

### Consumption

- Starting from 1995 data, Sweden has changed its standard classification of industry sub-sectors
- Between 1985 and 1986, there are breaks in consumption time series of **fuel oil** due to more detailed reporting.
- In 1984 data, consumption of **other kerosene** in the road sector is discontinued due to product re-classification.

### Natural gas

#### Transformation

- Since 2005, the natural gas inputs to gas works has been estimated by the IEA Secretariat.
- Autoproducer inputs to waste-heat production that are sold are reported in the respective end-use sectors and not in the transformation sector.

#### Consumption

- For 2013, data for the energy use of gas by oil refineries have been estimated by the IEA Secretariat.
- For 2008, data for total final consumption and its breakdown have been estimated by the IEA Secretariat based on other Statistics Sweden publications.
- For years prior to 1993, road transport is included in commercial/public services.

### Biofuels and waste

#### General notes

- There are some breaks in time series between 2015 and 2016 in pumped hydro, **industrial waste** and **other liquid biofuels** figures due to the lack of data. The figures are expected to be modified in the 2018 edition.
- From 1990 to 2006, **municipal waste** was reported as 60% non-renewable and 40% renewable. In 2007, reanalysis of the waste revealed the content was 40% non-renewable and 60% renewable. This results in breaks in the time series between 2006 and 2007 for both renewable and non-renewable **municipal waste**.

#### Supply

- For 2015, data for **primary solid biofuels** were revised downwards because estimated figures in the last edition came from quarterly surveys

whereas in this 2017 edition, final statistics for 2015 are published.

### Consumption

- Due to confidentiality issues, **solid biofuels** consumption in food, beverages and tobacco is reported with paper, pulp and printing for 2014 data.
- Consumption data by sector for **biogases** are available from 2011.
- In 2011 data, there was a change in the reporting methodology for consumption of solid biofuels and waste in the residential sector, which is responsible for breaks in time series between 2010 and 2011.

### Electricity and heat

#### Supply

- Inputs to **heat pumps** include heat recovered from industry and from ambient sources (including sewage and seawater).
- Ambient heat is shown as the indigenous production of **heat**.
- Information on heat for sale produced in **heat pumps** and **electric boilers** is available starting in 1992.

#### Transformation

- In Sweden, heat produced in **heat pumps** is sold to third parties (as district heat) and is therefore included in transformation.
- The electricity used to drive **heat pumps** is considered to be transformed and appears as output in transformation rather than as electricity used in energy industry own use.
- Heat production from **solid biofuels** in autoproducer CHP includes waste heat and chemical heat.
- For 2012 and 2013, small quantities of bi-methanol used to produce electricity are included in **other liquid biofuels**, under production, as well as input and output of autoproducer CHP.
- For 1997 and 1998, heat production from **liquid fuels** in main activity producer CHP plants includes heat recovered from flue-gas condensing.
- Prior to 1992, data on electricity production from **biogases** is included with **solid biofuels**.
- Heat produced for sale by autoproducer CHP plants is reported starting in 1992.

- From 1987, the breakdown of net **electricity** production by industry for autoproducer electricity plants is available.
- Prior to 1987 net **electricity** production by autoproducer plants includes data for CHP plants only.
- Prior to 1980, **heat** produced in main activity producer heat plants is not available.
- Prior to 1974, **heat** produced in main activity producer CHP plants is not available.

### Consumption

- Consumption of electricity for distribution of district heat is included with other energy industry own use.
- Fuel inputs to the **heat** that is recovered by the heat pump are reported in the appropriate industry sub-sector (i.e. chemical and paper, pulp and printing).
- In 2014, consumption of **electricity** in the mining and quarrying and the pulp, paper and printing sectors are confidential and were incorporated under the *non-specified industry* sector.
- Data on direct use of **solar thermal** are available from 1989.
- Consumption of **heat** in industry and other sectors is available from 1984.

## Switzerland

### Sources

- Swiss Federal Office of Energy (SFOE), Ittigen.
- Carburas – Swiss Organisation for the Compulsory Stockpiling of Oil Products, Zurich.

### General notes

- From 1999, data on consumption result from a new survey and are not comparable with data for previous years.

### Coal

#### General notes

- Calorific values for **anthracite, other bituminous coal** and **coke oven coke** are taken from a common default figure. Calorific values for **lignite** are also default, but are based on dried **lignite** fines which have a higher calorific value.

### Consumption

- From 1985, industrial consumption of **gas works gas** is reported in *non-specified industry* to prevent the disclosure of commercially confidential data.
- The allocation of consumption between certain coal types is estimated by the Swiss administration.

### Oil

#### General notes

- The statistical differences for **gas/diesel oil** are partly due to changes in consumer stocks.
- In 2004, **petroleum coke** production started due to the installation of a cracking unit in a refinery
- As of 1993, the Swiss administration has reported figures for **naphtha** that are net of quantities used for blending into motor gasoline. For 1994, 1995, 1997, 1999, 2001 and 2002 this reporting has led to negative production numbers for naphtha. For these years, the IEA Secretariat has moved the data into transfers and reduced the production of motor gasoline by corresponding amounts.

### Supply

- In 2015, low refinery throughput is due to maintenance in May and June and to an unplanned outage in October due to a leak in a heat exchanger, both at the Cressier refinery. This also led to increased imports of many oil products in 2015.
- In 2015, the drop in refinery output of **petroleum coke** was due to the temporary closure of the Collombey refinery.

### Transformation

- **Gas/diesel oil non-specified transformation** represents inputs to mobile and stationary power generators, of which the electricity output is unknown at this stage.
- In 2012, low refinery intake is due to the temporary shutdown of the refinery in Cressier in the first semester of 2012 and maintenance at Collombey refinery.
- In 1988, the reduction in refinery intake of refinery **feedstocks** in 1988 is partly due to a switch to crude oil and partly to a shutdown for maintenance of a refinery.

### Consumption

- In 1994, the increase in consumption of **gas/diesel oil** is due to consumer stock-building prior to the introduction of a value-added excise tax on heating fuels as of 1 January 1995.

## Natural gas

### General notes

- The statistical difference is reported under Agriculture/Forestry, and it is not possible to differentiate between the two.

### Transformation

- Since 2013 there are fluctuations in gas consumption of main activity producers CHP plants due to the fuel flexibility of a plant.
- In 1996, the increase of gas input to main activity CHP plants is due to more complete accounting for all producing entities.

### Consumption

- Between 1977 and 1978, there are breaks in time series due to the introduction of a new survey by industry type.

## Biofuels and waste

### Supply

- Due to a new program launched in September 2014 in which CO<sub>2</sub> emissions due to traffic can be compensated by substituting fossil gasoline and diesel by biofuels, the imports and road consumption of **biodiesels** and **biogasoline** increased sharply in 2015.

### Consumption

- Consumption data for **biogases** in the transport sector are available from 1996 to 2012 as a biogas fuel station had stopped selling biogas in 2013.

## Electricity and heat

### Supply

- **Heat** production includes heat produced by nuclear power stations and distributed to other consumers.
- Data for electricity production from **wind** are available from 1996.
- Data for **solar** electricity production by auto-producers are available from 1990.

### Transformation

- For 2015, the large decline in **electricity** and **heat** production from **industrial waste** is due to one large main activity CHP plant significantly reduces their activity.

- From 2012, the **municipal waste** autoproducer plant previously reported as electricity plant met the CHP requirements and was reclassified as such.
- **Biogas** is no longer being used for heat production as of 2011.
- The decrease in the use of **natural gas** in main activity CHP plants in 2007 is caused by the reduced operation of one plant after the start-up of a new waste-incineration plant and the shutting down of another plant. Use increases again in 2008 due to the re-starting of a district heating plant.
- The autoproducer heat plant that produced heat for sale using **municipal waste** was closed in 2006.
- The breakdown of **electricity** and heat generation from autoproducers by sector is not available after 1990.
- Prior to 1978, data for **heat** output from CHP plants are not available.
- The allocation of **electricity** production in main activity producer electricity only and CHP plants between 1967 and 1973, and in main activity producer CHP and autoproducer CHP plants in 1974 are Secretariat estimates.
- All **hydro electricity** production is reported under large scale hydro (> 10 MW) due to the fact that production data are not being collected by different size capacity categories.

### Consumption

- **Electricity** consumption in the transport equipment industry is included with machinery.
- **Geothermal** direct use is overstated as it refers to heat production by **geothermal heat** pumps, which include inputs from electricity and/or gas in the transformation process.
- The breakdown of final consumption of electricity in the industry sector from 2000 to 2001 was estimated by the Secretariat.
- Data for direct use of **geothermal** heat and **solar thermal** heat are available from 1990.

## Turkey

### Sources

- Ministry of Energy and Natural Resources (Enerji ve Tabii Kaynaklar Bakanlığı), Ankara.
- Petrol İşleri Genel Müdürlüğü, Ankara.



## Coal

### General notes

- In the 2017 edition, historical revisions on **coal tar** data were conducted by the Turkish administration due to new available information.
- In the middle of 2014, most autoproducer electricity, heat and CHP plants in Turkey were reclassified as main activity producer due to a change in the legislation. This has resulted in electricity and heat amounts for autoproducer plants to record sharp generation changes from 2014 onwards.
- Data from 2012 onwards utilised the latest census data, causing breaks in time series between 2011 and 2012.
- Data from 2008 are provided from the results of an improved questionnaire. Significant changes occur in consumption patterns within the iron and steel industry, coal mining as well as across industry, residential and commercial/public services for **other bituminous coal**.
- Calorific values for fuels used for electricity, CHP and heat plants are obtained from data submitted to the Ministry of Energy and Natural Resources (MENR) by the Turkish Electricity Transmission Company, and these values may differ significantly from production and import values provided by MENR, causing imbalances for some years.
- Production of **gas works gas** declined in 1989 due to plant closures; the last plant closed in 1994. Use of **gas coke** and **gas works gas** ceased in 1994.
- Due to government regulations in industry and residential, in particular, there has been a shift from the use of domestically produced **coal** to imported **coal** and **natural gas**.

### Transformation

- In the middle of 2014, most autoproducer plants in Turkey were reclassified as main activity producer due to a change in the legislation. Amongst other things, this brought the reporting of unsold heat and prorated inputs in line with IEA methodology.

### Consumption

- Privatisation of state owned coke ovens in recent years results in incomplete information on **coke oven gas** distribution.
- In 2017 edition, consumption of **sub-bituminous coal** in construction has been reclassified by the

Turkish administration as consumption in the non-metallic minerals industry.

- In 2015, a new survey was introduced by the Turkish administration to collect more detailed industrial consumption data, resulting in breaks in time series between 2014 and 2015.

## Oil

### General notes

- A project to upgrade the İzmit refinery was completed in 2015. This resulted in considerably higher refinery throughput in 2015, compared to previous years. The project included a new unit to convert high sulphur fuel oil into higher grade products, such as gas/diesel oil and motor gasoline, and producing petroleum coke as a by-product.
- In the 2016 edition, the Ministry of Energy revised time series for **kerosene-type jet fuel** from 2013. Sales to foreign airlines, previously accounted for under exports, are now reported under international aviation according to the IEA methodology. Data could not be revised for prior years. Exports of **jet kerosene** up to 2012 years may include international aviation consumption.
- In the 2016 edition, the Ministry of Energy revised crude oil net calorific values from 2010 due to a new methodology for calculating them.
- Production from *other sources (natural gas)* of **other hydrocarbons** corresponds to hydrogen used in refineries, also represented as the output of *non-specified transformation* in the balances format.
- From 2013, marine fuels are reported under **fuel oil** instead of **gas/diesel oil**.
- From 2012, **petroleum coke** data are reported.

### Supply

- In 2014, the drop in **lubricants** imports and consumption is related to a legislation change effective 1st of January 2014 regarding base oil imports.
- From 2012, new information on **additives** imports (MTBE) data became available.
- From 2012, no exports breakdown is available for **white spirit, lubricants, bitumen** and **other products**.
- From 2010 more accurate NCVs for Crude Oil are available due to the implementation of a new survey.

- In 1984, 1983, 1981, 1980 and 1978, international marine bunkers are included in exports.

### Transformation

- **Gas/diesel oil** and **fuel oil** consumed to produce electricity are used in both oil and coal-fired plants.

### Consumption

- For the 2015 data, new surveys were used to create a more detailed breakdown of the industry and other sectors. This led to breaks in time series between 2014 and 2015.
- From 2014, information on gas/diesel consumption in fishing is available.
- From 2013, additional information on **petroleum coke** cement consumption is available.
- Prior to 2012, consumption of **other oil products** in the chemical sector was included under *non-specified industry*.
- Between 2010 and 2011, breaks in consumption time series for **LPG**, **motor gasoline** and **gas/diesel oil** appear due to improved survey methods.
- Between 1977 and 1978, the end-use classification of **gas/diesel oil** and **fuel oil** were changed in the Turkish national statistics resulting in breaks in time series.

## Natural gas

### Supply

- Exports reported by the Turkish administration represent transit gas.
- In 2008, there is a break in time series for stock change due to a revision of storage capacity.

### Transformation

- *Non-specified transformation* of natural gas represents amounts used to produce hydrogen for hydrocracking in refineries.

### Consumption

- In 2015, a new survey was introduced by the Turkish administration to collect industrial consumption data, resulting in a substantial decrease of consumption reported under *non-specified industry*.
- In 2013, energy use of **natural gas** in blast furnaces was zero, as gas was replaced by coal and coke.
- From 2009, there are some breaks in time series across all sectors, as consumption data started

being collected by a different institution, the Turkish Energy Market Regulatory Authority.

- In 2006, there is a break in time series for non-energy use in chemical industry due to improvements in the classification.
- Prior to 2000, data for commercial/public services were included in the residential sector.
- Between 1999 and 2001, the decrease in natural gas petrochemical feedstocks is linked to the activity of the fertiliser industry.
- Since 1988, data for natural gas consumption in the chemical industry (for fertilisers) and in *non-specified industry* (dye industry) are available.
- *Non-specified industry* includes the natural gas distributed by OIZ (Organised Industrial Zones).

## Biofuels and waste

### General note

- The Turkish administration only intermittently surveys **renewables and waste** used for power and heat. Due to this fact, some breaks may appear in the **biofuels and waste** time series.

### Consumption

- Prior to 1998, consumption in the **wood and wood products** sector includes that of the paper, pulp and printing industry.

## Electricity and heat

### Supply

- *Other sources* **electricity** and **heat** production is available from 2013 and represents purchased steam (waste heat) from the industry.
- Electricity production from **wind** is available starting in 1998.

### Transformation

- In the 2006 edition, the Turkish Statistical Office started providing **electricity** and **heat** output on the basis of a new survey that revised time series back to 2000. This causes breaks in the time series between 1999 and 2000. Not all of the input time series have been revised.
- A new gas-fired main activity producer CHP plant was put into operation in 1999 and a new auto-producer electricity plant fuelled with coking coal started in 2000.

- In 1995, the Turkish administration reclassified autoproducer plants by type and source to be consistent with IEA definitions. This caused breaks between 1994 and 1995 for electricity production.
- Data for blast furnace gas for electricity and heat generation are available from 1995.
- Data on electricity generated from **biofuels** are available from 1991.

### Consumption

- Consumption data in the machinery sector includes transport equipment.
- Comprehensive data on electricity consumption are available from 1973. This causes a break in the time series between 1972 and 1973.

## United Kingdom

### Source

Department for Business, Energy and Industrial Strategy (BEIS), London.

### Coal

#### General notes

- Oxygen steel furnace gas data are reported with **blast furnace gas** rather than as **other recovered gases**.
- In the 2017 edition, calorific values of **other bituminous coal** were revised for the period 2002-2015 due to a change in the methodology, impacting all flows.
- Prior to 1994, the consumption of substitute natural gas is included with **natural gas** while its production is included with **gas works gas**.

#### Transformation

- The consumption of **solid biofuels** increased in 2015, as the largest power station in the UK converted a further unit from **coal** to **biomass** mid-year, and the previously converted unit had a full year of operation in 2015 rather than just the last few months of 2014.
- The market decline in use of **other bituminous coal** from 2013 onwards for autoproducer electricity generation was due to a plant being sold to a dedicated main-activity electricity producer.

### Consumption

- Consumption shown for the commercial/public services includes consumption of some of *non-specified other*.

### Oil

#### General notes

- In the 2016 edition, data for consumption of **gas/diesel oil** were revised back to 2012 inclusive, following the UK administration's improved access to customs trade data, in particular duty figures for demand in agriculture. Additional information on the destination of some upstream NGL was obtained from 2008. Previously classified as exports, these amounts now appear as transfers, mainly to LPG, then as consumption in the petrochemical sector. In the 2016 edition, naphtha refinery output was revised from 2008 to better reflect the blending of naphtha in motor gasoline.
- In the 2016 edition, **LPG** data were revised from 2008. Revisions were made to refinery output and additional consumption in petrochemical sector was recorded. As a result, new breaks in time series may appear from 2008.
- For international marine bunkers and domestic navigation, a different bunkers methodology is applied from 2008, in line with UK's National Atmospheric Emissions Inventory. From 2013 onwards, improved data are available for international marine bunkers. Deliveries to international marine bunkers may be underestimated in previous years.
- For consumption of oil products, the UK administration revised its methodology from 2008 to better track consumption of imported oil products and domestically refined oil products sold through third parties to final consumers.
- Breaks in time series appear in 2013 for **ethane, naphtha, white spirit, lubricants, bitumen, petroleum coke and other oil products**, as new information became available on the energy use of these products.
- From 2002 to 2004, products transfers data include backflows and interproduct transfers. From 2005 onwards, backflows were estimated by the UK administration.

### Supply

- Condensates are reported in **NGL** from 1980 and in crude oil until 1979.

- **LPG** includes ethane until 1980.
- **Other hydrocarbons**, reported until 1994, correspond to bitumen production from coal.

## Natural gas

### General notes

- Since 1992, distribution losses include metering differences and losses due to pipeline leakage.

### Supply

- In 2002, the increase in imports is due to increased supplies from the Norwegian sector of the North Sea through the Vesterled pipeline, which was commissioned in the 4th quarter of 2001.

### Transformation

- The natural gas reported in coke oven transformation is used to form synthetic coke oven gas rather than undergoing a coking process.
- The natural gas consumed to fuel the distribution of natural gas in natural gas networks is reported under *non-specified energy*.

### Consumption

- Before 2008, the commercial sector consumption is included in *non-specified other*, while that of public services is shown separately.
- Between 2007 and 2008 there are some breaks in time series in sectoral consumption due to a new methodology of data estimation.
- Natural gas consumption includes substitute natural gas made at gas works and piped into the natural gas distribution system.
- *Non-specified industry* represent to sales by independent gas suppliers unallocated by category.
- Consumption by the mining and quarrying and the wood and wood products sectors is included in *non-specified industry*.
- *Non-specified energy* includes gas used for heating and pumping operations in the distribution network.

## Biofuels and waste

### General notes

- In the 2017 edition, the UK government revised the data time series for **municipal waste** and **solid biofuels** back to 2001. As a result, breaks in time series may occur between 2000 and 2001.

### Transformation

- From 2015, the UK administration started collecting data from the main-activity **solar PV** companies. Prior to this, all data were included under autoproducers.
- The consumption of **solid biofuels** has increased in 2015, as the largest power station in the UK halfway through the year converted a further unit from **coal** to **biomass**, plus the previously converted unit had a full year of operation in 2015 rather than just the last few months of 2014.
- Prior to 2013, due to data confidentiality reasons, one or two main-activity **municipal waste** plants had to be included within the autoproducer plant category. Since 2013, as there have been at least three main-activity companies, these plants have been reclassified from autoproducer plant to main activity electricity plant, with some CHP plants included under main electricity due to confidentiality reasons.

### Consumption

- The UK administration undertook a survey of domestic wood consumption in 2015 and revised figures back to 2008. This resulted in breaks in time series for **solid biofuels** consumption in residential between 2007 and 2008.

## Electricity and heat

### General notes

- For the United Kingdom, it is necessary to combine figures for main activity producers and autoproducers in order to prevent the disclosure of information relating to less than three electricity generating companies, since this information is considered confidential. For this reason, data for main activity producer CHP plants have been included with autoproducer CHP plants from 1988. Prior to 1988, electricity output from CHP plants was included with autoproducer electricity plants.
- The re-organisation and subsequent privatisation of the electricity supply industry in 1990 has resulted in some breaks in time series.

### Supply

- Electricity production data for **solar PV** are available from 1999.
- The launch of a feed-in-tariff scheme in April 2010 resulted in a rapid increase of capacity and corresponding electricity production growth from **solar PV** in the following years.



- In 1996, the break in electricity production from **nuclear** is due to a reclassification of plants from autoproducer to main activity producer plants.
- Data on electricity production from **wind** is available from 1989.

### Transformation

- In 2007, outputs of electricity from **petroleum coke** are included in **fuel oil**.
- Prior to 2003, all outputs of electricity and heat from **oil products** are reported in the other oil products category.
- **Heat** production from autoproducers is available starting in 1999.
- Inputs and output from **natural gas** for main activity producer electricity production are included in autoproducer electricity for 1990 (for reasons of confidentiality).

### Consumption

- Consumption in gas works includes electricity use in the transmission/distribution of public supply gas.
- Consumption in the non-metallic mineral products sector includes mining and quarrying.
- **Electricity** consumption in coal mines includes consumption in patent fuel plants.
- Data for **electricity** consumption in transport was classified by sub-sector only starting from 2004 resulting in a break in time series between 2003 and 2004. Prior to 2004, *non-specified transport* includes consumption for traction by urban rails and road vehicles, and consumption for non-traction by railways and bus stations and airports. From 2004 onwards, road vehicles consumption is included under road transport. Prior to 2004, electricity consumption in rail refers to industrial rail only. From 2004 onwards it includes both industrial and urban rail.
- Consumption in the machinery sub-sector includes that of the transport equipment industry before 1996.
- Starting in 1990, small amounts of **electricity** used in heat pumps have been included in residential.
- From 1984 onwards, the **electricity** consumption in the *non-specified industry* sector includes that of the wood and wood products sub-sector and unallocated consumption.

## United States

### Source

U.S. Energy Information administration, Washington D.C.

### General notes

- End-use energy consumption data for the United States present a break in time series with historical data due to a change in methodology in 2014. The break in time series occurs between 2011 and 2012 for oil; and between 2001 and 2002 for electricity and natural gas. The new methodology is based on the last historical year of the most recent Annual Energy Outlook (AEO) publication. Changes occur primarily in reported end-use energy consumption in the industrial sector and its subsectors, including the non-manufacturing industries of mining, construction and agriculture. Historical revisions are pending. Due to other changes in reporting methodologies, there are numerous breaks in time series for the US data, particularly in 1992, 1999, 2001, 2002 and 2013. Care should be taken when evaluating consumption by sector since inputs of fuel to autoproducers are included in final consumption for some years. No data are available for most energy products in the construction and mining and quarrying industries.

### Coal

#### General notes

- Since the Energy Information administration (EIA) and the US Department of Commerce do not collect separate data on **patent fuel** exports by country, total exports data of **patent fuel** are included in the exports of **other bituminous coal**.
- **Coal tar** as a by-product of coke ovens is not currently reported.
- In 2002, the United States reported “synfuel” production as **patent fuel** for the first time. Prior to 2002, the consumption of this fuel was reported with **other bituminous coal**. Production ceased in 2007 for economic reasons.
- **Hard coal** data prior to 1978 may include **sub-bituminous coal**.

### Supply

- *Other sources* **coal** production represents coal production that does not have a Mine Health and Safety Administration (MSHA) identifier.

## Oil

### General notes

- In the 2017 edition, the US administration revised the methodology for reporting **NGL** and **LPG**, resulting in breaks in time series for these products between 2014 and 2015. Revisions to historical data are pending.
- In the 2017 edition, data for **biofuels** is estimated in 2013 and 2014 based on the figures submitted to the IEA in the Renewables and Waste questionnaire.
- In the 2015 edition, the US administration made the following reclassifications: olefins are reported in other oil products instead of LPG, special naphtha exports are classified under refinery feedstock instead of white spirit. Road use lubricants have been moved to industry Sector in transport Equipment, machinery, and wood and wood products. As a result, breaks in time series appear for LPG, other oil products, refinery feedstocks, white spirit, lubricants between 2012 and 2013. Historical revisions are pending.
- Breaks in time series due methodology improvements and newly available information to the US administration also appear in historical data: in 1990 for fuel oil (new methodology for marine bunkers); in 1992 for LPG/NGL (specific densities); in 1993 for oxygenates (new collection system to accommodate the revised Clean Air Act); in 1994 for motor gasoline (new model from the US Department of Transportation); in 1999-2000 for industry consumption (new available data from the 2002 MECS survey); in 2001 for fuel oil (changes in methodology for classifying imports of unfinished oils) and in 2012 for refinery gas (new density).

### Supply

- High statistical differences for crude oil represent “unaccounted for crude oil”, the difference between the supply and disposition of crude oil.
- Stocks changes for **gas/diesel oil**, **fuel oil** and **petroleum coke** were estimated by the IEA Secretariat from 1996 onwards to include stock changes at utilities.

### Transformation

- From 2002 onwards, the IEA Secretariat has estimated the amounts of refinery gas used for autoproducer electricity production.

### Consumption

- In the 2017 edition, the following flows have been estimated by the IEA Secretariat for 2015: energy-use of **LPG** in residential, commercial and public services and road sectors; non-energy use of **LPG**; energy use of **fuel oil** in commercial and public services; and energy use of **gas/diesel oil** in commercial and public services. Revisions to consumption data are pending.
- Between 2011 and 2012, end-use energy consumption data for the United States present a break in time series due to a change in methodology. Data for 2012 onwards are based on the last historical year of the most recent Annual Energy Outlook (AEO) publication while 2011 data are based on projections derived from the Manufacturing Energy Consumption Survey (MECS) of 2010. Changes occur primarily in reported end-use energy consumption in the industrial sector and its subsectors, including the non-manufacturing industries of mining, construction and agriculture. Historical revisions are pending.
- From 1995 onwards, **LPG** inputs to gas works are included in industry.

### Natural gas

#### Supply

- In the 2017 edition of this publication, the indigenous production data for 2014 was revised by the US administration creating a break in the time series between 2013 and 2014 due to a change in the methodology. In addition, this increased the statistical difference that remained high in 2015.
- From 1990 to 2002, the amounts of gas works gas that are blended with natural gas have been estimated on the basis of the output efficiency of the process.

#### Transformation

- Since 2012, data reported under *non-specified transformation* represent **natural gas** used for hydrogen manufacture. Prior to 2012, these quantities are reported under the petrochemical sector.
- Between 1999 and 2000, there are some breaks in time series for the transformation subsectors due to a new data reporting method.
- Between 1990 and 2002, the amounts of gas works gas that are blended with natural gas have been estimated on the basis of the output efficiency of the process.

- Since 1989, consumption by autoproducer CHP plants is available, while consumption by autoproducer electricity and main activity producer CHP plants is available since 1991. Prior to these years, these consumptions are included with industry and commerce/public services.

### Consumption

- The administration of the United States is currently making significant revisions to the iron and steel model. For this reason, there is a break in the time series between 2014 and 2015 for the consumption in blast furnaces (Energy).
- Until 2001, agriculture and forestry consumption is included under industry.
- From 1995 to 2001, the detailed breakdown of industry consumption is estimated by the Energy Information Administration using the Manufacturing Energy Consumption Survey (MECS), which is conducted quadrennially.
- Prior to 1995 a detailed breakdown of industry consumption is not available (between 1990 and 1994, chemical consumption is estimated by the American administration).
- In 1991 data on natural gas use in the road sector were collected for the first time, and are not available for previous years.
- *Non-specified energy industry own use* represents gas consumed for the production of ethanol.
- Consumption in fisheries is included under industry.

### Biofuels and waste

#### General notes

- Due to the change in reporting methodology for **liquid biofuels**, breaks in time series occur between 2012 and 2013. This is especially noticeable in **biodiesel** time series. Potential revisions to historical data could occur in the 2018 edition.
- **Geothermal** supply and transformation data are estimated by the IEA Secretariat starting in 2009 because of efficiency discrepancies.

#### Transformation

- The EIA collects generation and consumption data from all plants 1 MW or more in capacity.

#### Consumption

- Due to an improved estimation, there are some breaks in time series of industrial sector and other

sector between 2009 and 2010 for many fuels types: For the industrial sector, this can be found in **geothermal**, **biogases** and **industrial waste** (paper, pulp and printing). For other sectors, breaks can be shown in **geothermal** and **solar thermal**.

### Electricity and heat

#### General notes

- Between 2001 and 2002, there are breaks in time series concerning the total production of electricity and heat in the United States. Comprehensive data on electricity and heat production and consumption in main activity producer electricity, CHP and heat plants and autoproducer electricity and CHP plants are not available for all years.

#### Supply

- The IEA Secretariat estimated US **solar PV** electricity generation from autoproducers starting in 1999 by multiplying the dispersed and distributed PV capacity estimated by the US administration by an average capacity factor of 12%. The capacity factor was based on a report published in 2007 by the IEA Photovoltaic Power Systems Programme, Cost and Performance Trends in Grid-Connected Photovoltaic Systems and Case Studies. The corresponding consumption of electricity has been included under *non-specified other*.
- Data for electricity absorbed by pumping and electricity production from **pumped storage** plants became available starting in 1987.

#### Transformation

- Accurate accounting of **coke oven gas** and **refinery gas** inputs is not always possible, which can lead to efficiencies over 100% in main activity producer CHP plants.
- *Other sources electricity* production represents purchased steam and waste heat from industries.
- Two **geothermal** plants were reclassified as CHP in 2014, causing new time series to appear.
- The low efficiencies from 2011 for **other bituminous coal** autoproducer electricity plants are due to the fact that one unit, the Albany Brewery Power Plant only produces unsold heat.
- From 2007 to 2009, heat from **industrial waste** includes recovered heat from industrial processes. From 2010, the electricity produced from recovered heat is reported under **other sources**.

- The decline in **patent fuel** used for electricity production in 2008 and subsequent cessation of the time series in 2009 is a result of the termination of the patent fuel tax credit in 2008 which had previously made the fuel economical for electricity production.
- The US administration changed its methodology for calculating **heat** production in CHP plants, and revised data back to 2006. This leads to breaks in the time series between 2005 and 2006.
- From 2004 onwards, the EIA has reported electricity and heat production from **anthracite** under **sub-bituminous coal**. The Secretariat estimated the split of output by fuel type based on the assumption that the plant efficiencies of the aggregate are equal to that of each part.
- Starting in 2002, autoproducer electricity output for **oil** includes generation from **refinery gases** with a low average calorific value. Prior to 2002, this output was not accounted for.
- Prior to 2001, data on plants consuming **other bituminous coal**, **sub-bituminous coal** and **lignite** have been estimated by the Secretariat using information provided in the EIA's Annual Electricity Generator Report – Utility.
- Data for **peat** are confidential between 1994 and 1998 and from 2000 are not reported.
- Prior to 2000, autoproducers include small and independent power producers which under IEA definitions are considered as main activity producers. Production from these small and independent power producers accounts for about 25% of reported production of electricity by autoproducers in the United States. This reclassification causes breaks between 1999 and 2000.
- In the 2003 edition, the US administration reclassified some plants to autoproducers. This reclassification causes more breaks between 1998 and 1999.
- Data for **heat** produced in main activity producer heat and autoproducer CHP plants are available from 1992 to 1999.
- From 1999 onwards, the fuel used in **heat** production by autoproducers is included in final consumption because the US administration cannot distinguish between the heat used directly on-site and the heat sold. Therefore, this may underestimate the heat sold to third parties.
- Prior to 1999, **solar thermal** electricity production includes generation from natural gas because some natural gas units are attached to **solar thermal** plants and their production could not be separated.
- The breakdown of fuel used and production of **heat** in main activity producer heat plants have been estimated by the Secretariat for 1992 and 1993.
- Prior to 1991 some of the fuel inputs to **electricity** and **heat** production reported for autoproducer plants are reported as final consumption in the particular economic sector in which the autoproducer is operating.
- Prior to 1989, there are no data available for autoproducers.
- **Sub-bituminous coal** inputs for electricity and heat production are included in **hard coal** before 1983.

### *Consumption*

- For the 2017 edition, the breakdown of final electricity consumption for 2015 was based on the results of the Annual Energy Outlook (AEO) of 2016. Breaks in time series appear in the mining and agricultural electricity consumption sectors as a result of introduction of individual industry benchmarking for 2015 results. Large changes in iron and steel and pulp and paper model results from 2014 to 2015 are the result of fundamental revisions of the iron and steel and pulp and paper models between AEO2014 and AEO2016 as well as the use of individual industry benchmarking for AEO2016. Prior to 1991, total consumption of **heat** sold referred to consumption in commercial/public services. No data are available for **heat** sold that is consumed in residential and agriculture/forestry.
- Data for direct use of **solar thermal** heat in residential are available from 1999.
- Since 1995, **heat** consumption data are no longer collected and have been estimated, resulting in breaks in the time series between 1994 and 1995.
- Data for consumption of **heat** sold in industry are available from 1991 and in energy industry own use from 1992.



## NON-OECD COUNTRIES

Before 2016, the IEA Secretariat published separately “Energy balances of non-OECD countries” and “Energy balances of OECD countries”. The two were combined into “World energy balances” in 2016.

When making references to “this publication”, it includes “Energy balances for non OECD countries” produced until 2016.

In the references below, both the statistical year (2015) for which data are being published in this edition, as well as publication dates of the many documents which have been consulted during the development of this publication are mentioned. As a general rule, where specific documents or personal communications have been used, the date that is referenced is the date of publication of the document or the date of the communication, whereas, where data received through the completion of questionnaires are mentioned, the date that is referenced is the statistical year for which data are being published in this edition, namely 2015.

Data may not include all informal and/or illegal trade, production or consumption of energy products, although the IEA Secretariat makes efforts to estimate these where reliable information is available.

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- *Forestry Data*, Food and Agriculture Organisation of the United Nations, Rome, 2000.
- *Foreign Scouting Service, Commonwealth of Independent States*, IHS Energy Group – IEDS Petroconsultants, Geneva.
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- *PlanEcon Energy Outlook for the Former Soviet Republics*, Washington, June 1995 and 1996.
- *Prospects of Arab Petroleum Refining Industry*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, 1990.
- *Review of Wood Energy Data in RWEDP Member Countries*, Regional Wood Energy Development Programme in Asia, Food and Agriculture Organisation of the United Nations, Bangkok, 1997.
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- *Solar Heat Worldwide*, AEE - Institute for Sustainable Technologies, Gleisdorf, various editions up to 2017.
- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- *Statistical Bulletin*, The InterState Statistical Committee of the Commonwealth of Independent States, Moscow, 1993 and 1994.
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- *Statistical Yearbook*, The Interstate Statistical Committee of the Commonwealth of Independent States, Moscow, various editions up to 2011.
- *Statistical Yearbook of the Member States of the CMEA*, Council of Mutual Economic Assistance (CMEA), Moscow, 1985 and 1990.
- *The LNG Industry*, International Group of Liquefied Natural Gas Importers (GIIGNL), Levallois, various editions up to 2016.
- *The United Nations Energy Statistics Database*, United Nations Statistical Office, New York, various editions up to 2017.
- *World Development Indicators*, The World Bank, Washington, various editions up to 2016.

**Note:**

- EU4Energy is a 4-year (2016-2020) EU-funded programme working to support evidence-based energy policy and decision making in the areas of energy security, energy markets and sustainable development in 11 focus countries - Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan and Ukraine. The IEA is responsible for the programme's energy-data management and data use in policy design.
- The OLADE database was used for several Non-OECD Americas countries.
- The UN database was the only source of information for time series of the countries not listed individually and included in the regions Other Africa, Other non-OECD Americas and Other non-OECD Asia. It was also used in a number of other countries as a complementary data source.

## Albania

### General notes

For 1993, large quantities of oil, widely reported to have moved through Albania into Former Yugoslavia, may not be included in oil trade. Although estimated to represent up to 100 per cent of domestic consumption levels, no reliable figures for this trade were available.

Starting from 2011, motor gasoline consumption is reported in the residential sector. This consumption corresponds to motor gasoline used in electricity generators.

#### Sources 2011 to 2015:

- Direct communication with the National Agency of Natural Resources, Tirana.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

#### Sources 2005 to 2010:

- *Energy Balances 2005-2010*, Energy Department of the National Agency of Natural Resources of Albania, Tirana.
- IEA Secretariat estimates.

#### Sources up to 2004:

- Joint IEA/Eurostat/UNECE annual energy questionnaires 1994, 1995, 1998.
- *Energy Balances*, National Agency of Energy of Albania, 1999 to 2004.
- *The UN Energy Statistics Database*.
- Aide Memoire of World Bank Mission to Albania May/June 1991.
- IEA Secretariat estimates.

#### Sources for biofuels and waste:

- The UN Energy Statistics Database.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- IEA Secretariat estimates.

## Algeria

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Revisions were made to the energy balances in 2009 and 2010 which add more detail for certain products and flows. This may result in breaks in time series between 2008 and 2009.

### Sources

#### Sources 1990 to 2015:

- Direct communication with the Ministry of Energy and Mining, Algiers.

#### Additional sources 2008:

- SONELGAZ, Société nationale de l'électricité et du gaz, online statistics on electricity production, Algiers.

#### Sources up to 1989:

- *Annuaire Statistique de l'Algérie 1980-1984*, Office National des Statistiques, Algiers, 1985.
- *Bilan Energétique National*, Gouvernement Algérien, Algiers, 1984.
- *Algérie Energie, N° 6*, Ministère de l'Énergie et des Industries Chimiques et Pétrochimiques, Algiers, 1979 to 1983.

#### Sources for biofuels and waste:

- The UN Energy Statistics Database.
- Ministry of Energy and Mining.
- IEA Secretariat estimates.

## Angola

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

The natural gas export terminal, Soyo, was in operation between 2013-2014. Breaks in time series in natural gas export, supply, and consumption can be observed in 2013 and 2014.

### Sources

#### Sources 2003 to 2015:

- Direct communication with the Ministério da Energia e Águas (Ministry of Energy and Water), Luanda.
- *Relatório de Gestão e Contas*, Sonangol E.P., Luanda, various editions up to 2015.

- Balanço da Produção & Informação sobre o Sector de Petróleo e Gás & Balanço da Refinaria de Luanda, Ministério dos petróleos, Luanda, 2013.
- *Relatório de Actividades do Sector Petrolífero*, Ministério dos petróleos, Luanda, 2007 and 2008 editions.
- *Annual Report*, Southern African Power Pool, Harare, various editions up to 2012.
- IEA Secretariat estimates.

#### Sources 1992 to 2002:

- Direct communication with oil industry sources.
- IEA Secretariat estimates.
- *Eskom Annual Statistical Yearbook, 1993, 1994, 1995* citing Empresa Nacional de Electricidade as a source, Johannesburg, 1994-1996.
- *The UN Energy Statistics Database*.

#### Sources up to 1991:

- *Le Pétrole et l'Industrie Pétrolière en Angola en 1985*, Ambassade de France, Poste d'Expansion Economique de Luanda, Luanda, 1985.

#### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1991 data from African Energy Programme of the African Development Bank, *Forests and Biomass Sub-sector in Africa*, Abidjan, 1996.

## Argentina

### General notes

Since 2010 a different methodology was adopted by Argentina for reporting refinery flows leading to more detailed information (e.g. reprocessing of some oil products). This may result in breaks in time series between 2009 and 2010.

### Sources

#### Sources up to 2015:

- Direct communication with the Ministry of Economy, Secretariat of Energy, Buenos Aires.
- *Balance Energético Nacional*, Ministerio de Economía, Secretaria de Energía, Buenos Aires, various editions up to 2016.
- *Informe del sector eléctrico*, Ministerio de Planificación Federal, Inversión Pública y Servicios,

Secretaria de Energía, Dirección Nacional de Prospectiva, Buenos Aires, various editions up to 2016.

- *Información del mercado de hidrocarburos*, Ministerio de Planificación Federal, Inversión Pública y Servicios, Secretaria de Energía, Dirección Nacional de Prospectiva, Buenos Aires, various editions up to 2016.
- *Informe Enargas*, Enargas, Buenos Aires, various editions up to 2016.
- Camara Argentina de Biocombustibles, online statistics.
- *Informe del sector eléctrico*, Ministerio de Economía, Secretaria de Energía, Buenos Aires, 1986 to 2003.
- *Anuario de Combustibles*, Ministerio de Economía, Secretaria de Energía, Buenos Aires, 1980 to 2003.
- *Anuario Estadístico del sector energético Argentino*, Instituto Argentino de la Energía "General Mosconi", Buenos Aires, 2000.
- *Anuario Estadístico de la República Argentina*, Instituto Nacional de Estadística y Censos, Buenos Aires, September 1997.
- *Boletín Mensual de Combustibles*, Ministerio de Obras y Servicios Públicos, Secretaria de Energía, Buenos Aires, various editions.
- *Natural Gas Projection up to 2000*, Gas del Estado Argentina, Buenos Aires, 1970, 1984 to 1986.
- *Anuario Estadístico de la República Argentina 1970-1981*, Instituto Nacional de Estadística y Censos, Secretaria de Planificación, Buenos Aires, 1982.
- *Plan Energético Nacional 1986-2000*, Ministerio de Economía, Secretaría de Energía, Subsecretaría de Planificación Energética, Buenos Aires, 1985.
- *Anuario Estadístico*, Yacimientos Petrolíferos Fiscales, Buenos Aires, 1984 to 1987.
- *Memoria y Balance General*, Yacimientos Petrolíferos Fiscales, Buenos Aires, 1984 to 1986.

## Armenia

### General notes

Data for Armenia are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Armenia is one of the 11 EU4Energy focus countries.

From 2015, survey data are available on the consumption of energy products in Armenia. Partial data



were already available for 2014 for some products (pilot survey). Prior to 2014, consumption data were not available have been estimated by the IEA Secretariat based on supply. Therefore breaks in time series occur between 2013 and 2014 and 2014 and 2015. 2015 should be used as reference year. Data for 2014 and prior estimates may be revised after a few years of survey results.

No information is available about the source of peat exports.

## Sources

### *Sources 2014-2015:*

- Direct communication with National Statistical Service, Yerevan.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- IEA Secretariat estimates.

### *Sources 1992 to 2013:*

- Direct communication with National Statistical Service, Yerevan.
- Joint IEA/Eurostat/UNECE annual energy questionnaires on Coal, Electricity and heat, Natural gas, Oil.
- IEA Secretariat estimates.

### *Sources 1990 to 1991:*

- IEA Secretariat estimates.

### *Sources for biofuels and waste:*

- From 2014: Joint IEA/Eurostat/UNECE annual energy questionnaires on Renewables
- Prior to 2014: *Forestry Statistics*, FAO, Rome., IEA Secretariat estimates.

## Azerbaijan

### General notes

Data for Azerbaijan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Azerbaijan is one of the 11 EU4Energy focus countries.

Production of natural gas may differ from the Azerbaijan national energy balance because natural gas used for production of electricity by the oil and gas extraction industry is included by the IEA Secretariat in the definition of natural gas production.

Breaks in time series appear for inputs and outputs of electricity, CHP and heat plants in Azerbaijan between 2006 and 2007 due to an improved data collection methodology in the country from 2007 onwards.

For the purpose of calculating CO<sub>2</sub> emissions, an allocation between domestic and international aviation consumption of jet kerosene was estimated by the IEA Secretariat for 1990-2006 based on total aviation consumption reported by Azerbaijan and the 2007 allocation.

## Sources

### *Sources 1990 to 2015:*

- Direct communication with the State Committee of Statistics and the Ministry of Economics of Azerbaijan, Baku.
- Joint IEA/Eurostat/UNECE annual energy questionnaires, 1992 to 2015.

### *Sources for biofuels and waste:*

- Joint IEA/Eurostat/UNECE annual energy questionnaires, 2000-2015.
- Before 2000: IEA Secretariat estimates.

## Bahrain

### General notes

Crude oil production includes production from the Abu Sa'fah field, which is shared with Saudi Arabia.

Consumption of natural gas for autoproducer power generation may include quantities used for non-power generation purposes.

Estimations of the use of petroleum coke in the manufacture of aluminium have been made to track this consumption from 2000 onwards. This may lead to breaks in time series between 1999 and 2000.

Historical revisions in LPG, Naphtha and Refinery Gas data from 2011 are consistent with official report from Bahrain National Gas Company. Breaks in time series are observed in 2011 for LPG exports.

## Sources

### *Sources 1992 to 2015:*

- Direct communication with National Oil and Gas Authority of Bahrain, Manama.

- *Statistics 2005-2015*, National Oil and Gas Authority of Bahrain, Manama.
- *Annual Pamphlet 2013-2015*, Bahrain National Gas Company, Riffa.
- *Online statistics 2000-2015*, Central Informatics Organization (CIO), Manama, Kingdom of Bahrain.
- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- *Statistics 2007 and 2008*, Electricity & Water Authority, Manama.
- *Statistical Abstract, 1994, 1998, 1999, 2000, 2001, 2002 and 2003*, Council of Ministers, Control Statistics Organisation, Bahrain.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Statistical Abstract 1990*, Council of Ministers, Central Statistics Organisation, Manama, 1991.
- *1986 Annual Report*, Bahrain Monetary Agency, Manama, 1987.
- *B.S.C. Annual Report*, Bahrain Petroleum Company, Manama, 1982-1984.
- *Foreign Trade Statistics*, Council of Ministers, Central Statistics Organisation, Manama, 1985.
- *Bahrain in Figures*, Council of Ministers, Central Statistics Organisation, Manama, 1983-1985.

## Bangladesh

### General notes

Data are reported on a fiscal year basis, beginning on 1 July and ending on 30 June of the subsequent year.

In 2013, time series were revised from 2008 to 2011 based on data retrieved from the Bangladesh Power Development Board. This may result in breaks in time series between 2007 and 2008 for electricity.

In 2014, time series were revised from 2004 to 2012 based on new data on petroleum products retrieved from the Bangladesh Petroleum Corporation and the Eastern Refinery Limited. This may result in breaks in time series between 2004 and 2005 for primary and secondary oil products.

### Sources

#### Sources 2008 to 2015:

- *Annual Report*, PetroBangla - Bangladesh Oil, Gas and Mineral Corporation, Dhaka, various editions up to 2015.
- *Annual Report*, Bangladesh Power Development Board (BPDB), Dhaka, various editions from 2007 to 2015.
- *Annual Report*, Dhaka Electric Supply Company Limited (DESCO), Dhaka, various editions from 2008 to 2015.
- *Bangladesh Economic Review*, Ministry of Finance, Dhaka, various editions from 2008 to 2015.
- *Coal Recent Mine Activities*, Barapukuria Coal Mining Company Limited (BCMCL), Dhaka, 2015.
- Statement of total coal production, sale, delivery and stock position, Barapukuria Coal Mining Company Limited (BCMCL), Dhaka, 2015
- *Production Activities*, Eastern Refinery Limited, online statistics: erl.com.bd, 2015.
- *Commercial & Operation – Petroleum products*, Bangladesh Petroleum Corporation (BPC), online statistics: www.bpc.gov.bd.
- IEA Secretariat estimates.

#### Sources 1996 to 2007:

- U.S. Agency for International Development, Dhaka, 2003 to 2008.
- IEA Secretariat estimates.
- *Statistical Yearbook of Bangladesh 1996 to 1999*, Ministry of Planning, Bangladesh Bureau of Statistics, Dhaka, 1997 to 2000.

#### Sources 1992 to 1995:

- *Statistical Pocket Book of Bangladesh*, Ministry of Planning, Bangladesh Bureau of Statistics, Dhaka, 1986 to 1996.
- *The UN Energy Statistics Database*.

#### Sources up to 1991:

- *Bangladesh Energy Balances 1976-1981*, Government of Bangladesh, Dhaka, 1982.
- *Statistical Yearbook of Bangladesh 1991*, Government of Bangladesh, Dhaka, 1976 to 1991.
- *Monthly Statistical Bulletin of Bangladesh*, Ministry of Planning, Bangladesh Bureau of Statistics, Statistics Division, Dhaka, June 1986 and October 1989.

**Sources for biofuels and waste:**

- *Forestry Statistics*, FAO, Rome, 2014.
- IEA Secretariat estimates.

**Belarus****General notes**

Data for Belarus are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Belarus is one of the 11 EU4Energy focus countries.

Imports of refinery feedstocks were recorded for the first time in 2015.

In 2016 edition methane produced as a by-product during the petrochemical transformation of naphtha was re-classified by Belarus for the period 1998-2011 from industrial waste to refinery gas. This may lead to breaks in time series between 1997 and 1998.

Jet kerosene was reported under “other products” until 2012. Breaks in time series appear in gas/diesel and fuel oil between 2011 and 2012 as a result of a new classification of industrial products (heating oil re-classified under high sulphur fuel oil).

Oil trade in 2010 shows a significant drop due to higher customs fee of imported quantities of crude oil from Russian Federation.

Since January 2010, Belarus became a member of a Customs Union with Russia and Kazakhstan. Breaks in trade time series and statistical differences appear from 2009 to 2011 as the Customs progressively shifted from one accounting system to another. Belarus reports all inputs and outputs to CHP and heat auto-producer plants including those corresponding to own use of heat.

**Sources****Sources 1990 to 2015:**

- Direct communication with the National Statistical Committee of Belarus, Minsk.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

**Sources for biofuels and waste:**

- Joint IEA/Eurostat/UNECE annual energy questionnaires for Renewables.
- IEA Secretariat estimates.

**Benin****General notes**

In this edition, times series were revised from 2011 to 2014 based on new data received from the Ministry of Energy, Water, and Mines. Breaks in time series may occur between 2010 and 2011.

**Sources****Sources 1999 to 2015:**

- *Système d'Information Énergétique du Bénin (SIE-Bénin)* 2015, Direction Générale de l'Énergie, Ministère de l'Énergie, de l'Eau et des Mines.
- Direct communication with the *Ministère des Mines, de l'Énergie et de l'Hydraulique*, Cotonou, through the WEC-IEA Joint Energy Reporting Format for Africa, 1999 to 2002, 2004, 2006, 2007, 2011, 2012.
- IEA Secretariat estimates.

**Sources up to 1998:**

- Direct communication with the Secretariat, Direction de l'Énergie, Cotonou, 1999, 2000.
- Direct communication with the electricity utility, Cotonou, 1998 to 1999.
- *The UN Energy Statistics Database*.
- *Rapport sur l'Etat de l'Economie Nationale*, Ministère de l'Économie, Cotonou, September 1993.
- IEA Secretariat estimates.

**Sources for biofuels and waste up to 1995:**

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

**Bolivia****General notes**

Data for international aviation bunkers are estimated by the IEA Secretariat based on passenger data.

Breaks in time series for solid biofuels occur between 2009 and 2010. This is due to differences in definitions between Bolivia and IEA. Solid biofuels may include other sources of renewable energy (e.g. wind, solar, etc.).

## Sources

### Sources 1992 to 2015:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Boletín Estadístico*, Yacimientos Petrolíferos Fiscales Bolivianos, La Paz, 2008 to 2015.
- *Anuario Estadístico*, Autoridad de Fiscalización y Control Social de Electricidad, La Paz, 2015. *Balance Energético Nacional 2000-2014* Ministerio de Hidrocarburos y Energía, La Paz, 2014.
- *Anuario Estadístico*, Agencia nacional de hidrocarburos, various editions from 2013 to 2014.
- *Anuario Estadístico*, Ministerio de Hidrocarburos y Energía, La Paz, 2012.
- *Memoria Anual*, Comité Nacional de Despacho de Carga, 2011.
- *Informe Estadístico*, Yacimientos Petrolíferos Fiscales Bolivianos, La Paz, various editions from 1992 to 1998.
- *Anuario Estadístico*, Superintendencia de Electricidad, La Paz, various editions from 1996 to 2007.
- IEA Secretariat estimates.

### Sources up to 1991:

- *Boletín Estadístico 1973-1985*, Banco Central de Bolivia, División de Estudios Económicos, La Paz, 1986.
- *Diez Anos de Estadística Petrolera en Bolivia 1976-1986*, Dirección de Planeamiento, División de Estadística, La Paz, 1987.
- *Empresa Nacional de Electricidad S.A. 1986 Ende Memoria*, Empresa Nacional de Electricidad, La Paz, 1987.

## Bosnia and Herzegovina

### General notes

Data for Bosnia and Herzegovina are available starting in 1990. Prior to that, they are included in Former Yugoslavia.

Energy statistics are available from the Agency for Statistics of Bosnia and Herzegovina (BHAS) from 2008 for electricity and heat and from 2009 for coal and natural gas. As a consequence, breaks in time

series may occur between 2007 and 2008 for electricity and heat and 2008 and 2009 for other products.

In 2015, BHAS conducted their first household survey on biomass consumption. Due to this newly available data breaks in time series may occur between 2013 and 2014. Also, due to the ongoing work of BHAS to further improve the biomass data quality, future revisions may be expected.

In 2014, BHAS conducted their first survey on oil product consumption. Due to this newly available data breaks in time series may occur between 2012 and 2013.

Until 2012, the source for crude oil and secondary oil products data is the publication “Industrial Production Bosnia and Herzegovina 2012” and “Oil Trade Data” both produced by the Agency for Statistics of Bosnia and Herzegovina.

## Sources

### Sources 2009 to 2015:

- Direct communication with the Agency for Statistics of Bosnia and Herzegovina, Sarajevo.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Energy Statistics: Oil products, Issue 1, Agency for Statistics of Bosnia and Herzegovina, Sarajevo.
- PRODCOM Survey - Industrial Production, Bosnia and Herzegovina, 2009 to 2012.
- IEA Secretariat estimates.

### Sources 2006 to 2008:

- European Network of Transmission System Operators for Electricity, online statistics, 2010.
- Union for the Co-ordination of Transmission of Electricity, online statistics, 2009.
- IEA Secretariat estimates.

### Sources 2000 to 2005:

- *Energy Sector Study BiH*, Third Electric Power Reconstruction Project, consortium led by Energy Institute Hrvoje Pozar, Sarajevo, 2008.
- Direct communication with the Joint Power Co-ordination Centre (JPCC).
- *Statistical Yearbook of BiH*, Federation of Bosnia and Herzegovina Federal Office of Statistics, Sarajevo, 2008.



- *Power Generation and Transmission System in Bosnia Herzegovina*, International Management Group, European Commission, Sarajevo, November 2000.
- *Energy Outlook*, Federal Ministry of Energy, Mining and Industry, Sarajevo, December 2001.
- *The UN Energy Statistics Database*.

## Botswana

### General notes

Data for Botswana are available from 1981. Prior to that, they are included in Other Africa.

### Sources

#### Sources 1981 to 2015:

- Direct communication with the Department of Energy, Ministry of Minerals, Energy and Water Resources, Gaborone.
- *Annual Report*, Botswana Power Corporation (BPC), Gaborone. Various editions up to 2015. Note: BPC data are published on a fiscal year basis (April to March).
- *Environment Statistics 2012*, Botswana Central Statistics Office, Gaborone.
- Indices of the physical volume of mining production 3Q 2014, Botswana Central Statistics Office, Gaborone.
- *Botswana in Figures 2011*, Botswana Central Statistics Office, Gaborone.
- *Statistical Yearbook 2010*, Botswana Central Statistics Office, Gaborone.
- *Annual Report 2009*, Department of Mines, Gaborone.
- *Energy Statistics*, Central Statistics Office, Gaborone.
- IEA Secretariat Estimates.

## Brazil

### General notes

New information became available in 2015 which explains the types of product transfers within Brazilian refineries. The IEA has attempted to reflect these transfers as accurately as possible in the 2015 publication.

In the IEA balance for Brazil, “Biogasoline” refers to anhydrous ethanol while “Other liquid biofuels” refers to hydrated ethanol.<sup>1</sup>

Although IEA’s balance is based on Brazil’s national statistics, differences with the national energy balance can be observed due to the different methodologies adopted for reporting nuclear, chemical heat, natural gas, renewables, blast furnaces and coke ovens.

Brazil produces a large share of its pig iron in blast furnaces that are fuelled and fed with charcoal. The blast furnace gases produced when charcoal is used as a reagent in the blast furnaces are renewable products and they have been reported in this publication under the product “Biogases from thermal processes”. Additionally, only the part of these gases consumed for power generation (i.e. energy purposes) has been accounted for in the transformation sector. The remaining charcoal consumed in or used to heat the blast furnaces is reported in final consumption under the iron and steel industry with no distinction between transformation and final consumption.

Prior to the year 2000 blast furnace gases data availability is limited to the input to auto producer electricity plants. Therefore, from 1971 to 1999, the other flows (e.g. production, consumption etc.) are IEA Secretariat estimates.

The Itaipu hydroelectric plant, operating since 1984 and located on the Paraná River (which forms the border of Brazil and Paraguay) was formed as a joint venture between Eletrobrás and the Paraguayan government. Production is shared equally between Brazil and Paraguay.

### Sources

#### Sources 1971 to 2015:

- Direct communication with the Ministério de Minas e Energia, Brasília.
- Mauthner, F. and Weiss W., *Solar Heat Worldwide - Markets and contribution to the energy supply*, various editions up to 2015, IEA Solar Heating and Cooling Programme.

1. The national energy balance of Brazil shows bioethanol as two separate products: anhydrous ethanol (“álcool anidro”, i.e. nearly pure ethanol, containing less than 1% of water) and hydrated ethanol (“álcool hidratado”, i.e. a blend of ethanol and water, in the proportion of about 95% to 5%, generally obtained from conventional distillation). While anhydrous ethanol is blended with gasoline (the blend sold at the pump generally contains 20-25% of ethanol), hydrated ethanol is sold at separate pumps as a product by itself (álcool) to be used in flex fuel cars, i.e. vehicles that can run on any mix of gasoline and ethanol.

## Brunei Darussalam

### Sources

#### *Sources 2006 to 2015:*

- APEC Energy Database, Tokyo, 2016.
- Direct communication with the Prime Minister's Office, Strategic Planning Division, Bandar Seri Begawan.
- Direct communication with the Prime Minister's Office, Department of Electrical Services, Bandar Seri Begawan.
- IEA Secretariat estimates.

#### *Sources 1992 to 2005:*

- APEC Energy Database, Tokyo, 2007.
- Direct communication with the UN Statistics Division.
- Direct communication with the Office of the Prime Minister, Petroleum Unit
- Direct communication with the Asia Pacific Energy Research Centre.
- Direct communication with the Ministry of Development, Electrical Services Department.
- *Brunei Statistical Yearbook, 1992 to 1994*, Ministry of Finance, Statistics Section, Bandar Seri Begawan, 1993, 1995.

#### *Sources up to 1991:*

- *Fifth National Development Plan 1986-1990*, Ministry of Finance, Economic Planning Unit, Bandar Seri Begawan, 1985.

#### *Sources for biofuels and waste:*

- *The UN Energy Statistics Database*.

## Bulgaria

### General notes

Non-specified transformation of natural gas to other hydrocarbons corresponds to hydrogen used in refineries.

Bulgaria has re-classified black liquor from industrial waste to solid biofuels and the renewable portion of tyres from industrial waste to municipal waste – renewables from 2008. Breaks in time series may occur between 2007 and 2008.

A break in the time series for natural gas stock changes may occur between 2003 and 2004 as cushion gas is excluded starting in 2004.

### Sources

#### *Sources 1990 to 2015:*

- Direct communication with the National Statistical Institute, Sofia.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Energy Balances, National Statistical Institute, Sofia, 1995.

#### *Sources up to 1991:*

- *Energy Development of Bulgaria*, Government of Bulgaria, Sofia, 1980 and 1984.
- *Energy in Bulgaria*, Government of Bulgaria, Sofia, 1980 to 1983.
- General Statistics in the Republic of Bulgaria 1989/1990, Government of Bulgaria, Sofia, 1991.

#### *Sources for biofuels and waste:*

- *The UN Energy Statistics Database* and Joint IEA/Eurostat/UNECE annual energy questionnaires.

## Cambodia

### General notes

Data for Cambodia are available starting in 1995. Prior to that, they are included in Other Asia.

In 2015, new information regarding the imports of petroleum products in Cambodia from 2007 onwards became available. Data for these products were revised accordingly and as a result breaks in time series may occur for different products between 2007 and 2013.

### Sources

#### *Sources 1995 to 2015:*

- *Cambodia National Energy Statistics 2016*, Economic Research Institute for ASEAN and East Asia.
- *Report on Power Sector of the Kingdom of Cambodia*, Electricity Authority of Cambodia, Phnom Penh, various editions up to 2016.

- *Petroleum Products Imports Data from the Customs Office*, General Department of Petroleum of Cambodia, Phnom Penh, 2014.
- APEC annual energy questionnaires, 2010-2011.
- Direct communication with the Department of Energy, Ministry of Industry, Mines and Energy, Phnom Penh through the APEC annual energy statistics questionnaire, 1995-2011.
- Direct communication with the Department of Corporate Planning and Projects, Ministry of Industry, Mines and Energy, Phnom Penh through the APEC annual energy statistics questionnaire, 1995-2011.
- Direct communication with the Electricity Authority of Cambodia, Phnom Penh through the APEC annual energy statistics questionnaire, 1995-2011.
- Direct communication with Electricité du Cambodge, Phnom Penh through the APEC annual energy statistics questionnaire, 1995-2011.
- IEA Secretariat estimates.

## Cameroon

### General notes

In 2015, new information regarding Cameroon became available. Data points were revised accordingly which may lead to breaks in time series between 2011 and 2012 for electricity own use and losses and between 2011 and 2011 for crude oil trade and production.

### Sources

#### *Sources 1971 to 2015:*

- Direct communication with Ministère de l'Énergie et de l'Eau, Yaoundé.
- *Annuaire Statistique sur le Commerce*, CELSTAT, 2015.
- *Annual Report*, Eneo, 2014.
- *Statistiques Annuelles*, Société Nationale des Hydrocarbures (SNH), 2013, 2014, 2015.
- *Statistiques économiques*, Banque des États de l'Afrique Centrale (BEAC), online database, 2011.
- Direct communication with Société Nationale de Raffinage (SONARA).

- Direct communication with Société Nationale d'Électricité du Cameroun (*AES – SONEL*), Douala.
- *The UN Energy Statistics Database*
- IEA Secretariat estimates.

#### *Sources for biofuels and waste:*

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## People's Republic of China

### General notes

The People's Republic of China (China) joined the IEA as an Association country in November 2015.

### Revisions of China's 2000 - 2010 energy data

In early 2016, the National Bureau of Statistics (NBS) of the People's Republic of China (China) supplied the IEA with detailed energy balances for 2000 to 2010 and the IEA revised its data accordingly.

In September 2015, the NBS published China's energy statistics for 2013, as well as revised statistics for the years 2011 and 2012. These have already been taken into account by the IEA in the "Special data release with revisions for the People's Republic of China" in November 2015.

All revisions show significant changes both on the supply and demand side for a number of energy products, resulting in breaks in time series between 1999 and 2000. Most importantly, the previously significant statistical difference for coal has now been allocated in industrial consumption based on findings from a national economic census.

### Coal

Net calorific values (NCV) for coal inputs to power generation from 2000 are estimated by applying assumptions used by China on the average thermal efficiency of coal-fired power stations in these years. NCVs are also estimated for bituminous coal production from 2000 as well as for inputs to main activity heat plants from 2008.

A collaborative effort between NBS and IEA continues, with the objective of providing additional detail on energy production, transformation and consumption of all five different types of coal

(e.g. anthracite, coking coal, other bituminous, sub-bituminous and lignite). At the moment NBS only provides quantities of raw coal and washed coal in their energy balances and the IEA Secretariat has attributed these quantities to coking coal and other bituminous coal. It is expected that the continuing work to provide disaggregated data on the five different coals will result in greater detail in future editions.

Since 2000, imports and exports of cleaned coal are no longer reported in the national energy balance of China. The IEA Secretariat has used secondary sources of information to report this coking coal trade and corresponding quantities have been removed from bituminous coal trade. Consumption of this coking coal is assumed to be in coke ovens.

The IEA data of coal stocks for the years 1985 and 1990 as well as coal production for the years 1997-1999 are estimates and do not represent official data released by the Chinese government. Those estimates were based on the assumption that coal consumption statistics are more reliable than coal production statistics and that the production-consumption relationship should maintain a balance over time. In recent years, China has reported large increases in stocks for different types of coal. These stock increases are seen as consistent with trends in economic growth and development in China; however, information is currently lacking on the scale of the infrastructure available for this magnitude of stock increases.

Data for coal trade in this publication may not match data from secondary sources of information.

## Oil

Starting with 2010 data, NBS increased the level of detail of the national energy balance regarding oil products and coal gases. Breaks in time series may occur between 2009 and 2010.

In 2012, new information became available on how NBS accounts for international aviation and marine bunkers in the China's national energy balance. Previously international flights by Chinese airlines and ships had been excluded. A revised methodology was implemented that now includes fuel use for international airplanes and ships, regardless of whether they are foreign- or China-owned.

Coal to liquids output was estimated based on projected production slate of operational coal-to-liquid plants.

In recent years, China has reported large increases in stocks for crude oil and oil products. These stock increases are seen as consistent with trends in economic growth and development in China; however, information is currently lacking on the scale of the infrastructure available for this magnitude of stock increases.

## Natural gas

In the 2012 edition, information became available on natural gas consumption in public transportation in China. This consumption was added to the natural gas time series to ensure proper coverage of the transport sector.

Coal to gas output is estimated based on operational capacity of coal-to-gas plants.

## Biofuels and waste

Since 2016, the IEA has been working with the Institute of Built Environment of Tsinghua University, Beijing, to improve its data on biomass consumption in the residential sector in China. Biomass figures have therefore been revised in this edition back to 1997 to reflect the results of their study and of IEA analysis. Information also became available in 2012 from NBS on the production and consumption of gangue, a mining waste product that has been classified as industrial waste in the IEA energy balances. This quantity of industrial waste is not likely to represent the only combustion of industrial waste in China, however, information is not available to provide more complete data on this activity.

Time series for liquid biofuels and biogases are based on tertiary sources of information and IEA Secretariat estimates. None of these time series are reported in the national energy balance of China.

## Electricity and heat

Estimates on the electricity consumption in road transportation have been added in this edition, starting with 2001 data.

Electricity production from pumped storage hydro is reported from 2010.

Time series for wind (prior to 2010), geothermal, solar photovoltaic and solar thermal generation are based on tertiary sources of information and IEA Secretariat estimates. None of these time series are reported in the national energy balance of China.



## Sources

### Sources 1990 to 2015:

- *China Energy Statistical Yearbook*, National Bureau of Statistics, Beijing, various editions up to 2016.
- Direct communication with the China National Renewable Energy Centre (CNREC), National Energy Administration (NEA), Beijing.
- Direct communication with the Institute of Built Environment of Tsinghua University, Beijing.
- *Solar Heat Worldwide*, AEE - Institute for Sustainable Technologies, Gleisdorf, various editions up to 2017.
- China Electricity Council, online statistics, various editions up to 2014.
- *Trends in Photovoltaic Applications*, International Energy Agency Photovoltaic Power Systems Programme, 2013 edition.
- European Photovoltaic Industry Association, *Global Market Outlook for Photovoltaics 2013-2017, Figure 1: Evolution of global cumulative installed capacity 2000-2021*, May 2014.
- Zhang G., *Report on China's Energy Development 2010*, China's National Energy Administration, Beijing, editions 2009 to 2011.
- Zheng et. al, *Steady Industrialized Development of Geothermal Energy in China: Country Update Report*, Beijing, 2005-2009.
- Lund et. al, *Direct Utilization of Geothermal Energy 2010 Worldwide Review*, World Geothermal Congress, Bali, 2010.
- *The Global Biodiesel Balance for 2012 and 2013, World Ethanol and Biofuels Report*, F.O. Lichts, London, Vol. 11 No. 16, Apr. 23, 2013.
- IEA Secretariat estimates.

### Sources up to 1990:

- *Electric Industry in China in 1987*, Ministry of Water Resources and Electric Power, Department of Planning, Beijing, 1988.
- *Outline of Rational Utilization and Conservation of Energy in China*, Bureau of Energy Conservation State Planning Commission, Beijing, June 1987.
- *China Coal Industry Yearbook*, Ministry of Coal Industry, People's Republic of China, Beijing, 1983, 1984, 1985 and 2000.
- *Energy in China 1989*, Ministry of Energy, People's Republic of China, Beijing, 1990.

- *China: A Statistics Survey 1975-1984*, State Statistical Bureau, Beijing, 1985.
- *China Petro-Chemical Corporation (SINOPEC) Annual Report*, SINOPEC, Beijing, 1987.
- *Almanac of China's Foreign Economic Relations and Trade*, The Editorial Board of the Almanac, Beijing, 1986.

### Sources for biofuels and waste:

- IEA Secretariat estimates.

## Colombia

### Sources

#### Sources 1992 to 2015:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- Unidad de Planeación Minero Energética (UPME) Online statistics, Ministerio de Minas y Energía, various editions up to 2015.
- Direct communication with the Ministry of Mines and Energy, Energy Information Department, Bogotá.
- *Statistics 1996-2015*, Sistema de Información Eléctrico Colombiano, Ministry of Mines and Energy, online statistics, various editions up to 2015.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Boletín Minero-Energético*, Ministerio de Minas y Energía, Bogotá, December 1991.
- *Estadísticas Minero-Energéticas 1940-1990*, Ministerio de Minas y Energía, Bogotá, 1990.
- *Estadísticas Básicas del Sector Carbón*, Carbocol, Oficina de Planeación, Bogotá, various editions from 1980 to 1988.
- *Colombia Estadística 1985*, DANE, Bogotá, 1970 to 1983 and 1987.
- *Empresa Colombiana de Petróleos, Informe Anual*, Empresa Colombiana de Petróleos, Bogotá, 1979, 1980, 1981 and 1985.
- *Estadísticas de la Industria Petrolera Colombiana Bogotá 1979-1984*, Empresa Colombiana de Petróleos, Bogotá, 1985.

- Informe Estadístico Sector Eléctrico Colombiano, Government of Colombia, Bogotá, 1987 and 1988.
- *La Electrificación en Colombia 1984-1985*, Instituto Colombiano de Energía Eléctrica, Bogotá, 1986.
- *Balances Energéticos 1975-1986*, Ministerio de Minas y Energía, Bogotá, 1987.
- *Energía y Minas Para el Progreso Social 1982-1986*, Ministerio de Minas y Energía, Bogotá, 1987.

#### *Sources for Biofuels and waste:*

- Ministry of Mines and Energy, Energy Information Department, Bogotá.

## Congo

### General notes

In 2017 edition, no official data were available therefore figures are based on secondary sources and IEA estimates.

In 2016, time series for the period 2000-2012 were revised based on new energy balances received from the Ministry of Energy. Breaks in time series may occur between 1999 and 2000.

The Imboulou Hydro Plant (120MW) began operating in May 2011.

### Sources

#### *Sources 1971 to 2015:*

- Direct communication with the Ministère de l'Énergie et de l'Hydraulique, Brazzaville.
- Rapport annuel SIE-Congo 2014
- Direct communication with the Agence de Régulation de l'Aval Pétrolier, Brazzaville.
- Les chiffres caractéristiques de la Société Nationale d'Électricité 2005-2011, SNE, Brazzaville.
- IEA Secretariat estimates.

#### *Sources for biofuels and waste:*

- Rapport annuel SIE-Congo 2014.
- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Costa Rica

### Sources

#### *Sources up to 2015:*

- Direct communication with the Ministerio del Ambiente y Energía, San José.
- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- IEA Secretariat estimates.

## Côte d'Ivoire

### General notes

In the 2014 edition, new information regarding the classification of kerosene type jet fuel and other kerosene produced in Cote d'Ivoire since 1971 became available. Time series for these products were revised accordingly.

### Sources

#### *Sources 2013 to 2015:*

- AFREC Energy questionnaire, African Energy Commission, 2017 submitted by Direction de l'Énergie, Abidjan.
- Direct communication with Direction de l'Énergie, Abidjan.
- IEA Secretariat estimates.

#### *Sources 2009 to 2012:*

- Direct communication with Direction de l'Énergie, Abidjan.
- IEA Secretariat estimates.

#### *Sources 2005 to 2008:*

- WEC-IEA Joint Energy Reporting Format for Africa, questionnaire submitted by Direction de l'Énergie, Abidjan.
- Direct communication with Direction de l'Énergie, Abidjan.
- IEA Secretariat estimates.

**Sources 2002 to 2004:**

- Direct communication with the Ministry of Mines and Energy, Abidjan, 2005-2006, and IEA Secretariat estimates.

**Sources 1992 to 2001:**

- Direct communication with oil industry and the Ministry of Energy, Abidjan, July 2003.
- Direct communication with Société Ivoirienne de Raffinage, 2004.
- *La Côte d'Ivoire en chiffres*, Ministère de l'Economie et des Finances, Abidjan, 1996-97 edition.
- *L'Energie en Afrique*, IEPE/ENDA, Paris, 1995, in turn sourced from Ministère des Mines et de l'Energie, Abidjan.
- The UN Energy Statistics Database.

**Sources up to 1991:**

- *Etudes & Conjoncture 1982-1986*, Ministère de l'Economie et des Finances, Direction de la Planification et de la Prévision, Abidjan, 1987.

**Sources for biofuels and waste:**

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Croatia

**General notes**

Data for Croatia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.

Non-specified transformation of natural gas reported from 2007 refers to natural gas used by refineries for hydrogen production.

Breaks in time series may appear between 2007 and 2008 as transit data of electricity trade are not available for years prior to 2008.

**Sources****Sources 1990 to 2015:**

- Direct communication with the Energy Institute "Hrvoje Požar", Zagreb.
- Direct communication with the Central Bureau of Statistics, Zagreb.

- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- IEA Secretariat estimates.

## Cuba

**General notes**

Breaks in time series in the early 90s are assumed to be due to the codification into law of the embargo imposed on Cuba in 1992.

Figures for crude oil include additives added to reduce viscosity.

**Sources****Sources up to 2015:**

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Anuario Estadístico de Cuba*, Oficina Nacional de Estadísticas, Havana, various editions from 1998 to 2016.
- *Estadísticas Energéticas en la Revolución*, Oficina Nacional de Estadísticas, Havana, September 2009 edition.
- *Compendio estadístico de energía de Cuba 1989*, Comité Estatal de Estadísticas, Havana, 1989.
- *Anuario Estadístico de Cuba*, Comité Estatal de Estadísticas, Havana, various editions from 1978 to 1987.
- *Anuario Estadístico de Cuba*, Oficina Nacional de Estadísticas, Havana, various editions from 1998 to 2015.
- IEA Secretariat estimates.

## Curaçao

**General notes**

The Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent countries, Curaçao and Sint Maarten, with the remaining islands joining the Netherlands as special municipalities. In this edition, the methodology for accounting for the energy statistics of the Netherlands Antilles has been revised in order to follow the above-mentioned geographical changes. From 2012 onwards, data now

account for the energy statistics of Curaçao Island only. Prior to 2012, data remain unchanged and still cover the entire territory of the former Netherland Antilles.

As the Isla Refinery in Curaçao did not operate to its maximum capacity in 2010, a break in time series might occur in that year for crude oil and oil products.

## Sources

### Sources 1997 to 2015:

- *Informe de Gestión Anual*, PDVSA - Petróleos de Venezuela, S.A., various editions up to 2016.
- *The Economy of Curaçao and Sint Maarten in Data and Charts, Yearly Overview 2004-2016*, Centrale Bank van Curaçao en Sint Maarten, Willemstad.
- *Statistical indicators 1998-2010*, Central Bank of Netherlands Antilles, Willemstad.
- Direct communication with the Isla Refinery, Emmastad, Curaçao, up to 2008.
- *Statistical Information*, Central Bureau of Statistics, Fort Amsterdam, up to 2008.
- IEA Secretariat estimates.

## Cyprus

### General notes

#### Note by Turkey:

*The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".*

#### Note by all the European Union member states of the OECD and the European Union:

*The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the government of the Republic of Cyprus.*

Time series data from 2009-2010 for primary solid biofuels were revised based on newly available

information. Breaks in time series may occur between 2008 and 2009 for these products.

## Sources

### Sources 1994 to 2015:

- Direct communication with the statistical service of Cyprus, Nicosia.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- *Electricity Authority of Cyprus Annual Report 1996*, Electricity Authority of Cyprus, Nicosia, 1997.

### Sources up to 1993:

- *Electricity Authority of Cyprus Annual Report 1988, 1992*, Electricity Authority of Cyprus, Nicosia, 1989 and 1993.
- *Industrial Statistics 1988*, Ministry of Finance, Department of Statistics, Nicosia, 1989.

### Sources for biofuels and waste:

- Joint IEA/Eurostat/UNECE annual energy questionnaires and IEA Secretariat estimates.
- Note: Data on electricity generation from solar thermal and heat production from municipal waste and wood were submitted for the first time from the year 2004.

## Democratic People's Republic of Korea

### General notes

2011 data for primary coals were revised based on new information in the 2014 edition. This may lead to breaks in the time series between 2010 and 2011 and differences in trends compared to previous editions for some products.

## Sources

### Sources 1971 to 2015:

- Direct communication with Korea's National Statistical Office and Korea's Energy Economics Institute.
- *North Korea Statistics*, Korean Statistical Information Service website, www.kosis.kr, Seoul.

- *The UN Energy Statistics Database.*
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- *The UN Energy Statistics Database.*
- Forestry Statistics, FAO, Rome, 2017.
- IEA Secretariat estimates.

## Democratic Republic of the Congo

### General notes

In the 2015 edition, new information and methodologies regarding biomass and charcoal became available. Breaks in time-series may occur between 2013 and 2014.

New estimations were made for biomass production in 2014. This may result in break in time series.

### Sources

#### **Sources up to 2015:**

- AFREC Energy questionnaire, African Energy Commission, 2014 and 2015.
- IEA Secretariat estimates.

#### **Sources up to 2013:**

- Direct communication with the Ministère de l'Énergie, Kinshasa Gombe.
- Commission Nationale de l'Énergie, Ministère de l'Énergie, Kinshasa Gombe, 2005.
- WEC-IEA Joint Energy Reporting Format for Africa, 1999 to 2000.
- *The UN Energy Statistics Database.*
- *L'Énergie en Afrique*, IEPE/ENDA, Paris, 1995, in turn sourced from the *Annuaire Statistique Énergétique 1990*, Communauté Economique des Pays des Grands Lacs, Bujumbura, 1990.
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Dominican Republic

### General notes

In 2014 the national energy balance was adopted as the primary data source. This could lead to breaks in time series between 1997 and 1998 for some flows. In 2017 the breakdown of consumption data was integrated to IEA balance starting from year of 1998.

### Sources

#### **Sources 1971 to 2015:**

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed Jan 2017: <http://sier.olade.org/>.
- *Balance energía neta*, Comisión nacional de energía, Santo Domingo various editions up to 2015.
- *Importación de petróleo y derivados*, Ministre de Industria y Comercio (MIC), Santo Domingo, various editions up to 2012.
- Capacidad instalada y generación del SENI por año, según tecnología, 2000-2010, Oficina Nacional de Estadística, Santo Domingo.
- IEA Secretariat estimates.

## Ecuador

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Ecuador has revised historical data since 2004. This may lead to different trends compared to previous editions of this publication.

In the 2015 edition new information became available regarding production and consumption of refinery fuel. This may lead to breaks in time series between 2012 and 2013 (2011 and 2012) for some oil products.

A new hydro plant opened in northern Ecuador in 2015.

### Sources

#### **Sources 1999 to 2015:**

- Direct communication with the Ministerio Coordinador de Sectores Estratégicos, Quito.



- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- Direct communication with the Ministerio de Recursos Naturales No Renovables, Quito, up to 2014.
- Direct communication with the Ministerio de Minas y Petróleos, Quito, up to 2011. *Balance Energético Nacional – Resumen*, Ministerio Coordinador de Sectores Estratégicos, Quito, various editions up to 2014.
- *Estadística del Sector Eléctrico Ecuatoriano*, Agencia de Regulación y Control de Electricidad Arconel, Quito.
- *Informe Estadístico, & Informe Cifras Petroleras*, Petroecuador, Empresa Estatal Petróleos del Ecuador, Quito.
- *Reporte del Sector Petrolero*, Banco Central del Ecuador, Quito.
- IEA Secretariat estimates.

#### Sources 1990 to 1998:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito: <http://sier.olade.org/>.

#### Sources up to 1989:

- Ministerio de Energía y Minas.
- *Cuentas Nacionales*, Banco Central del Ecuador, Quito, various editions from 1982 to 1987.
- *Memoria 1980-1984*, Banco Central del Ecuador, Quito, 1985.
- *Ecuadorian Energy Balances 1974-1986*, Instituto Nacional de Energía, Quito, 1987.
- *Información Estadística Mensual, No. 1610*, Instituto Nacional de Energía, Quito, 1988.
- *Plan Maestro de Electrificación de Ecuador*, Ministerio de Energía y Minas, Quito, 1989.

## Egypt

### General notes

Data are reported on a fiscal year basis. Data for 2015 correspond to 1 July 2015-30 June 2016.

Stock changes may include informal trade.

The IEA Secretariat has revised marine bunkers back to 2004. Data from 2004 are now based on data

received from the Egyptian Authorities. Electricity data for 2015 are estimated by the Secretariat.

### Sources

#### Sources 1992 to 2015:

- Direct communication with the Central Agency for Public Mobilization and Statistics, Cairo, CAPMAS.
- Direct communication with the Organisation for Energy Planning, Cairo.
- WEC-IEA Joint Energy Reporting Format for Africa, 2000 to 2012.
- Direct submission to the IEA Secretariat from the Ministry of Petroleum, Cairo.
- *Annual Report 1995, 1997, 1998, 1999*, Ministry of Petroleum, Egyptian General Petroleum Corporation, Cairo, 1996, 1998 to 2000.
- *Annual Report of Electricity Statistics 1996/1997 to 2010/2011*, Ministry of Electricity and Energy, Egyptian Electricity Holding Company, Cairo, 1998 to 2012.
- *Arab Oil and Gas*, The Arab Petroleum Research Center, Paris, October 1997.
- *Middle East Economic Survey*, Middle East Petroleum and Economic Publications, Nicosia, February 1994, June 1996, March 1998.
- *A Survey of the Egyptian Oil Industry 1993*, Embassy of the United States of America in Cairo, Cairo, 1994.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Annual Report of Electricity Statistics 1990/1991*, Ministry of Electricity and Energy, Egyptian Electricity Authority, Cairo, 1992.
- *Statistical Yearbook of the Arab Republic of Egypt*, Central Agency for Public Mobilisation and Statistics, Cairo, 1977 to 1986.
- *L'Electricité, l'Energie, et le Pétrole*, République Arabe d'Egypte, Organisme Général de l'Information, Cairo, 1990.
- *Annual Report*, The Egyptian General Petroleum Corporation, Cairo, 1985.

#### Sources for biofuels and waste:

- *The UN Energy Statistics Database*
- IEA Secretariat estimates.

## El Salvador

### General notes

El Salvador shut down its only refinery in 2012.

### Sources

#### *Sources up to 2015:*

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Balances Energeticos*, Consejo Nacional de Energia (CNE), San Salvador, various editions from 2007 to 2015.
- *Boletín de Estadísticas*, Superintendencia General de Electricidad y Telecomunicaciones (SIGET), San Salvador, various editions from 1998 to 2015.
- *Centroamérica: estadísticas de hidrocarburos, 2014*. Comisión Económica para América Latina y el Caribe (CEPAL), various editions from 2009-2015.
- Direct communication with the Ministerio de Economía, Dirección de Hidrocarburos y Minas, San Salvador.
- Direct communication with the Consejo Nacional de Energia El Salvador (CNE), San Salvador.
- IEA Secretariat estimates.

## Eritrea

### General notes

Data for Eritrea are available from 1992. Prior to 1992, data are included in Ethiopia.

Solid biofuels consumption data have been periodically re-estimated by Eritrea. This may result in breaks in time series for this product.

### Sources

#### *Sources 1992 to 2015:*

- Direct Communication with the Ministry of Energy and Mines, Asmara.
- IEA Secretariat estimates.

## Ethiopia

### General notes

Ethiopia energy data include Eritrea from 1971 to 1991. From 1992, the two countries are reported separately.

Data are reported according to the Ethiopian financial year, which runs from 1 July to 30 June of the next year.

Electricity data are revised based on ministry reporting split between wind and geothermal production since 2011.

The Aluto Langanu pilot geothermal power plant began an expansion project in 2010. Breaks in geothermal time series can be seen in 2010 due to the plant being out of commission.

### Sources

#### *Sources 2012 to 2015:*

- Direct communication with the Ministry of Water, Irrigation, and Energy, Addis Ababa.
- *Existing Power Plants*, Ethiopian Electric Power Corporation, online database, 2014.
- *Biomass Energy Strategy Formulation for Ethiopia*, European Union Energy initiative, in cooperation with the Ethiopian Ministry for Water and Energy, Germany, 2013
- IEA Secretariat estimates.

#### *Sources 1992 to 2012:*

- Direct communication with the Ministry of Mines and Energy, Addis Ababa.
- Direct communication with the Energy Development Follow-up and Expansion Department of the Ministry of Infrastructure, Addis Ababa, 2004 and 2005.
- Direct communication with the Ministry of Finance and Economic Development, Addis Ababa, 1998 to 2003.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

#### *Sources up to 1991:*

- *Ten Years of Petroleum Imports, Refinery Products, and Exports*, Ministry of Mines & Energy, Addis Ababa, 1989.

- *Energy Balance for the Year 1984*, Ministry of Mines & Energy, Addis Ababa, 1985.
- *1983 Annual Report*, National Bank of Ethiopia, Addis Ababa, 1984.
- *Quarterly Bulletin*, National Bank of Ethiopia, Addis Ababa, various editions from 1980 to 1985.

#### **Sources for biofuels and waste:**

- *Biomass Data 2007-2012*, Ministry of Water and Energy, Addis Ababa, 2012.
- IEA Secretariat estimates up to 2006 based on 1992 data from Eshetu and Bogale, *Power Restructuring in Ethiopia*, AFREPREN, Nairobi, 1996.

## Former Yugoslav Republic of Macedonia

### General notes

Data for FYR of Macedonia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.

The FYR of Macedonia has changed the methodology for reporting autoproducer heat consumption for own use in 2010, which can lead to breaks in time series between 2009 and 2010.

The refinery OKTA in the FYR of Macedonia was shut down in 2014. This may lead to breaks in time series from 2013-2014.

The State Statistical Office revised the energy balances from 2005 to 2014 in accordance with the survey conducted on household energy consumption.

### Sources

#### **Sources 1990 to 2015:**

- Direct communication with the State Statistical Office of Macedonia, Department for Environment, Energy and Transport, Skopje.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- *UN Energy Statistics Database and Forestry Statistics*, FAO, Rome, 2000.

## Gabon

### General notes

Revisions were made to the residential fuel consumption from the time period of 2010 to 2014 to take into account newly available data. This may result in break in time series between 2009 and 2010. Revisions were made for crude oil production for the whole time series.

### Sources

#### **Sources 1992 to 2015:**

- AFREC Energy questionnaire, African Energy Commission, 2015.
- *Rapport annuel de la SEEG*, Société d'Énergie et d'Eau du Gabon, Libreville, various editions from 2000 to 2015.
- *Tableau historique de production de 1957 à nos jours*, Total Gabon, online database, 2015.
- *Statistiques économiques*, Banque des Etats de l'Afrique Centrale (BEAC), online database, 2011.
- *Annuaire Statistique du Gabon*, Ministère de l'économie, du commerce, de l'industrie et du tourisme, Libreville, 2001 to 2007 and 2004 to 2008, 2011.
- Direct communication with Direction Générale de L'Energie, Libreville, 2003 to 2008.
- Direct communication with Société Gabonaise de Raffinage, Port Gentil, 1997, 2000 to 2006, 2008 to 2009.
- *Tableau de Bord de l'Economie, Situation 1997, Perspectives 1998-1999*, Direction Générale de l'Economie, Ministère des Finance, de l'Economie, du Budget et des participations, chargé de la privatisation, May 1998.
- *Rapport d'Activité*, Banque Gabonaise de Développement, Libreville, 1985, 1990, 1992 and 1993.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

#### **Sources up to 1991:**

- *Tableau de Bord de l'Economie, Situation 1983 Perspective 1984-85*, Ministère de l'Economie et des Finances, Direction Générale de l'Economie, Libreville, 1984.



### *Sources for biofuels and waste:*

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Georgia

### General notes

Data for Georgia are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Georgia is one of the 11 EU4Energy focus countries.

Energy data for Georgia do not include Abkhazia and South Ossetia.

Data on international marine bunkers for Georgia are not currently available; however upcoming local surveys are planned and should make this information available in future years.

In the 2016 edition, population figures, collected from the World Bank, have been revised down compared to previous editions. This explains an increase in energy consumption per capita compared to previous editions. Georgia conducted a general population census in 2014 and revised population figures accordingly.

In 2015, a refinery started operating in Georgia.

In 2015, trade of crude oil includes a share of crude oil blended with fuel oil. This explains breaks in time series from 2014.

In 2015, trade of natural gas for the year might include re-export.

Between 2014 and 2015, a break in stock level time series appears for some oil products as the National Statistical Office (GEOSTAT) received more detailed information on stocks of oil products.

Between 2012 and 2013, breaks in time series may appear for some products, as data collection and submission to the IEA became the responsibility of the National Statistical Office (GEOSTAT), whereas it used to be done by the Energy Efficiency Centre.

Since 2011, heat production has stopped due to the shutdown of combined heat and power plants.

### Sources

#### *Sources 2015:*

- Direct communication with GEOSTAT.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

#### *Sources 2013 to 2014:*

- Direct communication with GEOSTAT. The National Statistical Office started submitting Joint IEA/Eurostat/UNECE questionnaires in 2015 (2013 data).
- IEA Secretariat estimates.

#### *Sources 2008 to 2012:*

- Direct communication with the Energy Efficiency Centre Georgia, Tbilisi.
- IEA Secretariat estimates.

#### *Sources 1990 to 2008:*

- *Official Energy Balance of Georgia 1990-1999, 2000-2008*, Ministry of Economy and Ministry of Energy, Tbilisi.
- IEA Secretariat estimates.

## Ghana

### General notes

In 2014, Ghana started to exploit gas that was previously flared.

Primary solid biomass figures for 2000-2012 were revised in the 2015 edition, as new information became available. Breaks in time series might occur between 1999 and 2000.

In 2011, Ghana began oil production from the Jubilee fields, resulting in a change in crude production and exports between 2010 and 2011.

Data were revised for electricity, oil products and biofuels until 2000 and from 2009 to 2012 based on new information received from the Energy Commission. Breaks in time series may occur for these products.

### Sources

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- Detailed Statistics of Petroleum Products Consumption 1999-2008, National Petroleum Authority, Accra, 2009.
- *National Energy Statistics*, Ministry of Energy and Mines, Accra, 2000.
- *Quarterly Digest of Statistics*, Government of Ghana, Statistical Services, Accra, March 1990, March 1991, March 1992, March 1995.
- *Energy Balances*, Volta River Authority, Accra, various editions from 1970 to 1985.
- IEA Secretariat estimates.

#### Sources for biofuels and waste:

- Ministry of Mines and Energy, *the UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Gibraltar

### General notes

In the 2015 edition, the time series for residual fuel oil and gas/diesel oil consumed as international marine bunkers were revised based on newly available information.

### Sources

#### Sources up to 2015:

- *Abstract of Statistics*, Government of Gibraltar, Gibraltar, various editions up to 2015.
- Gibraltar Port Authority, Gibraltar, 2015. Gibraltar Electricity Authority, Gibraltar, 2008.
- IEA Secretariat estimates.

## Guatemala

### General notes

The Texaco refinery in Escuintla ceased operations in 2002.

Orimulsion was imported between 2004 and 2006 for electricity generation and is reported under Other Hydrocarbons.

## Sources

#### Sources up to 2015:

- Direct communication with the Dirección Nacional de Energía, Ministerio de Energía, Guatemala City.
- Energy-Economic Information System (SIEE), Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- *Informe Balance Energético, 2010, 2011, 2012, 2013, 2014 and 2015* Ministry of Energy and Mines, Guatemala City.
- Estadísticas Energéticas – Subsector Eléctrico, 2010 to 2014 editions, Ministry of Energy and Mines, Guatemala City.
- Production, consumption, Exports and Imports of Oil products Ministry of Energy and Mines, Guatemala City, 2015.
- IEA Secretariat estimates.

## Haiti

### General notes

In 2015 edition, data for solid biofuels and waste products were revised from 2005 to 2011 based on revisions made by OLADE. Breaks in time series may occur during this period for some products.

### Sources

#### Sources 2009 to 2015:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- Direct communication with Bureau des Mines et de l'Énergie, Port-au-Prince. *Tableau de suivi du secteur électricité*, Ministère de l'Économie et des Finances de la République d'Haïti.
- IEA Secretariat estimates.

#### Sources 2008:

- Direct communication with Table Sectorielle Énergie Électrique, Ministère des Travaux Publics, Transports et Communications, Haiti.
- IEA Secretariat estimates.

#### Sources 2005 to 2007:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito: <http://sier.olade.org/>.

**Sources up to 2004:**

- Direct communication with Bureau des Mines et de l'Énergie.

## Honduras

**General notes**

In 2016 edition, time series data were revised for the period 2009-2013. These revisions made in OLADE data might create breaks in time series in 2010 and 2011 for biofuels and waste used in autoproductors' electricity plants.

**Sources****Sources 2007 to 2015:**

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Anuario Estadístico*, Empresa Nacional de Energía Eléctrica (ENEE), Tegucigalpa, several editions up to 2015
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- *Centroamérica: Estadísticas de Producción del Subsector Eléctrico*, Comisión Económica para América y el Caribe (CEPAL), United Nations, Mexico, several editions up to 2013.
- IEA Secretariat estimates.

**Sources up to 2006:**

- Direct communication with Empresa Nacional de Energía Eléctrica, Comayagüela.
- Direct Communication with the Secretariat de Recursos Naturales y del Ambiente, Tegucigalpa.
- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito: <http://sier.olade.org/>.

## Hong Kong, China

**General notes**

In the 2016 edition, trade data for various other petroleum products were revised based on newly

available information. Breaks in time series may occur between 2000 and 2001.

**Sources****Sources up to 2015:**

- *Hong Kong Energy Statistics - Annual Report*, Census and Statistics Department, Hong Kong Special Administrative Region, various editions up to 2016.
- *Hong Kong Merchandise Trade Statistics – Domestic Exports and Re-exports/ Imports*, Census and Statistics Department, Hong Kong Special Administrative Region, various editions up to December 2015.
- Direct communication with The Hongkong Electric Company, Ltd, Hong Kong.
- *China Light & Power - Annual Report*, China Light & Power Group, Hong Kong, several editions up to 2016.
- *China Light & Power – Facility Performance Statistics*, China Light & Power Group, Hong Kong, several editions up to 2016.
- *Hong Kong Monthly Digest of Statistics*, Census and Statistics Department, Hong Kong, various editions to 1994.
- *Towngas - Annual Report*, The Hong Kong and China Gas Company Ltd., Hong Kong, several editions up to 2013.

**Sources for biofuels and waste:**

- *Hong Kong Energy End-use Data, EMSD*, The Electrical & Mechanical Services Department, Government of Hong Kong, several editions up to 2016.
- *The UN Energy Statistics Database*.
- *Hong Kong Energy Statistics - Annual Report 2003*.
- IEA Secretariat estimates.

## India

**General notes**

India joined the IEA as an Association country in March 2017.

Data are reported on a fiscal year basis. Data for 2015 correspond to 1 April 2015 – 30 March 2016.

## Coal

In 2015, significant revisions of the net calorific values of the different types of coal were made for the whole time series, based on official data as well as IEA and other expert estimates. As a result, there have been significant changes for the coal data when presented in energy units, as well as in the calculated efficiency of coal fired power generation. Data on the production and consumption of secondary coal products may have also been revised as a result.

From 2008, due to a notable discrepancy between official coal imports from India and coal exports to India as reported by trade partners, imports of coking coal and non-coking coal are estimated by the IEA Secretariat, based on trade partners' data. The breakdown of non-coking coal imports between bituminous coal and sub-bituminous coal is estimated from 2008. This could lead to breaks in time series between 2007 and 2008.

Coking coal figures for India do not align with IEA definitions as they include production of non-metallurgical coking coal reported by India. Figures may be revised in future editions to include only washed coking coal.

Due to data limitations, IEA Secretariat estimates are used for some products and flows, including supply and demand of coke oven gas and blast furnace gas. Coke oven coke production is estimated from 2006 based on growth of blast furnace iron production, as official production data do not include production from small private producers.

## Oil

Information on stock changes of crude oil and oil products, available from the JODI database from April 2011, was added to the 2014 edition. Breaks in time series may appear in stock changes between 2010 and 2011. Based on data available by the Ministry of Petroleum and Gas, refinery intake is split between crude oil and refinery feedstocks from 1999. The refinery feedstocks reported by the IEA Secretariat correspond to the quantities officially reported as "other inputs" to Reliance Refineries. They do not include additives and refinery feedstocks to other Indian refineries. These missing inputs could reach up to 2.5 million tonnes.

Data for diesel consumption from 2008 are partially based on an official survey on the end use of diesel retail sales. The IEA Secretariat classifies the diesel used in mobile phone towers and non-industry power generators as input to autoproducer electricity generation. A corresponding electricity output is estimated.

No NGL production is officially reported by India. The NGL production estimated by the IEA Secretariat corresponds to the production of oil products from gas separation plants, known in India as "fractionators". In the IEA methodology, the output of oil products from gas separation plants comes from an input of NGL and the separation process is shown in the transfer row. Prior to 2005-06, the split of fractionator output between petroleum products is estimated by the IEA Secretariat.

No breakdown of refinery fuel by products is currently officially available. In this edition, refinery gas production has been estimated based on expected refinery output for the years 2009-2015. In addition, refinery gas may also include other oil products used, such as residual fuel oil. Due to notable breaks in official data for fuel oil, consumption of fuel oil in international marine bunkers is estimated from 1990 based on industry sources, and final consumption of fuel oil is estimated from 2004 based on 2003 data.

## Natural gas

Natural gas imports for India from 2008 are based on Indian Customs data, in order to include all LNG importers.

No data are officially available on the sectoral consumption of re-gasified LNG and city gas. The breakdown is estimated by the IEA Secretariat.

## Biofuels and waste

Due to data limitations, use of biogas produced in family biogas plants for cooking is currently not estimated by the IEA Secretariat. Data for biofuels production are based on USDA-estimates for the calendar year.

In 2015, estimates of the production and consumption of charcoal have been added for the whole time series, as well as the respective inputs of fuelwood to charcoal production plants.

## Electricity and heat

Data for total electricity generation include estimates for electricity generation from diesel by non-industrial autoproducers as well as off-grid electricity generation from renewable energy. In 2017, data on the electricity consumption by industrial sub-sector have been added for the year 2014. 2015 data have been estimated by the IEA Secretariat.

Only information on total on-grid generation from renewables is officially available. The breakdown between sources was estimated by the IEA Secretariat



from 2007 using official data on capacities from MNRE. Total off-grid generation and split by sources are estimated based on capacities from 2007 onward.

According to newly available information, estimates of solar thermal output up to 2012 may include systems that were out of operation. For this reason, a break in time series might occur between 2012 and 2013.

## Sources

### Sources 1992 to 2015:

- Direct communication with the Central Statistical Office, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
- *Energy Statistics*, Central Statistical Office, Ministry of Statistics and Programme Implementation, New Delhi, various editions up to 2015-16.
- *Monthly Abstract of Statistics*, Ministry of Planning, Central Statistics Organisation, Department of Statistics, New Delhi, various editions from 1984 to 2000.

### Coal

- Direct communication with the Coal Controller's Office, Ministry of Coal, Government of India, Kolkata.
- *Coal Directory of India*, Coal Controller's Office, Ministry of Coal, Kolkata, various editions up to 2015-2016.
- *Annual Review of Coal Statistics*, Coal Controller's Office, Ministry of Coal, Kolkata, various editions from 1993-1994 to 1998-1999.

### Oil and natural gas

- Direct communication with the Economic Division and Petroleum Planning and Analysis Cell, Ministry of Petroleum and Natural Gas, Government of India, New Delhi.
- *Indian Petroleum and Natural Gas Statistics*, Ministry of Petroleum and Natural Gas, New Delhi, various editions from 2000-01 to 2015-16.
- *Petroleum and Natural Gas data*, website of Petroleum Planning and Analysis Cell, Ministry of Petroleum and Natural Gas, New Delhi, [www.ppac.org](http://www.ppac.org).
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Ministry of Petroleum and Gas, New Delhi, January 2014.

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- Joint Oil Data Initiative (JODI) online database.
- *India – On the Move*, World Bunkering, The International Bunker Industry Association, London, Spring 2012.

### Biofuels and waste

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- *Physical Targets and Achievements During the 11<sup>th</sup> Plan*, Ministry of New and Renewable Energy, Open Government Data Platform India, [data.gov.in](http://data.gov.in), accessed 8.4.2014
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- *Annual Report 1994-1996, 1998-1999*, Ministry of Energy, Department of Non-Conventional Energy, New Delhi, 1996 and 1999.
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- *Monthly Review of the Indian Economy*, Center for Monitoring Indian Economy PVT Ltd., New Delhi, various issues from 1994 to June 1999.
- *The UN Energy Statistics Database*.
- Forestry Statistics, FAO, Rome, 2017.
- IEA Secretariat estimates, based on a per capita average consumption from various surveys and direct communication with the former Ministry of Non-conventional Energy Sources.

### Electricity and heat

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- *Statistical Outline of India*, Ministry of Finance, New Delhi, 1983, 1984, 1986, 1987.
- *Monthly Coal Bulletin, vol xxxvi no.2.*, Ministry of Labour, Directorate General of Mines Safety, New Delhi, February 1986.
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- *Energy Data Directory, Yearbook "TEDDY"*, and *Annual Report*, The Energy and Resources Institute "TERI", New Delhi, 1986-1988, 1990.

## Indonesia

### General notes

Indonesia joined the IEA as an Association country in November 2015.

For 2012-2015 coal exports data from BPS are used. This results in breaks in time series for 2011-2012.

Non-specified industry consumption is re-estimated by the IEA Secretariat.

The production and allocation of coal among the various coal types and products between 2000 and 2015 are estimated by the IEA Secretariat due to data collection limitations.

In 2015, data reported for coal consumption in pulp and paper industry might also include coal consumed in the textile and fertilizers sectors. This may create breaks in time series.

Electricity consumption for the agricultural sector is estimated by the IEA Secretariat for 2000-2015. This may lead to breaks in time series between 1999-2000.

### Sources

#### Sources 2008 to 2015:

- Direct communication with the Data Centre and Information Technology (PUSDATIN), Ministry of Energy and Mineral Resources, Jakarta.
- *Handbook of Energy & Economic Statistics of Indonesia*, PUSDATIN, Ministry of Energy and

Mineral Resources (ESDM), Jakarta, various editions up to 2016.

- *Statistik, Minyak & Gas Bumi*, Directorate General of Oil and Gas, Ministry of Energy and Mineral Resources (ESDM), Jakarta, various editions up to 2016.
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- Direct communication with PT PLN (Persero), Jakarta.
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- IEA Secretariat estimates.

#### **Sources 1992 to 2007:**

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- *Statistics on Electricity and Energy, 1998 to 2004*, Directorate General of Electricity and Energy Utilisation, Jakarta, 1999 to 2005.
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#### **Sources up to 1991:**

- *Indonesian Financial Statistics*, Bank of Indonesia, Jakarta, 1982.
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- *Statistical Yearbook of Indonesia*, Biro Pusat Statistik, Jakarta, 1978 to 1984 and 1992.
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#### **Sources for Biofuels and waste:**

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- *The UN Energy Statistics Database* and IEA Secretariat estimates.
- Direct communication with Indonesian Biofuel Producer Association (APROBI), Jakarta.

## Islamic Republic of Iran

### General notes

Data are reported according to the Iranian calendar year. Data for 2015 correspond to 20 March 2015 – 19 March 2016, which is Iranian year 1394.

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Statistical differences in the Islamic Republic of Iran statistics and balances can include stock change for some coal and oil products.

More detailed information for the consumption of coke oven coke became available for 2009-2012. Breaks in time series may occur between 2008 and 2009.

### Sources

#### **Sources 1999 to 2015:**

- Direct communication with the Ministry of Energy, Teheran.

- Energy Balance of Iran, Department of Energy, Teheran, various editions up to the Iranian year 1393, Teheran.
- Statistical Report on 49 Years of Activities of Iran Electric Power Industry (1967-2015), Tavanir Holding Company, Tehran, 2016.
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#### Sources for biofuels and waste:

- *The UN Energy Statistics Database*; Forestry Statistics, FAO, Rome, 2000.
- IEA Secretariat estimates.
- Direct communication with the Ministry of Energy, Teheran.

## Iraq

### General notes

New data for electricity generation became available for 2010-2013. Breaks in time series may occur between 2009 and 2010.

Destruction of Iraq's largest refinery occurred in 2015, resulting in large decreases in oil products output in 2015.

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Crude oil export data include back-blending of fuel oil.

### Sources

#### Sources 1998 to 2015:

- Direct communication with the Ministry of Electricity.
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- Direct communication with the Ministry of Planning and Development Cooperation and with the Central Organization for Statistics and Information Technology.
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- *Oil Production, Export, and Consumption Report*, Ministry of Natural Resources Kurdistan Regional Government, various editions up to 2015.
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- IEA Secretariat estimates.

#### Sources up to 1997:

- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Jamaica

### General notes

In 2016 edition new information became available on industrial consumption of oil products and electricity. This may lead to breaks in time series between 2007 and 2008 data as well as differences with previous editions.



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- *Statistical Digest*, Research and Development Division, Bank of Jamaica, Kingston, 1984, 1985, 1986, 1989, 1990.

## Jordan

### General notes

Due to an attack on a major natural gas pipeline between Egypt and Jordan during the 2011 revolution in Egypt, Jordan relied much more on fuel oil and diesel for power generation between 2011 and 2014.

Jordan started importing coal products in 2012.

## Sources

### Sources 2005 to 2015:

- Direct communication with the Ministry of Energy and Mineral Resources, Amman.
- *Annual Report*, National Electric Power Company, Amman, various editions up to 2016.
- IEA Secretariat estimates.

### Sources 1992 to 2004:

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### Sources for biofuels and waste:

- *Forestry Statistics*, FAO, Rome, 2000.
- IEA Secretariat estimates.

## Kazakhstan

### General notes

Data for Kazakhstan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Kazakhstan is one of the 11 EU4Energy focus countries.

In 2016, the Committee on Statistics of Kazakhstan introduced changes in the forms used to collect energy data to align more closely with the International Recommendations for Energy Statistics. In order to reduce burden on enterprises, questions on supply were removed and supply data are now taken from administrative sources. As a consequence, breaks in the time series appear for many product and flows, both for supply and demand between 2014 and 2015 data. Revisions are to be expected as data for additional years become available in the new format.

From 2012 onwards, as a result of important work carried out jointly by the Committee on Statistics and the Ministry of National Economy of the Republic of Kazakhstan, the IEA Secretariat was able to switch to the Joint IEA/Eurostat/UNECE questionnaires as a primary source for Kazakhstan's data. Breaks in time series appear between 2011 and 2012 as a result of this change.

In 2010, Kazakhstan became a member of a Customs Union with Russia and Belarus. Breaks in trade time series appear from 2009 to 2012 as the Customs shifted from one accounting system to another.

Kazakhstan's coal data are normally not disaggregated by coal type. The disaggregation presented in the IEA energy balances is achieved by considering the typical end uses for different types of coals. This may lead to large statistical differences for some types of coal.

Natural gas production excludes re-injection but, due to data limitations, may include gas vented or flared. As a consequence, the data for natural gas use in oil and gas extraction may also include these amounts.

In order to be consistent with the Customs Union agreements between Russia and Kazakhstan, natural gas production and exports data include raw gas production from the Karachaganak field (not marketable gas as per IEA definition).

Natural gas trade data have been revised by Kazakhstan leading to large statistical differences for 2012 and 2013.

## Sources

### Sources 2012 to 2015:

- Direct communication with the Committee on Statistics of the Ministry of National Economy (formerly: Agency on Statistics) of the Republic of Kazakhstan, Astana.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

- IEA Secretariat estimates.

### Sources 1993 to 2011:

- Direct communication with the Agency on Statistics of the Republic of Kazakhstan, Astana.
- *Fuel and Energy Balance of Kazakhstan Republic*, Agency on Statistics of the Republic of Kazakhstan, Astana, various editions up to 2010.
- Joint IEA/Eurostat/UNECE annual energy questionnaires, 1993, 1995, 1997 to 2009.
- *Statistical Yearbook "Kazakhstan in 2009"*, Agency on Statistics of the Republic of Kazakhstan, Astana, 2010.
- IEA Secretariat estimates.

### Sources 1990 to 1992:

- IEA Secretariat estimates.

### Sources for biofuels and waste:

- *Fuel and Energy Balance of Kazakhstan Republic*, Agency on Statistics of the Republic of Kazakhstan, Astana, various editions up to 2010.
- Forestry Statistics, FAO, Rome, 2000.
- IEA Secretariat estimates.

## Kenya

### General notes

As of 2001, electricity data are reported on a fiscal year basis, beginning on 1 July and ending on 30 June of the subsequent year.

In 2014, the Olkaria geothermal plant came online, significantly increasing the country's geothermal electricity production capacity. Breaks in time series can be observed between 2013-2014 in electricity output from geothermal energy.

Stock changes for lubricants may include informal trade.

## Sources

### Sources 2005 to 2015:

- *Economic Survey*, Central Bureau of Statistics, Nairobi, various editions up to 2016.
- *Annual Report and Financial Statements*, Kenya Power, various editions up to 2016.

- Direct communication with AFREPREN and Petroleum Institute of East Africa, Nairobi, up to 2008.
- *Kenya, Facts and figures*, 2006 Edition, Central Bureau of Statistics, Nairobi.
- *Annual Report and Accounts*, 2006/07 to 2013/14 the Kenya Power & Lighting Company Limited, Nairobi.
- IEA Secretariat estimates.

#### Sources 1992 to 2004:

- Direct communication with the Ministry of Energy, Nairobi.
- *Economic Survey, 1995 to 2004*, Central Bureau of Statistics, Nairobi.
- *Annual Report and Accounts*, 2001/02, 2002/03, 2003/2004, 2004, 2005, the Kenya Power & Lighting Company Limited, Nairobi.
- *The UN Energy Statistics Database*.

#### Sources up to 1991:

- *Economic Survey*, Government of Kenya, Nairobi, 1989.
- *Economic Survey 1991*, Ministry of Planning and National Development, Central Bureau of Statistics, Nairobi, 1992.
- *Kenya Statistical Digest*, Ministry of Planning and National Development, Central Bureau of Statistics, Nairobi, 1988.

#### Sources for biofuels and waste:

- Data for 2000 are based on research carried out by the Ministry of Energy on consumption of solid biofuels. The results of this research were published as part of a National Energy Policy initiative.
- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Kosovo

### General notes

Data for Kosovo are available starting in 2000. Prior to that, they are included in Serbia.

2011 is the first year when electricity transit trade data are available. As a result, a break in time series occurs between 2010 and 2011.

In 2011, a desulphurization unit operated in Kosovo for a few months only. As a result, breaks in time series occur between 2010-2011 and 2011-2012.

### Sources

#### Sources 2011 to 2015:

- Direct communication with the Kosovo Agency of Statistics, Pristina, Kosovo.
- Direct communication with the Ministry of Energy and Mining, Pristina, Kosovo.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

#### Sources 2003 to 2010:

- Kosovo National Energy Balances, Ministry of Energy and Mining Department of Strategy, Standards and Statistics from 2003 to 2010.
- IEA Secretariat estimates

#### Sources 2000 to 2002:

- IEA Secretariat estimates.

## Kuwait

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Data for crude oil production include 50 per cent of the output of the Neutral Zone shared with Saudi Arabia.

Information for the use of ethane in the petrochemical sector is available from 2008 onward. This may lead to breaks in time series for ethane and naphtha production and consumption between 2007 and 2008.

### Sources

#### Sources 1992 to 2015:

- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, 2011 to 2016.
- Direct communication with the Ministry of Oil, Economic Affairs, Energy Research, Safat.
- Direct communication with Central Statistical Bureau, Kuwait City.

- *Electrical Energy Statistical Year Book*, Ministry of Electricity and Water, edition 2016.
- *Annual Report*, Kuwait National Petroleum Company, 2015-2016
- *Annual Electrical Statistics*, Ministry of Electricity and Water, Safat, various editions up to 2009.
- *Annual Statistical Abstract*, Central Statistical Bureau, State of Kuwait various editions up to 2014.
- *Annual Statistical Bulletin*, Organization of Petroleum Exporting Countries (OPEC), Vienna, various editions up to 2016.
- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2016.
- Direct communication with the Ministry of Planning and the Ministry of Electricity & Water, Kuwait City.
- *Monthly Digest of Statistics*, Ministry of Planning, Central Statistical Office, Kuwait, 1999.
- *A Survey of the Kuwait Oil Industry*, Embassy of the United States of America in Kuwait City, Kuwait, 1993.
- *Twelfth Annual Report 1991-1992*, Kuwait Petroleum Corporation, Kuwait, 1993.
- The UN Energy Statistics Database.
- IEA Secretariat estimates.

#### **Sources up to 1991:**

- *Quarterly Statistical Bulletin*, Central Bank of Kuwait, Kuwait, various editions from 1986 and 1987.
- *The Kuwaiti Economy*, Central Bank of Kuwait, Kuwait, various editions from 1980 to 1985.
- *Annual Statistical Abstract*, Ministry of Planning, Central Statistical Office, Kuwait, 1986 and 1989.
- *Monthly Digest of Statistics*, Ministry of Planning, Central Statistical Office, Kuwait, various editions from 1986 to 1990.
- *Economic and Financial Bulletin Monthly*, Central Bank of Kuwait, Kuwait, various editions from 1983 to 1986.
- *Kuwait in Figures*, The National Bank of Kuwait, Kuwait, 1986, 1987.

#### **Sources for Biofuels and waste:**

- *Forestry Statistics*, FAO, Rome, 2001.
- IEA Secretariat estimates.

## Kyrgyzstan

### General notes

Data for Kyrgyzstan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Kyrgyzstan is one of the 11 EU4Energy focus countries.

From the year 2013, the main data sources for Kyrgyzstan are the set of annual IEA/Eurostat/UNECE joint questionnaires sent by the National Statistical Committee of Kyrgyzstan.

The following data are not available and estimated by the IEA Secretariat: biofuels and waste, and output of electricity and heat by product.

For the year 2015, new information became available on the consumption of motorgasoline and gas/diesel by product. All motorgasoline use was allocated by the IEA to road transport. Gas/diesel consumption reported in other sector than road might include road transport.

In the 2014 edition, time series data for electricity, oil products, and coal products for 2005 to 2011 were revised based on newly available information. This may lead to breaks in the time for some products.

### Sources

#### **Sources 2013 to 2015:**

- Direct communication with the National Statistical Committee of Kyrgyzstan, Bishkek.
- Joint IEA/Eurostat/UNECE annual energy questionnaires, excluding renewables.
- *Fuel & Energy Balances*, National Statistical Committee of Kyrgyzstan, Bishkek.
- IEA Secretariat estimates.

#### **Sources 2007 to 2012:**

- Direct communication with the National Statistical Committee of Kyrgyzstan, Bishkek.
- Direct communication with the Interstate Statistical Committee of the Commonwealth of Independent States, Moscow.
- Joint IEA/Eurostat/UNECE annual energy questionnaires for 2012 and 2013.
- *Fuel & Energy Balances*, National Statistical Committee of Kyrgyzstan, Bishkek.
- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, Tolsta Chaolais, 2008 to 2014.



- *Natural Gas Vehicles Statistics*, International Association for Natural Gas Vehicles, online database: [www.iangv.org](http://www.iangv.org).
- The UN Energy Statistics Database.
- IEA Secretariat estimates.

#### Sources 1993 to 2006:

- Joint IEA/Eurostat/UNECE annual energy questionnaires, 1993 to 2006.
- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, Tolsta Chaolais, various editions up to 2007.
- Asian Development Bank.
- IEA Secretariat estimates.

#### Sources 1990 to 1992:

- IEA Secretariat estimates.

#### Sources for biofuels and waste:

- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Latvia

### General notes

Data for Latvia are available starting in 1990. Prior to that, they are included in Former Soviet Union.

On 1 July 2016, Latvia became a full member of the OECD.

### Sources

#### Sources 1990 to 2015:

- Direct communication with Statistics Latvia, Riga.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Balance of Latvian Energy, EC PHARE Project Implementation Unit, Ministry of Economics, Department of Energy, Riga, 1994.
- IEA Secretariat estimates.

## Lebanon

### General notes

In 2015, no official data were available for Lebanon. Data in this year's edition are primarily based on secondary sources, media reports and IEA Secretariat estimates.

A significant share of electricity generated in Lebanon is produced using private generators. The corresponding electricity outputs and inputs were estimated by the IEA Secretariat based on ALMEE-figures (Association Libanaise pour la Maîtrise de l'Énergie et l'Environnement) until 2014.

Customs data for trade of oil products may be misleading due to the existence of informal trade with neighbouring countries.

### Sources

#### Sources up to 2015:

- Direct communication with Association Libanaise pour la Maîtrise de l'Énergie et l'Environnement, (ALMEE), Beirut.
- Direct communication with Lebanese Center for Energy Conservation, Beirut.
- *Les bilans énergétiques au Liban*, Association Libanaise pour la Maîtrise de l'Énergie et de l'Environnement, Beirut, 2007 to 2015.
- *L'Énergie au Liban*, Association Libanaise pour la Maîtrise de l'Énergie et de l'Environnement, Beirut, 1994 to 2006.
- *L'Énergie au Liban, le Défi*, Association Libanaise pour la Maîtrise de l'Énergie, Beirut, December 1996.
- Mauthner, F. and Weiss W., *Solar Heat Worldwide - Markets and contribution to the energy supply*, various editions up to 2014, IEA Solar Heating and Cooling Programme.
- IEA Secretariat estimates.

#### Sources for biofuels and waste:

- *Le marché du solaire thermique au Liban*, Association Libanaise pour la Maîtrise de l'Énergie et de l'Environnement, Beirut, 2010.
- *Forestry Statistics*, FAO, Rome, 2016.
- IEA Secretariat estimates.

## Libya

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

New information on oil and electricity is available from 2006. Breaks in time series may occur between 2005 and 2006.

Non-technical losses and data uncertainty result in break in time series for electricity losses between 2011 and 2012.

## Sources

### Sources 1971 to 2015:

- *Bulletin Statistique Annuel, Comite Maghrebin d'électricité (COMELEC)*, various editions up to 2014.
- Statistical Bulletin, Central Bank of Libya, Tripoli, various editions up to 2016.
- Direct communication with the Ministry of Electricity and Renewable Energy, Tripoli.
- Annual Statistical Bulletin, Organization of Petroleum Exporting Countries (OPEC), Vienna, various editions up to 2015.
- Annual Statistical Report, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2015.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- Statistical Bulletin, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- Annual Report, 2008, General Electricity Company (GECOL), Tripoli.
- Statistical Abstract of Libya, 19th vol., Government of Libya, Tripoli, 1983.
- IEA Secretariat estimates.

### Sources for biofuels and waste:

- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Lithuania

### General notes

Data for Lithuania are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Lithuania shut down its only nuclear power plant in 2009 (Ignalina nuclear power plant).

In 2013 Lithuania started an industrial and municipal waste incinerator, which may lead to breaks in time series for these products.

Since December 2014, Lithuania has a new floating LNG terminal. LNG is imported, re-gasified and exported as pipeline gas.

### Sources up to 2015:

- Direct communication with Statistics Lithuania, Vilnius.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

## Malaysia

### General notes

For natural gas production from the Joint-Development Areas (JDA) with Thailand and with Indonesia, Malaysia reports only the production that corresponds to Malaysia. The rest is being reported as imports. For the JDA with Viet Nam, the production reported includes all the gas produced.

Detailed information on the non-energy use by oil product is only available from 2007 to 2009. From 2010, these quantities are only presented in aggregate form under the category other non-specified oil products.

From 2009, electricity generation from co-generators, small renewable power producers and self-generators is available. As a consequence, breaks in time series may appear for electricity between 2008 and 2009.

LPG data may include ethane.

## Sources

### Sources 2000 to 2015:

- Direct communication with the Energy Commission, Putrajaya.
- *National Energy Balance*, Malaysia, Energy Commission, Putrajaya, 2009 to 2015.
- Electricity Supply Industry in Malaysia, Performance and Statistical Information, Malaysia Energy Commission, Putrajaya, 2009 to 2015.
- *Electricity Supply Statistics, Malaysia Energy Information Hub*, website: meih.st.gov.my, 2017.
- *Monthly exports of oil palm products*, Malaysia Palm Oil Board, Kuala Lumpur.
- APEC annual energy questionnaires, 2009, 2011.
- *National Energy Balance Malaysia*, Ministry of Energy, Water and Communication, Kuala Lumpur, 2002 to 2008.

### Sources up to 2000:

- Direct communication with Petroliaam Nasional Berhad, Kuala Lumpur, April 2001.

**Sources for biofuels and waste:**

- *Monthly exports of oil palm products*, Malaysia Palm Oil Board, Kuala Lumpur.
- *The UN Energy Statistics Database*.
- *Forestry Statistics*, FAO, Rome, 2016.
- IEA Secretariat estimates.

**Malta****General notes**

2015 saw a sharp decrease in electricity production, and fuel oil and gas diesel consumption coming from the transformation sector (main activity electricity producers). This decrease is attributed to a main power station being switched off. The oil output decrease is mirrored in a reduction in electricity generated in Malta, and an increase in imports, mainly from Italy via an interconnector.

In 2011, a new power generation station fuelled by biogas became operational in Malta. This may lead to breaks in time series for some products and flows.

**Sources****Sources 1971 to 2015:**

- Direct communication with the Central Office of Statistics, Valletta.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Oil, 1995 to 1998, 2000, 2001, 2005 to 2015.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Electricity and heat, 1994 to 1998, 2000, 2001, 2003, and 2005 to 2015.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Renewables, 2011 to 2015.
- Joint IEA/Eurostat/UNECE annual questionnaire on Coal, 1994, 1995.
- *Solar Heat Worldwide*, AEE - Institute for Sustainable Technologies, Gleisdorf, various editions up to 2010.
- IEA Secretariat estimates.

**Mauritius****Sources****Sources 1971 to 2015:**

- Direct communication with the Ministry of Public Utilities, Statistics Unit, Port Louis.

- Website of the Statistics Mauritius under the Ministry of Public Utilities, statsmauritius.gov.mu.
- *Energy and Water Statistics, various editions up to 2015*, Statistics Mauritius, Port Louis.

**Moldova****General notes**

Data for Moldova are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Moldova is one of the 11 EU4Energy focus countries.

Official figures on natural gas imports, natural gas inputs to power plants, electricity production and consumption are modified by the IEA Secretariat to include estimates for supply and demand for the autonomous region of Stînga Nistrului (also known as the Pridnestrovian Moldavian Republic or Transnistria). Other energy production or consumption from this region is not included in the Moldovan data. This may lead to breaks in the time series for some products.

Due to the inclusion of estimated data in the Moldova energy balance, indicators for per capita energy consumption or energy intensity may appear inconsistent with expected trends.

The National Bureau of Statistics is constantly improving its data set. In the recent years, a great effort has been put to follow the International Recommendations for Energy Statistics and revise time series when possible. As a consequence, breaks in time series in 1993 for heat, in 2012 for aviation bunkers and in 2005 for other products. More survey data on solid biomass, including wood, animal waste and other plant residues are available since 2010.

**Sources****Sources 2008 to 2015:****For Moldova, excluding Transnistria:**

- Direct communication with the National Bureau of Statistics of the Republic of Moldova, Chisinau.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

**For natural gas imports:**

- Direct communication with State Statistics Service of Ukraine.

**For Transnistria electricity production:**

- Website of Ministry of Economic Development of Transnistrian Moldovian Republic, [www.mepmr.org](http://www.mepmr.org).
- IEA Secretariat estimates.

**Sources 1992 to 2008:**

- Joint IEA/Eurostat/UNECE annual energy questionnaire on Electricity and heat, 1991 to 2008.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Natural gas, 1991 to 2008.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Coal, 1992 to 2008.
- Joint IEA/Eurostat/UNECE annual energy questionnaire on Oil, 1993 to 1998, 2001 to 2008.
- Direct communication with the Ministry of Industry and Energy, July 1992.
- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, Tolsta Chaolais, various editions up to 2011.
- IEA Secretariat estimates.

**Sources 1990 to 1991:**

- IEA Secretariat estimates.

**Sources for biofuels and waste:**

- Joint IEA/Eurostat/UNECE Renewables questionnaire.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Mongolia

**General notes**

Data for Mongolia are available starting in 1985. Prior to that, they are included in Other Asia.

Data allowing a disaggregation of coal by type became available in 2015. In addition time series were revised from 2005 forward. Breaks in time series between 2004 and 2005 may result as well as differences in trends from previous editions.

**Sources****Sources 1985 to 2015:**

- *Mongolian Statistical Yearbook*, National Statistical Office, Ulaanbaatar, various editions up to 2016.
- *Balance of Coal & Coal Exports*, Mongolian Statistical Information Service, National Statistical Office, Ulaanbaatar, online statistical service: [www.1212.mn](http://www.1212.mn).

- *Mongolian Statistical Bulletin, December 2009*, National Statistical Office, Ulaanbaatar, 2009.
- Asian Development Bank online database.
- IEA Secretariat estimates.

**Sources for biofuels and waste:**

- *FAO, Forestry Statistics, online database*.
- IEA Secretariat estimates.

## Montenegro

**General notes**

Data for Montenegro are available starting in 2005. Between 1990 and 2004, they are included in Serbia. Prior to 1990, they are included in Former Yugoslavia.

Breaks in time series appearing in solid biofuels between 2010 and 2011 can be explained by a new survey carried out by Montenegro in 2013.

A new survey on energy consumption in industry was conducted by Montenegro in 2014. Due to this newly available data some breaks in time series may occur between 2004 and 2005.

**Sources****Sources 2005 to 2015:**

- Direct communication with the Statistical Office of Montenegro (MONSTAT), Podgorica.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

## Morocco

**General notes**

Morocco joined the IEA as an Association country in November 2016.

In this edition, Morocco started filling the five Joint IEA/Eurostat/UNECE questionnaires. This may lead to breaks in time series between 2014 and 2015.

In the previous edition, revisions were made in the energy balances for the period 2004-2014. This may lead to breaks in time series between 2003 and 2004.

The Samir-Mohammedia refinery expansion was completed in 2009, accommodating new feedstocks and additives. This may lead to breaks in time series between 2009 and 2010.



In August 2015, refinery activity stopped, causing significant decreases in refined oil products production and breaks in time series between 2014 and 2015.

## Sources

### Sources for 2015 :

- Joint IEA/Eurostat/UNECE annual energy questionnaires.

### Sources 1992 to 2014:

- Direct communication with Ministère de l'Energie et des Mines, Direction des Mines, Rabat.
- *Annuaire Statistique du Maroc*, Haut-Commissariat au Plan, Direction de la Statistique, Rabat, 1980, 1984, 1986 to 2011.
- Electricity consumption by economic sector from direct communication with Office National de l'Electricité, Casablanca.

### Sources up to 1991:

- *Rapport d'Activité 1992*, Office National de l'Electricité, Casablanca, 1993.
- *Le Maroc en Chiffres 1986*, Ministère du Plan, Direction de la Statistique, Rabat, 1987.
- *Rapport Annuel*, Office National de Recherches et d'Exploitations Pétrolières, Maroc, 1984.
- *Rapport d'Activité du Secteur Pétrolier 1983*, Ministère de l'Energie et des Mines, Direction de l'Energie, Rabat, 1984.
- *Rapport sur les Données Energétiques Nationales 1979-1981*, Ministère de l'Energie et des Mines, Rabat, 1982.

### Sources for biofuels and waste:

- Direct communication with Ministère de l'Energie et des Mines, Direction des Mines, Rabat.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Mozambique

## Sources

### Sources 1992 to 2015:

- Direct communication with Ministério da Energia, Maputo and the National Petroleum Institute.

- *Annual Statistical Yearbook 1993, 1994, 1995*, Eskom, Johannesburg, 1994, 1995, 1996, citing Electricidade de Mozambique, Maputo, as source.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

### Sources up to 1991:

- IEA Secretariat estimates.

### Sources for biofuels and waste:

- Direct communication with Ministério da Energia, Maputo.
- IEA Secretariat estimates.

## Myanmar

## General notes

Some data are reported on a fiscal year basis, beginning on 1 April and ending on 31 March of the subsequent year.

## Sources

### Sources 1992 to 2015:

- Direct communication with the Institute of Energy Economics, Japan (IEEJ), Tokyo, 2010-2014.
- *Selected Indicators*, Myanmar Central Statistical Organisation website: [www.csostat.gov.mm](http://www.csostat.gov.mm).
- Joint Oil Data Initiative (JODI) online database.
- *Oil and Thailand*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, Bangkok, 2007 to 2013.
- Direct communication with the Ministry of Energy, Planning Department, Rangoon, 2006-2007.
- *Review of the Financial Economic and Social Conditions*, Ministry of National Planning and Economic Development, Central Statistical Organization, Rangoon, 1995, 1996.
- *Statistical Yearbook*, Ministry of National Planning and Economic Development, Central Statistical Organization, Rangoon, 1995, 1996.
- *The UN Energy Statistics Database*.
- *The ASEAN Energy Statistics Database*.
- Asian Development Bank online database.

- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- IEA Secretariat estimates.

#### **Sources up to 1991:**

- *Sectoral Energy Demand in Myanmar*, UNDP Economic and Social Commission for Asia and the Pacific, Bangkok, 1992.
- *Selected Monthly Economic Indicators, paper no. 3*, Ministry of Planning and Finance, Central Statistical Organization, Rangoon, 1989.

#### **Sources for biofuels and waste:**

- Wood data have been submitted by the Ministry of Energy, from 1985 to 2003.
- IEA Secretariat estimates based on 1990 data from *UNDP Sixth Country Programme Union of Myanmar*, World Bank, Programme Sectoral Review of Energy, by Sousing et. al., Washington, D.C., 1991.

## Namibia

### **General notes**

Data for Namibia are available starting in 1991. Prior to that, data are included in Other Africa.

### **Sources**

#### **Sources 1991 to 2015:**

- *Namibia Energy Balance 2000-2014*. Electricity Control Board, Windhoek.
- Direct communication with the Ministry of Mines and Energy, Windhoek.
- *NamPower Annual Report*, Namibia Power Corporation, Windhoek, various editions up to 2016. Note: NamPower data are published on a fiscal year basis (July to June)
- Mauthner, F. and Weiss W., *Solar Heat Worldwide - Markets and contribution to the energy supply*, various editions up to 2017, IEA Solar Heating and Cooling Programme.
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- IEA Secretariat estimates.

## Nepal

### **General notes**

Data are reported on a fiscal year basis, beginning on 1 July and ending on 30 June of the subsequent year 2015/16 is treated as 2015.

### **Sources**

#### **Sources up to 2015:**

- Direct communication with the Water and Energy Commission Secretariat (WECS), Ministry of Water Resources, Kathmandu.
- *A Year in Review*, Nepal Electricity Authority, Durbar Marg, Kathmandu, various editions up to fiscal year 2015/16.
- *Imports and Sales of Petroleum Products*, Nepal Oil Corporation Limited, Kathmandu, various editions up to 2013.
- *Energy Sector Synopsis Report*, Water and Energy Commission Secretariat (WECS), Kathmandu, July 2010.
- IEA Secretariat estimates.

#### **Sources up to 1996:**

- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- Water and Energy Commission Secretariat (WECS), Ministry of Water Resources, Kathmandu.
- IEA Secretariat estimates.

## Nicaragua

### **Sources**

#### **Sources up to 2015:**

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed Feb 2017: <http://sier.olade.org/>.
- *Estadísticas de los Hidrocarburos*, Ministerio de Energía y Minas, Managua, 2008 to 2014.
- *Generación Bruta por Tipo de Planta*, Instituto Nicaragüense de Energía, Managua, 2016.

- *Consumo de Combustible por Tipo de Planta*, Instituto Nicaragüense de Energía, Managua, 2016.
- *Balance Energético Nacional*, Ministerio de Energía y Minas, Managua, 1999 to 2007.
- *Balance Energético Nacional*, Comisión Nacional de Energía (CNE), Dirección de Políticas Energéticas, Managua, 2000 to 2005.
- *Estadísticas de Suministro de los Hidrocarburos*, Instituto Nicaragüense de Energía, Managua, 1999 to 2004.
- *Informe Anual 1996: Datos Estadísticos del Sector Electrico*, INE, Managua, 1999.
- *Balance Energetico Nacional*, Comision Nacional de Energia (CNE), Managua, 1999 to 2007.

## Niger

### General notes

Data for Niger are available starting in 2000. Prior to 2000, data for Niger are presented in Other Africa.

Stock change may include statistical difference for Crude Oil.

### Sources

#### Sources up to 2015:

- Direct communication with the Ministry of Energy and Oil.
- IEA Secretariat estimates

#### Sources for biofuels and waste:

- Ministry of Energy and Oil
- IEA Secretariat estimates

## Nigeria

### General notes

Crude oil production and export data may include field condensate.

Statistical differences may include oil products smuggled to or from neighbouring countries.

Inputs of motor gasoline and gas/diesel to back-up electricity generation, as well as the associated electricity outputs, which may be substantial in Nigeria, may not be captured.

In the 2015 edition, new information became available indicating that on-grid power generation has been fuelled by natural gas for many years. This may lead to breaks in time series between 1996 and 1997 as well as differences in trends compared to previous editions for some oil products.

In the 2017 edition, new information became available through the Nigerian National Petroleum Corporation for Natural Gas Liquids. Break in time series can be observed between 2012 and 2013.

In the 2017 edition, naphtha data are added. Breaks in time series can be observed in Other Oil Products and Naphtha in 2003 and 2015.

### Sources

#### Sources 1992 to 2015:

- Direct communication with the Energy Commission of Nigeria, Abuja.
- Direct communication with the African Energy Commission, Algiers, Algeria.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- *Annual Statistical Bulletin*, Organization of Petroleum Exporting Countries (OPEC), Vienna, various editions up to 2016.
- *Annual Petroleum Bulletin*, Nigerian National Petroleum Corporation (NNPC), Abuja, various editions from 1998 to 2015.
- *Statistical Bulletin*, Central Bank of Nigeria, Abuja, various editions from 2003 to 2015.
- *Monthly Petroleum Bulletin* for 2000, Nigerian National Petroleum Corporation (NNPC), Abuja.
- Annual Report and Statement of Accounts 1995, Central Bank of Nigeria, Lagos, 1996.
- *Nigerian Petroleum News*, Energy Publications, monthly reports, various issues up to May 1998.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Annual Report and Statement of Accounts*, Central Bank of Nigeria, Lagos, various editions from 1981 to 1987.
- *Basic Energy Statistics for Nigeria*, Nigerian National Petroleum Corporation, Lagos, 1984.
- *NNPC Annual Statistical Bulletin*, Nigerian National Petroleum Corporation, Lagos, 1983 to 1987.
- *The Economic and Financial Review*, Central Bank of Nigeria, Lagos, various editions.

### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Oman

### General notes

The interconnected nature of the Mina-Al-Fahal and Suhar oil refineries is reflected in the fuel oil data leading to breaks in time series for some products between 2007 and 2008.

Natural gas shows a break in time series for some flows between 2006 and 2007 due to a new methodology applied in both supply and demand.

Electricity output shows a break in time series between 2004 and 2005 as a national data source became available.

In 2006, the Suhar Refinery came online with 166 kbd capacity. Breaks in time series can be observed in oil products between 2005 and 2006.

### Sources

#### Sources 2005 to 2015:

- *Statistical Yearbook*, National Centre for Statistics and Information (NSCI), various editions from 1999 to 2016 (Formerly Ministry of National Economy).
- *Online statistics*, Sultanate of Oman, Ministry of Oil and Gas.
- *Annual report*, Authority for Electricity Regulation, Oman, various editions from 2005 to 2015.
- *Annual report*, Oman LNG Company, various editions from 2009 to 2015.
- *Annual Report*, Central Bank of Oman, Muscat, various editions up to 2015.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2015.
- The LNG Industry, International Group of Liquefied Natural Gas Importers (GIIGNL), Levallois, 2005-2015.
- IEA Secretariat estimates.

#### Sources 1992 to 2004:

- Direct communication with the Ministry of National Economy, Muscat.
- Direct communication with the Ministry of Oil and Gas, Muscat.
- Direct communication with the Ministry of Petroleum and Minerals, Muscat, 1997, 1998, and 1999.
- Direct communication with the Ministry of Electricity & Water, Office of the Under Secretary, Ruwi, 1998 to 2001.
- *Quarterly Bulletin December 1994*, Central Bank of Oman, Muscat, 1995.
- *Annual Report*, Central Bank of Oman, Muscat, 1993.
- *Statistical Yearbook*, 1994, 1995, 1996, 1997, Ministry of Development, Muscat, 1995 to 1998.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Quarterly Bulletin*, Central Bank of Oman, Muscat, 1986, 1987, 1989 and 1995.
- *Annual Report to His Majesty the Sultan of Oman*, Department of Information and Public Affairs, Petroleum Development, Muscat, 1981, 1982, and 1984.
- *Oman Facts and Figures 1986*, Directorate General of National Statistics, Development Council, Technical Secretariat, Muscat, 1987.
- *Quarterly Bulletin on Main Economic Indicators*, Directorate General of National Statistics, Muscat, 1989.
- *Statistical Yearbook*, Directorate General of National Statistics, Development Council, Muscat, 1985, 1986, 1988 and 1992.

## Pakistan

### General notes

The IEA Secretariat could not obtain data for 2015 from Pakistan in time. As a consequence, most data points for 2015 have been estimated based on developments in population and GDP in Pakistan. Specific information on new installed capacity has been incorporated into these estimations.

Time series data for natural gas for the years 2004-2007 were revised in 2009 due to the inclusion of the North-West Frontier Province data (now called KPK)

and Pakistan Steel Mills. Breaks in time series may occur between 2003 and 2004.

Own use of electricity by industries with autoproducer electricity plants may not be captured.

For bitumen and lubricants, data for stock variations may include unreported trade or consumption.

## Sources

### Sources 1992 to 2015:

- *Energy Yearbook*, Hydrocarbon Development Institute of Pakistan, Ministry of Petroleum and Natural Resources, Islamabad, various editions from 1979 to 2015.
- *Pakistan Economic Survey 1994-1995, 1996, 1997*, Government of Pakistan, Finance Division, Islamabad, 1995, 1997, 1998.
- *Statistical Supplement 1993/1994*, Finance Division, Economic Adviser's Wing, Government of Pakistan, Islamabad, 1995.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- IEA Secretariat estimates.

### Sources up to 1991:

- *Monthly Statistical Bulletin, no. 12*, Federal Bureau of Statistics, Islamabad, December 1989.
- *1986 Bulletin*, The State Bank of Pakistan, Islamabad, 1987.

### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1991 data from *Household Energy Strategy Study (HESS)* of 1991.

## Panama

### General notes

International aviation bunkers figures for jet kerosene may include exports.

From 2003 onwards there has been no output of oil products due to refinery closure.

## Sources

### Sources up to 2015:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.

- *Compendio Estadístico Energético 1970-2015*, Ministerio de Economía y Finanzas, Comisión de Política Energética, Panama.
- *Boletín Estadístico Marítimo Portuario*, Autoridad Marítima de Panama (AMP), Panama, 2007 to 2015, [www.amp.gob.pa](http://www.amp.gob.pa).
- *Annual Report*, Canal de Panamá, Panama, 2012.
- U.S. Energy Information Administration (EIA), website, marine bunkers data from 2001 to 2006.

## Paraguay

### General notes

The Itaipu hydroelectric plant, operating since 1984 and located on the Paraná River (which forms the border of Brazil and Paraguay) was formed as a joint venture between Eletrobrás and the Paraguayan government.

From 2006 onwards, there has been no output of oil products, due to refinery closure.

## Sources

### Sources up to 2015:

- *Balance Energético Nacional, 1971-2014*, Vice-ministerio de Energía y Minas, Ministerio de Obras Públicas y Comunicaciones, San Lorenzo.
- Direct communication with Ministerio de Obras Públicas y Comunicaciones, San Lorenzo.

## Peru

### General notes

Liquid biofuels are included in the energy balances from 2010 onwards.

## Sources

### Sources up to 2015:

- Direct communication with Ministerio de Energía y Minas, Oficina Técnica de Energía, Lima.
- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Balance Nacional de Energía*, Ministerio de Energía y Minas, Lima, various editions up to 2016.



- Organismo Supervisor de la Inversión en Energía y Minería, Hidrocarburos Estadísticas 2012.
- IEA Secretariat estimates.

## Philippines

### Sources

#### Sources 1990 to 2015:

- Direct communication with the Department of Energy, Manila.
- *Energy Commodity Account (ECA) and Overall Energy Balance (OEB)*, 1990-2008, 2010-2015 submitted by the Department of Energy, Manila.
- APEC annual energy statistics questionnaires.
- *Annual Report*, Semirara Mining Corporation, 2006-2016.
- Annual steel production 1980-2016, World Steel Association, [www.worldsteel.org/statistics/](http://www.worldsteel.org/statistics/).
- Philippines Energy Bulletin 1996, 1997, 1998, 1999.
- IEA Secretariat estimates.

#### Sources up to 1989:

- Direct communication with the Office of Energy Affairs, Manila.
- APEC Energy Statistics 1994, Tokyo, October 1996.
- *1990 Power Development Program (1990-2005)*, National Power Corporation, Manila, 1990.
- *Philippine Medium-term Energy Plan 1988-1992*, Office of Energy Affairs, Manila, 1989.
- *Philippine Statistical Yearbook 1977-1983*, National Economic and Development Authority, Manila.
- *1985 and 1989 Annual Report*, National Power Corporation, Manila, 1986, 1990.
- *Philippine Economic Indicators*, National Economic and Development Authority, Manila, various editions of 1985.
- *Accomplishment Report: Energy Self-Reliance 1973-1983*, Ministry of Energy, Manila, 1984.
- *Industrial Energy Profiles 1972-1979*, vol. 1-4, Ministry of Energy, Manila, 1980.
- *National Energy Program*, Ministry of Energy, Manila, 1982-1987 and 1986-1990.

- *Philippine Statistics 1974-1981*, Ministry of Energy, Manila, 1982.
- *Energy Statistics*, National Economic and Development Authority, Manila, 1983.
- *Quarterly Review*, Office of Energy Affairs, Manila, various editions.
- *UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Qatar

### General notes

Crude oil production and export data do not include field condensate.

Natural gas liquids (NGL) include field condensates, propane, butane and ethane production from natural gas processing plants. NGL produced from liquefied natural gas production plants and gas-to-liquids plants may be excluded.

Propane and butane from natural gas processing plants are transferred to LPG. Ethane from natural gas processing plants is transferred to ethane.

Information on the use of LPG and ethane in the petrochemical sector is from 2005 onward. This may lead to breaks in time series for these products between 2004 and 2005.

Electricity production from autoproducers includes generation by desalination plants since 1988. Own use of electricity includes use by desalination plants since a breakdown is not available. Electricity consumption in industry includes electricity consumption by the energy sector.

Three satellite power stations located outside of Doha are included as main electricity producers up to 2014. In 2015, these power stations are not reported and are likely included as part of RAF-A station as auto production.

Revisions were made in 2014 for refinery intake of crude oil production based on Qatar Petroleum reports.

### Sources

#### Sources 1992 to 2015:

- Direct communication with Qatar Statistical Authority, Doha.

- Direct communication with Qatar Petroleum, Doha.
- Direct communication with Kahramaa, Qatar General Electricity and Water Corporation, Doha.
- Direct communication with National Minerals Information Center, U.S Geological Survey.
- *Statistics Report*, Kahramaa, Qatar General Electricity and Water Corporation, Doha, editions 2005 to 2008, 2010 to 2015.
- *Qatar in Figures*, Qatar Statistics Authority. Doha, 2011-2015 editions.
- *2015 Integrated Report*, Qatar Petrochemical Company, Doha.
- *Annual Report 2015*, Qatar Fertilizer Company, Doha.
- JODI extended database, [www.jodi.org](http://www.jodi.org).
- *Statistical Bulletin*, Arab Union of Electricity, 2011-2015.
- *Annual Report 2004-2015*, Qatar Petroleum, Doha.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- *The LNG Industry*, International Group of Liquefied Natural Gas Importers (GIIGNL), various editions up to 2016.
- *Statistics Archives*, World Steel Association, [www.worldsteel.org](http://www.worldsteel.org).
- *Annual Statistical Abstract, Qatar Statistics Authority, 1994 to 2012*.
- The UN Energy Statistics Database.
- IEA Secretariat estimates.

#### Sources up to 1991:

- *Qatar General Petroleum Corporation 1981-1985*, General Petroleum Corporation, Doha, 1986.
- *Economic Survey of Qatar 1990*, Ministry of Economy and Commerce, Department of Economic Affairs, Doha, 1991.
- *Statistical Report 1987 Electricity & Water*, Ministry of Electricity, Doha, 1988.
- *State of Qatar Seventh Annual Report 1983*, Qatar Monetary Agency, Department of Research and Statistics, Doha, 1984.

#### Sources for biofuels and waste:

- *Forestry Statistics*, FAO, Rome, 2000.
- IEA Secretariat estimates.

## Romania

### General notes

Romania's methodology for estimating indigenous production of geothermal energy differs from the one that IEA has adopted. Therefore, data comparisons between Romania and other countries might be misleading.

Data on quantities of coke oven coke used in blast furnaces do not correspond to the official submission of the national administration, as they have been estimated by the IEA Secretariat to ensure a carbon balance in the blast furnace transformation.

### Sources

#### Sources 1992 to 2015:

- Direct communication with the National Institute of Statistics, Bucharest.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- *Buletin Statistic de Informare Publica*, Comisia Nationala Pentru Statistica, Bucharest, various editions up to June 1995.
- *Renel Information Bulletin*, Romanian Electricity Authority, Bucharest, 1990, 1991, 1992, 1993, 1994. *Anuarul Statistic al Republicii Socialiste Romania*, Comisia Nationala Pentru Statistica, Bucharest, 1984, 1985, 1986, 1990, 1991.
- IEA Secretariat estimates.

## Russian Federation

### General notes

Data for the Russian Federation are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Annual statistics are based on annual joint IEA/Eurostat/UNECE questionnaires submissions received from Rosstat, the official data provider to the IEA. Data may differ from secondary sources, and discrepancies are being investigated.

In 2007, the Federal State Statistics Service introduced a new classification, the Russian Classification of Economic Activities (OKVED), oriented towards harmonization with the Statistical

Classification of Economic Activities in the European Community (NACE Rev.1). Data for the years prior to 2005 were submitted to the IEA Secretariat according to the Russian Classification of the Industries of the Economy (OKONKH). Therefore, breaks in time series for final consumption sectors may occur between 2004 and 2005.

## Coal

Coal statistics provided by Rosstat may differ from those collected by Rosinformugol. Blast furnace gas values since 2012 utilise a different methodology to that of prior years (where heat from other sources than blast furnace gas had been attributed to blast furnace gas). Some coal trade from partners of the Customs Union has been estimated by the IEA Secretariat and additionally removed from indigenous production where it may be reported in data of other organisations.

## Oil

2015 data were estimated by the IEA Secretariat for refinery output and observed deliveries of jet kerosene, exports of fuel oil and gas-diesel, residential consumption of LPG, and all consumption flows of fuel oil.

Condensate data provided by Rosstat are published separately from Crude Oil under NGL.

Jet kerosene output is confidential and estimated based on historical refinery throughput growth rate. No information on Vacuum Gas Oil is available.

LPG refinery output may include output from gas separation plants.

Naphtha exports are reported by Rosstat from 2011, and are significantly lower than in secondary sources. As a consequence domestic consumption of naphtha calculated as residual in the Russian balance is likely to be overestimated.

Information on international marine bunker consumption is submitted from 2010 with high fluctuation in time series.

Jet kerosene consumption split between international and domestic aviation is unknown so consumption is equally split between the two flows.

## Natural gas

In the 2017 edition, the Russian Federation revised natural gas data back to 2013.

From 2009, all data concerning LNG trade and LNG production have been estimated by the Secretariat.

Oil and gas extraction includes natural gas consumed by oil refineries.

## Biofuels and waste

Charcoal data are reported with solid biofuels since 2010. The time series of charcoal is expected to be reported in the 2018 edition.

The geothermal input to main activity electricity plant was estimated by IEA Secretariat for 2013 and 2014.

## Electricity and heat

The 2015 data for electricity and Heat show a substantial drop in heat production on autoproducer plants fuelled by natural gas. These figures have been confirmed by the Russian authorities.

The 2013 data for electricity and heat show a substantial drop in the efficiency of autoproducer heat plants fuelled by natural gas as well as a decrease in production and consumption of heat. These figures have been confirmed by the Russian authorities.

Heat from other sources is produced from recovered waste heat.

## Sources

### Sources 1990 to 2015:

- Direct communication with the Department of Foreign Statistics and International Cooperation from the Federal State Statistics Service (Rosstat), Moscow, Russian Federation.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Energy trade: direct communication with the Federal State Statistics Service, July 1994.
- *Statistical Yearbook of Russia 1994*. The State Committee of Statistics, Moscow, 1994.
- The Russian Federation in 1992, Statistical Yearbook, The Federal State Statistics Service, Moscow, 1993.
- *Russian Federation External Trade*, annual and quarterly various editions, the Federal State Statistics Service, Moscow.
- *Statistical Bulletin*, various editions, The State Committee of Statistics of the CIS, Moscow, 1993, 1994.
- *Statistical Bulletin N° 3*, The Federal State Statistics Service, Moscow, 1992.
- *Fuel and Energy Balance of Russia 1990*, The Federal State Statistics Service, Moscow, 1991.



- *Energetika*, Energo-Atomisdat, Moscow, 1981 to 1987.
- IEA Secretariat estimates.

### **Sources for biofuels and waste:**

- The Federal State Statistics Service.
- IEA Secretariat estimates.

## Saudi Arabia

### **General notes**

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

Data for crude oil production include 50 per cent of the output of the Neutral Zone, shared with Kuwait. Similarly, crude oil production includes 50% of the output of the Abu Safa field shared with Bahrain.

Natural gas consumption for oil and gas extraction may include quantities used in oil refineries.

New data became available in 2015 allowing the estimation of natural gas consumption as a feedstock in ammonia and methanol manufacture from 1990 to 2013. The remaining natural gas consumption has been allocated to the non-specified Industry sector. Breaks in time series may occur between 1989 and 1990 for this reason.

Electricity production from autoproducers includes generation by desalination plants since 1979.

Electricity end use specific to Agriculture/forestry not reported in 2015.

New Yasref refinery in Yanbu came online in 2015 with 400kbd refining capacity. This is reflected in increase in oil industry consumption of oil products as feedstock. Similarly, an increase in diesel output is also perceived.

Diesel transportation end use and export figures revised from 2011.

### **Sources**

#### **Sources 1992 to 2015:**

- *Annual Reports*, Saudi ARAMCO, Dhahran, various editions up to 2015.
- *Annual Report*, Saudi Arabian Monetary Agency, Research and Statistics Department, Riyadh, various editions up to 2016.

- Joint Oil Data Initiative (JODI) online database.
- *Annual Statistical Booklet*, Electricity and Co-generation Regulatory Authority, 2015.
- Ministry of Petroleum and Mineral Resources, 2009.
- *Middle East Petroleum Databook*, FACTS Global Energy Group, Singapore, 2009 and 2010.
- *Electricity Growth and Development in the Kingdom of Saudi Arabia up to the year from 1416H. (1996G.), 1420 H (1999/2000G) and 1423/1424 H (2003G)*, Ministry of Industry and Electricity, Riyadh, 1997, 1998, 1999, 2004.
- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2016.
- *Annual Statistical Bulletin*, Organization of Petroleum Exporting Countries (OPEC), Vienna, various editions up to 2016.
- Nitrogen statistics and information, U.S. Geological Survey, www.usgs.gov.
- Direct communication from the Central Department of Statistics of the Ministry of Planning and oil industry sources.
- *A Survey of the Saudi Arabian Oil Industry 1993*, Embassy of the United States of America in Riyadh, Riyadh, January 1994.
- IEA Secretariat estimates.

#### **Sources up to 1991:**

- *Annual Reports*, Saudi ARAMCO, various editions.
- *Petroleum Statistical Bulletin 1983*, Ministry of Petroleum and Mineral Resources, Riyadh, 1984.
- *Achievement of the Development Plans 1970-1984*, Ministry of Planning, Riyadh, 1985.
- *The 1st, 2nd, 3rd and 4th Development Plans*, Ministry of Planning, Riyadh, 1970, 1975, 1980 and 1985.
- *Annual Report*, Saudi Arabian Monetary Agency, Research and Statistics Department, Riyadh, 1984, 1985, 1986, 1988, 1989.
- *Statistical Summary*, Saudi Arabian Monetary Agency, Research and Statistics Department, Riyadh, 1986.

#### **Sources for biofuels and waste:**

- *Forestry Statistics*, FAO, Rome, 2000.
- IEA Secretariat estimates.

## Senegal

### General notes

The IEA Secretariat could not obtain data for 2014 and 2015 from Senegal. As a consequence, most data points for 2014 and 2015 have been estimated based on developments in population and GDP.

In the 2014 edition, the time series for solid biofuels were revised from 2009 based on newly available information. Breaks in time series may occur between 2008 and 2009.

### Sources

#### Sources 2009 to 2015:

- Direct communication with Ministère de l'Énergie, des Mines, Dakar.
- Bilans énergétiques du Sénégal 2009 to 2013, Direction de l'Énergie, Dakar.
- IEA Secretariat estimates.

#### Sources 2008:

- *Bulletin mensuel des statistiques économiques*, Agence nationale de la Statistique et de la Démographie (ANSD), Dakar, March 2009.
- Direct communication with Ministère de l'Énergie, Dakar.

#### Sources 2000 to 2007:

- Bilans énergétiques du Sénégal 2003, 2004, 2005, 2006, Direction de l'Énergie, Dakar.
- IEA Secretariat estimates.

#### Sources 1992 to 1999:

- Direct communication with Ministère de l'Énergie, des Mines et de l'Industrie, Direction de l'Énergie, Dakar, 1997 to 2002.
- Direct communication with Ministère de l'Énergie, des Mines et de l'Hydraulique, Comité National des Hydrocarbures, Dakar, 2002.
- Direct communication from oil industry sources, Société Africaine de raffinage.
- Direct communication from electricity industry sources, SENELEC.
- *Report of Senegal on the Inventory of Greenhouse Gases Sources*, Ministère de l'Environnement et de la Protection de la Nature, Dakar, 1994.

- Direct communication to the IEA Secretariat from ENDA - Energy Program, Dakar, 1997.
- The UN Energy Statistics Database.

#### Sources up to 1991:

- *Situation Economique 1985*, Ministère de l'Économie et des Finances, Direction de la Statistique, Senegal, 1986.

#### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1994 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996, and from direct communication with ENDA, Senegal.

## Serbia

### General notes

Data for Serbia are available starting in 1990. Prior to that, they are included in Former Yugoslavia.

Serbia energy data include Montenegro until 2004 and The United Nations Interim Administration Mission in Kosovo until 1999.

The Ministry of Mining and Energy of Republic of Serbia is currently in the process of revising time series for energy statistics. Important revisions were made in the past two years, in particular for renewables.

Breaks in time series for oil products and natural gas may appear between 2006 and 2007 due to newly available data for 2007 (see Sources).

### Sources

#### Sources 1990 to 2015:

- Direct communication with the Ministry of Mining and Energy, Belgrade.
- Direct communication with the Statistical Office of the Republic of Serbia, Belgrade.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Pilot study: Energy Balances (2007 and 2008) - Oil and Derivates of Oil, Natural Gas, Geothermal Energy and Energy Balance of the Republic of Serbia, Statistical Office of the Republic of Serbia, Belgrade, 2009.
- Direct communication with the Federal Ministry of Economy, Belgrade.
- IEA Secretariat estimates.

**Sources for biofuels and waste:**

- Direct communication with the Ministry of Mining and Energy, Belgrade.
- IEA Secretariat estimates.

## Singapore

**General notes**

Singapore joined the IEA as an Association country in October 2016.

Some key oil products and flows are aggregated by Singapore, to avoid breach of confidentiality. Detailed breakdown is then estimated by the IEA Secretariat.

At the time of publication, refinery input and output figures for 2015 were not available and they have been therefore estimated by IEA Secretariat. These values may differ significantly from actual figures published later in Singapore's official sources."

The IEA Secretariat, the Energy Market Authority and the National Climate Change Secretariat (NCCS) are working closely together on improving data quality for Singapore. Therefore, breaks in time series between 2008 and 2009 and differences in trends when compared to previous publications may occur for some products.

From 2009, Singapore publishes splits of refinery output between light, middle and heavy distillates and residuum only. Further breakdown between products is estimated by the IEA Secretariat. Singapore aggregates petrochemical and refinery consumption. The split between refining and petrochemical consumption is estimated by the IEA Secretariat.

Refinery input is broken down between crude oil and feedstocks. Splits of feedstock by product are not provided by Singapore. By default, IEA estimates that feedstocks come from naphtha, gas/diesel and fuel oil in equal proportions.

Other data remain aggregated due to lack of data availability. Electricity consumption in the industry sector from 2005 includes electricity consumption by refineries. Electricity consumption in transport includes all electricity consumption at airport terminals. Municipal waste production and consumption may include biogas.

Refinery gas production and consumption may include syngas produced by the petrochemical sector.

Due to Singapore's large trade volume in comparison to its final consumption, slight misalignment of trade

figures can have a significant impact on the energy balance of Singapore. The IEA Secretariat has adjusted total imports of crude oil, gas/diesel and fuel oil from 2009 to match demand.

A coal-fired power plant started operations in 2013. This might lead to breaks in time series between 2012 and 2013.

**Sources****Sources 1992 to 2015:**

- Direct communication with the Energy Market Authority, Singapore.
- Direct communication with the National Climate Change Secretariat (NCCS), Singapore, from 2013.
- Direct communication with the Solar Energy Research Institute of Singapore, 2011.
- *Singapore Energy Statistics*, Energy Market Authority, Singapore, various editions up to 2016.
- *Monthly oil statistics*, IE Singapore, 2011-2015.
- *Yearbook of Statistics Singapore*, Department of Statistics, Singapore, various editions up to 2016.
- *Bunker sales*, website of The Maritime and Port Authority of Singapore: [www.mpa.gov.sg](http://www.mpa.gov.sg).
- *Motor Vehicle Population by Type of Fuel Used*, website of the Land Transport Authority: [www.lta.gov.sg](http://www.lta.gov.sg).
- *Solid Waste Management Statistics*, website of The Ministry of the Environment and Water Resources: <http://app.mewr.gov.sg/>.
- *Singapore Trade Statistics*, International Enterprise Singapore, Singapore, various CD-ROM editions up to 2011.
- *Argus Fundamentals*, Argus Media, various editions up to 2012.
- *Asia Pacific Databook*, FACTS Global Energy, Singapore, various editions up to 2013.
- *The Strategist Oil Report*, Singapore, various issues up to March 1999.
- *Petroleum in Singapore 1993/1994*, Petroleum Intelligence Weekly, Singapore, 1994.
- AEEMTRC, 1996.
- Direct submissions from oil industry sources up to 1996.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

**Sources up to 1991:**

- *Monthly Digest of Statistics*, Department of Statistics, Singapore, various editions from 1987 to 1989.

- *Yearbook of Statistics Singapore 1975/1985*, Department of Statistics, Singapore, 1986.
- *ASEAN Oil Movements and Factors Affecting Intra-ASEAN Oil Trade*, Institute of Southeast Asian Studies, Singapore, 1988.
- *The Changing Structure of the Oil Market and Its Implications for Singapore's Oil Industry*, Institute of Southeast Asian Studies, Singapore, 1988.
- *Public Utilities Board Annual Report (1986 and 1989)*, Public Utilities Board, Singapore, 1987 and 1990.

#### Sources for biofuels and waste:

- *Singapore Energy Statistics*, Energy Market Authority, Singapore, various editions up to 2016.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## South Africa

### General notes

#### Coal

Outputs from gas-to-liquids and coal-to-liquids plants are presented in the “Transfers” flow.

New information became available in 2015 which allowed the separation of non-energy use of coal in Coal to Liquids (CTL) plants from the coal used for energy purposes in these same plants. Non-energy conversion efficiencies for CTL plants in South Africa are assumed to be 60%. This new methodology may lead to breaks in time series between 2010 and 2011 for these products and flows.

Breaks in time series may occur for anthracite and coking coal between 2009 and 2010 as new information became available. Prior to 2010, coking coal data may include anthracite.

Coking coal, coke oven coke, coke oven gas, gas works gas and blast furnace gas production and consumption have been estimated using reported crude steel production figures.

#### Oil

New information became available in 2015 on refinery output of lubricants. Data have been revised from 1998. This may lead to breaks in time series between 1997 and 1998. Reported quantities of synthetic fuels output may not include quantities from PetroSA.

### Natural gas

Breaks in time series may occur for consumption of natural gas in industrial sectors between 2009 and 2010 as new information became available.

### Sources

#### Sources 2010 to 2015:

- Direct communication with the Department of Energy, Pretoria, South Africa.
- *Energy statistics: Supply and demand of petroleum products*, Department of Energy, Pretoria, South Africa.
- *Statistical release on electricity generated and available for distribution*, Statistics South Africa, Pretoria.
- *South African Statistics*, Statistics South Africa, Pretoria, various editions up to 2016.
- Joint Oil Data Initiative (JODI) online database.
- *Annual Reports*, South Africa Petroleum Industry Association (SAPIA), Sandton.
- *Integrated Annual Reports*, Electricity Supply Commission (ESKOM), South Africa.
- *Analyst Book*, SASOL Limited Group, Johannesburg, various editions up to 2016.
- *Integrated Annual Reports*, PetroSA, Parow, various editions up to 2016.
- World Steel Association online statistics database.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016. Mauthner, F. and Weiss W., *Solar Heat Worldwide - Markets and contribution to the energy supply*, various editions up to 2015, IEA Solar Heating and Cooling Programme.
- IEA Secretariat estimates.

#### Sources 1992 to 2009:

- Energy balances submitted to the IEA Secretariat from the Department of Minerals and Energy, 2003 to 2009.
- *Electricity generated and available for distribution*, Statistics South Africa, Pretoria, various editions up to 2009.
- Direct submission from the Institute for Energy Studies, Rand Afrikaans University, Pretoria, 1998 to 2001.
- *Digest of South African Energy Statistics 1998*.
- Direct submissions from the Energy Research Institute, University of Cape Town.



- *ESKOM Annual Report*, Electricity Supply Commission (ESKOM), South Africa, 1992 to 1994.
- *Statistical Yearbook*, Electricity Supply Commission (ESKOM), South Africa, 1992 to 1994.
- *South Africa's Mineral Industry*, Department of Mineral and Energy Affairs, Braamfontein, 1995.
- *South African Energy Statistics, 1950-1993*, Department of Mineral and Energy Affairs, Pretoria, 1995.
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- *South African Coal Statistics 1994*, South African Coal Report, Randburg, 1995.
- *Energy Balances in South Africa 1970-1993*, Energy Research Institute, Plumstead, 1995.

#### **Sources up to 1991:**

- *ESKOM Annual Report*, Electricity Supply Commission (ESKOM), South Africa, 1989 to 1991.
- *Statistical Yearbook*, Electricity Supply Commission (ESKOM), South Africa, 1983 to 1991.
- *Statistical News Release 1981-1985*, Central Statistical Service, South Africa, various editions from 1986 to 1989.
- *Annual Report Energy Affairs 1985*, Department of Mineral and Energy Affairs, Pretoria, 1986.
- *Energy Projections for South Africa (1985 Balance)*, Institute for Energy Studies, Rand Afrikaans University, South Africa, 1986.

#### **Sources for biofuels and waste:**

- *South African Energy Statistics 1950-1989, No. 1*, National Energy Council, Pretoria, 1989.
- IEA Secretariat estimates.

## South Sudan

### **General notes**

The IEA Secretariat could not obtain data for 2015 from South Sudan in time. As a consequence, most data points for 2015 have been estimated based on developments in population and GDP in South Sudan.

Data for South Sudan are available from 2012. Prior to 2012, they are included in Sudan.

Crude oil production and exports were halted for most of 2012, and only continued in April 2013. Both production and exports have been estimated by the IEA Secretariat for the years 2012 to 2015.

### **Sources**

#### **Sources 2012 to 2015:**

- AFREC Energy questionnaire, African Energy Commission, 2015.
- IEA Secretariat estimates.

## Former Soviet Union

### **General notes**

Data for individual countries of the Former Soviet Union are available starting in 1990, and most of the information on 1990 and 1991 was estimated by the IEA Secretariat. Because of large breaks in reporting occurring in the early 1990's, breaks in time series may occur in 1990 for all regional totals.

Coal production statistics refer to unwashed and unscreened coal up to 1990. IEA coal statistics normally refer to coal after washing and screening for the removal of inorganic matter. Also, see notes under "Classification of Fuel Uses" and "Heat", in section on Notes on data quality.

The commodity balances presented for the Former Soviet Union include IEA Secretariat estimates of fuel consumption in the main categories of transformation. These estimates are based on secondary sources and on isolated references in FSU literature.

In older editions of this publication, intra-FSU trade was excluded.

### **Sources**

#### **Sources up to 1989:**

- *Statistical Yearbook*, The State Committee for Statistics of the USSR, Moscow, various editions from 1980 to 1989.
- External Trade of the Independent Republics and the Baltic States, 1990 and 1991, the State Committee of Statistics of the CIS, Moscow, 1992.
- *External Trade of the USSR*, annual and quarterly, various editions, The State Committee of Statistics of the USSR, Moscow, 1986 to 1990.

- *CIR Staff Paper no. 14, 28, 29, 30, 32 and 36*, Center for International Research, U.S. Bureau of the Census, Washington, 1986, 1987 and 1988.
- *Yearbook on Foreign Trade*, The Ministry of Foreign Trade, Moscow, 1986.

## Sri Lanka

### General notes

Breaks in time series may occur between 1999 and 2000 due to newly available energy balances provided by the Sri Lanka Sustainable Energy Authority in 2009.

Stock change may include statistical difference for certain secondary oil products.

Refinery losses may include own use of refinery fuel.

### Sources

#### *Sources 1992 to 2015:*

- Direct communication with the Sri Lanka Sustainable Energy Authority, Colombo.
- *Sri Lanka Energy Balances 2000-2015*, Sri Lanka Sustainable Energy Authority, Colombo.
- Economic and Social Statistics of Sri Lanka 2011-2015, Central Bank of Sri Lanka, Colombo.
- *Statistical Digest 2014*, Ceylon Electricity Board, Colombo.
- Direct communication with the Department of Census and Statistics, 2003 to 2006.
- *Annual Report 1993*, Central Bank of Sri Lanka, Colombo, July 1994.
- Direct communication with the Ceylon Electricity Board, *Sri Lanka Energy Balances, 1994*.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

#### *Sources up to 1991:*

- *Energy Balance Sheet 1991, 1992*, Energy Unit, Ceylon Electricity Board, Colombo, 1992, 1993.
- *Bulletin 1989*, Central Bank of Sri Lanka, Colombo, July 1989.
- *Bulletin (monthly)*, Central Bank of Sri Lanka, Colombo, May 1992.
- *Sectoral Energy Demand in Sri Lanka*, UNDP Economic and Social Commission for Asia and the Pacific, Bangkok, 1992.

- *External Trade Statistics 1992*, Government of Sri Lanka, Colombo, 1993.

#### *Sources for biofuels and waste:*

- Energy Conservation Fund and Ceylon Electricity Board.
- IEA Secretariat estimates.

## Sudan

### General notes

South Sudan became an independent country on 9 July 2011. From 2012 data for South Sudan are reported separately and therefore, breaks in the time series may occur between 2011 and 2012 for Sudan data.

The IEA Secretariat could not obtain data for 2014 or 2015 from Sudan. As a consequence, some data points for 2014 and 2015 have been estimated based on macroeconomic indicators.

In 2015, the Kosti power plant began operation in Sudan, with 500 MW capacity. The plant uses crude oil for fuel, and break in time series can be seen for crude oil imports and input into main activity power plants in 2015.

### Sources

#### *Sources 1992 to 2015:*

- Direct communication with the Ministry of Petroleum, Khartoum.
- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2016.
- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- *Sudanese Petroleum Corporation Statistics*, Ministry of Petroleum, Khartoum, May 2012.
- AFREC energy questionnaire, African Energy Commission, 2013.
- *Sudan Energy Handbook 2006*, Ministry of Energy and Mines, Khartoum.
- IEA Secretariat estimates.

#### *Sources up to 1991:*

- *Foreign Trade Statistical Digest 1990*, Government of Sudan, Khartoum, 1991.

**Sources for biofuels and waste:**

- IEA Secretariat estimates based on 1990 data from Bhagavan (ed.) *Energy Utilities and Institutions in Africa*, AFREPREN, Nairobi, 1996.

**Suriname****General notes**

The data are available from 2000 to 2015. Prior to 2000, data for Suriname are presented in Other Non-OECD Americas.

**Sources****Sources up to 2015:**

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed May 2017, <http://sier.olade.org/>.
- IEA Secretariat estimates

**Syrian Arab Republic****General notes**

Due to the on-going conflict in Syria, no official government data sources were available for 2012 to 2015. Data in this year's edition are primarily based on secondary sources, media reports and IEA Secretariat estimates.

Imports of crude oil and secondary oil products may include informal imports.

In this edition, revised figures were edited from OAPEC for oil production. This might create break in time series.

**Sources****Sources 1992 to 2015:**

- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2016.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- Direct Communication with the Ministry of Petroleum and Mineral Resources, 2012.
- *Statistical Abstract*, Office of the Prime Minister, Central Bureau of Statistics, Damascus, various editions up to 2011.

- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- *The UN Energy Statistics Database (until 2007)*.
- *Quarterly Bulletin*, Central Bank of Syria, Research Department, Damascus, 2001.
- IEA Secretariat estimates.

**Sources up to 1991:**

- *Quarterly Bulletin*, Central Bank of Syria, Research Department, Damascus, 1984.

**Sources for biofuels and waste:**

- *Forestry Statistics*, FAO, Rome, 2000.
- IEA Secretariat estimates.

**Chinese Taipei****General notes**

Data for the period 1982-2009 were revised in 2012 based on new balances submitted by the Bureau of Energy. Breaks in time series may occur between 1981 and 1982.

Breaks in time series may also occur between 2010 and 2011 as more detailed information became available for refinery feedstocks and oil products.

**Sources****Sources 1982 to 2015:**

- *Energy Balances in Taiwan*, Bureau of Energy, Ministry of Economic Affairs, Taipei, various editions up to 2016.
- Direct communication with the electricity utilities.
- *Yearbook of Energy Statistics*, Ministry of Trade, Industry and Energy, Taipei, 1996.

**Sources up to 1981:**

- *The Energy Situation in Taiwan*, Ministry of Economic Affairs, Energy Committee, Taipei, 1986, 1987, 1988 and 1992.
- *Industry of Free China 1975-1985*, Council for Economic Planning and Development, Taipei, 1986.
- *Taiwan Statistical Data Book 1954-1985*, Council for Economic Planning and Development, Taipei, 1986.

- *Energy Policy for the Taiwan Area*, Ministry of Economic Affairs, Energy Committee, Taipei, 1984.
- *Energy Balances in Taiwan*, Ministry of Economic Affairs, Taipei, 1980 to 1981.

#### **Sources for biofuels and waste:**

- *Energy Balances in Taiwan*, Bureau of Energy, Ministry of Economic Affairs, Taipei.
- The UN Energy Statistics Database.
- IEA Secretariat estimates.

## Tajikistan

### **General notes**

Data for Tajikistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Tajikistan is one of the 11 EU4Energy focus countries.

Breaks in time series occur between 2011 and 2012 and between 2013 and 2014, as new information became available in 2016 to the statistics office.

### **Sources**

#### **Sources 2015:**

- Direct communication with the Statistical Agency under President of the Republic of Tajikistan, Dushanbe.
- IEA Secretariat estimates

#### **Sources 1990 to 2014:**

- Direct communication with the Statistical Agency under President of the Republic of Tajikistan, Dushanbe.
- Joint IEA/Eurostat/UNECE annual energy questionnaires, 1991 to 2007 and 2014.
- *Online statistics*, Statistical Agency under the President of the Republic of Tajikistan.
- *Tajikistan in Figures*, Statistical Agency under the President of Tajikistan, various editions up to 2014.
- *Energy and Communal Services in Kyrgyzstan and Tajikistan: A Poverty and Social Impact Assessment*. UNDP Bratislava Regional Centre 2011
- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, Tolsta Chaolais, various editions up to 2013.

- Asian Development Bank Statistics, various editions up to 2014.
- Direct communication with the State Committee on Statistics, Republic of Tajikistan, Dushanbe.
- *Natural Gas Vehicles Statistics*, International Association for Natural Gas Vehicles, online database: [www.iangv.org](http://www.iangv.org).
- *Industry of Tajikistan, Statistics*, the State Committee on Statistics of the Republic of Tajikistan, 2004.
- IEA Secretariat estimates.

## Tanzania

### **General notes**

Some of oil data (EWURA) are reported on a fiscal year basis. Data for 2015 correspond to 1 July 2015 – 30 June 2016.

### **Sources**

#### **Sources up to 2015:**

- *Annual Report*, Bank of Tanzania, Dar es Salaam, various editions up to 2016.
- *EWURA Annual Report*, Energy and Water Utilities Regulatory Authority of the United Republic of Tanzania, Dar es Salaam, various editions up to 2016.
- *Annual Report*, Orca Exploration Group Inc., various editions up to 2016.
- *The Economic Survey*, the Ministry of Finance, Dar Es Salaam, various editions up to 2015.
- *SAPP Annual Report 2008*, Southern African Power Pool, online statistics, 2010-2011.
- *The Economic Survey*, The President's Office – Planning and Privatization, Dar es Salaam, 2003-2007.
- Direct communication with the Ministry of Energy and Minerals and the electricity utility.
- *Tanzanian Economic Trends*, Economic Research Bureau, University of Dar es Salaam, 1991.
- IEA Secretariat estimates.

#### **Sources for biofuels and waste:**

- IEA Secretariat estimates based on 1990 data from *Energy Statistics Yearbook 1990*, Southern Africa Development Community (SADC), Luanda, 1992.



## Thailand

### General notes

Thailand joined the IEA as an Association country in November 2015.

Data for lubricants, refinery gas and non-specified oil products are not published by the Ministry of Energy and are estimated by the IEA Secretariat. Up to 2014, IEA Secretariat also estimated naphtha.

Data for production, own use and non-energy use of natural gas may include propane, butane and ethane produced in gas separation plants.

Stock changes may include statistical difference for certain products.

In the 2014 edition, new information became available for the consumption of anthracite and lignite coal in industry. Breaks in time series may occur between 2011 and 2012.

### Sources

#### Sources 2012 to 2015:

- Direct communication with the Ministry of Energy, Thailand, Bangkok.
- Direct communication with the Petroleum Institute of Thailand, Bangkok.
- *Thailand Energy Statistics*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, Bangkok, various editions up to 2016.
- *Thailand Energy Balance Table*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, Bangkok, various editions up to 2016.
- *Thailand Alternative Energy Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, Bangkok, various editions up to 2016.
- *Thailand Energy Efficiency Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, Bangkok, various editions up to 2014.
- *Energy Statistics of Thailand*, Ministry of Energy, Energy Policy & Planning Office, Bangkok, various editions up to 2016.
- *Key Statistical Data*, Electricity Generation Authority of Thailand, online database: [www.egat.co.th](http://www.egat.co.th).
- *Thailand's Petroleum & Petrochemical Statistics*, Petroleum Institute of Thailand, Bangkok, various editions up to 2016.

- IEA Secretariat estimates.

#### Sources 2002 to 2012:

- Direct communication with the Petroleum Institute of Thailand, Bangkok, 2008 to 2012.
- *Thailand Energy Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, various editions up to 2012.
- *Key Statistical Data*, Electricity Generation Authority of Thailand, online database: [www.egat.co.th](http://www.egat.co.th).
- *Thailand Alternative Energy Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, various editions up to 2012.
- *Electric Power in Thailand*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, various editions up to 2012.
- *Oil in Thailand*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, various editions up to 2012.
- IEA Secretariat estimates.

#### Sources up to 2001:

- *Electric Power in Thailand*, Ministry of Science, Technology and Energy, National Energy Administration, Bangkok, 1985, 1986, 1988 to 2001.
- *Oil in Thailand*, Ministry of Science, Technology and Energy, National Energy Administration, Bangkok, 1979 to 2001.
- *Thailand Energy Situation*, Ministry of Science, Technology and Energy, National Energy Administration, Bangkok, 1978 to 2001.

#### Sources for biofuels and waste:

- *Thailand Energy Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, 2002 to 2010.
- *Thailand Alternative Energy Situation*, Ministry of Energy, Department of Alternative Energy Development and Efficiency, 2009-2010.
- IEA Secretariat estimates.

## Togo

### General notes

The IEA Secretariat could not obtain data from 2013 to 2015 from Togo in time. As a consequence, data for these years have been estimated based on population

growth for biomass and household consumption, and GDP growth for other products than hydro.

Official data were submitted by Togo in 2014 for the years 2009-2012. Breaks in time series between 2008 and 2009 or differences in trends compared to previous publications may occur for this reason.

## Sources

### Sources 1999 to 2015:

- Direct communication with Ministère de l'Équipement, des Mines, de l'Énergie et des Postes et Télécommunications, Lomé.
- Bilans Énergétiques du Togo, 1999 to 2012.
- Autorité de Réglementation du Secteur de l'Électricité (ARSE), 2015 and 2016.
- IEA Secretariat estimates.

### Sources up to 1998:

- IEA Secretariat estimates.

## Trinidad and Tobago

### General notes

In the 2014 edition, natural gas time series from 2000 were revised based on newly available information on the definition of production of natural gas used by Trinidad and Tobago (gross versus marketed production).

## Sources

### Sources 1992 to 2015:

- Direct communication with the Ministry of Energy and Energy Affairs, Port of Spain.
- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- *Energy Industry Consolidated Monthly Bulletins*, Ministry of Energy and Energy Affairs, Government of the Republic of Trinidad and Tobago, Port of Spain, various editions up to 2015.
- *Downstream Gas Industry Annual Report*, Ministry of Energy and Energy Affairs, Government of the Republic of Trinidad and Tobago, Port of Spain, various editions up to 2015.
- *Annual Economic Survey*, Central Bank of Trinidad and Tobago, Port of Spain, 1995 to 2015.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2015.

- *The LNG Industry*, GIIGNL – International Group of Liquefied Natural Gas Importers, Paris, various editions up to 2014.
- *Petroleum Industry Monthly Bulletin*, Ministry of Energy and Natural Resources, Port of Spain, various issues up to 1999.

### Sources up to 1991:

- *Annual Statistical Digest*, Central Statistical Office, Port of Spain, 1983, 1984.
- *History and Forecast*, Electricity Commission, Port of Spain, 1987.
- *Annual Report*, Ministry of Energy and Natural Resources, Port of Spain, 1985, 1986.
- *The National Energy Balances 1979-1983*, Ministry of Energy and Natural Resources, Port of Spain, 1984.
- *Trinidad and Tobago Electricity Commission Annual Report*, Trinidad and Tobago Electricity Commission, Port of Spain, 1984, 1985.

### Sources for biofuels and waste:

- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- *Forestry Statistics*, FAO, Rome.

## Tunisia

### General notes

New information for lubricants and bitumen became available in 2015. Breaks in the time series may occur between 2009 and 2010 because of this.

A significant increase in crude oil production was reported for 2007 due to the start-up of several new development wells and the beginning of production of the Oudna field.

A shutdown of the Bizerte refinery occurred between March 2010 and June 2011, resulting in breaks in time series for crude oil and oil products for the years 2009 to 2011.

## Sources

### Sources 1992 to 2015:

- Direct communication with the Observatoire National de l'Énergie, Agence Nationale pour la Maîtrise de l'Énergie, Tunis.
- Joint IEA/Eurostat/UNECE annual energy questionnaires.

- *Rapport Annuel 2011*, Société Tunisienne de l'Electricité et du Gaz, Tunis.
- Société Tunisienne des Industries de Raffinage, 2009 online statistics, 2008 to 2009.
- Statistiques d'Electricité du COMELEC, 2006, 2007, Comité Maghrébin de l'Electricité.

#### Sources up to 1991:

- *Bilan Energétique de l'Année 1991*, Banque Centrale de Tunisie, Tunis, September 1992.
- *Rapport d'Activité 1990*, Observatoire National de l'Energie, Agence pour la Maîtrise de l'Energie, Tunis, 1991.
- *Rapport Annuel 1990*, Banque Centrale de Tunisie, Tunis, 1991.
- *Activités du Secteur Pétrolier en Tunisie*, Banque Centrale de Tunisie, Tunis, 1987.
- *Statistiques Financières*, Banque Centrale de Tunisie, Tunis, 1986.
- *Entreprise Tunisienne d'Activités Pétrolières (ETAP)*, Tunis, 1987.
- *Annuaire Statistique de la Tunisie*, Institut National de la Statistique, Ministère du Plan, Tunis, 1985, 1986.
- *L'Economie de la Tunisie en Chiffres*, Institut National de la Statistique, Tunis, 1984, 1985.
- *Activités et Comptes de Gestion*, Société Tunisienne de l'Electricité et du Gaz, Tunis, 1987.

#### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1991 data from *Analyse du Bilan de Bois d'Energie et Identification d'un Plan d'Action*, Ministry of Agriculture, Tunis, 1998.

## Turkmenistan

### General notes

Data for Turkmenistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Turkmenistan is one of the 11 EU4Energy focus countries.

Very little data for Turkmenistan are currently available. Supply data are available from secondary sources and consumption is estimated. To indicate the lack of data, certain figures for 2015 have deliberately been kept equal to 2014.

### Sources

#### Sources 2015:

- Turkmenistan Country Report, Turkmenenergo, 2016.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- IEA Secretariat estimates.

#### Sources up to 2014:

- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, David Cameron Wilson, various editions up to 2015.
- Asian Development Bank online database.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2015.
- Direct communication with the National Institute on Statistics and Forecasting of Turkmenistan, November 1999 and January 2001.
- IEA Secretariat estimates.

## Ukraine

### General notes

Data for Ukraine are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Ukraine is one of the 11 EU4Energy focus countries.

Due to limited information being available to the State Statistics Service of Ukraine from part of the Donetsk and Luhansk regions of Ukraine and from the Autonomous Republic of Crimea, breaks in the time series may occur after 2013.

The IEA Secretariat and State Statistics Service of Ukraine are working closely on the improvement of data quality, and in particular revision of historical data. Therefore, breaks in time series may occur between 2006 and 2007.

For the period 2007 to 2015 the transparency of data may be reduced because of confidentiality issues. For instance: peat includes lignite; other kerosene includes aviation fuels (aviation gasoline, gasoline-type jet fuel and kerosene-type jet fuel); other products include petroleum coke.

### Coal

Official Ukrainian coal statistics refer to unwashed and unscreened coal prior to 1995. IEA statistics normally refer to coal after washing and screening for the removal of inorganic matter. Therefore, the IEA Secretariat has

revised Ukrainian coal supply and demand statistics downward to reflect levels of washed coal.

The breakdown of coal by type for 2016p has been estimated by the IEA Secretariat.

Bituminous coal “From other sources” refers to coal mined in informal sector.

Due to a plant closure in 2008, a stock of lignite/peat became available, without details about its consumption. This may lead to breaks in time series and high statistical difference for 2008.

In 2015, some inputs to oven coke production may be missing leading to high efficiency.

## Oil

Large statistical differences still exist for some oil products such as transport fuels and LPG. These are due to identified reporting issues in Ukraine. The State Statistics Service of Ukraine continues to work with data reporters to try and resolve these issues.

Due to limited information being available from one of the refining companies, data for motor gasoline, gas/diesel oil, fuel oil, bitumen and other hydrocarbons are estimated by the State Statistics Service of Ukraine. Breaks in the time series may occur between 2014 and 2015.

## Natural gas

The data for the stock draw and statistical difference of natural gas in 2010 are a consequence of the accounting method chosen by the Ukrainian administration to reflect the ruling of the Stockholm Arbitration Tribunal of 30 March 2010.

Gas stocks include stocks supplied to the Autonomous republic of Crimea.

## Biofuels and waste

Charcoal production includes pyrolysis and calculated amounts of traditional production from 2008.

## Electricity and heat

Statistical difference for electricity includes electricity supplied to the Autonomous Republic of Crimea and the Donetsk and Luhansk regions of Ukraine.

Information on electricity used for pumped hydro is available from 2012 only.

## Sources

### Sources 2007 to 2015:

- Direct communication with the State Statistics Service of Ukraine, Kiev.

- Joint IEA/Eurostat/UNECE annual energy questionnaires.

### Sources 1992 to 2006:

- Joint IEA/Eurostat/UNECE annual energy questionnaires.
- Direct communication with the Ministry of Statistics, the Coal Ministry, the National Dispatching Company, 1995.
- Coal: Direct communication with the State Mining University of Ukraine, 1995, 1996.
- Natural gas: Direct communication with Ukgazprom, February 1995.
- Direct communication with the Ministry of Statistics of the Ukraine, July 1994.
- *Ukraine in 1992, Statistical Handbook*, Ministry of Statistics of the Ukraine, Kiev, 1993.
- *Ukraine Power Demand and Supply Options*, The World Bank, Washington, 1993.
- *Power Industry in Ukraine*, Ministry of Power and Electrification, Kiev, 1994.
- *Energy Issues Paper*, Ministry of Economy, March 1995.
- *Ukraine Energy Sector Statistical Review 1993, 1994, 1995, 1996, 1997*, The World Bank Regional Office, Kiev, 1994, 1995, 1996, 1997, 1998.
- *Global Energy Saving Strategy for Ukraine*, Commission of the European Communities, TACIS, Madrid, July 1995.
- IEA Secretariat estimates.

### Sources 1990 to 1991:

- IEA Secretariat estimates.

### Sources for biofuels and waste:

- Statistical Office in Kiev, The World Bank and IEA Secretariat estimates.

## United Arab Emirates

### General notes

Crude oil production and export data do not include field condensate. Field condensate quantities are included with natural gas liquids.

In 2013, time series on electricity imports and exports were revised due to new information available on international trade at the interconnectors for the



United Arab Emirates. This may lead to revisions to these time series from 2007.

Time series revisions in NGL production were advised by the Federal Competitiveness and Statistical Authority. Breaks in time series can be observed in 2011 for NGLs.

In 2015, time series for oil and gas data were revised according to data from Federal Competitiveness and Statistical Authority. Time series breaks can be observed in 2009 for crude oil production and trade.

In 2015, Ruwais refining complex expansion was completed, significantly increasing refined oil product production and oil industry own use for refinery inputs.

In 2015, time series for coal data were revised according to data from the Federal Competitiveness and Statistical Authority. Break in time series can be observed in 2009.

## Sources

### Sources 1993 to 2015:

- Direct communication with Federal Competitiveness and Statistics Authority, Dubai.
- Direct communication with United Arab Emirates Ministry of Energy, Dubai.
- *Annual Statistical Report*, Organization of Arab Petroleum Exporting Countries (OAPEC), Kuwait, various editions up to 2016.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2016
- *Annual Statistical Bulletin*, Organization of Petroleum Exporting Countries (OPEC), Vienna, various editions up to 2015.
- Statistical Data for Electricity and Water 2015-2014, United Arab Emirates Ministry of Energy, Dubai.
- *Statistical Report 1999-2015*, Abu Dhabi Water & Electric Company (ADWEC), Abu Dhabi, 2015.
- Annual Report, Regulation & Supervision Bureau of Abu Dhabi, Abu Dhabi, various editions up to 2012.
- *Statistical Yearbook 1995, 1996, 1998*, Department of Planning, Abu Dhabi, 1998, 2001.
- Direct communication with the National Bureau of Statistics of the United Arab Emirates, Abu Dhabi.

- Direct communication with the Ministry of Electricity and Water, Abu Dhabi, March 2001.
- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

### Sources up to 1992:

- Annual Report 1998, Ministry of Electricity & Water, Dubai.
- *Abu Dhabi National Oil Company, 1985 Annual Report*, Abu Dhabi National Oil Company, Abu Dhabi, 1986.
- *United Arab Emirates Statistical Review 1981*, Ministry of Petroleum and Mineral Resources, Abu Dhabi, 1982.
- *Annual Statistical Abstract*, Ministry of Planning, Central Statistical Department, Abu Dhabi, various editions from 1980 to 1993.

### Sources for biofuels and waste:

- *Forestry Statistics*, FAO, Rome, 2001.
- IEA Secretariat estimates.
- *Initial National Communication to the United Nations Framework Convention on Climate Change*, Ministry of Energy, United Arab Emirates, 2006.

## Uruguay

### General notes

The pronounced growth in production of biofuels and waste from 2007 to 2010 is a result of the development of the pulp and paper industry.

The power produced from the Salto Grande hydroelectric plant, located on the Uruguay River between Concordia in Argentina and Salto in Uruguay is equally shared between the two countries. Exports include power produced in Salto Grande and exported to Argentina.

The refinery was shut down for maintenance in 1993-1994. This explains the low refinery output observed in 1993 and the absence of output in 1994..

### Sources

#### Sources 1990 to 2015:

- Direct communication with Dirección Nacional de Energía, Ministerio de Industria, Energía y Minería, Montevideo

- *Balance Energético Nacional*, Ministerio de Industria, Energía y Minería, Dirección Nacional de Energía, Montevideo, 1971 to 2015.
- *Energy-Economic Information System (SIEE)*, Latin American Energy Organization (OLADE), Quito, accessed April 2017: <http://sier.olade.org/>.
- IEA Secretariat estimates.

## Uzbekistan

### General notes

Data for Uzbekistan are available starting in 1990. Prior to that, they are included in Former Soviet Union.

Uzbekistan is one of the 11 EU4Energy focus countries.

Very little data for Uzbekistan are currently available. Supply data are available from secondary sources and consumption is estimated. To indicate the lack of data certain figures for 2015 have deliberately been kept equal to 2014.

### Sources

#### Sources 2015:

- Asian Development Bank online database.
- IEA Secretariat estimates.

#### Sources 1990 to 2014:

- Asian Development Bank online database.
- *CIS and East European Energy Databook*, Eastern Bloc Research Ltd, Tolsta Chaolais, various editions up to 2014.
- Direct communication with the Interstate Statistical Committee of the Commonwealth of Independent States.
- Direct communications to the IEA Secretariat from the Institute of Power Engineering and Automation, Academy of Sciences of Uzbekistan 1994, 1996, 1998 to 2003.
- Joint IEA/Eurostat/UNECE annual energy questionnaires, 1995 to 1997.
- IEA Secretariat estimates.

## Venezuela

### General notes

In 2015, new information on the production and consumption of refinery gas since 2007 became available.

For this reason, breaks in time series may occur between 2006 and 2007.

Data for crude oil production are obtained from Petróleos de Venezuela S.A. (PDVSA) with an estimate of lease condensate removed. Crude oil production data are comparable to data reported by the Organization of the Petroleum Exporting Countries (OPEC) and the Organización Latino Americana de Energía (OLADE); however, some other sources of information report lower crude oil production, noting other components may be included in the crude oil production data reported in the above sources.

Lease condensate quantities are included in the product NGL from 2000. This may lead to breaks in time series for some products between 1999 and 2000.

Revised data for the years 2005-2011 were provided by OLADE for Venezuela. These revisions may lead to breaks in time series between 2004 and 2005 and differences in trends in comparison to previous editions.

### Sources

#### Sources up to 2015:

- Energy-Economic Information System (SIEE), Latin American Energy Organization (OLADE), Quito, accessed May 2017: <http://sier.olade.org/>.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- Petróleos de Venezuela S.A. (PDVSA) 2015 Annual Report, Petróleos de Venezuela, Caracas.
- Estadísticas consolidadas, Cámara Venezolana de la Industria Eléctrica, 1996 to 2007.
- Oficina de operación de sistemas interconectados Venezuela, 2008.
- Petróleo y Otros Datos Estadísticos, Dirección General Sectorial de Hidrocarburos, Caracas, 1983 to 1991, 1993 to 2004, 2007 to 2008.
- Balance Energético de Venezuela, Dirección de Planificación Energética, Ministerio de Energía y Minas, Caracas, 1971 to 2005.
- Transformando la energía en desarrollo social, CVG EDELCA Informe Anual 2006.
- Compendio Estadístico del Sector Eléctrico, Ministerio de Energía y Minas, Dirección de Electricidad, Carbón y Otras Energías, Caracas, 1984, 1989, 1990, 1991.
- Memoria y Cuenta, Ministerio de Energía y Minas, Caracas, 1991.

- IEA Secretariat estimates.

### Sources for biofuels and waste:

- *The UN Energy Statistics Database.*

## Viet Nam

### General notes

Data for stock changes may contain statistical differences for some energy products.

### Sources

#### Sources 1992 to 2015:

- Direct communication with the Institute of Energy and the Ministry of Industry and Trade, Hanoi.
- *Vietnam Energy Balance Tables*, General Directorate of Energy, Ministry of Industry and Trade, Hanoi, various editions up to 2015.
- *Statistical Yearbook of Vietnam & Statistical Handbook*, General Statistics Office of Vietnam (GSO), Hanoi, various editions up to 2015.
- *Yearbook*, Vietnam Energy (Năng Lượng Việt Nam), Hanoi, 2012.
- *Annual Report 2006*, Petrovietnam, Vietnam national Oil and Gas Group.
- Direct communications with the Center for Energy-Environment Research and Development, Pathumthami, 1997 to 1999.
- *Sectoral Energy Demand in Vietnam*, UNDP Economic and Social Commission for Asia and the Pacific, Bangkok, 1992.
- *Energy Commodity Account of Vietnam 1992*, Asian Development Bank, Manila, 1994.
- *World Economic Problems (20)*, National Centre for Social Sciences of the S.R. Vietnam, Institute of World Economy, Hanoi, 1993.
- *Vietnam Energy Review*, Institute of Energy, Hanoi, 1995, 1997, 1998.
- APEC annual energy statistics questionnaires.
- IEA Secretariat estimates.

#### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1992 data from *Vietnam Rural and Household Energy Issues and Options: Report No. 161/94*, The World Bank, ESMAP, Washington, D.C., 1994.

## Yemen

### General notes

Oil and gas pipeline sabotage was reported in 2012 due to unrest in Yemen. Breaks in time series between 2011 and 2012 as well as between 2012 and 2013 may be observed because of this.

Oil and gas activity was halted in 2015 due to military conflict, affecting 2015 oil and oil products data.

Some revisions to 2014 oil data are due to receipt of Ministry of Planning reports.

### Sources

#### Sources 2011 to 2015:

- Direct communication with the Ministry of Planning and International Cooperation, Sana'a.
- Direct communication with Aden Refinery, Aden.
- *Statistical Bulletin*, Arab Union of Producers, Transporters and Distributors of Electricity (AUPTDE), Amman, various editions up to 2015.
- *Natural Gas in the World*, Cedigaz, Paris, various editions up to 2016.
- *Statistical Yearbook*, Central Statistical Organization, Sana'a, various editions up to 2013.
- Household Budget Survey 2005/2006, Central Statistical Organization, Sana'a.
- Petroleum Subsidies in Yemen, IFPRI, 2011.

#### Sources 1991 to 2010:

- Yemen Petroleum Company, online statistics, 2010.
- *Oil & Gas in Figures 2001 – 2007*, Ministry of Oil & Minerals, Statistics Technical Committee, Yemen, 2008.
- Oil, Gas and Minerals Statistics, Annual Bulletin 2001, 2002, 2003, 2004, 2005 and 2006, Ministry of Oil & Minerals, Statistics Technical Committee, Yemen, 2001 to 2007.
- Direct communications with the Yemen General Oil and Gas Corporation, the Public Electricity Corporation, and the National Information Center, Sana'a, 2001.
- *Statistical Indicators in the Electricity Sector*, Ministry of Planning and Development, Central Statistical Organization, Yemen, 1993.
- IEA Secretariat estimates.

**Sources up to 1991:**

- *Statistical Yearbook*, Government of Yemen Arab Republic, Yemen, 1988.

**Sources for biofuels and waste:**

- *The UN Energy Statistics Database*.
- Forestry Statistics, FAO, Rome, 2000.
- IEA Secretariat estimates.

## Former Yugoslavia

**General notes**

Data for individual countries of the Former Yugoslavia are available starting in 1990, and most of the information on 1990 and 1991 was estimated by the IEA Secretariat. Because of large breaks in reporting which occurred in the early 1990's, breaks in time series may occur in 1990 for all regional totals.

**Sources****Sources up to 1989:**

- *Statisticki Godisnjak Jugoslavije*, Socijalisticka Federativna Reublika Jugoslavija, Savezni Zavod Za Statistiku, Beograd, 1985 to 1991.
- Indeks, Socijalisticka Federativna Reublika Jugoslavija, Beograd, 1990, 1991, 1992.

## Zambia

**General notes**

Crude oil imports reported by Zambia's Energy Regulation Board include petroleum feedstocks comprised of crude oil, naphtha, condensate, and gasoil.

A fire damaged the sole oil refinery (Indeni) in Zambia in 2000. Therefore, breaks in time series may occur between 1999 and 2000, as well as between 2000 and 2001.

In 2015, information on refinery yields was obtained and applied to the refinery production from 2001. Therefore, breaks in time series may occur between 2000 and 2001.

**Sources****Sources 1971 to 2015:**

- *Statistical Bulletin*. Energy Regulation Board, Lusaka, 2016.

- *Energy Sector Report*. Energy Regulation Board, Lusaka, various editions up to 2015.
- *Petroleum Industry Statistics*, Energy Regulation Board, Lusaka. Various editions up to 2015.
- *Institutional Framework and Storage and Transportation Infrastructure of the Zambian Petroleum Supply Chain (DRAFT)*, Government of the Republic of Zambia, 2007.
- *Economic Report 2003*, Ministry of Finance, Lusaka.
- *Energy Statistics Bulletin 1980-1999*, The Department of Energy, Lusaka, 2000.
- AFREPREN, 2002.
- *Annual Statistical Yearbook 1993, 1994, 1995 (Consumption in Zambia 1978-1983)*, Eskom, Lusaka, 1984.
- IEA Secretariat estimates.

**Sources for biofuels and waste:**

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass Sub-sector in Africa*, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Zimbabwe

**General notes**

A new mining company was commissioned in 2011, leading to a rapid increase in coal production. Due to limited availability of coal consumption data, the IEA Secretariat has estimated coal stocks for Zimbabwe. Breaks in time series may occur between 2013 and 2014 because of this.

More detailed data on energy consumption is available from the Census of Industrial Production (ZimStat) since 2009. Breaks in time series may occur between 2008 and 2009 because of this.

More detailed data on road fuel imports is available since 2011. Breaks in time series may occur between 2010 and 2011 because of this.

**Sources****Sources 2006 to 2015:**

- Direct communication with the Ministry of Energy and Power Development, Harare.
- *Census of Industrial Production (CIP)*, Zimbabwe National Statistics Agency (ZimStat), Harare, Various editions up to 2015.



- Direct communication with the Zimbabwe National Statistical Agency (ZimStat), Harare.
- *Annual Report*, Zimbabwe Power Company (ZPC), Harare, various editions from 2010 up to 2012.
- IEA Secretariat estimates.

#### Sources 1996 to 2005:

- Direct communication with the Ministry of Energy and Power Development.
- Direct communication with the Zimbabwe Electricity Supply Authority (ZESA), 2003, 2005, 2006.
- *African Economic Outlook 2004*, OECD, Paris, 2004.
- Direct communication with the Department of Energy Resources and Development, February 2002, AFREPREN, 2002.
- Direct communication with the Ministry of Environment and Tourism, Harare, 1999, 2000.
- Direct communication with the electricity utility.
- *Electricity Statistics Information*, Central Statistical Office, Causeway, February 1998.
- IEA Secretariat estimates.

#### Sources 1992 to 1995:

- *Eskom Annual Statistical Yearbook 1993, 1994, 1995*, Johannesburg, 1994, 1995, 1996, citing Zimbabwe Electricity Supply Authority, Harare as source.
- *The UN Energy Statistics Database*.

#### Sources up to 1991:

- *Zimbabwe Statistical Yearbook 1986*, Central Statistical Office, Harare, 1990.
- *Quarterly Digest of Statistics*, Central Statistical Office, Harare, 1990.
- *Zimbabwe Electricity Supply Authority Annual Report*, Zimbabwe Electricity Supply Authority, Harare, 1986 to 1991.

#### Sources for biofuels and waste:

- IEA Secretariat estimates based on 1991 data from *Forests and Biomass* Sub-sector in Africa, African Energy Programme of the African Development Bank, Abidjan, 1996.

## Other Africa

### General notes

Time series for this region are obtained by summing data corresponding to individual countries (see lists in section I.5, Geographical coverage). As a consequence, intra-regional trade is included as part of total trade. Therefore, trade is likely to be overstated.

The UN Statistics Division database is the main data source for the countries not listed individually and included in the region. At the time when this edition was prepared only 2014 data were available. As a consequence, all data points for 2015 have been estimated based on developments in population and GDP in the region.

In 2015 data for bagasse use in the transformation sector in autoproducer electricity plants, main activity producer CHP plants and autoproducer CHP plants became available for the years 2011-2013. This may lead to breaks in time series between 2010 and 2011.

Since 2015 edition, data for Niger are no longer included in Other Africa for the period 2000-2015. This may lead to breaks in time series between 1999 and 2000.

### Sources

#### Sources up to 2015:

- *The UN Energy Statistics Database*.
- IEA Secretariat estimates.

## Other non-OECD Asia

### General notes

Time series for this region are obtained by summing data corresponding to individual countries (see lists in section I.5, Geographical coverage). As a consequence, intra-regional trade is included as part of total trade. Therefore, trade is likely to be overstated.

The UN Statistics Division database is the main data source for the countries not listed individually and included in the region. At the time when this edition was prepared only 2014 data were available. As a consequence, all data points for 2015 have been estimated based on developments in population and GDP in the region.

In this edition only UN data for the period 2011-2014 were uploaded which may create breaks in time series between 2010 and 2011.

## Sources

### *Sources up to 2015:*

- *The UN Energy Statistics Database.*
- IEA Secretariat estimates.

## Other non-OECD Americas

### General notes

Time series for this region are obtained by summing data corresponding to individual countries (see lists in section I.5, Geographical coverage). As a consequence, intra-regional trade is included as part of total trade. Therefore, trade is likely to be overstated.

The UN Statistics Division database is the main data source for the countries not listed individually and included in the region. At the time when this edition was prepared only 2014 data were available. As a

consequence, all data points for 2015 have been estimated based on developments in population and GDP in the region.

The refinery in Aruba was shut down in September 2012. This may lead to breaks in time series for the period 2011-2013.

Energy data for Bonaire, Saba, Saint Eustratius and Sint Maarten are included in Other non-OECD Americas for the period 2012-2015.

Data for Suriname are no longer included in Other non-OECD America's for the period 2000-2014. This may lead to breaks in time series between 1999 and 2000.

## Sources

### *Sources up to 2015:*

- Annual Statistical Digest of the Central Bank of Aruba.
- The economy of Curacao and Sint Maarten in Data and Charts Yearly Overview.
- *The UN Energy Statistics Database.*
- IEA Secretariat estimates.



# PART III

## SUMMARY TIME SERIES

## Production of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 474.00</b>	<b>1 799.65</b>	<b>2 224.45</b>	<b>2 277.86</b>	<b>2 997.33</b>	<b>3 663.34</b>	<b>3 974.31</b>	<b>3 871.53</b>	<b>3 689.85</b>
<b>Non-OECD Total</b>	<b>654.90</b>	<b>830.64</b>	<b>1 151.35</b>	<b>1 311.25</b>	<b>1 986.12</b>	<b>2 665.61</b>	<b>2 996.91</b>	<b>2 949.87</b>	<b>2 868.83</b>
<b>OECD Total</b>	<b>819.10</b>	<b>969.02</b>	<b>1 073.10</b>	<b>966.61</b>	<b>1 011.21</b>	<b>997.73</b>	<b>977.40</b>	<b>921.66</b>	<b>826.96</b>
Canada	11.70	20.25	37.93	34.41	34.55	33.95	35.37	30.61	30.09
Chile	0.96	0.78	1.45	0.24	0.27	0.25	2.77	2.09	1.68
Mexico	1.50	1.73	3.74	5.68	7.08	8.01	7.75	7.99	6.38
United States	333.36	447.92	542.32	536.86	565.28	531.84	485.03	431.28	354.98
<b>OECD Americas</b>	<b>347.52</b>	<b>470.68</b>	<b>585.44</b>	<b>577.19</b>	<b>607.18</b>	<b>574.04</b>	<b>530.93</b>	<b>471.97</b>	<b>393.12</b>
Australia	40.25	51.90	106.10	164.58	201.58	246.56	285.44	298.58	293.62
Israel <sup>1</sup>	-	-	0.02	0.03	0.03	0.03	0.04	0.04	0.04
Japan	17.90	10.90	4.31	1.52	-	-	-	-	-
Korea	6.65	8.20	7.58	3.64	1.26	0.96	0.78	0.78	0.77
New Zealand	1.15	1.14	1.42	2.07	3.16	3.14	2.34	1.94	1.66
<b>OECD Asia Oceania</b>	<b>65.96</b>	<b>72.14</b>	<b>119.44</b>	<b>171.84</b>	<b>206.03</b>	<b>250.69</b>	<b>288.59</b>	<b>301.34</b>	<b>296.08</b>
Austria	1.02	0.84	0.64	0.29	0.00	0.00	0.00	0.00	0.00
Belgium	6.42	4.71	1.18	0.21	0.06	0.01	0.01	0.01	0.01
Czech Republic	38.01	40.45	36.31	25.05	23.57	20.83	16.98	17.06	16.06
Denmark	-	-	-	-	-	-	-	-	-
Estonia	..	..	5.23	2.67	3.18	3.94	4.53	4.20	4.35
Finland	0.06	0.73	1.81	1.09	2.14	1.81	1.60	0.84	0.72
France	18.04	13.38	8.24	2.48	0.38	0.16	0.19	-	-
Germany	141.40	143.14	121.77	60.63	56.48	45.91	44.13	43.00	39.83
Greece	1.69	2.95	7.12	8.22	8.54	7.32	6.38	5.68	3.96
Hungary	6.05	6.34	4.22	2.89	1.75	1.59	1.59	1.52	1.51
Iceland	-	-	-	-	-	-	-	-	-
Ireland	1.06	1.08	1.43	0.97	0.82	0.98	0.97	0.76	0.68
Italy	0.30	0.32	0.28	0.00	0.06	0.06	0.05	0.05	0.03
Latvia	..	..	0.06	0.02	0.00	0.00	0.00	-	0.00
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	1.14	-	-	-	-	-	-	-	-
Norway	0.29	0.20	0.20	0.42	0.99	1.30	1.12	0.74	0.55
Poland	100.73	120.35	98.97	71.30	68.86	55.38	54.03	53.87	52.24
Portugal	0.13	0.07	0.12	-	-	-	-	-	-
Slovak Republic	1.70	1.70	1.40	1.02	0.64	0.61	0.58	0.50	0.47
Slovenia	..	..	1.35	1.06	1.18	1.20	0.82	0.86	0.91
Spain	6.48	9.82	11.75	7.97	6.26	3.30	1.63	1.25	0.73
Sweden	0.01	0.01	0.17	0.16	0.21	0.24	0.13	0.11	0.14
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	5.21	6.15	12.37	12.49	10.81	17.52	16.20	12.80	13.06
United Kingdom	75.89	73.96	53.61	18.66	12.07	10.84	6.92	5.11	2.49
<b>OECD Europe</b>	<b>405.62</b>	<b>426.20</b>	<b>368.22</b>	<b>217.59</b>	<b>197.99</b>	<b>173.00</b>	<b>157.88</b>	<b>148.35</b>	<b>137.75</b>
<i>IEA</i>	<i>816.64</i>	<i>966.51</i>	<i>1 066.47</i>	<i>959.58</i>	<i>1 002.64</i>	<i>988.24</i>	<i>966.02</i>	<i>910.68</i>	<i>817.94</i>
<i>IEA/Accession/Association</i>	<i>1 059.16</i>	<i>1 328.59</i>	<i>1 693.14</i>	<i>1 860.26</i>	<i>2 504.63</i>	<i>3 123.50</i>	<i>3 393.18</i>	<i>3 300.55</i>	<i>3 102.74</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>369.79</i>	<i>214.59</i>	<i>196.19</i>	<i>165.03</i>	<i>150.15</i>	<i>145.47</i>	<i>127.68</i>
<i>G7</i>	<i>598.59</i>	<i>709.87</i>	<i>768.46</i>	<i>654.56</i>	<i>668.83</i>	<i>622.76</i>	<i>571.70</i>	<i>510.06</i>	<i>427.41</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>960.84</i>	<i>783.09</i>	<i>826.25</i>	<i>789.12</i>	<i>761.45</i>	<i>710.33</i>	<i>635.70</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>1 996.36</i>	<i>2 121.60</i>	<i>2 803.61</i>	<i>3 437.99</i>	<i>3 732.97</i>	<i>3 653.01</i>	<i>3 461.21</i>
<i>OPEC</i>	<i>1.02</i>	<i>0.76</i>	<i>2.21</i>	<i>6.52</i>	<i>6.27</i>	<i>2.74</i>	<i>1.62</i>	<i>1.36</i>	<i>1.53</i>

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Production of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>654.90</b>	<b>830.64</b>	<b>1 151.35</b>	<b>1 311.25</b>	<b>1 986.12</b>	<b>2 665.61</b>	<b>2 996.91</b>	<b>2 949.87</b>	<b>2 868.83</b>
Albania	0.28	0.50	0.49	0.01	0.01	0.00	-	0.03	..
Armenia	..	..	-	-	-	-	-	-	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	0.84	0.49	0.56	0.57	0.36	0.24	..
Bosnia and Herzegovina	..	..	4.18	2.46	2.95	3.50	3.77	3.93	4.25
Bulgaria	4.65	5.19	5.38	4.29	4.18	4.94	5.12	5.85	5.10
Croatia	..	..	0.10	-	-	-	-	-	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	1.21	1.21	1.23	1.19	0.99	0.88	0.76
Georgia	..	..	0.66	0.00	0.00	0.04	0.12	0.12	0.12
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	58.01	34.13	38.28	48.55	49.94	47.11	42.97
Kosovo	..	..	..	0.93	1.22	1.61	1.34	1.54	1.64
Kyrgyzstan	..	..	1.41	0.16	0.12	0.21	0.66	0.71	0.91
Lithuania	..	..	0.01	0.01	0.02	0.01	0.03	0.02	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	-	-	-	-	-	-	..
Montenegro	..	..	..	..	0.29	0.43	0.36	0.39	0.31
Romania	6.05	8.10	8.65	5.60	5.79	5.90	4.45	4.79	4.33
Russian Federation	..	..	192.38	128.54	157.43	166.36	189.74	200.27	208.55
Serbia	..	..	10.17	8.35	7.46	7.23	5.71	7.20	7.32
Tajikistan	..	..	0.37	0.01	0.04	0.09	0.38	0.46	0.61
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	86.81	36.35	34.69	33.71	32.29	17.42	16.83
Uzbekistan	..	..	2.26	0.91	1.08	1.28	1.58	1.42	1.40
Former Soviet Union	331.53	339.56	x	x	x	x	x	x	x
Former Yugoslavia	7.65	9.62	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>350.17</b>	<b>362.97</b>	<b>372.94</b>	<b>223.44</b>	<b>255.35</b>	<b>275.62</b>	<b>296.84</b>	<b>292.38</b>	<b>294.83</b>
Algeria	0.21	0.00	-	-	-	-	-	-	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	0.45	0.53	0.56	0.56	0.96	1.18	1.06
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	0.08	0.08	0.08	-	-	-	-	-	..
Egypt	-	-	-	0.04	0.02	-	-	-	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	0.02	-	-	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	0.35	0.42	0.29	0.02	0.01	-	-	-	..
Mozambique	0.24	0.12	0.02	0.01	0.00	0.02	4.07	4.31	4.44
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	0.04	0.05	0.08	0.07	0.06	0.08
Nigeria	0.21	0.11	0.06	0.00	0.00	0.02	0.03	0.03	0.03
Senegal	-	-	-	-	-	-	-	-	..
South Africa	35.14	66.76	100.16	126.93	138.37	143.94	147.41	146.25	145.41
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	0.00	0.00	0.05	0.02	-	0.15	0.16	0.17
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	-	-	-	-	-	..
Zambia	0.55	0.34	0.22	0.12	0.09	0.00	0.09	0.09	0.12
Zimbabwe	1.81	1.78	3.45	2.89	2.34	1.84	3.73	2.80	1.74
Other Africa	0.10	0.35	0.20	0.26	0.31	0.34	0.17	0.18	0.19
<b>Africa</b>	<b>38.69</b>	<b>69.96</b>	<b>104.93</b>	<b>130.89</b>	<b>141.75</b>	<b>146.82</b>	<b>156.70</b>	<b>155.05</b>	<b>153.23</b>

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Production of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	0.09	0.35	0.47	0.34	0.51
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	17.51	25.44	26.62	16.91	19.87	14.51	16.29	16.87	21.54
India	32.74	47.84	93.34	130.64	163.31	212.87	253.49	263.52	272.90
Indonesia	0.09	0.17	5.85	45.45	98.23	186.31	264.18	244.23	246.91
Malaysia	-	-	0.07	0.24	0.50	1.51	1.69	1.61	1.52
Mongolia	..	..	2.66	1.81	3.65	15.19	15.89	13.51	20.50
Myanmar	0.01	0.01	0.04	0.32	0.34	0.41	0.41	0.44	0.34
Nepal	-	-	-	0.01	0.01	0.01	0.01	0.01	0.00
Pakistan	0.51	0.63	1.10	1.24	1.86	1.37	1.48	1.53	1.59
Philippines	0.01	0.17	0.65	0.72	1.52	3.51	4.01	3.89	5.79
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	2.10	1.60	0.29	0.05	-	-	-	-	..
Thailand	0.08	0.41	3.60	5.14	6.05	5.32	4.62	3.88	4.35
Viet Nam	1.67	2.91	2.60	6.50	19.00	25.11	23.00	23.23	22.04
Other Asia	0.91	1.69	0.07	0.23	0.37	0.94	1.08	1.03	1.10
<b>Non-OECD Asia excl. China</b>	<b>55.64</b>	<b>80.87</b>	<b>136.88</b>	<b>209.24</b>	<b>314.80</b>	<b>467.42</b>	<b>586.63</b>	<b>574.10</b>	<b>599.12</b>
People's Rep. of China	206.79	310.72	518.39	713.50	1 227.03	1 722.49	1 894.35	1 868.16	1 758.46
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	<b>206.79</b>	<b>310.72</b>	<b>518.39</b>	<b>713.50</b>	<b>1 227.03</b>	<b>1 722.49</b>	<b>1 894.35</b>	<b>1 868.16</b>	<b>1 758.46</b>
Argentina	0.27	0.23	0.16	0.15	0.01	0.04	0.03	0.02	0.05
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	0.88	2.49	1.93	2.63	2.48	2.10	3.04	3.05	2.62
Colombia	1.84	2.71	13.89	24.86	38.39	48.33	57.58	55.61	58.83
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	-	-	-	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.02	0.03	0.07	0.01	0.03	0.06	0.15	0.17	0.19
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	0.04	0.03	1.60	5.76	5.25	1.99	0.88	0.61	0.69
Other Non-OECD Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	..
<b>Non-OECD Americas</b>	<b>3.05</b>	<b>5.49</b>	<b>17.66</b>	<b>33.41</b>	<b>46.17</b>	<b>52.53</b>	<b>61.67</b>	<b>59.46</b>	<b>62.38</b>
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.57	0.62	0.56	0.76	1.01	0.73	0.71	0.73	0.81
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>0.57</b>	<b>0.62</b>	<b>0.56</b>	<b>0.76</b>	<b>1.01</b>	<b>0.73</b>	<b>0.71</b>	<b>0.73</b>	<b>0.81</b>

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

## Production of crude oil and NGL (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>2 938.39</b>	<b>3 173.56</b>	<b>3 241.36</b>	<b>3 702.66</b>	<b>4 044.61</b>	<b>4 082.13</b>	<b>4 318.93</b>	<b>4 416.26</b>	<b>4 421.56</b>
<b>Non-OECD Total</b>	<b>2 227.87</b>	<b>2 325.61</b>	<b>2 317.15</b>	<b>2 661.68</b>	<b>3 088.90</b>	<b>3 187.51</b>	<b>3 226.26</b>	<b>3 290.49</b>	<b>3 325.63</b>
<b>OECD Total</b>	<b>710.51</b>	<b>847.95</b>	<b>924.21</b>	<b>1 040.98</b>	<b>955.71</b>	<b>894.62</b>	<b>1 092.67</b>	<b>1 125.77</b>	<b>1 095.94</b>
Canada	96.53	83.64	94.15	128.43	142.94	167.16	219.95	226.23	224.59
Chile	1.79	1.83	1.17	0.43	0.36	0.61	0.44	0.30	0.26
Mexico	27.49	114.64	153.28	171.19	197.52	155.26	144.82	130.95	124.65
United States	534.59	498.35	432.54	365.61	322.55	346.69	549.94	582.08	559.01
<b>OECD Americas</b>	<b>660.41</b>	<b>698.45</b>	<b>681.14</b>	<b>665.65</b>	<b>663.36</b>	<b>669.72</b>	<b>915.14</b>	<b>939.56</b>	<b>908.51</b>
Australia	19.85	21.30	29.03	33.91	25.67	25.54	19.08	18.09	17.86
Israel <sup>1</sup>	6.10	0.02	0.01	0.00	0.00	0.00	0.08	0.08	0.08
Japan	0.81	0.56	0.69	0.77	0.75	0.69	0.51	0.47	0.45
Korea	-	-	-	0.67	0.53	0.70	0.78	0.66	0.68
New Zealand	0.18	0.37	1.97	1.94	1.08	2.75	2.08	2.16	1.81
<b>OECD Asia Oceania</b>	<b>26.94</b>	<b>22.25</b>	<b>31.69</b>	<b>37.30</b>	<b>28.04</b>	<b>29.68</b>	<b>22.54</b>	<b>21.46</b>	<b>20.87</b>
Austria	2.64	1.52	1.21	1.09	0.98	1.03	0.99	0.89	0.81
Belgium	-	-	-	-	-	-	-	-	-
Czech Republic	0.04	0.24	0.22	0.38	0.59	0.27	0.26	0.21	0.19
Denmark	0.07	0.30	6.11	18.26	19.02	12.49	8.35	7.90	7.11
Estonia	..	..	-	-	-	-	-	-	-
Finland	-	-	-	0.10	0.15	0.07	0.07	0.07	0.07
France	2.07	2.26	3.47	1.81	1.36	1.07	0.93	0.97	0.93
Germany	6.85	5.66	4.71	3.94	4.60	3.30	3.11	3.18	3.20
Greece	-	-	0.84	0.26	0.09	0.10	0.06	0.06	0.15
Hungary	2.02	2.52	2.27	1.68	1.42	1.09	0.84	0.87	0.96
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	1.05	1.73	4.47	4.69	6.26	5.62	5.98	5.79	4.19
Latvia	..	..	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	1.59	1.61	4.13	2.65	2.55	1.64	2.09	2.05	1.63
Norway	1.51	24.34	83.66	167.75	135.28	99.37	86.69	91.66	93.94
Poland	0.39	0.34	0.18	0.72	0.89	0.74	0.97	0.95	1.02
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	0.13	0.04	0.08	0.06	0.26	0.21	0.23	0.24	0.23
Slovenia	..	..	0.00	0.00	-	-	-	-	-
Spain	0.67	1.79	1.17	0.23	0.17	0.13	0.31	0.24	0.14
Sweden	-	0.03	0.00	-	-	-	-	-	-
Switzerland	-	-	-	-	-	0.00	-	-	-
Turkey	3.59	2.27	3.61	2.73	2.23	2.65	2.61	2.66	2.72
United Kingdom	0.55	82.59	95.25	131.67	88.47	65.45	41.50	47.03	49.27
<b>OECD Europe</b>	<b>23.17</b>	<b>127.24</b>	<b>211.37</b>	<b>338.03</b>	<b>264.31</b>	<b>195.22</b>	<b>155.00</b>	<b>164.75</b>	<b>166.55</b>
<i>IEA</i>	<i>675.13</i>	<i>731.46</i>	<i>769.74</i>	<i>869.36</i>	<i>757.84</i>	<i>738.75</i>	<i>947.33</i>	<i>994.45</i>	<i>970.95</i>
<i>IEA/Accession/Association</i>	<i>833.81</i>	<i>1 046.05</i>	<i>1 175.29</i>	<i>1 320.97</i>	<i>1 241.25</i>	<i>1 206.86</i>	<i>1 406.34</i>	<i>1 442.46</i>	<i>1 399.99</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>134.65</i>	<i>175.46</i>	<i>133.98</i>	<i>98.29</i>	<i>70.37</i>	<i>75.16</i>	<i>74.46</i>
<i>G7</i>	<i>642.47</i>	<i>674.79</i>	<i>635.27</i>	<i>636.92</i>	<i>566.92</i>	<i>589.99</i>	<i>821.92</i>	<i>865.76</i>	<i>841.64</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>1 161.53</i>	<i>960.17</i>	<i>1 035.63</i>	<i>1 096.53</i>	<i>1 350.59</i>	<i>1 402.04</i>	<i>1 390.22</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>2 030.86</i>	<i>2 026.66</i>	<i>2 217.96</i>	<i>2 215.26</i>	<i>2 537.94</i>	<i>2 610.94</i>	<i>2 600.13</i>
<i>OPEC</i>	<i>1 529.68</i>	<i>1 332.20</i>	<i>1 180.28</i>	<i>1 562.24</i>	<i>1 771.57</i>	<i>1 736.42</i>	<i>1 769.17</i>	<i>1 815.88</i>	<i>1 868.75</i>

1. Please refer to section 'Geographical coverage'.



## Production of crude oil and NGL (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>2 227.87</b>	<b>2 325.61</b>	<b>2 317.15</b>	<b>2 661.68</b>	<b>3 088.90</b>	<b>3 187.51</b>	<b>3 226.26</b>	<b>3 290.49</b>	<b>3 325.63</b>
Albania	2.11	2.00	1.16	0.31	0.42	0.74	1.37	1.28	1.06
Armenia	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	12.57	14.09	22.33	51.14	42.32	41.87	41.24
Belarus	..	..	2.05	1.86	1.79	1.71	1.65	1.65	1.59
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	-
Bulgaria	0.19	0.28	0.06	0.04	0.03	0.02	0.03	0.02	0.02
Croatia	..	..	2.78	1.35	1.03	0.76	0.61	0.69	0.74
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	-
FYR of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	0.19	0.11	0.07	0.05	0.04	0.04	0.04
Gibraltar	-	-	-	-	-	-	-	-	-
Kazakhstan	..	..	26.45	36.10	63.85	82.99	84.35	82.73	81.28
Kosovo	..	..	..	-	-	-	-	-	-
Kyrgyzstan	..	..	0.16	0.08	0.08	0.08	0.08	0.11	0.11
Lithuania	..	..	0.01	0.32	0.22	0.12	0.08	0.08	0.07
Malta	-	-	-	-	-	-	-	-	-
Republic of Moldova	..	..	-	-	0.01	0.01	0.01	0.01	0.01
Montenegro	..	..	..	..	-	-	-	-	-
Romania	13.87	11.17	7.70	6.20	5.90	4.19	3.96	3.93	3.74
Russian Federation	..	..	526.25	323.26	468.71	506.54	528.66	536.28	548.58
Serbia	..	..	1.09	1.00	0.66	0.94	1.22	1.12	1.07
Tajikistan	..	..	0.15	0.02	0.02	0.03	0.03	0.03	0.03
Turkmenistan	..	..	4.18	7.77	10.30	10.36	12.80	13.09	12.09
Ukraine	..	..	5.27	3.71	4.39	3.59	2.82	2.62	2.35
Uzbekistan	..	..	2.81	7.74	5.61	3.98	2.98	2.89	2.67
Former Soviet Union	431.21	606.16	x	x	x	x	x	x	x
Former Yugoslavia	3.40	4.32	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>450.78</b>	<b>623.94</b>	<b>592.88</b>	<b>403.96</b>	<b>585.41</b>	<b>667.26</b>	<b>682.99</b>	<b>688.43</b>	<b>696.68</b>
Algeria	52.57	54.22	61.24	72.32	90.94	78.50	72.98	71.33	71.68
Angola	8.33	7.58	23.83	37.60	63.75	90.26	85.86	91.33	88.67
Benin	-	-	0.21	-	-	-	-	-	-
Botswana	..	..	-	-	-	-	-	-	-
Cameroon	-	3.62	6.93	5.86	4.59	3.35	3.87	4.92	4.98
Congo	2.11	3.43	8.23	13.97	12.93	16.49	13.92	13.28	12.29
Côte d'Ivoire	-	0.08	0.09	0.37	2.08	2.01	0.97	1.38	1.23
Dem. Rep. of the Congo	-	0.91	1.46	1.18	1.28	1.12	1.07	1.06	1.01
Egypt	8.64	30.26	46.23	36.11	32.76	35.23	35.71	35.11	33.55
Eritrea	..	..	..	-	-	-	-	-	-
Ethiopia	-	-	-	-	-	-	-	-	-
Gabon	7.74	8.91	13.53	13.54	13.53	12.64	11.16	11.71	11.56
Ghana	-	-	-	-	0.01	0.20	5.42	5.66	4.91
Kenya	-	-	-	-	-	-	-	-	-
Libya	109.04	92.20	67.98	70.98	88.38	89.84	25.95	22.02	21.47
Mauritius	-	-	-	-	-	-	-	-	-
Morocco	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Mozambique	-	-	-	-	0.02	0.03	0.06	-	-
Namibia	..	..	..	-	-	-	-	-	-
Niger	..	..	..	-	-	-	0.85	0.75	0.75
Nigeria	103.54	103.93	90.18	117.60	131.35	129.17	110.06	106.49	88.32
Senegal	-	-	0.00	-	-	-	-	-	-
South Africa	-	-	-	0.94	0.85	0.49	0.31	0.31	0.26
South Sudan	..	..	..	..	..	..	7.92	7.52	6.00
Sudan	-	-	-	9.02	15.52	23.52	6.11	5.34	4.12
United Rep. of Tanzania	-	-	-	-	-	-	-	-	-
Togo	-	-	-	-	-	-	-	-	-
Tunisia	3.99	5.82	4.75	3.81	3.55	3.99	2.90	2.63	2.48
Zambia	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-
Other Africa	-	-	-	5.90	27.00	20.49	20.64	20.74	20.74
<b>Africa</b>	<b>295.99</b>	<b>310.97</b>	<b>324.67</b>	<b>389.20</b>	<b>488.56</b>	<b>507.33</b>	<b>405.75</b>	<b>401.57</b>	<b>374.02</b>

1. Please refer to section 'Geographical coverage'.

## Production of crude oil and NGL (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.01	-	0.09	0.10	0.11	0.24	0.25	0.30	0.30
Brunei Darussalam	11.61	12.19	7.70	10.22	11.06	8.31	6.35	6.69	6.49
Cambodia	..	..	..	-	-	-	-	-	-
DPR of Korea	-	-	-	-	-	-	-	-	-
India	7.35	10.74	35.32	37.24	37.68	43.14	42.39	41.89	40.86
Indonesia	67.43	79.50	74.59	71.60	53.45	48.44	40.84	40.44	43.19
Malaysia	4.43	13.71	30.63	32.28	37.41	34.40	30.76	33.57	33.88
Mongolia	..	..	-	0.01	0.03	0.30	1.02	1.21	1.15
Myanmar	0.99	1.57	0.73	0.57	1.14	0.94	0.77	0.58	0.49
Nepal	-	-	-	-	-	-	-	-	-
Pakistan	0.43	0.49	2.70	2.99	3.58	3.50	4.93	5.58	5.45
Philippines	-	0.49	0.23	0.06	0.78	0.98	0.90	0.76	0.76
Singapore	-	-	-	-	-	-	-	-	-
Sri Lanka	-	-	-	-	-	-	-	-	-
Chinese Taipei	0.15	0.25	0.18	0.03	0.03	0.01	0.01	0.01	0.01
Thailand	0.01	0.01	2.86	8.06	12.98	17.49	18.90	19.67	20.18
Viet Nam	-	-	2.75	16.86	19.52	16.08	16.13	17.22	15.68
Other Asia	0.00	0.01	4.54	3.23	5.67	4.39	4.15	5.01	5.01
<b>Non-OECD Asia excl. China</b>	<b>92.39</b>	<b>118.96</b>	<b>162.33</b>	<b>183.25</b>	<b>183.43</b>	<b>178.22</b>	<b>167.40</b>	<b>172.93</b>	<b>173.46</b>
People's Rep. of China	54.58	107.85	138.31	163.08	181.43	203.16	211.63	214.76	199.89
Hong Kong, China	-	-	-	-	-	-	-	-	-
<b>China</b>	<b>54.58</b>	<b>107.85</b>	<b>138.31</b>	<b>163.08</b>	<b>181.43</b>	<b>203.16</b>	<b>211.63</b>	<b>214.76</b>	<b>199.89</b>
Argentina	22.16	25.97	26.09	41.38	37.76	35.35	30.39	30.80	29.74
Bolivia	2.57	1.40	1.30	1.84	2.82	2.39	3.53	3.47	3.32
Brazil	8.60	9.47	33.39	65.34	86.94	109.59	122.76	132.80	137.42
Colombia	9.84	6.65	23.03	35.83	27.42	40.92	51.76	52.40	46.15
Costa Rica	-	-	-	-	-	-	-	-	-
Cuba	0.24	0.55	0.86	2.86	3.06	3.15	3.26	3.08	2.87
Curaçao	-	-	-	-	-	-	-	-	-
Dominican Republic	-	-	-	-	-	-	-	-	-
Ecuador	10.77	10.65	15.02	21.02	25.99	24.47	28.06	27.72	28.03
El Salvador	-	-	-	-	-	-	-	-	-
Guatemala	-	0.21	0.20	1.15	1.02	0.66	0.56	0.55	0.50
Haiti	-	-	-	-	-	-	-	-	-
Honduras	-	-	-	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-
Nicaragua	-	-	-	-	-	-	-	-	-
Panama	-	-	-	-	-	-	-	-	-
Paraguay	-	-	-	-	-	-	-	-	-
Peru	3.63	9.96	6.55	5.18	5.38	8.84	9.40	7.96	6.60
Suriname	..	..	..	0.61	0.60	0.80	0.85	0.85	0.81
Trinidad and Tobago	8.37	10.69	7.87	6.83	8.39	6.71	5.35	5.12	4.58
Uruguay	-	-	-	-	-	-	-	-	-
Venezuela	191.53	124.47	122.72	182.20	191.12	169.36	156.95	155.56	141.69
Other Non-OECD Americas	0.00	0.07	0.38	0.08	0.06	0.26	0.13	0.13	0.13
<b>Non-OECD Americas</b>	<b>257.70</b>	<b>200.09</b>	<b>237.40</b>	<b>364.29</b>	<b>390.56</b>	<b>402.51</b>	<b>413.00</b>	<b>420.45</b>	<b>401.84</b>
Bahrain	9.49	9.56	9.88	9.89	9.89	9.64	10.68	10.63	10.39
Islamic Republic of Iran	298.72	75.86	167.42	202.58	224.22	218.37	165.01	165.27	203.92
Iraq	101.83	134.37	106.85	132.26	95.80	119.97	157.82	176.89	195.21
Jordan	-	-	-	0.00	0.00	0.00	0.00	-	-
Kuwait	155.28	87.97	47.08	106.39	136.71	124.97	154.14	154.03	161.15
Lebanon	-	-	-	-	-	-	-	-	-
Oman	15.20	14.77	35.87	51.27	41.67	43.34	47.47	49.27	50.37
Qatar	28.24	23.63	22.14	37.69	49.47	71.08	77.59	75.35	75.52
Saudi Arabia	387.01	524.49	348.96	445.06	524.97	471.56	552.90	577.35	595.77
Syrian Arab Republic	5.57	9.23	20.71	27.79	21.09	20.20	1.40	1.15	1.04
United Arab Emirates	75.09	83.91	93.34	123.01	135.34	136.22	170.69	180.83	185.76
Yemen	-	-	9.31	21.95	20.36	13.69	7.78	1.56	0.61
<b>Middle East</b>	<b>1 076.42</b>	<b>963.80</b>	<b>861.56</b>	<b>1 157.90</b>	<b>1 259.50</b>	<b>1 229.04</b>	<b>1 345.48</b>	<b>1 392.34</b>	<b>1 479.74</b>

## Production of oil products (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>2 762.10</b>	<b>3 004.14</b>	<b>3 115.84</b>	<b>3 554.03</b>	<b>3 855.33</b>	<b>3 935.86</b>	<b>4 041.31</b>	<b>4 128.69</b>	..
<b>Non-OECD Total</b>	<b>893.68</b>	<b>1 117.53</b>	<b>1 274.31</b>	<b>1 418.63</b>	<b>1 683.37</b>	<b>1 895.64</b>	<b>2 064.17</b>	<b>2 107.65</b>	..
<b>OECD Total</b>	<b>1 868.42</b>	<b>1 886.61</b>	<b>1 841.52</b>	<b>2 135.40</b>	<b>2 171.96</b>	<b>2 040.22</b>	<b>1 977.14</b>	<b>2 021.04</b>	..
Canada	84.42	95.39	86.65	96.31	103.36	99.23	88.67	90.64	..
Chile	4.75	4.99	6.28	9.74	11.09	8.87	9.89	9.91	..
Mexico	26.17	51.09	68.37	66.41	71.24	64.66	62.95	57.80	..
United States	691.12	744.65	753.82	843.82	861.39	839.06	841.60	841.94	..
<b>OECD Americas</b>	<b>806.47</b>	<b>896.12</b>	<b>915.11</b>	<b>1 016.28</b>	<b>1 047.08</b>	<b>1 011.83</b>	<b>1 003.11</b>	<b>1 000.29</b>	..
Australia	26.15	30.26	32.06	38.26	34.38	32.17	28.63	25.56	..
Israel <sup>1</sup>	6.13	6.33	8.19	10.84	12.03	12.85	14.54	14.37	..
Japan	228.28	206.63	183.92	214.01	212.04	185.10	168.14	169.28	..
Korea	15.35	26.22	43.54	125.63	123.42	123.46	133.00	144.51	..
New Zealand	3.38	3.02	4.97	5.27	5.43	5.37	5.43	5.85	..
<b>OECD Asia Oceania</b>	<b>279.28</b>	<b>272.46</b>	<b>272.68</b>	<b>394.00</b>	<b>387.30</b>	<b>358.96</b>	<b>349.74</b>	<b>359.57</b>	..
Austria	8.80	10.24	9.07	8.92	9.40	8.22	9.11	9.33	..
Belgium	35.46	33.60	29.60	38.40	37.28	35.25	35.51	35.47	..
Czech Republic	7.47	9.60	8.00	6.18	8.23	8.31	7.96	7.64	..
Denmark	9.76	6.67	7.96	8.41	7.67	7.15	6.85	9.10	..
Estonia	..	..	-	-	-	-	-	-	..
Finland	9.11	12.61	10.60	12.89	12.90	14.25	14.49	13.01	..
France	134.20	116.73	79.67	90.19	87.83	72.71	58.76	60.67	..
Germany	140.16	138.14	107.99	118.45	125.30	103.63	98.84	101.35	..
Greece	12.35	14.09	16.56	22.39	21.41	22.45	27.76	28.67	..
Hungary	7.95	10.28	8.46	7.59	8.34	8.56	8.00	7.52	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	2.68	2.02	1.74	3.31	3.16	2.91	2.73	3.39	..
Italy	129.92	98.07	91.55	95.86	101.94	91.40	67.71	75.14	..
Latvia	..	..	-	-	-	-	-	-	..
Luxembourg	-	-	-	-	-	-	-	-	..
Netherlands	73.12	57.92	49.99	59.83	60.13	59.20	57.80	61.34	..
Norway	6.11	7.86	13.40	15.61	16.04	14.40	14.89	17.50	..
Poland	10.78	15.45	12.89	18.80	18.81	23.98	25.18	27.60	..
Portugal	4.23	7.57	11.53	12.41	13.73	12.07	12.80	15.28	..
Slovak Republic	6.00	8.03	7.06	5.97	6.39	6.25	5.90	6.67	..
Slovenia	..	..	0.56	0.17	-	-	-	-	..
Spain	42.23	48.21	53.24	60.31	60.91	58.12	60.59	65.51	..
Sweden	10.44	17.50	18.10	22.78	19.92	20.89	20.06	20.95	..
Switzerland	6.16	4.64	3.11	4.75	4.98	4.65	5.08	2.91	..
Turkey	12.52	12.68	22.96	23.82	25.81	20.23	22.22	29.67	..
United Kingdom	113.23	86.10	89.68	88.07	87.41	74.78	62.06	62.45	..
<b>OECD Europe</b>	<b>782.67</b>	<b>718.03</b>	<b>653.73</b>	<b>725.11</b>	<b>737.59</b>	<b>669.43</b>	<b>624.29</b>	<b>661.18</b>	..
IEA	1 831.37	1 824.20	1 758.13	2 048.24	2 077.60	1 953.83	1 889.76	1 938.96	..
IEA/Accession/Association	1 968.32	2 046.77	2 090.34	2 565.97	2 740.69	2 795.78	2 846.87	2 924.73	..
European Union - 28	..	..	661.73	708.84	726.90	661.06	611.39	642.21	..
G7	1 521.33	1 485.71	1 393.29	1 546.72	1 579.26	1 465.93	1 385.78	1 401.48	..
G8	..	..	1 663.01	1 726.63	1 788.11	1 715.97	1 673.88	1 685.10	..
G20	..	..	2 497.51	2 869.43	3 079.26	3 174.05	3 292.31	3 374.92	..
OPEC	168.20	176.57	270.01	351.61	381.51	404.46	405.09	423.46	..

In this table production refers to refinery output.

1. Please refer to section 'Geographical coverage'.

## Production of oil products (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>893.68</b>	<b>1 117.53</b>	<b>1 274.31</b>	<b>1 418.63</b>	<b>1 683.37</b>	<b>1 895.64</b>	<b>2 064.17</b>	<b>2 107.65</b>	..
Albania	1.59	1.86	1.10	0.29	0.37	0.14	0.31	0.26	..
Armenia	..	..	-	-	-	-	-	-	..
Azerbaijan	..	..	16.21	8.24	8.07	6.26	6.60	6.44	..
Belarus	..	..	38.64	13.31	19.49	16.33	22.15	23.31	..
Bosnia and Herzegovina	..	..	1.90	0.51	0.14	1.16	0.99	0.92	..
Bulgaria	9.26	13.13	7.78	5.27	6.40	6.05	6.21	6.79	..
Croatia	..	..	6.88	5.30	5.22	4.29	3.06	3.43	..
Cyprus <sup>1</sup>	0.66	0.58	0.63	1.17	-	-	-	-	..
FYR of Macedonia	..	..	1.19	0.94	1.16	0.83	0.00	-	..
Georgia	..	..	2.19	0.02	0.01	-	-	0.01	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	18.42	6.30	11.02	13.29	14.64	13.45	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	-	0.14	0.09	0.10	0.15	0.32	..
Lithuania	..	..	9.42	5.01	9.39	9.38	8.10	9.10	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	-	-	0.01	0.02	0.02	0.01	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	18.13	26.37	22.76	11.16	15.14	11.19	11.92	11.79	..
Russian Federation	..	..	269.72	179.91	208.85	250.04	288.11	283.62	..
Serbia	..	..	4.70	1.22	3.34	2.90	3.16	3.43	..
Tajikistan	..	..	0.06	0.01	0.01	0.02	0.02	0.01	..
Turkmenistan	..	..	3.62	5.22	7.04	8.69	8.71	8.72	..
Ukraine	..	..	61.14	9.32	19.43	12.14	3.39	2.86	..
Uzbekistan	..	..	7.92	6.93	5.15	3.96	2.93	2.85	..
Former Soviet Union	332.22	447.46	x	x	x	x	x	x	..
Former Yugoslavia	9.02	14.20	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>370.89</b>	<b>503.61</b>	<b>474.28</b>	<b>260.29</b>	<b>320.34</b>	<b>346.81</b>	<b>380.47</b>	<b>377.32</b>	..
Algeria	6.30	11.40	21.47	21.00	18.58	27.41	32.25	30.85	..
Angola	0.74	1.25	1.63	1.88	1.86	1.90	2.28	2.61	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	0.20	0.86	1.58	1.87	2.12	1.74	1.85	..
Congo	-	-	0.53	0.40	0.52	0.66	0.80	0.76	..
Côte d'Ivoire	1.17	1.79	2.10	3.08	4.06	3.15	3.22	3.30	..
Dem. Rep. of the Congo	0.70	0.40	0.32	-	-	-	-	-	..
Egypt	7.12	14.08	23.91	25.61	31.59	29.81	26.07	26.44	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	0.62	0.59	0.66	-	-	-	-	-	..
Gabon	1.07	1.26	0.32	0.62	0.72	0.95	0.82	0.80	..
Ghana	0.99	1.08	0.77	1.10	1.69	1.00	0.13	0.10	..
Kenya	2.65	3.05	2.25	2.06	1.67	1.52	0.64	0.67	..
Libya	1.63	5.69	12.26	16.99	17.10	16.71	4.91	4.32	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	2.26	4.25	5.66	6.69	6.95	6.54	6.72	3.19	..
Mozambique	0.74	0.70	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	0.75	0.70	..
Nigeria	2.82	7.21	13.30	5.07	10.21	5.25	3.56	1.63	..
Senegal	0.68	0.76	0.68	0.92	0.89	0.59	0.81	0.86	..
South Africa	13.16	12.32	13.44	17.68	23.76	19.14	20.28	19.58	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	1.15	0.91	0.82	1.92	3.42	4.97	4.15	4.35	..
United Rep. of Tanzania	0.79	0.55	0.59	-	-	-	-	-	..
Togo	-	0.21	-	-	-	-	-	-	..
Tunisia	1.05	1.58	1.70	1.98	1.81	0.27	1.67	1.33	..
Zambia	0.41	0.76	0.69	0.02	0.39	0.60	0.67	0.62	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	1.53	1.45	1.16	0.45	0.15	-	-	-	..
<b>Africa</b>	<b>47.58</b>	<b>71.46</b>	<b>105.14</b>	<b>109.04</b>	<b>127.23</b>	<b>122.59</b>	<b>111.46</b>	<b>103.96</b>	..

In this table production refers to refinery output.

1. Please refer to section 'Geographical coverage'.

## Production of oil products (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.61	1.22	1.03	1.38	1.15	1.30	1.24	1.27	..
Brunei Darussalam	-	0.00	0.34	0.57	0.63	0.65	0.40	0.49	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	1.89	2.06	0.38	0.47	0.53	0.53	0.53	..
India	21.24	26.11	52.87	105.94	133.54	207.01	234.95	245.86	..
Indonesia	10.18	18.08	37.76	50.32	48.32	46.12	47.52	46.27	..
Malaysia	3.96	5.69	10.42	20.97	21.45	21.22	23.42	24.29	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	1.00	1.33	0.71	1.01	0.77	0.86	0.73	0.61	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	3.43	4.49	5.85	9.12	11.47	9.69	12.24	13.09	..
Philippines	8.70	9.17	10.57	14.97	10.01	8.39	7.83	9.81	..
Singapore	22.92	31.94	41.38	41.73	59.26	50.63	47.43	44.46	..
Sri Lanka	1.73	1.83	1.72	2.34	1.87	1.70	1.74	1.67	..
Chinese Taipei	8.98	17.92	21.43	37.22	53.55	46.14	44.31	44.33	..
Thailand	7.64	7.75	11.72	36.92	47.35	53.58	56.34	60.90	..
Viet Nam	-	-	-	-	-	5.72	5.88	6.82	..
Other Asia	-	-	-	-	0.96	0.89	1.28	1.21	..
<b>Non-OECD Asia excl. China</b>	<b>90.39</b>	<b>127.44</b>	<b>197.84</b>	<b>322.88</b>	<b>390.81</b>	<b>454.42</b>	<b>485.83</b>	<b>501.62</b>	..
People's Rep. of China	41.77	78.36	108.18	199.97	285.34	404.53	491.30	517.38	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	<b>41.77</b>	<b>78.36</b>	<b>108.18</b>	<b>199.97</b>	<b>285.34</b>	<b>404.53</b>	<b>491.30</b>	<b>517.38</b>	..
Argentina	23.65	25.72	22.36	29.67	28.67	29.39	30.26	30.86	..
Bolivia	0.80	1.25	1.24	1.54	2.05	2.10	2.72	3.04	..
Brazil	38.01	55.70	61.73	85.14	91.87	96.44	112.82	106.46	..
Colombia	8.29	7.65	11.26	15.51	15.22	14.10	17.02	14.13	..
Costa Rica	0.39	0.51	0.44	0.01	0.49	0.51	-	-	..
Cuba	5.14	5.85	6.45	2.17	2.24	4.96	4.91	5.07	..
Curaçao	42.89	27.36	10.00	11.34	11.89	4.29	9.68	9.17	..
Dominican Republic	1.20	1.56	1.06	2.13	1.98	1.33	1.29	0.77	..
Ecuador	1.61	4.73	6.06	7.77	8.22	7.66	7.08	6.67	..
El Salvador	0.62	0.66	0.69	0.95	1.03	0.81	-	-	..
Guatemala	0.94	0.75	0.43	0.85	0.06	0.07	0.07	0.06	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	0.62	0.50	0.41	-	-	-	-	-	..
Jamaica	1.76	0.92	1.35	0.96	0.45	1.18	0.96	1.19	..
Nicaragua	0.57	0.54	0.61	0.84	0.76	0.78	0.70	0.71	..
Panama	3.32	1.90	1.17	2.14	-	-	-	-	..
Paraguay	0.20	0.26	0.31	0.10	0.03	-	-	-	..
Peru	4.89	7.32	7.34	7.70	8.99	9.45	9.16	8.42	..
Suriname	..	..	..	0.27	0.39	0.37	0.38	0.41	..
Trinidad and Tobago	19.51	11.36	4.30	8.05	8.47	6.31	5.29	6.45	..
Uruguay	1.66	1.83	1.19	1.87	2.08	1.92	1.95	1.93	..
Venezuela	73.83	50.40	52.62	57.13	53.15	59.03	51.49	46.53	..
Other Non-OECD Americas	12.74	8.81	0.97	12.35	11.62	0.87	0.93	0.95	..
<b>Non-OECD Americas</b>	<b>242.65</b>	<b>215.60</b>	<b>192.01</b>	<b>248.49</b>	<b>249.68</b>	<b>241.57</b>	<b>256.73</b>	<b>242.84</b>	..
Bahrain	12.21	12.36	12.67	13.08	13.60	13.47	13.63	13.74	..
Islamic Republic of Iran	29.13	34.27	41.37	78.02	82.58	85.27	89.24	86.94	..
Iraq	4.06	9.32	18.08	24.94	22.65	24.93	23.85	19.57	..
Jordan	0.68	1.76	2.68	3.81	4.30	3.30	2.96	3.15	..
Kuwait	18.78	16.93	12.05	36.74	42.93	43.80	42.89	43.88	..
Lebanon	2.46	2.27	0.10	-	-	-	-	-	..
Oman	-	-	3.25	4.05	4.41	8.10	10.96	11.24	..
Qatar	0.02	0.40	2.97	3.22	5.64	14.31	12.98	12.59	..
Saudi Arabia	28.22	33.14	78.42	83.69	100.35	96.38	110.46	123.27	..
Syrian Arab Republic	1.99	6.58	11.23	12.13	12.42	11.82	5.44	5.44	..
United Arab Emirates	-	0.58	9.48	14.55	17.51	20.87	23.28	43.79	..
Yemen	2.86	3.46	4.58	3.72	3.57	3.48	2.69	0.92	..
<b>Middle East</b>	<b>100.40</b>	<b>121.07</b>	<b>196.87</b>	<b>277.96</b>	<b>309.97</b>	<b>325.72</b>	<b>338.39</b>	<b>364.53</b>	..

In this table production refers to refinery output.

## Production of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>990.98</b>	<b>1 240.26</b>	<b>1 688.29</b>	<b>2 064.25</b>	<b>2 370.48</b>	<b>2 714.81</b>	<b>2 934.70</b>	<b>2 975.71</b>	<b>2 997.62</b>
<b>Non-OECD Total</b>	<b>284.76</b>	<b>521.10</b>	<b>970.80</b>	<b>1 154.64</b>	<b>1 461.34</b>	<b>1 744.49</b>	<b>1 884.80</b>	<b>1 895.57</b>	<b>1 917.16</b>
<b>OECD Total</b>	<b>706.22</b>	<b>719.16</b>	<b>717.49</b>	<b>909.61</b>	<b>909.14</b>	<b>970.32</b>	<b>1 049.89</b>	<b>1 080.13</b>	<b>1 080.46</b>
Canada	61.36	63.62	88.55	148.32	154.10	132.39	137.54	139.11	145.70
Chile	0.53	0.72	1.41	1.60	1.61	1.55	0.66	0.85	1.03
Mexico	10.54	21.55	22.75	33.38	38.45	42.57	37.26	34.36	31.48
United States	502.61	454.56	418.09	446.82	421.44	494.65	606.07	636.49	616.14
<b>OECD Americas</b>	<b>575.05</b>	<b>540.46</b>	<b>530.80</b>	<b>630.11</b>	<b>615.59</b>	<b>671.15</b>	<b>781.53</b>	<b>810.80</b>	<b>794.36</b>
Australia	3.38	7.46	17.13	28.53	31.35	44.47	52.90	56.36	73.95
Israel <sup>1</sup>	0.05	0.13	0.03	0.01	1.31	2.67	6.19	6.75	7.58
Japan	2.29	1.94	1.92	2.29	2.89	3.21	2.40	2.38	2.51
Korea	-	-	-	-	0.44	0.49	0.29	0.17	0.14
New Zealand	0.28	0.79	3.87	5.05	3.23	3.85	4.38	4.04	4.23
<b>OECD Asia Oceania</b>	<b>6.00</b>	<b>10.33</b>	<b>22.95</b>	<b>35.88</b>	<b>39.22</b>	<b>54.69</b>	<b>66.17</b>	<b>69.70</b>	<b>88.41</b>
Austria	1.96	1.67	1.11	1.55	1.33	1.40	1.08	1.04	0.96
Belgium	0.04	0.03	0.01	0.00	-	-	-	-	-
Czech Republic	0.36	0.32	0.20	0.17	0.15	0.20	0.21	0.20	0.18
Denmark	0.00	0.00	2.77	7.41	9.38	7.34	4.14	4.14	4.04
Estonia	..	..	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	6.29	6.33	2.52	1.50	0.91	0.65	0.01	0.02	0.02
Germany	16.44	16.26	13.53	15.80	14.33	11.11	6.86	6.33	5.74
Greece	-	-	0.14	0.04	0.02	0.01	0.01	0.00	0.01
Hungary	4.03	5.09	3.81	2.47	2.33	2.23	1.44	1.37	1.43
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	0.74	1.87	0.96	0.46	0.22	0.12	0.11	2.43
Italy	12.61	10.26	14.03	13.62	9.88	6.88	5.85	5.54	4.74
Latvia	..	..	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	53.75	68.89	54.52	52.17	56.25	63.41	50.13	38.99	36.07
Norway	-	22.77	24.14	46.27	75.02	95.18	94.96	102.10	102.33
Poland	4.87	4.54	2.38	3.31	3.88	3.69	3.73	3.68	3.55
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	0.39	0.17	0.34	0.13	0.13	0.09	0.08	0.08	0.08
Slovenia	..	..	0.02	0.01	0.00	0.01	0.00	0.00	0.00
Spain	0.00	-	1.27	0.15	0.14	0.04	0.02	0.05	0.05
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	0.00	-	-	-	-	-	-
Turkey	-	-	0.17	0.53	0.74	0.56	0.39	0.31	0.30
United Kingdom	24.44	31.31	40.91	97.53	79.37	51.45	33.14	35.65	35.77
<b>OECD Europe</b>	<b>125.17</b>	<b>168.38</b>	<b>163.73</b>	<b>243.62</b>	<b>254.33</b>	<b>244.48</b>	<b>202.18</b>	<b>199.63</b>	<b>197.70</b>
<i>IEA</i>	<i>695.10</i>	<i>696.76</i>	<i>693.28</i>	<i>874.62</i>	<i>867.77</i>	<i>923.53</i>	<i>1 005.77</i>	<i>1 038.18</i>	<i>1 040.37</i>
<i>IEA/Accession/Association</i>	<i>712.20</i>	<i>747.27</i>	<i>787.97</i>	<i>1 032.23</i>	<i>1 059.11</i>	<i>1 190.29</i>	<i>1 274.81</i>	<i>1 303.50</i>	<i>1 305.56</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>163.95</i>	<i>209.15</i>	<i>190.52</i>	<i>159.63</i>	<i>117.19</i>	<i>107.56</i>	<i>104.31</i>
<i>G7</i>	<i>626.05</i>	<i>584.29</i>	<i>579.54</i>	<i>725.87</i>	<i>682.93</i>	<i>700.34</i>	<i>791.88</i>	<i>825.52</i>	<i>810.62</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>1 096.22</i>	<i>1 196.48</i>	<i>1 198.62</i>	<i>1 240.34</i>	<i>1 323.06</i>	<i>1 349.70</i>	<i>1 339.64</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>1 335.97</i>	<i>1 519.13</i>	<i>1 585.26</i>	<i>1 724.83</i>	<i>1 809.46</i>	<i>1 830.89</i>	<i>1 841.08</i>
<i>OPEC</i>	<i>36.40</i>	<i>56.92</i>	<i>131.99</i>	<i>250.89</i>	<i>345.72</i>	<i>476.83</i>	<i>557.40</i>	<i>578.52</i>	<i>594.16</i>

1. Please refer to section 'Geographical coverage'.

## Production of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>284.76</b>	<b>521.10</b>	<b>970.80</b>	<b>1 154.64</b>	<b>1 461.34</b>	<b>1 744.49</b>	<b>1 884.80</b>	<b>1 895.57</b>	<b>1 917.16</b>
Albania	0.16	0.32	0.20	0.01	0.01	0.01	0.02	0.03	0.07
Armenia	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	8.04	4.57	4.64	13.99	16.19	16.15	15.71
Belarus	..	..	0.24	0.21	0.19	0.18	0.18	0.19	0.18
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	-
Bulgaria	0.17	0.15	0.01	0.01	0.38	0.06	0.16	0.08	0.08
Croatia	..	..	1.62	1.35	1.86	2.21	1.44	1.47	1.35
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	-
FYR of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	0.05	0.06	0.02	0.01	0.01	0.01	0.00
Gibraltar	-	-	-	-	-	-	-	-	-
Kazakhstan	..	..	5.76	7.62	15.82	24.60	31.26	33.35	34.11
Kosovo	..	..	..	-	-	-	-	-	-
Kyrgyzstan	..	..	0.07	0.03	0.02	0.02	0.03	0.02	0.02
Lithuania	..	..	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-
Republic of Moldova	..	..	-	-	-	-	0.00	0.00	-
Montenegro	..	..	..	..	-	-	-	-	-
Romania	24.30	31.27	22.90	10.96	9.70	8.62	8.76	8.78	7.82
Russian Federation	..	..	516.67	470.60	515.69	540.00	531.18	524.18	529.02
Serbia	..	..	0.53	0.62	0.23	0.31	0.44	0.46	0.46
Tajikistan	..	..	0.09	0.03	0.02	0.02	0.00	0.00	0.00
Turkmenistan	..	..	68.77	38.20	51.30	36.88	65.18	68.15	64.98
Ukraine	..	..	22.59	15.00	17.43	15.43	15.05	14.81	14.69
Uzbekistan	..	..	33.00	45.92	49.10	48.94	50.27	50.64	51.50
Former Soviet Union	195.40	359.60	x	x	x	x	x	x	x
Former Yugoslavia	1.33	1.74	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>221.36</b>	<b>393.07</b>	<b>680.55</b>	<b>595.21</b>	<b>666.42</b>	<b>691.28</b>	<b>720.18</b>	<b>718.33</b>	<b>719.99</b>
Algeria	3.64	11.48	38.84	69.83	75.59	71.95	70.19	71.40	78.54
Angola	0.05	0.06	0.44	0.47	0.53	0.60	0.60	0.63	1.56
Benin	-	-	-	-	-	-	-	-	-
Botswana	..	..	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	0.26	0.25	0.30	0.29
Congo	0.00	-	-	-	0.02	0.08	0.20	0.20	0.20
Côte d'Ivoire	-	-	-	1.27	1.25	1.33	1.65	1.69	1.69
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	-
Egypt	0.07	1.59	6.73	14.43	42.62	46.40	35.17	31.28	31.28
Eritrea	..	..	..	-	-	-	-	-	-
Ethiopia	-	-	-	-	-	-	-	-	-
Gabon	0.40	0.01	0.09	0.10	0.12	0.27	0.28	0.31	0.31
Ghana	-	-	-	-	-	-	0.02	0.47	0.47
Kenya	-	-	-	-	-	-	-	-	-
Libya	3.42	4.22	5.06	4.80	9.23	13.73	10.17	9.47	9.52
Mauritius	-	-	-	-	-	-	-	-	-
Morocco	0.06	0.06	0.04	0.04	0.03	0.04	0.08	0.07	0.06
Mozambique	-	-	-	0.00	1.87	2.68	3.47	4.09	4.09
Namibia	..	..	..	-	-	-	-	-	-
Niger	..	..	..	-	-	-	-	-	-
Nigeria	0.35	1.24	3.27	10.18	19.77	26.57	34.64	35.68	33.64
Senegal	-	-	0.01	0.00	0.01	0.02	0.04	0.04	0.04
South Africa	-	-	1.50	1.40	1.78	1.26	0.88	1.02	1.02
South Sudan	..	..	..	..	..	..	-	-	-
Sudan	-	-	-	-	-	-	-	-	-
United Rep. of Tanzania	-	-	-	-	0.33	0.64	0.76	0.73	0.73
Togo	-	-	-	-	-	-	-	-	-
Tunisia	0.11	0.35	0.33	1.89	1.99	3.08	2.58	2.52	2.24
Zambia	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-
Other Africa	0.00	0.00	0.00	0.00	0.97	5.50	5.03	5.06	5.06
<b>Africa</b>	<b>8.11</b>	<b>19.01</b>	<b>56.32</b>	<b>104.40</b>	<b>156.12</b>	<b>174.42</b>	<b>166.02</b>	<b>164.95</b>	<b>170.75</b>

1. Please refer to section 'Geographical coverage'.

## Production of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.52	1.04	3.73	7.38	10.81	16.62	19.44	21.13	21.13
Brunei Darussalam	1.54	8.94	7.94	9.46	10.00	10.27	9.91	9.41	9.13
Cambodia	..	..	..	-	-	-	-	-	-
DPR of Korea	-	-	-	-	-	-	-	-	-
India	0.63	1.26	10.57	23.06	25.93	42.95	27.48	26.19	25.92
Indonesia	0.33	14.96	42.12	61.15	65.56	74.79	65.67	65.47	67.43
Malaysia	0.10	2.24	15.48	42.55	55.35	50.99	58.82	57.83	59.21
Mongolia	..	..	-	-	-	-	-	-	-
Myanmar	0.09	0.29	0.76	5.17	10.30	10.17	12.78	14.77	14.40
Nepal	-	-	-	-	-	-	-	-	-
Pakistan	2.86	5.02	10.08	16.66	25.64	26.98	26.30	26.45	26.51
Philippines	-	-	-	0.01	2.70	3.05	3.06	2.87	3.25
Singapore	-	-	-	-	-	-	-	-	-
Sri Lanka	-	-	-	-	-	-	-	-	-
Chinese Taipei	1.22	1.59	1.04	0.60	0.44	0.24	0.27	0.27	0.23
Thailand	-	-	4.99	15.63	18.50	24.72	28.98	25.79	24.76
Viet Nam	-	-	0.00	1.12	5.99	8.12	9.12	9.55	10.03
Other Asia	2.20	2.21	0.24	0.20	0.22	5.09	6.20	7.54	7.84
<b>Non-OECD Asia excl. China</b>	<b>9.48</b>	<b>37.55</b>	<b>96.96</b>	<b>183.00</b>	<b>231.43</b>	<b>273.99</b>	<b>268.02</b>	<b>267.26</b>	<b>269.84</b>
People's Rep. of China	5.01	11.96	12.80	22.76	41.26	80.14	108.89	112.62	114.51
Hong Kong, China	-	-	-	-	-	-	-	-	-
<b>China</b>	<b>5.01</b>	<b>11.96</b>	<b>12.80</b>	<b>22.76</b>	<b>41.26</b>	<b>80.14</b>	<b>108.89</b>	<b>112.62</b>	<b>114.51</b>
Argentina	5.75	8.55	17.01	34.31	39.91	35.36	32.51	33.55	35.20
Bolivia	1.69	2.14	2.76	4.02	10.26	12.29	18.31	16.27	15.62
Brazil	0.16	0.82	3.24	6.07	9.23	12.49	19.28	19.87	20.12
Colombia	1.41	2.39	3.37	5.46	6.12	9.42	9.90	9.06	8.44
Costa Rica	-	-	-	-	-	-	-	-	-
Cuba	0.01	0.01	0.03	0.46	0.59	0.85	0.95	0.99	0.99
Curaçao	-	-	-	-	-	-	-	-	-
Dominican Republic	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	0.28	0.43	0.60	0.56	0.60
El Salvador	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-
Haiti	-	-	-	-	-	-	-	-	-
Honduras	-	-	-	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-
Nicaragua	-	-	-	-	-	-	-	-	-
Panama	-	-	-	-	-	-	-	-	-
Paraguay	-	-	-	-	-	-	-	-	-
Peru	0.30	0.45	0.41	0.49	1.62	7.62	13.16	12.68	14.21
Suriname	..	..	..	-	-	-	-	-	-
Trinidad and Tobago	1.59	2.44	4.70	12.19	26.49	35.82	34.29	32.47	32.35
Uruguay	-	-	-	-	-	-	-	-	-
Venezuela	8.67	11.27	16.74	21.85	19.36	19.16	19.65	19.36	19.94
Other Non-OECD Americas	0.00	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.02
<b>Non-OECD Americas</b>	<b>19.60</b>	<b>28.08</b>	<b>48.29</b>	<b>84.87</b>	<b>113.89</b>	<b>133.46</b>	<b>148.67</b>	<b>144.84</b>	<b>147.49</b>
Bahrain	1.34	2.43	4.43	6.84	8.35	10.57	12.20	12.16	12.06
Islamic Republic of Iran	10.05	3.66	19.12	49.84	83.44	121.69	147.70	155.69	160.36
Iraq	0.99	1.05	3.25	2.57	1.49	4.19	5.52	5.67	5.90
Jordan	-	-	0.10	0.21	0.18	0.14	0.10	0.10	0.09
Kuwait	4.96	5.63	3.29	7.84	10.04	9.58	12.27	13.81	14.13
Lebanon	-	-	-	-	-	-	-	-	-
Oman	-	0.31	2.44	9.06	17.92	23.76	27.09	28.27	28.27
Qatar	1.29	2.84	5.56	21.78	39.85	107.27	142.34	145.96	147.12
Saudi Arabia	1.54	9.15	19.48	30.77	45.95	59.88	69.52	71.25	73.32
Syrian Arab Republic	-	0.04	1.37	4.62	4.94	7.24	3.97	3.48	3.14
United Arab Emirates	1.05	6.30	16.85	30.87	40.05	41.52	43.92	48.73	49.22
Yemen	-	-	-	-	-	5.38	8.39	2.46	0.98
<b>Middle East</b>	<b>21.21</b>	<b>31.42</b>	<b>75.88</b>	<b>164.40</b>	<b>252.22</b>	<b>391.21</b>	<b>473.01</b>	<b>487.58</b>	<b>494.58</b>



## Production of nuclear energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>53.05</b>	<b>186.41</b>	<b>525.61</b>	<b>675.59</b>	<b>721.84</b>	<b>718.96</b>	<b>661.44</b>	<b>670.73</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>3.83</b>	<b>24.16</b>	<b>74.40</b>	<b>89.41</b>	<b>108.87</b>	<b>122.47</b>	<b>145.27</b>	<b>157.04</b>	<b>..</b>
<b>OECD Total</b>	<b>49.22</b>	<b>162.25</b>	<b>451.21</b>	<b>586.18</b>	<b>612.96</b>	<b>596.49</b>	<b>516.18</b>	<b>513.69</b>	<b>512.70</b>
Canada	4.07	10.40	19.40	18.97	23.99	23.63	27.96	26.43	26.92
Chile	-	-	-	-	-	-	-	-	-
Mexico	-	-	0.77	2.14	2.82	1.53	2.52	3.02	2.75
United States	23.24	69.37	159.38	207.89	211.28	218.63	216.46	216.38	218.79
<b>OECD Americas</b>	<b>27.31</b>	<b>79.77</b>	<b>179.55</b>	<b>229.00</b>	<b>238.08</b>	<b>243.79</b>	<b>246.93</b>	<b>245.83</b>	<b>248.46</b>
Australia	-	-	-	-	-	-	-	-	-
Israel <sup>1</sup>	-	-	-	-	-	-	-	-	-
Japan	2.53	21.52	52.71	83.93	79.42	75.11	-	2.46	4.71
Korea	-	0.91	13.78	28.40	38.25	38.73	40.76	42.94	42.22
New Zealand	-	-	-	-	-	-	-	-	-
<b>OECD Asia Oceania</b>	<b>2.53</b>	<b>22.43</b>	<b>66.50</b>	<b>112.32</b>	<b>117.67</b>	<b>113.84</b>	<b>40.76</b>	<b>45.40</b>	<b>46.92</b>
Austria	-	-	-	-	-	-	-	-	-
Belgium	0.02	3.27	11.13	12.55	12.40	12.49	8.78	6.80	11.34
Czech Republic	-	-	3.28	3.54	6.47	7.32	7.92	7.02	6.30
Denmark	-	-	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	-	1.83	5.01	5.86	6.06	5.94	6.15	6.06	6.05
France	3.84	15.96	81.85	108.19	117.67	111.68	113.75	114.00	105.08
Germany	3.15	14.50	39.84	44.20	42.49	36.63	25.31	23.92	22.06
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	3.58	3.71	3.62	4.12	4.10	4.15	4.20
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	0.82	0.58	-	-	-	-	-	-	-
Latvia	..	..	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	0.29	1.09	0.91	1.02	1.04	1.03	1.07	1.06	1.03
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	0.06	1.18	3.14	4.30	4.67	3.86	4.08	3.99	3.92
Slovenia	..	..	1.20	1.24	1.53	1.47	1.66	1.47	1.49
Spain	1.71	1.35	14.14	16.21	15.00	16.15	14.93	14.93	15.28
Sweden	0.55	6.90	17.77	14.94	18.86	15.07	16.91	14.68	16.33
Switzerland	1.64	3.74	6.18	6.92	6.11	6.90	7.21	6.04	5.54
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	7.30	9.65	17.13	22.17	21.27	16.19	16.61	18.33	18.69
<b>OECD Europe</b>	<b>19.38</b>	<b>60.05</b>	<b>205.17</b>	<b>244.85</b>	<b>257.21</b>	<b>238.86</b>	<b>228.48</b>	<b>222.46</b>	<b>217.32</b>
<i>IEA</i>	<i>49.22</i>	<i>162.25</i>	<i>449.24</i>	<i>582.80</i>	<i>608.61</i>	<i>593.49</i>	<i>512.00</i>	<i>509.20</i>	<i>508.46</i>
<i>IEA/Accession/Association</i>	<i>49.84</i>	<i>163.03</i>	<i>451.61</i>	<i>593.71</i>	<i>629.78</i>	<i>621.12</i>	<i>558.47</i>	<i>566.47</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>207.31</i>	<i>246.35</i>	<i>260.16</i>	<i>238.99</i>	<i>228.46</i>	<i>223.48</i>	<i>..</i>
<i>G7</i>	<i>44.95</i>	<i>141.97</i>	<i>370.32</i>	<i>485.35</i>	<i>496.12</i>	<i>481.87</i>	<i>400.09</i>	<i>401.52</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>401.62</i>	<i>519.77</i>	<i>535.38</i>	<i>526.63</i>	<i>447.55</i>	<i>452.80</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>490.94</i>	<i>637.44</i>	<i>680.82</i>	<i>676.29</i>	<i>616.67</i>	<i>629.13</i>	<i>..</i>
<i>OPEC</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1.17</i>	<i>0.76</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Production of nuclear energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>3.83</b>	<b>24.16</b>	<b>74.40</b>	<b>89.41</b>	<b>108.87</b>	<b>122.47</b>	<b>145.27</b>	<b>157.04</b>	<b>..</b>
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	-	0.52	0.71	0.65	0.64	0.73	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	-	-	-	-	-	-	..
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	..
Bulgaria	-	1.61	3.82	4.75	4.88	4.00	4.15	4.02	..
Croatia	..	..	-	-	-	-	-	-	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	-	-	-	-	-	..
Georgia	..	..	-	-	-	-	-	-	..
Gibraltar	..	..	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	-	-	-	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	-	-	-	-	-	-	..
Lithuania	..	..	4.50	2.25	2.74	-	-	-	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	-	-	-	-	-	-	..
Montenegro	..	..	..	..	..	..	..	..	..
Romania	-	-	-	1.42	1.45	3.03	3.04	3.03	..
Russian Federation	..	..	31.30	34.42	39.25	44.76	47.46	51.28	51.58
Serbia	..	..	-	-	-	-	-	-	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	19.85	20.16	23.13	23.39	23.19	22.98	..
Uzbekistan	..	..	-	-	-	-	-	-	..
Former Soviet Union	3.13	19.02	x	x	x	x	x	x	..
Former Yugoslavia	-	-	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>3.13</b>	<b>20.63</b>	<b>59.48</b>	<b>63.51</b>	<b>72.16</b>	<b>75.82</b>	<b>78.49</b>	<b>82.05</b>	<b>..</b>
Algeria	-	-	-	-	-	-	-	-	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	-	-	-	-	-	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	-	-	-	-	-	-	-	-	..
Mozambique	-	-	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	-	-	2.20	3.39	2.94	3.15	3.59	3.19	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	-	-	-	-	-	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	-	-	-	-	-	..
<b>Africa</b>	<b>-</b>	<b>-</b>	<b>2.20</b>	<b>3.39</b>	<b>2.94</b>	<b>3.15</b>	<b>3.59</b>	<b>3.19</b>	<b>..</b>

1. Please refer to section 'Geographical coverage'.

## Production of nuclear energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.62	0.78	1.60	4.40	4.51	6.85	9.41	9.75	..
Indonesia	-	-	-	-	-	-	-	-	..
Malaysia	-	-	-	-	-	-	-	-	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	0.08	0.00	0.08	0.52	0.65	0.89	1.51	1.58	..
Philippines	-	-	-	-	-	-	-	-	..
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	-	2.14	8.57	10.03	10.42	10.85	11.05	9.50	..
Thailand	-	-	-	-	-	-	-	-	..
Viet Nam	-	-	-	-	-	-	-	-	..
Other Asia	-	-	-	-	-	-	-	-	..
<b>Non-OECD Asia excl. China</b>	<b>0.70</b>	<b>2.92</b>	<b>10.24</b>	<b>14.96</b>	<b>15.58</b>	<b>18.59</b>	<b>21.97</b>	<b>20.84</b>	..
People's Rep. of China	-	-	-	4.36	13.84	19.25	34.54	44.51	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	-	-	-	<b>4.36</b>	<b>13.84</b>	<b>19.25</b>	<b>34.54</b>	<b>44.51</b>	..
Argentina	-	0.61	1.90	1.61	1.79	1.87	1.50	1.86	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	-	-	0.58	1.58	2.57	3.78	4.01	3.84	..
Colombia	-	-	-	-	-	-	-	-	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	-	-	-	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	-	-	-	-	-	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	-	-	-	-	-	-	-	-	..
<b>Non-OECD Americas</b>	-	<b>0.61</b>	<b>2.48</b>	<b>3.19</b>	<b>4.36</b>	<b>5.65</b>	<b>5.51</b>	<b>5.70</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	-	-	-	1.17	0.76	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	-	-	-	-	-	-	<b>1.17</b>	<b>0.76</b>	..

## Production of hydro energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>110.31</b>	<b>147.65</b>	<b>184.25</b>	<b>225.24</b>	<b>252.37</b>	<b>296.06</b>	<b>335.99</b>	<b>334.40</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>31.36</b>	<b>53.69</b>	<b>82.45</b>	<b>109.83</b>	<b>140.39</b>	<b>179.43</b>	<b>215.38</b>	<b>215.65</b>	<b>..</b>
<b>OECD Total</b>	<b>78.94</b>	<b>93.96</b>	<b>101.81</b>	<b>115.41</b>	<b>111.98</b>	<b>116.63</b>	<b>120.61</b>	<b>118.74</b>	<b>120.56</b>
Canada	16.74	21.60	25.52	30.83	31.13	30.22	32.89	32.73	33.38
Chile	0.48	0.68	0.77	1.59	2.28	1.87	1.99	2.05	1.68
Mexico	1.39	1.45	2.02	2.85	2.38	3.19	3.34	2.65	2.51
United States	22.82	23.98	23.49	21.78	23.43	22.55	22.49	21.59	23.03
<b>OECD Americas</b>	<b>41.44</b>	<b>47.70</b>	<b>51.80</b>	<b>57.05</b>	<b>59.22</b>	<b>57.83</b>	<b>60.71</b>	<b>59.02</b>	<b>60.59</b>
Australia	0.98	1.11	1.22	1.41	1.32	1.16	1.58	1.15	1.30
Israel <sup>1</sup>	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Japan	5.74	7.59	7.47	7.33	6.58	7.07	7.03	7.33	6.76
Korea	0.11	0.17	0.55	0.34	0.32	0.32	0.24	0.18	0.24
New Zealand	1.23	1.63	1.99	2.10	2.01	2.13	2.09	2.11	2.23
<b>OECD Asia Oceania</b>	<b>8.07</b>	<b>10.50</b>	<b>11.23</b>	<b>11.19</b>	<b>10.22</b>	<b>10.68</b>	<b>10.94</b>	<b>10.77</b>	<b>10.54</b>
Austria	1.61	2.47	2.71	3.60	3.19	3.30	3.53	3.19	3.43
Belgium	0.01	0.02	0.02	0.04	0.02	0.03	0.03	0.03	0.03
Czech Republic	0.09	0.21	0.10	0.15	0.20	0.24	0.16	0.15	0.17
Denmark	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estonia	..	..	-	0.00	0.00	0.00	0.00	0.00	0.00
Finland	0.90	0.88	0.93	1.26	1.19	1.11	1.15	1.44	1.36
France	4.10	5.98	4.63	5.71	4.43	5.39	5.40	4.68	5.05
Germany	1.31	1.64	1.50	1.87	1.69	1.80	1.68	1.63	1.80
Greece	0.19	0.29	0.15	0.32	0.43	0.64	0.38	0.52	0.48
Hungary	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.02
Iceland	0.19	0.27	0.36	0.55	0.60	1.08	1.11	1.19	1.16
Ireland	0.06	0.07	0.06	0.07	0.05	0.05	0.06	0.07	0.06
Italy	3.23	3.89	2.72	3.80	3.10	4.40	5.03	3.92	3.53
Latvia	..	..	0.39	0.24	0.29	0.30	0.17	0.16	0.22
Luxembourg	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Netherlands	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Norway	6.27	7.19	10.42	12.20	11.67	10.04	11.65	11.86	12.34
Poland	0.13	0.20	0.12	0.18	0.19	0.25	0.19	0.16	0.18
Portugal	0.63	0.69	0.79	0.97	0.41	1.39	1.34	0.74	1.15
Slovak Republic	0.11	0.19	0.16	0.40	0.40	0.45	0.36	0.33	0.39
Slovenia	..	..	0.25	0.33	0.30	0.39	0.52	0.33	0.39
Spain	2.49	2.54	2.19	2.43	1.58	3.64	3.37	2.42	3.13
Sweden	5.15	5.06	6.24	6.76	6.26	5.71	5.48	6.48	5.31
Switzerland	2.40	2.82	2.56	3.17	2.69	3.10	3.27	3.29	2.98
Turkey	0.22	0.98	1.99	2.66	3.40	4.45	3.50	5.77	5.79
United Kingdom	0.33	0.33	0.45	0.44	0.42	0.31	0.51	0.54	0.46
<b>OECD Europe</b>	<b>29.44</b>	<b>35.75</b>	<b>38.78</b>	<b>47.17</b>	<b>42.55</b>	<b>48.12</b>	<b>48.95</b>	<b>48.95</b>	<b>49.43</b>
<i>IEA</i>	<i>76.88</i>	<i>91.56</i>	<i>98.02</i>	<i>109.85</i>	<i>106.13</i>	<i>109.79</i>	<i>113.47</i>	<i>112.36</i>	<i>114.61</i>
<i>IEA/Accession/Association</i>	<i>84.87</i>	<i>103.06</i>	<i>118.89</i>	<i>141.26</i>	<i>155.72</i>	<i>188.89</i>	<i>223.45</i>	<i>226.54</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>24.98</i>	<i>30.69</i>	<i>26.95</i>	<i>32.41</i>	<i>32.25</i>	<i>29.33</i>	<i>..</i>
<i>G7</i>	<i>54.28</i>	<i>65.01</i>	<i>65.78</i>	<i>71.75</i>	<i>70.77</i>	<i>71.74</i>	<i>75.04</i>	<i>72.42</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>80.05</i>	<i>85.86</i>	<i>85.62</i>	<i>86.06</i>	<i>90.12</i>	<i>86.86</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>138.45</i>	<i>167.14</i>	<i>186.75</i>	<i>226.72</i>	<i>258.14</i>	<i>258.36</i>	<i>..</i>
<i>OPEC</i>	<i>1.14</i>	<i>2.21</i>	<i>4.87</i>	<i>7.07</i>	<i>10.11</i>	<i>9.53</i>	<i>10.91</i>	<i>10.03</i>	<i>..</i>

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Production of hydro energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>31.36</b>	<b>53.69</b>	<b>82.45</b>	<b>109.83</b>	<b>140.39</b>	<b>179.43</b>	<b>215.38</b>	<b>215.65</b>	..
Albania	0.10	0.25	0.24	0.40	0.46	0.65	0.41	0.51	..
Armenia	..	..	0.13	0.11	0.15	0.22	0.17	0.19	..
Azerbaijan	..	..	0.14	0.13	0.26	0.30	0.11	0.14	..
Belarus	..	..	0.00	0.00	0.00	0.00	0.01	0.01	..
Bosnia and Herzegovina	..	..	0.26	0.44	0.52	0.69	0.51	0.48	..
Bulgaria	0.22	0.32	0.16	0.23	0.37	0.43	0.40	0.49	..
Croatia	..	..	0.35	0.55	0.61	0.78	0.77	0.55	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	0.04	0.10	0.13	0.21	0.10	0.16	..
Georgia	..	..	0.65	0.50	0.54	0.81	0.72	0.73	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	0.63	0.65	0.68	0.69	0.71	0.80	..
Kosovo	..	..	..	0.00	0.01	0.01	0.01	0.01	..
Kyrgyzstan	..	..	0.86	1.10	1.10	0.96	1.14	0.95	..
Lithuania	..	..	0.04	0.03	0.04	0.05	0.03	0.03	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.02	0.03	0.03	0.04	0.03	0.03	..
Montenegro	..	..	..	..	0.16	0.24	0.15	0.13	..
Romania	0.65	1.09	0.98	1.27	1.74	1.71	1.62	1.43	..
Russian Federation	..	..	14.27	14.11	14.85	14.32	15.07	14.45	15.89
Serbia	..	..	0.81	1.03	1.03	1.02	0.95	0.87	..
Tajikistan	..	..	1.42	1.21	1.46	1.41	1.40	1.45	..
Turkmenistan	..	..	0.06	-	-	-	-	-	..
Ukraine	..	..	0.90	0.97	1.06	1.13	0.73	0.46	..
Uzbekistan	..	..	0.57	0.51	0.74	0.93	1.02	1.02	..
Former Soviet Union	10.52	15.89	x	x	x	x	x	x	..
Former Yugoslavia	1.41	2.42	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>12.89</b>	<b>19.97</b>	<b>22.57</b>	<b>23.38</b>	<b>25.94</b>	<b>26.60</b>	<b>26.07</b>	<b>24.88</b>	..
Algeria	0.06	0.02	0.01	0.00	0.05	0.01	0.02	0.01	..
Angola	0.07	0.05	0.06	0.08	0.19	0.32	0.43	0.45	..
Benin	-	-	-	0.00	0.00	-	-	0.00	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	0.09	0.12	0.23	0.30	0.32	0.37	0.39	0.44	..
Congo	0.00	0.01	0.04	0.03	0.03	0.04	0.08	0.08	..
Côte d'Ivoire	0.01	0.12	0.11	0.15	0.12	0.14	0.16	0.12	..
Dem. Rep. of the Congo	0.32	0.36	0.48	0.51	0.63	0.67	0.76	0.77	..
Egypt	0.44	0.84	0.85	1.18	1.09	1.12	1.19	1.16	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	0.03	0.04	0.09	0.14	0.24	0.42	0.78	0.83	..
Gabon	0.00	0.02	0.06	0.07	0.07	0.08	0.07	0.08	..
Ghana	0.33	0.45	0.49	0.57	0.48	0.60	0.72	0.50	..
Kenya	0.04	0.09	0.21	0.11	0.26	0.29	0.28	0.33	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	..
Morocco	0.10	0.13	0.10	0.06	0.08	0.30	0.14	0.16	..
Mozambique	0.02	0.03	0.02	0.83	1.14	1.43	1.39	1.48	..
Namibia	..	..	..	0.12	0.14	0.11	0.13	0.13	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.16	0.24	0.38	0.48	0.67	0.55	0.46	0.49	..
Senegal	-	-	-	-	0.02	0.02	0.03	0.03	..
South Africa	0.08	0.09	0.09	0.09	0.11	0.18	0.08	0.07	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	0.04	0.05	0.08	0.10	0.11	0.53	0.77	0.72	..
United Rep. of Tanzania	0.03	0.06	0.13	0.18	0.15	0.23	0.22	0.18	..
Togo	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	..
Tunisia	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	..
Zambia	0.27	0.79	0.68	0.67	0.76	0.90	1.21	1.12	..
Zimbabwe	0.30	0.34	0.38	0.27	0.42	0.50	0.47	0.43	..
Other Africa	0.17	0.21	0.30	0.46	0.52	0.57	0.75	0.77	..
<b>Africa</b>	<b>2.59</b>	<b>4.08</b>	<b>4.84</b>	<b>6.44</b>	<b>7.67</b>	<b>9.41</b>	<b>10.56</b>	<b>10.36</b>	..

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Production of hydro energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.03	0.05	0.08	0.06	0.06	0.06	0.05	0.05	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	0.00	0.00	0.16	0.17	..
DPR of Korea	0.82	0.91	1.34	0.88	1.13	1.15	1.12	0.86	..
India	2.49	4.00	6.16	6.40	9.28	10.58	12.33	11.87	..
Indonesia	0.09	0.12	0.49	0.86	0.92	1.50	1.30	1.18	..
Malaysia	0.10	0.12	0.34	0.60	0.45	0.56	1.15	1.20	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	0.05	0.07	0.10	0.16	0.26	0.44	0.76	0.81	..
Nepal	0.01	0.02	0.08	0.14	0.22	0.28	0.33	0.30	..
Pakistan	0.37	0.75	1.46	1.48	2.65	2.74	2.79	2.92	..
Philippines	0.16	0.30	0.52	0.67	0.72	0.67	0.79	0.75	..
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	0.06	0.13	0.27	0.27	0.30	0.48	0.39	0.51	..
Chinese Taipei	0.29	0.25	0.55	0.39	0.34	0.36	0.37	0.38	..
Thailand	0.16	0.11	0.43	0.52	0.50	0.48	0.48	0.41	..
Viet Nam	0.04	0.13	0.46	1.25	1.46	2.37	5.15	4.83	..
Other Asia	0.09	0.20	0.39	0.69	0.74	1.14	1.26	1.20	..
<b>Non-OECD Asia excl. China</b>	<b>4.76</b>	<b>7.15</b>	<b>12.67</b>	<b>14.38</b>	<b>19.03</b>	<b>22.81</b>	<b>28.42</b>	<b>27.44</b>	..
People's Rep. of China	3.27	5.01	10.90	19.13	34.14	61.18	90.40	95.84	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	<b>3.27</b>	<b>5.01</b>	<b>10.90</b>	<b>19.13</b>	<b>34.14</b>	<b>61.18</b>	<b>90.40</b>	<b>95.84</b>	..
Argentina	0.26	1.30	1.54	2.47	2.92	2.89	3.52	3.27	..
Bolivia	0.08	0.09	0.10	0.17	0.17	0.19	0.19	0.21	..
Brazil	4.98	11.09	17.78	26.18	29.02	34.68	32.12	30.94	..
Colombia	0.68	1.23	2.36	2.76	3.42	3.47	4.28	3.86	..
Costa Rica	0.10	0.18	0.29	0.49	0.56	0.62	0.58	0.69	..
Cuba	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	0.05	0.05	0.03	0.10	0.20	0.15	0.14	0.10	..
Ecuador	0.04	0.07	0.43	0.65	0.59	0.74	0.99	1.13	..
El Salvador	0.04	0.08	0.14	0.10	0.14	0.18	0.15	0.12	..
Guatemala	0.02	0.02	0.15	0.22	0.25	0.33	0.42	0.33	..
Haiti	0.01	0.02	0.04	0.02	0.02	0.02	0.01	0.01	..
Honduras	0.03	0.07	0.20	0.19	0.15	0.26	0.22	0.20	..
Jamaica	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	..
Nicaragua	0.03	0.04	0.03	0.02	0.04	0.04	0.03	0.03	..
Panama	0.01	0.08	0.19	0.29	0.32	0.36	0.43	0.54	..
Paraguay	0.03	0.06	2.34	4.60	4.40	4.65	4.75	4.79	..
Peru	0.41	0.60	0.90	1.39	1.55	1.72	1.91	2.04	..
Suriname	..	..	..	0.09	0.07	0.10	0.12	0.12	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.13	0.30	0.60	0.61	0.57	0.75	0.83	0.71	..
Venezuela	0.54	1.25	3.18	5.41	6.64	6.60	7.50	6.44	..
Other Non-OECD Americas	0.10	0.09	0.13	0.03	0.15	0.11	0.08	0.08	..
<b>Non-OECD Americas</b>	<b>7.54</b>	<b>16.65</b>	<b>30.44</b>	<b>45.81</b>	<b>51.23</b>	<b>57.90</b>	<b>58.27</b>	<b>55.62</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.24	0.48	0.52	0.31	1.38	0.82	1.19	1.21	..
Iraq	0.02	0.06	0.22	0.05	0.52	0.41	0.25	0.22	..
Jordan	-	-	0.00	0.00	0.00	0.01	0.00	0.00	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	0.04	0.07	0.04	0.04	0.09	0.07	0.02	0.04	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.22	0.23	0.28	0.37	0.22	0.20	0.04	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>0.31</b>	<b>0.84</b>	<b>1.03</b>	<b>0.69</b>	<b>2.37</b>	<b>1.53</b>	<b>1.67</b>	<b>1.51</b>	..

Excludes hydro pumped storage.

## Production of geothermal energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>6.08</b>	<b>12.40</b>	<b>34.14</b>	<b>52.20</b>	<b>53.68</b>	<b>62.51</b>	<b>71.19</b>	<b>74.08</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>-</b>	<b>2.21</b>	<b>7.63</b>	<b>21.76</b>	<b>25.61</b>	<b>32.94</b>	<b>37.90</b>	<b>39.19</b>	<b>..</b>
<b>OECD Total</b>	<b>6.08</b>	<b>10.19</b>	<b>26.50</b>	<b>30.44</b>	<b>28.07</b>	<b>29.57</b>	<b>33.29</b>	<b>34.89</b>	<b>36.78</b>
Canada	-	-	-	-	-	-	-	-	-
Chile	-	-	-	-	-	-	-	-	-
Mexico	0.14	0.79	4.41	5.07	6.27	3.63	3.10	3.21	3.05
United States	2.11	4.60	14.10	13.09	8.63	8.44	8.98	8.99	9.47
<b>OECD Americas</b>	<b>2.25</b>	<b>5.39</b>	<b>18.51</b>	<b>18.16</b>	<b>14.91</b>	<b>12.07</b>	<b>12.08</b>	<b>12.20</b>	<b>12.52</b>
Australia	-	-	-	-	-	0.00	0.00	0.00	-
Israel <sup>1</sup>	-	-	-	-	-	-	-	-	-
Japan	0.23	0.77	1.58	3.10	2.99	2.45	2.39	2.39	2.07
Korea	-	-	-	-	0.00	0.03	0.11	0.14	0.17
New Zealand	1.07	1.02	1.48	1.95	1.98	3.64	4.69	4.87	4.69
<b>OECD Asia Oceania</b>	<b>1.30</b>	<b>1.79</b>	<b>3.05</b>	<b>5.05</b>	<b>4.97</b>	<b>6.12</b>	<b>7.19</b>	<b>7.39</b>	<b>6.92</b>
Austria	-	-	0.00	0.02	0.03	0.03	0.03	0.03	0.03
Belgium	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	0.00	0.00	0.00	0.01	0.00	0.00	0.01
Estonia	..	..	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	0.00	0.01	0.11	0.13	0.19	0.17	0.22	0.21	0.22
Germany	-	-	..	..	0.05	0.09	0.18	0.21	0.24
Greece	-	-	0.00	0.00	0.01	0.02	0.01	0.01	0.01
Hungary	-	-	0.09	0.09	0.09	0.10	0.09	0.11	0.10
Iceland	0.35	0.64	1.26	1.87	1.78	3.71	4.11	3.73	4.53
Ireland	-	-	-	-	-	-	-	-	-
Italy	2.13	2.30	2.97	4.26	4.79	4.77	5.23	5.47	5.51
Latvia	..	..	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	0.01	0.04	0.06	0.07
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	0.00	0.01	0.01	0.02	0.02	0.02
Portugal	-	0.00	0.00	0.07	0.07	0.18	0.19	0.19	0.15
Slovak Republic	-	-	-	-	0.01	0.01	0.01	0.01	0.00
Slovenia	..	..	-	-	-	0.03	0.04	0.04	0.04
Spain	-	-	0.00	0.01	0.01	0.02	0.02	0.02	0.02
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	0.07	0.10	0.15	0.26	0.30	0.34	0.38
Turkey	0.05	0.06	0.43	0.68	1.01	1.97	3.52	4.83	6.00
United Kingdom	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>OECD Europe</b>	<b>2.53</b>	<b>3.01</b>	<b>4.94</b>	<b>7.23</b>	<b>8.18</b>	<b>11.38</b>	<b>14.02</b>	<b>15.30</b>	<b>17.33</b>
<i>IEA</i>	<i>5.59</i>	<i>8.76</i>	<i>20.84</i>	<i>23.50</i>	<i>20.01</i>	<i>22.21</i>	<i>26.04</i>	<i>27.91</i>	<i>29.16</i>
<i>IEA/Accession/Association</i>	<i>5.73</i>	<i>9.55</i>	<i>27.18</i>	<i>38.61</i>	<i>39.99</i>	<i>45.63</i>	<i>51.19</i>	<i>53.46</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>3.18</i>	<i>4.59</i>	<i>5.31</i>	<i>5.52</i>	<i>6.16</i>	<i>6.47</i>	<i>..</i>
<i>G7</i>	<i>4.47</i>	<i>7.68</i>	<i>18.76</i>	<i>20.57</i>	<i>16.65</i>	<i>15.93</i>	<i>17.00</i>	<i>17.28</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>18.78</i>	<i>20.62</i>	<i>17.00</i>	<i>16.36</i>	<i>17.11</i>	<i>17.39</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>25.66</i>	<i>36.61</i>	<i>38.27</i>	<i>42.26</i>	<i>46.42</i>	<i>48.48</i>	<i>..</i>
<i>OPEC</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Production of geothermal energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	-	<b>2.21</b>	<b>7.63</b>	<b>21.76</b>	<b>25.61</b>	<b>32.94</b>	<b>37.90</b>	<b>39.19</b>	..
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	-	-	-	-	-	-	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	-	-	-	-	-	-	..
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	..
Bulgaria	-	-	-	-	0.03	0.03	0.03	0.03	..
Croatia	..	..	-	-	-	0.01	0.01	0.01	..
Cyprus <sup>1</sup>	-	-	-	-	-	0.00	0.00	0.00	..
FYR of Macedonia	..	..	-	0.02	0.01	0.01	0.01	0.01	..
Georgia	..	..	-	0.01	0.01	0.05	0.01	0.02	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	-	-	-	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	-	-	-	-	-	-	..
Lithuania	..	..	-	-	0.00	0.00	0.00	0.00	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	-	-	-	-	-	-	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	-	-	-	0.01	0.02	0.02	0.03	0.03	..
Russian Federation	..	..	0.02	0.05	0.35	0.43	0.11	0.12	0.37
Serbia	..	..	-	-	-	0.01	0.01	0.01	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	-	-	-	-	-	-	..
Uzbekistan	..	..	-	-	-	-	-	-	..
Former Soviet Union	-	-	x	x	x	x	x	x	..
Former Yugoslavia	-	-	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	-	-	<b>0.02</b>	<b>0.08</b>	<b>0.43</b>	<b>0.56</b>	<b>0.22</b>	<b>0.22</b>	..
Algeria	-	-	-	-	-	-	-	-	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	-	-	-	-	-	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	0.00	-	0.02	-	-	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	0.28	0.37	0.86	1.25	3.49	3.85	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	-	-	-	-	-	-	-	-	..
Mozambique	-	-	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	-	-	-	-	-	-	-	-	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	-	-	-	-	-	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	-	-	-	-	-	..
<b>Africa</b>	-	-	<b>0.28</b>	<b>0.37</b>	<b>0.86</b>	<b>1.26</b>	<b>3.49</b>	<b>3.85</b>	..

1. Please refer to section 'Geographical coverage'.



## Production of geothermal energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	-	-	-	-	-	-	-	-	..
Indonesia	-	-	1.93	8.37	11.35	16.09	17.26	17.28	..
Malaysia	-	-	-	-	-	-	-	-	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	-	-	-	-	-	-	-	-	..
Philippines	-	1.79	4.70	9.99	8.51	8.54	8.86	9.49	..
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	-	-	0.00	-	-	-	-	-	..
Thailand	-	-	0.00	0.00	0.00	0.00	0.00	0.00	..
Viet Nam	-	-	-	-	-	-	-	-	..
Other Asia	-	-	-	-	-	-	-	-	..
<b>Non-OECD Asia excl. China</b>	-	<b>1.79</b>	<b>6.64</b>	<b>18.37</b>	<b>19.87</b>	<b>24.63</b>	<b>26.12</b>	<b>26.77</b>	..
People's Rep. of China	-	-	-	1.66	2.34	3.71	4.79	5.06	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	-	-	-	<b>1.66</b>	<b>2.34</b>	<b>3.71</b>	<b>4.79</b>	<b>5.06</b>	..
Argentina	-	-	-	-	-	-	-	-	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	-	-	-	-	-	-	-	-	..
Colombia	-	-	-	-	-	-	-	-	..
Costa Rica	-	-	-	0.47	0.83	0.98	1.16	1.16	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	-	-	-	..
Ecuador	-	-	-	0.00	0.00	0.00	0.00	0.00	..
El Salvador	-	0.42	0.36	0.68	0.90	1.31	1.34	1.32	..
Guatemala	-	-	-	0.02	0.14	0.23	0.21	0.22	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	0.33	0.12	0.23	0.26	0.57	0.58	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	-	-	-	-	-	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	-	-	-	-	-	-	-	-	..
<b>Non-OECD Americas</b>	-	<b>0.42</b>	<b>0.69</b>	<b>1.28</b>	<b>2.11</b>	<b>2.79</b>	<b>3.29</b>	<b>3.29</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	-	-	-	-	-	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	-	-	-	-	-	-	-	-	..

## Production of energy from solar, wind, tide, etc. (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.048</b>	<b>0.071</b>	<b>2.669</b>	<b>8.030</b>	<b>16.618</b>	<b>48.053</b>	<b>109.114</b>	<b>126.482</b>	<b>..</b>
<b>Non-OECD Total</b>	-	-	<b>0.120</b>	<b>1.496</b>	<b>4.135</b>	<b>15.862</b>	<b>45.167</b>	<b>53.007</b>	<b>..</b>
<b>OECD Total</b>	<b>0.048</b>	<b>0.071</b>	<b>2.549</b>	<b>6.534</b>	<b>12.483</b>	<b>32.191</b>	<b>63.947</b>	<b>73.475</b>	<b>80.441</b>
Canada	-	-	0.002	0.027	0.139	0.811	2.163	2.566	2.694
Chile	-	-	-	-	0.001	0.032	0.195	0.320	0.445
Mexico	-	-	0.018	0.046	0.087	0.225	0.764	0.990	1.175
United States	-	-	0.321	2.075	2.951	10.529	20.471	22.366	27.158
<b>OECD Americas</b>	-	-	<b>0.341</b>	<b>2.147</b>	<b>3.177</b>	<b>11.597</b>	<b>23.592</b>	<b>26.242</b>	<b>31.472</b>
Australia	-	0.019	0.081	0.090	0.146	0.722	1.616	1.855	2.000
Israel <sup>1</sup>	-	-	0.358	0.596	0.725	1.129	0.429	0.453	0.504
Japan	-	-	1.381	0.945	0.916	1.145	2.901	3.861	4.456
Korea	-	-	0.010	0.044	0.047	0.183	0.470	0.638	0.780
New Zealand	-	-	0.044	0.055	0.112	0.190	0.237	0.252	0.251
<b>OECD Asia Oceania</b>	-	<b>0.019</b>	<b>1.874</b>	<b>1.728</b>	<b>1.946</b>	<b>3.369</b>	<b>5.653</b>	<b>7.057</b>	<b>7.991</b>
Austria	-	-	0.015	0.068	0.207	0.350	0.581	0.682	0.727
Belgium	-	-	0.001	0.002	0.022	0.171	0.665	0.765	0.723
Czech Republic	-	-	-	0.000	0.004	0.091	0.240	0.262	0.245
Denmark	-	0.002	0.055	0.373	0.579	0.688	1.206	1.302	1.207
Estonia	..	..	-	-	0.005	0.024	0.052	0.061	0.053
Finland	-	-	0.000	0.007	0.015	0.027	0.097	0.202	0.267
France	0.048	0.050	0.067	0.069	0.150	1.014	2.129	2.593	2.657
Germany	-	-	0.017	0.920	2.712	4.743	8.660	10.813	10.611
Greece	-	-	0.057	0.138	0.210	0.430	0.835	0.929	0.979
Hungary	-	-	-	-	0.003	0.051	0.117	0.126	0.131
Iceland	-	-	-	-	-	-	0.001	0.001	0.001
Ireland	-	-	0.000	0.021	0.096	0.250	0.454	0.578	0.543
Italy	-	-	0.005	0.061	0.232	1.083	3.403	3.440	3.688
Latvia	..	..	0.035	0.000	0.004	0.004	0.012	0.013	0.011
Luxembourg	-	-	-	0.002	0.006	0.007	0.017	0.020	0.020
Netherlands	-	-	0.022	0.104	0.220	0.385	0.605	0.786	0.873
Norway	-	-	-	0.003	0.043	0.076	0.191	0.216	0.182
Poland	-	-	-	0.000	0.012	0.153	0.695	0.984	1.148
Portugal	-	-	0.011	0.033	0.175	0.856	1.172	1.147	1.227
Slovak Republic	-	-	-	-	0.001	0.006	0.058	0.050	0.052
Slovenia	..	..	-	-	-	0.009	0.033	0.035	0.034
Spain	-	-	0.002	0.439	1.886	4.842	7.580	7.426	7.351
Sweden	-	-	0.004	0.045	0.087	0.312	0.981	1.419	1.350
Switzerland	-	-	0.003	0.014	0.021	0.046	0.134	0.162	0.181
Turkey	-	-	0.028	0.265	0.390	0.683	1.636	1.997	2.555
United Kingdom	-	-	0.011	0.093	0.280	0.925	3.146	4.168	4.161
<b>OECD Europe</b>	<b>0.048</b>	<b>0.052</b>	<b>0.333</b>	<b>2.658</b>	<b>7.359</b>	<b>17.226</b>	<b>34.702</b>	<b>40.175</b>	<b>40.978</b>
<i>IEA</i>	<i>0.048</i>	<i>0.071</i>	<i>2.138</i>	<i>5.892</i>	<i>11.666</i>	<i>30.792</i>	<i>62.512</i>	<i>71.663</i>	<i>78.270</i>
<i>IEA/Accession/Association</i>	<i>0.048</i>	<i>0.071</i>	<i>2.199</i>	<i>7.109</i>	<i>15.339</i>	<i>45.397</i>	<i>103.847</i>	<i>119.433</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.303</i>	<i>2.413</i>	<i>6.951</i>	<i>16.623</i>	<i>33.891</i>	<i>39.113</i>	<i>..</i>
<i>G7</i>	<i>0.048</i>	<i>0.050</i>	<i>1.805</i>	<i>4.189</i>	<i>7.379</i>	<i>20.249</i>	<i>42.872</i>	<i>49.806</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>1.805</i>	<i>4.189</i>	<i>7.380</i>	<i>20.250</i>	<i>42.894</i>	<i>49.847</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>2.187</i>	<i>7.103</i>	<i>15.330</i>	<i>45.837</i>	<i>105.988</i>	<i>122.540</i>	<i>..</i>
<i>OPEC</i>	-	-	-	<i>0.003</i>	<i>0.006</i>	<i>0.014</i>	<i>0.108</i>	<i>0.105</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Production of energy from solar, wind, tide, etc. (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	-	-	0.120	1.496	4.135	15.862	45.167	53.007	..
Albania	-	-	-	0.001	0.002	0.007	0.012	0.012	..
Armenia	..	..	-	-	-	0.001	0.000	0.000	..
Azerbaijan	..	..	-	-	-	0.000	0.000	0.001	..
Belarus	..	..	-	-	0.000	0.000	0.001	0.003	..
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	..
Bulgaria	-	-	-	-	0.000	0.070	0.242	0.266	..
Croatia	..	..	-	0.001	0.003	0.017	0.075	0.084	..
Cyprus <sup>1</sup>	-	-	-	0.035	0.041	0.064	0.090	0.098	..
FYR of Macedonia	..	..	-	-	-	-	0.007	0.012	..
Georgia	..	..	-	-	-	-	0.002	0.002	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	-	0.001	0.015	..
Kosovo	..	..	..	0.000	0.000	0.000	0.000	0.000	..
Kyrgyzstan	..	..	-	-	-	-	-	-	..
Lithuania	..	..	-	-	0.000	0.019	0.061	0.076	..
Malta	-	-	-	-	0.001	0.004	0.010	0.012	..
Republic of Moldova	..	..	-	-	-	-	0.000	0.000	..
Montenegro	..	..	..	..	-	-	0.000	0.000	..
Romania	-	-	-	-	-	0.026	0.673	0.778	..
Russian Federation	..	..	-	0.000	0.001	0.000	0.022	0.042	0.051
Serbia	..	..	-	-	-	-	0.001	0.001	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	-	0.001	0.003	0.004	0.134	0.134	..
Uzbekistan	..	..	-	-	-	-	-	-	..
Former Soviet Union	-	-	x	x	x	x	x	x	..
Former Yugoslavia	-	-	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	-	-	-	0.039	0.052	0.213	1.332	1.538	..
Algeria	-	-	-	-	-	-	-	0.007	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	0.000	..
Botswana	..	..	0.001	0.001	0.000	-	0.000	0.000	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	0.012	0.047	0.147	0.145	0.137	..
Eritrea	..	..	..	0.000	0.000	0.000	0.000	0.000	..
Ethiopia	-	-	-	-	-	-	0.043	0.065	..
Gabon	-	-	-	-	-	-	0.000	0.000	..
Ghana	-	-	-	-	-	-	0.000	0.000	..
Kenya	-	-	-	-	-	0.002	0.003	0.005	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	0.000	0.002	0.002	..
Morocco	-	-	-	0.006	0.018	0.057	0.165	0.217	..
Mozambique	-	-	-	-	-	-	-	-	..
Namibia	..	..	..	-	0.000	0.002	0.002	0.002	..
Niger	..	..	..	-	0.000	0.000	0.000	0.000	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	-	-	-	0.000	0.000	0.000	0.000	0.000	..
South Africa	-	-	-	-	0.019	0.069	0.269	0.496	..
South Sudan	..	..	..	..	..	..	0.000	0.000	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	0.001	0.002	0.002	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	0.002	0.004	0.039	0.089	0.089	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	0.001	0.001	0.002	0.007	0.008	..
<b>Africa</b>	-	-	0.001	0.021	0.089	0.318	0.730	1.032	..

1. Please refer to section 'Geographical coverage'.

## Production of energy from solar, wind, tide, etc. (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	0.013	0.014	..
Brunei Darussalam	-	-	-	-	-	-	0.000	0.000	..
Cambodia	..	..	..	0.000	0.000	0.000	0.000	0.000	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	-	-	0.010	0.180	0.631	1.992	4.187	4.827	..
Indonesia	-	-	-	-	-	0.000	0.001	0.001	..
Malaysia	-	-	-	-	0.000	-	0.020	0.023	..
Mongolia	..	..	-	-	-	-	0.015	0.015	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	-	-	-	-	-	0.001	0.001	..
Pakistan	-	-	-	-	-	-	0.069	0.072	..
Philippines	-	-	-	-	0.002	0.005	0.015	0.076	..
Singapore	-	-	-	-	-	0.000	0.003	0.006	..
Sri Lanka	-	-	-	0.001	0.001	0.006	0.025	0.031	..
Chinese Taipei	-	-	0.018	0.071	0.098	0.191	0.280	0.311	..
Thailand	-	-	-	-	-	0.002	0.145	0.233	..
Viet Nam	-	-	-	-	-	0.004	0.007	0.010	..
Other Asia	-	-	-	0.017	0.018	0.023	0.024	0.023	..
<b>Non-OECD Asia excl. China</b>	-	-	<b>0.028</b>	<b>0.270</b>	<b>0.750</b>	<b>2.224</b>	<b>4.804</b>	<b>5.643</b>	..
People's Rep. of China	-	-	0.033	0.986	2.937	12.296	35.874	41.177	..
Hong Kong, China	-	-	-	-	-	0.000	0.000	0.000	..
<b>China</b>	-	-	<b>0.033</b>	<b>0.986</b>	<b>2.937</b>	<b>12.296</b>	<b>35.874</b>	<b>41.177</b>	..
Argentina	-	-	-	0.003	0.006	0.002	0.055	0.053	..
Bolivia	-	-	-	-	-	0.000	0.001	0.002	..
Brazil	-	-	-	0.031	0.110	0.556	1.670	2.560	..
Colombia	-	-	-	-	0.004	0.003	0.005	0.005	..
Costa Rica	-	-	-	0.016	0.018	0.031	0.063	0.093	..
Cuba	-	-	-	-	-	0.001	0.003	0.004	..
Curaçao	-	-	-	0.001	0.003	0.003	0.003	0.003	..
Dominican Republic	-	-	-	0.004	0.005	0.007	0.072	0.090	..
Ecuador	-	-	-	-	-	0.000	0.008	0.012	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	0.001	0.022	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	0.034	0.057	..
Jamaica	-	-	-	-	0.004	0.005	0.010	0.011	..
Nicaragua	-	-	-	-	-	0.014	0.073	0.074	..
Panama	-	-	-	-	-	-	0.010	0.037	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	0.053	0.056	0.006	0.047	0.097	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	0.006	0.063	0.182	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	-	-	-	0.002	0.021	0.024	0.034	0.035	..
<b>Non-OECD Americas</b>	-	-	-	<b>0.110</b>	<b>0.227</b>	<b>0.657</b>	<b>2.153</b>	<b>3.336</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	0.003	0.006	0.014	0.031	0.019	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	0.058	0.065	0.067	0.124	0.152	0.170	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	0.004	0.007	0.015	0.023	0.024	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	0.000	0.000	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	0.068	0.068	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	-	-	<b>0.058</b>	<b>0.072</b>	<b>0.081</b>	<b>0.153</b>	<b>0.274</b>	<b>0.281</b>	..

## Production of biofuels and waste (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>640.84</b>	<b>741.59</b>	<b>908.69</b>	<b>1 021.82</b>	<b>1 095.78</b>	<b>1 212.43</b>	<b>1 302.73</b>	<b>1 319.00</b>	..
<b>Non-OECD Total</b>	<b>553.56</b>	<b>630.99</b>	<b>758.96</b>	<b>837.69</b>	<b>886.90</b>	<b>950.63</b>	<b>1 009.13</b>	<b>1 024.09</b>	..
<b>OECD Total</b>	..	<b>110.60</b>	<b>149.73</b>	<b>184.13</b>	<b>208.88</b>	<b>261.80</b>	<b>293.60</b>	<b>294.91</b>	<b>291.09</b>
Canada	7.81	7.65	10.89	13.88	14.61	13.22	13.98	13.65	13.03
Chile	1.32	1.79	3.13	4.72	4.83	4.90	7.38	7.30	7.94
Mexico	6.21	6.88	8.55	8.94	8.88	8.12	8.74	8.62	7.76
United States	37.50	54.49	62.26	73.17	75.48	89.90	103.52	99.36	96.95
<b>OECD Americas</b>	..	<b>70.81</b>	<b>84.83</b>	<b>100.71</b>	<b>103.80</b>	<b>116.14</b>	<b>133.62</b>	<b>128.93</b>	<b>125.68</b>
Australia	3.53	3.61	3.96	5.03	5.10	5.23	5.10	5.29	5.36
Israel <sup>1</sup>	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02
Japan	-	-	4.52	4.71	5.48	9.32	10.94	11.39	8.91
Korea	-	-	0.71	1.35	2.12	3.46	5.62	5.85	6.51
New Zealand	..	0.52	0.75	1.12	1.30	1.21	1.17	1.18	1.18
<b>OECD Asia Oceania</b>	..	<b>4.13</b>	<b>9.95</b>	<b>12.23</b>	<b>14.01</b>	<b>19.24</b>	<b>22.85</b>	<b>23.73</b>	<b>21.97</b>
Austria	0.70	1.13	2.45	3.17	4.04	5.73	5.77	6.13	6.43
Belgium	0.01	0.06	0.75	0.93	1.33	2.80	2.93	2.84	2.83
Czech Republic	-	-	1.05	1.55	2.24	3.12	4.04	4.14	4.21
Denmark	0.35	0.64	1.14	1.69	2.33	2.82	2.30	2.60	2.56
Estonia	..	..	0.19	0.51	0.69	0.96	1.20	1.29	1.06
Finland	3.92	3.48	4.33	6.55	7.07	8.44	9.10	8.99	9.11
France	9.79	8.64	10.99	10.76	12.02	15.26	14.50	15.27	15.81
Germany	2.50	4.42	4.80	7.87	14.25	24.98	29.79	30.48	31.97
Greece	0.45	0.45	0.89	1.01	1.01	0.92	1.12	1.27	1.25
Hungary	0.59	0.53	0.70	0.76	1.14	2.66	2.89	3.15	3.03
Iceland	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Ireland	-	-	0.11	0.14	0.22	0.33	0.40	0.39	0.42
Italy	0.24	0.82	0.85	1.74	5.88	10.18	11.13	11.89	11.82
Latvia	..	..	0.68	1.15	1.57	1.67	2.20	2.17	2.22
Luxembourg	..	0.02	0.02	0.05	0.09	0.10	0.13	0.12	0.12
Netherlands	..	0.23	0.97	1.94	2.48	3.40	4.59	4.66	4.62
Norway	..	0.58	1.03	1.36	1.35	1.55	1.32	1.43	1.31
Poland	1.29	1.22	2.23	3.73	4.49	6.83	7.68	7.99	7.84
Portugal	0.64	0.72	2.48	2.77	2.97	3.38	3.28	3.22	2.99
Slovak Republic	0.18	0.18	0.17	0.42	0.50	0.97	1.16	1.39	1.32
Slovenia	..	..	0.24	0.46	0.49	0.69	0.61	0.66	0.69
Spain	0.01	0.27	4.07	4.13	5.11	6.31	7.24	7.26	7.27
Sweden	3.54	4.13	5.51	8.26	8.96	11.49	10.84	11.10	10.80
Switzerland	0.24	0.47	1.48	1.82	2.05	2.33	2.35	2.38	2.52
Turkey	6.45	7.68	7.21	6.51	5.36	4.56	3.49	3.28	3.25
United Kingdom	-	-	0.63	1.92	3.44	4.94	7.07	8.17	8.00
<b>OECD Europe</b>	..	<b>35.66</b>	<b>54.95</b>	<b>71.19</b>	<b>91.07</b>	<b>126.42</b>	<b>137.13</b>	<b>142.26</b>	<b>143.45</b>
IEA	..	101.92	137.13	168.85	193.11	246.41	274.65	276.14	272.47
IEA/Accession/Association	384.75	448.71	541.99	595.53	606.02	646.91	684.00	686.37	..
European Union - 28	..	..	47.17	66.58	88.52	125.45	137.75	143.21	..
G7	57.84	76.02	94.93	114.06	131.15	167.81	190.93	190.20	..
G8	..	..	107.11	121.06	138.11	174.76	197.99	197.77	..
G20	..	..	594.43	645.82	672.27	731.26	766.84	771.95	..
OPEC	38.16	45.24	59.39	77.72	92.32	110.63	121.82	124.98	..

1. Please refer to section 'Geographical coverage'.

## Production of biofuels and waste (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>553.56</b>	<b>630.99</b>	<b>758.96</b>	<b>837.69</b>	<b>886.90</b>	<b>950.63</b>	<b>1 009.13</b>	<b>1 024.09</b>	..
Albania	0.38	0.38	0.36	0.26	0.23	0.20	0.20	0.21	..
Armenia	..	..	0.01	0.01	0.01	0.01	0.03	0.19	..
Azerbaijan	..	..	0.02	0.02	0.03	0.09	0.15	0.15	..
Belarus	..	..	0.20	0.84	1.15	1.50	1.46	1.46	..
Bosnia and Herzegovina	..	..	0.16	0.18	0.18	0.18	1.77	1.77	..
Bulgaria	0.24	0.20	0.17	0.56	0.78	0.98	1.19	1.28	..
Croatia	..	..	0.86	1.00	1.25	1.37	1.44	1.59	..
Cyprus <sup>1</sup>	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.02	..
FYR of Macedonia	..	..	-	0.21	0.20	0.19	0.23	0.22	..
Georgia	..	..	0.47	0.65	0.35	0.36	0.46	0.40	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	0.11	0.07	0.01	0.05	0.02	0.07	..
Kosovo	..	..	..	0.16	0.17	0.24	0.25	0.26	..
Kyrgyzstan	..	..	0.01	0.00	0.00	0.00	0.00	0.00	..
Lithuania	..	..	0.28	0.65	0.86	1.11	1.28	1.38	..
Malta	-	-	-	-	-	0.00	0.00	0.00	..
Republic of Moldova	..	..	0.06	0.06	0.07	0.17	0.29	0.31	..
Montenegro	..	..	..	..	0.15	0.16	0.18	0.20	..
Romania	1.37	0.96	0.60	2.85	3.31	3.98	3.84	3.77	..
Russian Federation	..	..	12.18	7.01	6.95	6.96	7.06	7.57	8.05
Serbia	..	..	1.17	0.87	0.90	1.05	1.12	1.11	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	0.00	0.00	0.00	-	-	..
Ukraine	..	..	0.36	0.26	0.26	1.67	2.40	2.61	..
Uzbekistan	..	..	0.00	0.00	0.00	0.00	0.00	0.00	..
Former Soviet Union	19.48	18.40	x	x	x	x	x	x	..
Former Yugoslavia	0.89	0.72	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>22.36</b>	<b>20.65</b>	<b>17.05</b>	<b>15.68</b>	<b>16.87</b>	<b>20.29</b>	<b>23.42</b>	<b>24.58</b>	..
Algeria	0.01	0.01	0.01	0.05	0.07	0.05	0.01	0.01	..
Angola	3.23	3.60	4.32	5.30	5.95	6.62	7.16	7.29	..
Benin	1.04	1.21	1.56	1.45	1.67	2.10	2.58	2.71	..
Botswana	..	..	0.42	0.54	0.46	0.50	0.54	0.55	..
Cameroon	2.46	2.97	3.82	4.98	5.87	4.43	4.90	5.02	..
Congo	0.33	0.38	0.47	0.48	0.66	0.91	1.48	1.52	..
Côte d'Ivoire	1.74	2.23	3.18	4.22	7.17	7.69	10.11	9.39	..
Dem. Rep. of the Congo	5.88	7.22	10.00	13.22	15.75	18.63	26.33	27.25	..
Egypt	0.68	0.79	1.06	1.33	1.45	1.59	1.74	1.77	..
Eritrea	..	..	..	0.51	0.50	0.58	0.63	0.65	..
Ethiopia	14.22	16.15	22.03	30.46	35.12	40.24	44.67	45.81	..
Gabon	0.51	0.59	0.74	0.92	2.32	4.04	3.74	3.81	..
Ghana	2.29	2.85	3.90	3.89	3.18	3.21	3.63	3.62	..
Kenya	4.43	5.75	8.29	10.95	12.45	14.22	15.80	16.21	..
Libya	0.11	0.13	0.13	0.14	0.15	0.16	0.15	0.15	..
Mauritius	0.27	0.24	0.29	0.26	0.25	0.23	0.21	0.24	..
Morocco	0.68	0.80	0.99	1.22	2.22	1.58	1.44	1.37	..
Mozambique	5.88	5.94	5.56	6.42	7.05	8.04	9.00	9.25	..
Namibia	..	..	..	0.26	0.27	0.30	0.33	0.34	..
Niger	..	..	..	1.24	1.46	1.71	2.13	2.21	..
Nigeria	32.65	39.37	52.42	69.69	81.78	97.72	108.67	111.57	..
Senegal	0.84	0.89	0.96	1.16	1.19	2.02	1.79	1.84	..
South Africa	5.13	6.33	10.58	12.87	13.83	14.85	15.82	16.08	..
South Sudan	..	..	..	..	..	..	0.19	0.20	..
Sudan	5.87	7.04	8.69	10.87	11.38	10.99	9.46	9.68	..
United Rep. of Tanzania	6.88	7.24	8.93	12.46	15.35	18.23	21.03	21.80	..
Togo	0.64	0.75	1.05	1.76	1.99	2.36	2.63	2.70	..
Tunisia	0.43	0.50	0.64	0.93	1.12	1.06	1.08	1.08	..
Zambia	2.30	2.94	4.03	5.23	5.93	6.93	7.79	7.99	..
Zimbabwe	3.17	3.66	4.73	5.59	6.02	6.69	7.32	7.50	..
Other Africa	20.28	23.95	37.17	41.57	46.34	52.09	55.94	57.81	..
<b>Africa</b>	<b>121.96</b>	<b>143.51</b>	<b>195.96</b>	<b>249.95</b>	<b>288.97</b>	<b>329.78</b>	<b>368.30</b>	<b>377.44</b>	..

1. Please refer to section 'Geographical coverage'.

## Production of biofuels and waste (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	4.79	5.65	6.86	7.62	8.29	8.80	9.23	9.34	..
Brunei Darussalam	0.01	0.01	0.00	-	-	-	-	-	..
Cambodia	..	..	..	2.72	2.49	3.62	4.10	4.22	..
DPR of Korea	0.72	0.86	0.95	1.00	1.04	1.07	1.10	1.10	..
India	100.22	116.46	133.46	148.82	160.99	178.31	193.39	196.35	..
Indonesia	26.94	30.28	43.56	50.05	50.08	51.16	58.50	57.25	..
Malaysia	1.47	1.59	1.84	1.88	1.86	1.84	2.19	2.26	..
Mongolia	..	..	0.08	0.13	0.17	0.18	0.14	0.14	..
Myanmar	6.68	7.57	9.02	9.18	10.11	10.10	10.11	10.11	..
Nepal	3.75	4.39	5.43	6.99	7.93	8.59	9.40	9.53	..
Pakistan	11.33	14.03	18.77	24.00	26.62	29.52	32.12	32.80	..
Philippines	7.86	9.43	11.12	8.10	7.16	6.79	8.17	8.46	..
Singapore	-	-	0.07	0.20	0.39	0.59	0.65	0.61	..
Sri Lanka	2.79	3.08	3.92	4.47	4.62	5.05	4.91	4.83	..
Chinese Taipei	-	-	-	0.61	1.16	1.31	1.66	1.84	..
Thailand	7.91	10.65	14.69	14.59	17.16	22.57	25.62	25.22	..
Viet Nam	8.65	10.14	12.47	14.19	14.79	14.71	15.35	15.51	..
Other Asia	2.47	2.75	3.28	4.17	4.31	4.31	4.44	4.55	..
<b>Non-OECD Asia excl. China</b>	<b>185.59</b>	<b>216.88</b>	<b>265.53</b>	<b>298.73</b>	<b>319.17</b>	<b>348.52</b>	<b>381.08</b>	<b>384.13</b>	..
People's Rep. of China	161.72	179.93	200.41	198.14	168.36	133.28	113.63	113.51	..
Hong Kong, China	0.03	0.04	0.04	0.05	0.05	0.10	0.10	0.10	..
<b>China</b>	<b>161.76</b>	<b>179.97</b>	<b>200.45</b>	<b>198.19</b>	<b>168.42</b>	<b>133.37</b>	<b>113.73</b>	<b>113.61</b>	..
Argentina	2.10	2.15	1.72	2.96	2.27	4.00	4.92	4.21	..
Bolivia	0.23	0.74	0.75	0.69	0.70	0.89	1.04	1.08	..
Brazil	36.62	40.48	47.22	45.75	64.19	83.34	84.27	86.23	..
Colombia	3.40	4.73	5.52	3.43	3.24	3.78	3.70	3.80	..
Costa Rica	0.27	0.31	0.39	0.25	0.64	0.80	0.66	0.65	..
Cuba	3.59	4.26	6.66	3.70	2.02	1.24	1.65	1.70	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	1.16	1.28	0.91	0.84	0.83	0.82	0.83	0.80	..
Ecuador	1.05	0.98	0.95	0.74	0.67	0.61	0.80	0.87	..
El Salvador	1.29	1.41	1.19	1.34	1.44	0.88	0.58	0.63	..
Guatemala	2.02	2.35	3.03	3.89	3.99	6.28	7.69	7.43	..
Haiti	1.46	1.86	1.21	1.52	2.72	3.11	3.23	3.30	..
Honduras	1.03	1.25	1.50	1.33	1.70	1.96	2.26	2.43	..
Jamaica	0.24	0.21	0.48	0.58	0.39	0.45	0.48	0.49	..
Nicaragua	0.73	0.86	1.05	1.22	1.22	1.26	1.49	1.52	..
Panama	0.33	0.44	0.42	0.46	0.45	0.31	0.36	0.32	..
Paraguay	1.25	1.55	2.24	2.24	2.18	2.47	2.32	2.32	..
Peru	3.51	3.43	2.67	2.23	2.27	3.04	2.64	2.55	..
Suriname	..	..	..	0.04	0.02	0.03	0.03	0.03	..
Trinidad and Tobago	0.02	0.03	0.07	0.02	0.04	0.01	0.01	0.01	..
Uruguay	0.40	0.47	0.55	0.42	0.45	1.32	1.73	2.05	..
Venezuela	0.45	0.42	0.59	0.69	0.75	0.77	0.74	0.74	..
Other Non-OECD Americas	0.42	0.43	0.42	0.41	0.41	0.37	0.36	0.37	..
<b>Non-OECD Americas</b>	<b>61.57</b>	<b>69.65</b>	<b>79.55</b>	<b>74.75</b>	<b>92.59</b>	<b>117.76</b>	<b>121.80</b>	<b>123.52</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.15	0.14	0.22	0.15	0.58	0.62	0.51	0.51	..
Iraq	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.05	..
Jordan	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	..
Kuwait	0.00	0.00	0.00	-	-	-	-	-	..
Lebanon	0.10	0.10	0.10	0.13	0.16	0.12	0.12	0.12	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	0.05	0.06	0.08	0.08	0.09	0.10	0.11	0.12	..
<b>Middle East</b>	<b>0.32</b>	<b>0.33</b>	<b>0.42</b>	<b>0.40</b>	<b>0.88</b>	<b>0.90</b>	<b>0.80</b>	<b>0.80</b>	..

## Total production of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>6 213.70</b>	<b>7 301.59</b>	<b>8 809.56</b>	<b>10 028.33</b>	<b>11 553.59</b>	<b>12 799.43</b>	<b>13 710.51</b>	<b>13 790.02</b>	..
<b>Non-OECD Total</b>	<b>3 756.29</b>	<b>4 388.40</b>	<b>5 362.95</b>	<b>6 187.98</b>	<b>7 702.64</b>	<b>8 899.46</b>	<b>9 562.04</b>	<b>9 625.93</b>	..
<b>OECD Total</b>	<b>2 457.41</b>	<b>2 913.19</b>	<b>3 446.60</b>	<b>3 840.35</b>	<b>3 850.95</b>	<b>3 899.97</b>	<b>4 148.47</b>	<b>4 164.09</b>	<b>4 045.68</b>
Canada	198.22	207.16	276.44	374.86	401.45	401.36	469.85	471.33	476.40
Chile	5.08	5.80	7.93	8.58	9.34	9.21	13.48	12.91	13.03
Mexico	47.27	147.03	195.54	229.30	263.49	222.52	208.30	191.79	179.76
United States	1 456.23	1 553.26	1 652.50	1 667.28	1 631.04	1 723.24	2 012.95	2 018.53	1 905.53
<b>OECD Americas</b>	<b>1 706.81</b>	<b>1 913.25</b>	<b>2 132.41</b>	<b>2 280.02</b>	<b>2 305.32</b>	<b>2 356.34</b>	<b>2 704.58</b>	<b>2 694.55</b>	<b>2 574.72</b>
Australia	67.99	85.41	157.52	233.55	265.16	323.68	365.73	381.33	394.09
Israel <sup>1</sup>	6.15	0.15	0.42	0.64	2.08	3.86	6.76	7.35	8.22
Japan	29.51	43.29	74.58	104.60	99.03	99.00	26.18	30.28	29.85
Korea	6.76	9.27	22.62	34.44	42.98	44.95	49.13	51.42	51.56
New Zealand	3.91	5.47	11.53	14.30	12.88	16.90	16.99	16.54	16.04
<b>OECD Asia Oceania</b>	<b>114.31</b>	<b>143.60</b>	<b>266.68</b>	<b>387.54</b>	<b>422.12</b>	<b>488.40</b>	<b>464.79</b>	<b>486.91</b>	<b>499.77</b>
Austria	7.92	7.63	8.14	9.80	9.78	11.84	11.99	11.96	12.40
Belgium	6.51	8.09	13.10	13.73	13.91	15.57	12.65	10.68	15.17
Czech Republic	38.51	41.21	41.17	30.84	33.23	32.07	29.83	29.06	27.37
Denmark	0.43	0.95	10.08	27.73	31.32	23.35	16.00	15.95	14.93
Estonia	..	..	5.41	3.18	3.87	4.93	5.78	5.55	5.46
Finland	4.88	6.91	12.08	14.94	16.71	17.49	18.31	17.75	17.74
France	44.17	52.60	111.87	130.65	137.10	135.40	137.14	137.76	129.77
Germany	171.66	185.62	186.16	135.23	136.60	128.56	119.73	119.57	115.45
Greece	2.33	3.70	9.20	9.99	10.32	9.43	8.80	8.47	6.83
Hungary	12.70	14.49	14.69	11.62	10.37	11.87	11.08	11.30	11.39
Iceland	0.54	0.90	1.62	2.41	2.38	4.79	5.22	4.92	5.69
Ireland	1.12	1.89	3.47	2.16	1.65	1.83	2.01	1.91	4.13
Italy	20.38	19.90	25.31	28.17	30.20	33.00	36.69	36.09	33.50
Latvia	..	..	1.16	1.41	1.86	1.98	2.38	2.34	2.44
Luxembourg	0.00	0.03	0.03	0.06	0.11	0.12	0.15	0.15	0.15
Netherlands	56.76	71.82	60.56	57.90	62.55	69.89	58.53	47.62	44.31
Norway	8.06	55.08	119.47	228.02	224.38	207.58	196.04	208.11	210.76
Poland	107.41	126.64	103.87	79.24	78.35	67.08	67.34	67.68	66.02
Portugal	1.40	1.48	3.39	3.85	3.61	5.80	5.98	5.31	5.52
Slovak Republic	2.57	3.47	5.28	6.33	6.61	6.21	6.57	6.59	6.45
Slovenia	..	..	3.07	3.10	3.51	3.79	3.68	3.41	3.56
Spain	11.35	15.77	34.59	31.56	30.16	34.43	35.10	33.60	33.97
Sweden	9.25	16.13	29.68	30.52	34.67	33.09	34.58	34.00	34.06
Switzerland	4.28	7.03	10.29	12.02	11.01	12.63	13.27	12.22	11.60
Turkey	15.52	17.14	25.81	25.86	23.93	32.40	31.35	31.65	33.67
United Kingdom	108.52	197.85	208.00	272.47	205.32	150.11	108.90	119.00	118.84
<b>OECD Europe</b>	<b>636.29</b>	<b>856.34</b>	<b>1 047.52</b>	<b>1 172.79</b>	<b>1 123.51</b>	<b>1 055.24</b>	<b>979.10</b>	<b>982.63</b>	<b>971.19</b>
IEA	2 398.36	2 759.30	3 236.87	3 594.91	3 568.30	3 653.82	3 908.65	3 941.40	3 832.97
IEA/Accession/Association	3 130.41	3 846.33	4 798.28	5 590.13	6 252.35	7 069.20	7 696.17	7 699.61	..
European Union - 28	..	..	951.42	950.38	909.22	842.67	777.19	770.71	..
G7	2 028.69	2 259.68	2 534.87	2 713.27	2 640.75	2 670.68	2 911.44	2 932.56	..
G8	..	..	3 827.95	3 691.25	3 843.99	3 950.05	4 230.76	4 266.75	..
G20	..	..	6 614.94	7 162.13	8 201.08	9 101.32	9 875.55	9 926.36	..
OPEC	1 606.39	1 437.33	1 378.74	1 904.43	2 225.99	2 336.17	2 462.20	2 531.64	..

1. Please refer to section 'Geographical coverage'.



## Total production of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>3 756.29</b>	<b>4 388.40</b>	<b>5 362.95</b>	<b>6 187.98</b>	<b>7 702.64</b>	<b>8 899.46</b>	<b>9 562.04</b>	<b>9 625.93</b>	..
Albania	3.02	3.45	2.46	0.99	1.13	1.62	2.01	2.07	..
Armenia	..	..	0.15	0.64	0.87	0.88	0.85	1.11	..
Azerbaijan	..	..	20.77	18.81	27.25	65.51	58.78	58.31	..
Belarus	..	..	3.34	3.40	3.70	3.96	3.67	3.55	..
Bosnia and Herzegovina	..	..	4.60	3.08	3.64	4.37	6.05	6.18	..
Bulgaria	5.47	7.74	9.61	9.89	10.65	10.59	11.36	12.08	..
Croatia	..	..	5.71	4.26	4.76	5.15	4.36	4.40	..
Cyprus <sup>1</sup>	0.01	0.01	0.01	0.04	0.05	0.09	0.12	0.12	..
FYR of Macedonia	..	..	1.26	1.53	1.57	1.61	1.33	1.28	..
Georgia	..	..	2.02	1.32	0.98	1.31	1.37	1.32	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	90.98	78.58	118.64	156.88	166.28	164.08	..
Kosovo	..	..	..	1.10	1.40	1.86	1.61	1.80	..
Kyrgyzstan	..	..	2.50	1.37	1.32	1.27	1.91	1.80	..
Lithuania	..	..	4.94	3.39	4.05	1.52	1.75	1.82	..
Malta	-	-	-	-	0.00	0.00	0.01	0.01	..
Republic of Moldova	..	..	0.08	0.09	0.11	0.22	0.33	0.35	..
Montenegro	..	..	..	..	0.59	0.83	0.69	0.72	..
Romania	46.24	52.59	40.83	28.32	27.91	27.47	26.37	26.54	..
Russian Federation	..	..	1 293.08	977.98	1 203.24	1 279.37	1 319.32	1 334.19	..
Serbia	..	..	13.77	11.87	10.29	10.55	9.44	10.76	..
Tajikistan	..	..	2.03	1.26	1.55	1.54	1.81	1.94	..
Turkmenistan	..	..	73.01	45.97	61.60	47.25	77.98	81.24	..
Ukraine	..	..	135.79	76.44	80.97	78.92	77.35	61.61	..
Uzbekistan	..	..	38.65	55.08	56.53	55.13	55.84	55.97	..
Former Soviet Union	991.26	1 358.63	x	x	x	x	x	x	..
Former Yugoslavia	14.68	18.82	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>1 060.69</b>	<b>1 441.23</b>	<b>1 745.58</b>	<b>1 325.42</b>	<b>1 622.81</b>	<b>1 757.90</b>	<b>1 830.58</b>	<b>1 833.25</b>	..
Algeria	56.49	65.74	100.10	142.21	166.65	150.51	143.20	142.76	..
Angola	11.68	11.30	28.65	43.44	70.43	97.80	94.05	99.69	..
Benin	1.04	1.21	1.77	1.45	1.67	2.10	2.58	2.71	..
Botswana	..	..	0.87	1.08	1.01	1.06	1.51	1.73	..
Cameroon	2.55	6.71	10.98	11.14	10.79	8.41	9.41	10.67	..
Congo	2.44	3.82	8.75	14.47	13.63	17.52	15.68	15.08	..
Côte d'Ivoire	1.76	2.42	3.38	6.01	10.63	11.17	12.89	12.58	..
Dem. Rep. of the Congo	6.28	8.58	12.02	14.91	17.66	20.42	28.16	29.07	..
Egypt	9.84	33.48	54.87	53.09	77.98	84.49	73.95	69.46	..
Eritrea	..	..	..	0.51	0.50	0.58	0.63	0.65	..
Ethiopia	14.25	16.19	22.12	30.60	35.36	40.71	45.49	46.71	..
Gabon	8.64	9.53	14.42	14.63	16.05	17.03	15.26	15.91	..
Ghana	2.63	3.31	4.39	4.46	3.67	4.01	9.80	10.25	..
Kenya	4.47	5.84	8.79	11.43	13.57	15.77	19.57	20.39	..
Libya	112.56	96.55	73.17	75.92	97.76	103.73	36.27	31.64	..
Mauritius	0.27	0.25	0.30	0.26	0.26	0.24	0.22	0.26	..
Morocco	1.23	1.41	1.45	1.35	2.37	1.99	1.83	1.82	..
Mozambique	6.13	6.09	5.61	7.26	10.08	12.21	17.99	19.13	..
Namibia	..	..	..	0.38	0.42	0.41	0.46	0.48	..
Niger	..	..	..	1.29	1.51	1.79	3.05	3.02	..
Nigeria	136.91	144.88	146.29	197.94	233.58	254.03	253.86	254.26	..
Senegal	0.84	0.89	0.96	1.19	1.27	2.09	1.87	1.93	..
South Africa	40.36	73.17	114.53	145.62	157.91	163.96	168.36	167.41	..
South Sudan	..	..	..	..	..	..	8.11	7.72	..
Sudan	5.91	7.09	8.77	19.98	27.01	35.04	16.34	15.75	..
United Rep. of Tanzania	6.91	7.30	9.06	12.69	15.86	19.11	22.17	22.87	..
Togo	0.64	0.75	1.05	1.76	2.00	2.37	2.64	2.71	..
Tunisia	4.54	6.67	5.73	6.63	6.68	8.33	6.74	6.39	..
Zambia	3.12	4.06	4.94	6.01	6.78	7.83	9.10	9.21	..
Zimbabwe	5.28	5.79	8.55	8.76	8.78	9.02	11.52	10.72	..
Other Africa	20.56	24.51	37.67	48.20	75.14	78.99	82.55	84.58	..
<b>Africa</b>	<b>467.34</b>	<b>547.54</b>	<b>689.20</b>	<b>884.69</b>	<b>1 087.01</b>	<b>1 172.69</b>	<b>1 115.25</b>	<b>1 117.54</b>	..

1. Please refer to section 'Geographical coverage'.

## Total production of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	5.34	6.75	10.76	15.16	19.36	26.08	29.46	31.17	..
Brunei Darussalam	13.16	21.14	15.64	19.68	21.06	18.57	16.26	16.11	..
Cambodia	..	..	..	2.72	2.50	3.62	4.26	4.39	..
DPR of Korea	19.05	27.21	28.91	18.79	22.04	16.73	18.51	18.83	..
India	144.05	181.09	280.46	350.75	402.33	496.70	542.67	554.39	..
Indonesia	94.88	125.04	168.55	237.48	279.59	378.29	447.75	425.86	..
Malaysia	6.09	17.66	48.37	77.54	95.57	89.31	94.64	96.49	..
Mongolia	..	..	2.74	1.95	3.85	15.67	17.07	14.88	..
Myanmar	7.81	9.51	10.65	15.41	22.14	22.06	24.83	26.71	..
Nepal	3.76	4.40	5.50	7.14	8.15	8.88	9.74	9.84	..
Pakistan	15.59	20.92	34.18	46.89	60.99	64.99	69.21	70.94	..
Philippines	8.04	12.17	17.22	19.55	21.40	23.55	25.80	26.31	..
Singapore	-	-	0.07	0.20	0.39	0.59	0.65	0.62	..
Sri Lanka	2.85	3.21	4.19	4.75	4.92	5.54	5.33	5.37	..
Chinese Taipei	3.76	5.82	10.65	11.79	12.48	12.96	13.64	12.31	..
Thailand	8.16	11.18	26.58	43.95	55.19	70.58	78.74	75.20	..
Viet Nam	10.37	13.18	18.28	39.92	60.76	66.39	68.75	70.35	..
Other Asia	5.67	6.85	8.53	8.54	11.33	15.89	17.16	19.35	..
<b>Non-OECD Asia excl. China</b>	<b>348.57</b>	<b>466.13</b>	<b>691.28</b>	<b>922.21</b>	<b>1 104.06</b>	<b>1 336.39</b>	<b>1 484.46</b>	<b>1 479.12</b>	..
People's Rep. of China	431.36	615.47	880.84	1 123.61	1 671.35	2 235.50	2 494.10	2 495.63	..
Hong Kong, China	0.03	0.04	0.04	0.05	0.05	0.10	0.10	0.11	..
<b>China</b>	<b>431.40</b>	<b>615.51</b>	<b>880.88</b>	<b>1 123.66</b>	<b>1 671.40</b>	<b>2 235.60</b>	<b>2 494.20</b>	<b>2 495.74</b>	..
Argentina	30.53	38.81	48.42	82.89	84.69	79.51	72.93	73.77	..
Bolivia	4.57	4.37	4.92	6.71	13.94	15.76	23.07	21.03	..
Brazil	51.24	64.35	104.14	147.64	194.70	246.62	267.21	279.37	..
Colombia	17.19	17.71	48.18	72.33	78.60	105.93	127.22	124.72	..
Costa Rica	0.37	0.50	0.68	1.22	2.05	2.44	2.46	2.60	..
Cuba	3.85	4.83	7.56	7.02	5.68	5.25	5.88	5.77	..
Curaçao	-	-	-	0.00	0.00	0.00	0.00	0.00	..
Dominican Republic	1.21	1.33	0.94	0.95	1.04	0.98	1.04	0.99	..
Ecuador	11.85	11.71	16.40	22.42	27.54	26.25	30.45	30.29	..
El Salvador	1.33	1.91	1.69	2.12	2.49	2.38	2.06	2.07	..
Guatemala	2.04	2.58	3.38	5.27	5.40	7.51	8.88	8.56	..
Haiti	1.47	1.88	1.25	1.54	2.74	3.12	3.24	3.31	..
Honduras	1.06	1.31	1.69	1.52	1.85	2.23	2.52	2.69	..
Jamaica	0.25	0.22	0.48	0.59	0.41	0.46	0.50	0.51	..
Nicaragua	0.76	0.91	1.42	1.35	1.49	1.57	2.17	2.20	..
Panama	0.34	0.53	0.61	0.76	0.77	0.67	0.80	0.90	..
Paraguay	1.27	1.61	4.58	6.84	6.58	7.12	7.08	7.11	..
Peru	7.87	14.47	10.60	9.36	10.91	21.29	27.31	25.51	..
Suriname	..	..	..	0.74	0.70	0.93	0.99	1.00	..
Trinidad and Tobago	9.98	13.16	12.63	19.04	34.92	42.55	39.66	37.60	..
Uruguay	0.54	0.77	1.15	1.03	1.02	2.07	2.62	2.94	..
Venezuela	201.22	137.44	144.83	215.89	223.12	197.88	185.71	182.71	..
Other Non-OECD Americas	0.53	0.61	0.95	0.56	0.67	0.79	0.63	0.64	..
<b>Non-OECD Americas</b>	<b>349.46</b>	<b>320.99</b>	<b>416.51</b>	<b>607.78</b>	<b>701.31</b>	<b>773.32</b>	<b>814.43</b>	<b>816.28</b>	..
Bahrain	10.83	11.99	14.31	16.73	18.24	20.21	22.88	22.79	..
Islamic Republic of Iran	309.73	80.76	187.83	253.65	310.65	342.24	316.33	324.18	..
Iraq	102.86	135.49	110.34	134.92	97.84	124.61	163.63	182.83	..
Jordan	0.00	0.00	0.16	0.29	0.26	0.27	0.26	0.28	..
Kuwait	160.23	93.60	50.37	114.23	146.75	134.56	166.41	167.84	..
Lebanon	0.14	0.18	0.14	0.17	0.26	0.21	0.16	0.18	..
Oman	15.20	15.09	38.30	60.33	59.58	67.09	74.55	77.54	..
Qatar	29.53	26.48	27.69	59.47	89.32	178.35	219.93	221.31	..
Saudi Arabia	388.54	533.64	368.44	475.83	570.92	531.44	622.42	648.61	..
Syrian Arab Republic	5.57	9.50	22.32	32.69	26.41	27.67	5.58	4.68	..
United Arab Emirates	76.14	90.21	110.20	153.88	175.39	177.74	214.69	229.63	..
Yemen	0.05	0.06	9.38	22.03	20.45	19.17	16.28	4.13	..
<b>Middle East</b>	<b>1 098.83</b>	<b>996.99</b>	<b>939.50</b>	<b>1 324.21</b>	<b>1 516.06</b>	<b>1 623.55</b>	<b>1 823.12</b>	<b>1 884.00</b>	..

## Net imports of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>9.71</b>	<b>2.46</b>	<b>- 7.43</b>	<b>- 2.37</b>	<b>- 12.22</b>	<b>- 4.84</b>	<b>- 10.92</b>	<b>- 28.62</b>	<b>- 36.24</b>
<b>Non-OECD Total</b>	<b>- 1.11</b>	<b>- 12.51</b>	<b>- 29.78</b>	<b>- 96.88</b>	<b>- 148.97</b>	<b>- 90.43</b>	<b>- 54.33</b>	<b>- 70.43</b>	<b>- 68.30</b>
<b>OECD Total</b>	<b>10.82</b>	<b>14.97</b>	<b>22.35</b>	<b>94.51</b>	<b>136.74</b>	<b>85.60</b>	<b>43.40</b>	<b>41.80</b>	<b>32.09</b>
Canada	2.83	- 0.04	- 11.90	- 4.22	- 4.27	- 11.31	- 15.17	- 13.10	- 13.53
Chile	0.20	0.63	1.13	2.92	2.41	3.81	4.06	5.09	5.94
Mexico	0.27	0.59	0.23	1.99	4.85	5.12	5.09	5.29	5.61
United States	- 30.32	- 57.01	- 65.87	- 28.30	- 9.86	- 36.80	- 50.83	- 37.92	- 31.01
<b>OECD Americas</b>	<b>- 27.01</b>	<b>- 55.83</b>	<b>- 76.40</b>	<b>- 27.62</b>	<b>- 6.87</b>	<b>- 39.19</b>	<b>- 56.85</b>	<b>- 40.65</b>	<b>- 33.00</b>
Australia	- 17.65	- 27.81	- 67.27	- 121.43	- 150.98	- 190.35	- 242.71	- 253.83	- 251.83
Israel <sup>1</sup>	0.00	0.00	2.43	6.04	7.72	7.38	6.58	6.58	5.24
Japan	40.89	47.55	72.06	95.75	110.43	115.02	118.49	117.45	116.69
Korea	0.34	3.47	15.73	39.14	46.93	72.95	79.52	81.13	81.47
New Zealand	- 0.02	- 0.05	- 0.24	- 1.11	- 1.10	- 1.58	- 1.01	- 0.76	- 0.62
<b>OECD Asia Oceania</b>	<b>23.55</b>	<b>23.16</b>	<b>22.72</b>	<b>18.39</b>	<b>13.00</b>	<b>3.42</b>	<b>- 39.12</b>	<b>- 49.42</b>	<b>- 49.05</b>
Austria	3.01	2.80	3.17	3.02	3.99	3.38	3.06	2.71	2.83
Belgium	4.55	7.18	9.61	7.32	5.24	3.69	3.39	3.10	2.82
Czech Republic	- 2.41	- 6.78	- 5.69	- 4.74	- 3.28	- 2.86	- 0.69	- 0.31	- 0.33
Denmark	1.87	6.05	6.22	3.78	3.51	2.64	2.53	1.47	1.57
Estonia	..	..	0.68	0.27	0.03	- 0.02	0.02	- 0.01	0.01
Finland	2.43	3.79	4.39	3.52	3.32	3.96	3.60	2.47	2.64
France	9.49	20.23	13.01	13.00	13.51	12.18	9.20	8.68	8.02
Germany	- 3.07	- 1.34	3.34	21.66	25.95	31.64	35.63	36.07	35.09
Greece	0.45	0.38	0.92	0.77	0.37	0.40	0.19	0.16	0.19
Hungary	1.63	2.20	1.63	1.08	1.30	1.13	0.62	0.79	0.68
Iceland	0.00	0.02	0.06	0.10	0.10	0.09	0.09	0.09	0.09
Ireland	0.50	0.81	1.99	1.68	1.89	0.95	1.20	1.46	1.15
Italy	7.73	11.65	13.74	13.14	16.37	13.79	12.91	12.38	10.84
Latvia	..	..	0.63	0.06	0.08	0.11	0.05	0.04	0.04
Luxembourg	2.44	1.84	1.11	0.11	0.08	0.07	0.05	0.05	0.05
Netherlands	1.54	3.72	8.65	7.92	8.22	9.18	9.81	12.29	9.17
Norway	0.58	0.79	0.67	0.60	- 0.41	- 0.38	- 0.26	0.00	0.12
Poland	- 26.17	- 20.56	- 20.12	- 16.31	- 12.99	- 2.74	- 4.22	- 5.53	- 5.83
Portugal	0.27	0.35	2.99	3.91	3.23	1.63	2.60	3.21	2.91
Slovak Republic	6.26	6.28	6.12	3.43	3.74	2.95	2.85	2.77	2.64
Slovenia	..	..	0.14	0.25	0.32	0.28	0.23	0.20	0.20
Spain	2.13	4.11	7.07	12.84	14.42	6.73	8.69	10.23	7.77
Sweden	1.68	1.68	2.64	2.41	2.55	2.55	1.99	1.95	2.22
Switzerland	0.22	0.51	0.34	0.19	0.10	0.13	0.11	0.13	0.11
Turkey	0.01	0.53	4.19	9.27	11.72	13.84	19.26	21.86	23.24
United Kingdom	- 0.87	1.40	8.53	14.46	27.26	16.05	26.49	15.60	5.89
<b>OECD Europe</b>	<b>14.28</b>	<b>47.63</b>	<b>76.03</b>	<b>103.73</b>	<b>130.61</b>	<b>121.36</b>	<b>139.38</b>	<b>131.87</b>	<b>114.13</b>
<i>IEA</i>	<i>10.35</i>	<i>13.72</i>	<i>17.72</i>	<i>83.16</i>	<i>121.26</i>	<i>68.82</i>	<i>27.31</i>	<i>24.51</i>	<i>14.97</i>
<i>IEA/Accession/Association</i>	<i>8.48</i>	<i>12.09</i>	<i>10.91</i>	<i>29.94</i>	<i>45.87</i>	<i>90.39</i>	<i>99.42</i>	<i>69.13</i>	<i>80.52</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>80.35</i>	<i>98.31</i>	<i>125.40</i>	<i>111.46</i>	<i>122.87</i>	<i>112.31</i>	<i>92.39</i>
<i>G7</i>	<i>26.68</i>	<i>22.44</i>	<i>32.92</i>	<i>125.49</i>	<i>179.40</i>	<i>140.57</i>	<i>136.71</i>	<i>139.17</i>	<i>131.98</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>27.59</i>	<i>115.39</i>	<i>137.28</i>	<i>69.93</i>	<i>52.44</i>	<i>53.72</i>	<i>36.97</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>- 6.40</i>	<i>- 14.55</i>	<i>- 27.46</i>	<i>- 15.60</i>	<i>- 24.03</i>	<i>- 64.71</i>	<i>- 66.79</i>
<i>OPEC</i>	<i>0.52</i>	<i>0.83</i>	<i>- 0.30</i>	<i>- 4.68</i>	<i>- 3.81</i>	<i>- 0.04</i>	<i>1.72</i>	<i>1.73</i>	<i>1.24</i>

A negative number shows net exports. World shows the discrepancy between total exports and total imports.

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Net imports of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>- 1.11</b>	<b>- 12.51</b>	<b>- 29.78</b>	<b>- 96.88</b>	<b>- 148.97</b>	<b>- 90.43</b>	<b>- 54.33</b>	<b>- 70.43</b>	<b>- 68.30</b>
Albania	0.07	0.11	0.14	0.01	0.00	0.11	0.09	0.06	0.05
Armenia	..	..	0.24	-	-	0.00	-	0.00	0.00
Azerbaijan	..	..	0.09	-	-	-	-	-	..
Belarus	..	..	1.38	0.40	0.05	- 0.06	0.48	0.39	0.42
Bosnia and Herzegovina	..	..	-	- 0.02	0.07	0.44	0.65	0.67	0.86
Bulgaria	3.71	4.27	3.46	2.26	2.55	1.70	0.93	0.74	0.52
Croatia	..	..	0.61	0.48	0.62	0.70	0.60	0.62	0.67
Cyprus <sup>1</sup>	-	-	0.06	0.03	0.04	0.01	0.00	0.00	0.00
FYR of Macedonia	..	..	0.10	0.09	0.11	0.12	0.12	0.08	0.10
Georgia	..	..	0.25	0.01	0.01	0.00	0.17	0.15	0.06
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	- 18.06	- 14.61	- 9.96	- 13.18	- 12.77	- 13.06	- 11.19
Kosovo	..	..	..	0.01	0.02	0.03	0.00	- 0.00	0.00
Kyrgyzstan	..	..	1.12	0.31	0.43	0.49	0.54	0.58	0.62
Lithuania	..	..	0.76	0.08	0.17	0.19	0.20	0.16	0.13
Malta	-	-	0.18	-	-	-	-	-	..
Republic of Moldova	..	..	2.01	0.06	0.07	0.09	0.09	0.09	0.06
Montenegro	..	..	..	..	- 0.01	- 0.01	- 0.01	- 0.01	- 0.01
Romania	2.64	4.45	4.51	1.88	2.91	1.18	0.96	0.99	0.52
Russian Federation	..	..	- 5.33	- 10.10	- 42.12	- 70.64	- 84.27	- 85.45	- 95.04
Serbia	..	..	-	0.29	0.66	0.73	0.47	0.62	0.15
Tajikistan	..	..	0.26	0.00	0.00	0.00	0.00	0.01	..
Turkmenistan	..	..	0.30	-	-	-	-	-	..
Ukraine	..	..	- 4.33	2.20	2.62	2.97	5.47	9.45	9.60
Uzbekistan	..	..	1.13	0.34	0.04	0.03	- 0.01	- 0.01	..
Former Soviet Union	- 9.46	- 11.05	x	x	x	x	x	x	x
Former Yugoslavia	1.66	2.33	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>- 1.38</b>	<b>0.12</b>	<b>- 11.12</b>	<b>- 16.26</b>	<b>- 41.70</b>	<b>- 75.09</b>	<b>- 86.30</b>	<b>- 83.90</b>	<b>- 92.44</b>
Algeria	0.28	0.12	0.70	0.44	0.63	0.34	0.17	0.14	0.01
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	0.04	0.03	0.07
Botswana	..	..	0.01	0.05	0.01	- 0.03	- 0.11	- 0.14	- 0.11
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	0.13	0.13	0.15	-	-	-	-	-	..
Egypt	0.24	0.48	0.76	0.79	0.79	0.44	0.39	0.35	0.16
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	0.02	0.25	0.25	0.27
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	0.04	0.01	0.09	0.07	0.09	0.17	0.33	0.35	0.34
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	0.03	0.14	0.23	0.41	0.48	0.50	0.57
Morocco	0.00	- 0.04	0.81	2.61	3.19	2.81	4.30	4.26	4.44
Mozambique	0.12	0.05	0.01	- 0.01	- 0.00	- 0.02	- 3.07	- 3.18	- 3.07
Namibia	..	..	..	0.00	0.01	-	-	-	0.00
Niger	..	..	..	-	-	-	-	-	..
Nigeria	- 0.02	0.00	- 0.02	-	-	-	-	-	..
Senegal	-	-	-	-	0.09	0.18	0.23	0.24	0.26
South Africa	- 1.30	- 19.07	- 33.62	- 46.05	- 46.43	- 43.45	- 45.58	- 49.92	- 50.61
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	0.00	-	-	-	-	-	-	..
United Rep. of Tanzania	-	0.00	0.00	-	-	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.07	0.06	0.08	0.08	-	-	-	-	..
Zambia	0.00	-	- 0.04	- 0.00	- 0.01	-	-	-	..
Zimbabwe	- 0.09	- 0.16	- 0.01	- 0.13	- 0.10	- 0.10	- 0.12	- 0.13	0.02
Other Africa	0.05	0.06	0.02	0.11	0.11	0.22	0.38	0.39	0.30
<b>Africa</b>	<b>- 0.48</b>	<b>- 18.35</b>	<b>- 31.02</b>	<b>- 41.89</b>	<b>- 41.38</b>	<b>- 39.02</b>	<b>- 42.31</b>	<b>- 46.86</b>	<b>- 47.35</b>

A negative number shows net exports.

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Net imports of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.12	0.12	0.28	0.33	0.35	0.40	0.49	1.83	1.67
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	..	..	0.01	0.24	0.59	0.70
DPR of Korea	0.33	0.44	1.65	-0.09	-1.63	-2.76	-9.75	-11.96	-13.60
India	-0.26	0.32	4.13	14.22	25.19	69.33	126.46	118.52	108.75
Indonesia	0.00	-0.04	-2.30	-33.45	-76.10	-154.47	-226.94	-203.20	-204.33
Malaysia	0.01	0.05	1.40	1.92	6.57	13.01	13.59	15.89	18.04
Mongolia	..	..	-0.14	0.01	-1.43	-11.32	-13.35	-9.75	-17.37
Myanmar	0.04	0.14	0.03	-	-	-	-	-	0.16
Nepal	0.05	0.05	0.05	0.25	0.24	0.29	0.47	0.55	0.55
Pakistan	0.02	0.06	0.59	0.63	1.88	2.82	3.30	3.46	4.37
Philippines	0.01	0.35	0.88	4.45	4.31	4.23	5.97	8.50	7.34
Singapore	0.00	0.00	0.02	-	0.00	0.01	0.40	0.41	0.43
Sri Lanka	0.00	0.00	0.00	0.00	0.07	0.08	1.12	1.32	1.64
Chinese Taipei	0.10	3.12	12.23	28.99	38.60	41.35	40.46	40.22	40.43
Thailand	0.01	0.06	0.21	2.57	5.40	10.71	13.39	15.09	14.25
Viet Nam	-0.12	-0.35	-0.43	-1.82	-9.72	-10.55	-2.38	2.79	6.47
Other Asia	0.07	0.17	0.12	0.12	0.05	0.16	0.32	0.30	0.30
<b>Non-OECD Asia excl. China</b>	<b>0.38</b>	<b>4.50</b>	<b>18.71</b>	<b>18.13</b>	<b>-6.24</b>	<b>-36.72</b>	<b>-46.19</b>	<b>-15.44</b>	<b>-30.19</b>
People's Rep. of China	-2.11	-3.17	-11.04	-44.09	-40.35	84.26	145.34	99.15	130.49
Hong Kong, China	0.01	0.01	5.50	3.73	6.67	6.36	8.50	6.89	6.88
<b>China</b>	<b>-2.10</b>	<b>-3.16</b>	<b>-5.54</b>	<b>-40.36</b>	<b>-33.68</b>	<b>90.62</b>	<b>153.84</b>	<b>106.04</b>	<b>137.36</b>
Argentina	0.56	0.67	0.82	0.34	0.84	0.96	1.27	1.27	1.12
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	1.41	3.70	7.90	10.33	10.61	12.11	14.67	14.84	12.91
Colombia	-0.05	-0.96	-8.84	-23.12	-34.85	-45.11	-53.72	-51.50	-54.16
Costa Rica	0.00	0.00	-	0.00	0.04	0.06	0.08	0.08	..
Cuba	0.08	0.10	0.14	0.03	0.02	0.02	0.00	0.00	0.00
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	0.01	0.05	0.43	0.72	1.00	1.04	0.67
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	0.00	-	0.00	0.00	-	-	-	..
Guatemala	-	0.01	-	0.13	0.25	0.35	0.44	1.38	1.26
Haiti	-	-	0.01	-	-	-	-	-	..
Honduras	-	-	0.00	0.08	0.15	0.11	0.13	0.07	0.07
Jamaica	-	-	0.03	0.03	0.04	0.03	0.06	0.07	0.04
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	0.01	-	0.02	0.04	-	-	0.21	0.21	0.19
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.14	0.12	0.07	0.59	0.81	0.63	0.18	0.13	0.37
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Venezuela	0.24	0.13	-1.14	-5.79	-5.21	-1.79	-0.68	-0.47	-0.40
Other Non-OECD Americas	0.03	0.02	0.00	0.00	0.00	0.00	0.12	0.13	0.15
<b>Non-OECD Americas</b>	<b>2.43</b>	<b>3.80</b>	<b>-0.96</b>	<b>-17.29</b>	<b>-26.88</b>	<b>-31.90</b>	<b>-36.23</b>	<b>-32.75</b>	<b>-37.77</b>
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.03	0.58	0.15	0.66	0.64	0.76	0.25	0.35	0.08
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	0.36	0.17	0.20
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	0.01	0.00	-	0.13	0.13	0.15	0.17	0.17	0.17
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	..
United Arab Emirates	-	-	-	-	0.15	0.66	1.97	1.71	1.54
Yemen	-	-	-	-	-	0.10	0.11	0.08	0.09
<b>Middle East</b>	<b>0.04</b>	<b>0.58</b>	<b>0.15</b>	<b>0.80</b>	<b>0.92</b>	<b>1.68</b>	<b>2.87</b>	<b>2.49</b>	<b>2.09</b>

A negative number shows net exports.

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

## Net imports of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>- 84.38</b>	<b>- 24.54</b>	<b>- 0.89</b>	<b>- 24.58</b>	<b>- 48.53</b>	<b>71.05</b>	<b>- 8.79</b>	<b>- 50.65</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>-1 461.78</b>	<b>-1 253.05</b>	<b>-1 090.99</b>	<b>-1 270.95</b>	<b>-1 477.07</b>	<b>-1 183.67</b>	<b>- 964.50</b>	<b>-1 015.21</b>	<b>..</b>
<b>OECD Total</b>	<b>1 377.40</b>	<b>1 228.51</b>	<b>1 090.10</b>	<b>1 246.37</b>	<b>1 428.54</b>	<b>1 254.72</b>	<b>955.70</b>	<b>964.56</b>	<b>978.61</b>
Canada	- 14.49	8.44	- 14.86	- 39.04	- 43.61	- 67.57	- 119.37	- 131.42	- 127.17
Chile	3.50	3.40	5.89	11.05	12.61	15.37	15.82	15.77	15.86
Mexico	5.72	- 47.58	- 70.41	- 76.60	- 91.78	- 57.24	- 43.57	- 36.94	- 33.49
United States	303.36	340.08	374.40	549.54	659.40	508.20	277.65	267.38	279.05
<b>OECD Americas</b>	<b>298.09</b>	<b>304.33</b>	<b>295.03</b>	<b>444.96</b>	<b>536.61</b>	<b>398.76</b>	<b>130.53</b>	<b>114.79</b>	<b>134.24</b>
Australia	9.21	11.25	5.10	3.55	14.61	20.45	28.87	28.42	29.74
Israel <sup>1</sup>	2.44	8.47	9.01	12.25	10.24	11.71	9.66	10.60	9.91
Japan	273.08	251.70	263.22	269.93	257.61	211.74	197.37	193.98	187.40
Korea	13.22	27.28	51.72	109.50	102.49	108.80	109.32	116.94	125.13
New Zealand	4.56	4.26	2.35	4.46	6.02	4.48	5.56	5.63	6.46
<b>OECD Asia Oceania</b>	<b>302.52</b>	<b>302.97</b>	<b>331.40</b>	<b>399.70</b>	<b>390.98</b>	<b>357.18</b>	<b>350.78</b>	<b>355.56</b>	<b>358.64</b>
Austria	9.67	11.00	9.68	10.96	13.27	11.68	11.07	11.46	11.45
Belgium	31.46	26.41	22.26	29.56	32.78	32.82	29.37	31.36	30.31
Czech Republic	8.85	10.89	8.58	7.52	9.74	8.97	8.89	8.71	8.05
Denmark	18.57	13.24	2.75	- 8.49	- 9.41	- 3.78	- 0.74	0.39	0.29
Estonia	..	..	3.15	0.79	0.92	0.79	0.78	0.62	0.76
Finland	13.61	13.67	10.34	10.53	10.90	9.42	9.25	9.52	9.25
France	128.66	112.32	85.91	89.84	93.93	81.78	76.74	77.55	73.97
Germany	160.84	148.86	122.12	126.89	123.65	112.11	107.23	108.26	109.33
Greece	11.58	13.22	14.34	19.32	20.11	17.02	13.39	14.59	13.96
Hungary	6.47	8.31	6.43	5.21	5.99	5.78	5.79	6.59	6.54
Iceland	0.69	0.58	0.69	0.85	0.86	0.68	0.75	0.85	0.95
Ireland	5.45	5.83	5.06	8.15	8.79	7.66	6.58	7.43	7.40
Italy	98.34	92.76	85.14	87.96	78.55	66.80	50.08	52.43	51.98
Latvia	..	..	3.97	1.23	1.79	1.67	1.53	1.79	1.87
Luxembourg	1.65	1.10	1.62	2.38	3.16	2.86	2.70	2.63	2.63
Netherlands	41.73	38.15	33.54	43.36	49.58	45.98	41.70	44.86	43.23
Norway	6.58	- 14.70	- 72.83	- 157.13	- 123.77	- 85.83	- 76.58	- 79.48	- 83.73
Poland	11.76	17.74	14.31	19.83	21.89	25.67	21.75	24.08	25.19
Portugal	6.19	9.44	11.92	16.03	16.83	12.53	10.54	11.22	10.82
Slovak Republic	5.27	7.47	4.50	2.63	3.18	3.41	2.89	3.10	3.47
Slovenia	..	..	1.81	2.43	2.61	2.60	2.33	2.34	2.52
Spain	41.01	49.92	49.66	71.50	79.97	69.47	59.21	61.79	61.90
Sweden	28.60	25.91	15.28	15.73	17.47	15.51	14.25	13.04	13.80
Switzerland	15.01	13.40	13.19	12.11	12.84	11.74	11.01	10.59	10.52
Turkey	8.84	13.74	21.24	29.25	28.07	30.55	33.87	42.07	44.53
United Kingdom	115.95	1.93	- 11.00	- 46.72	- 2.74	10.89	30.01	26.42	24.73
<b>OECD Europe</b>	<b>776.78</b>	<b>621.21</b>	<b>463.67</b>	<b>401.72</b>	<b>500.95</b>	<b>498.78</b>	<b>474.39</b>	<b>494.21</b>	<b>485.73</b>
<i>IEA</i>	<i>1 365.05</i>	<i>1 263.64</i>	<i>1 139.14</i>	<i>1 295.16</i>	<i>1 492.22</i>	<i>1 279.93</i>	<i>969.18</i>	<i>970.16</i>	<i>980.98</i>
<i>IEA/Accession/Association</i>	<i>1 362.06</i>	<i>1 191.40</i>	<i>1 085.26</i>	<i>1 442.52</i>	<i>1 748.04</i>	<i>1 745.58</i>	<i>1 559.02</i>	<i>1 614.37</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>532.20</i>	<i>532.68</i>	<i>602.67</i>	<i>561.49</i>	<i>523.10</i>	<i>539.67</i>	<i>..</i>
<i>G7</i>	<i>1 065.74</i>	<i>956.08</i>	<i>904.94</i>	<i>1 038.41</i>	<i>1 166.79</i>	<i>923.95</i>	<i>619.71</i>	<i>594.59</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>643.68</i>	<i>846.20</i>	<i>831.86</i>	<i>567.62</i>	<i>282.53</i>	<i>236.83</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>599.28</i>	<i>989.10</i>	<i>1 017.45</i>	<i>1 054.26</i>	<i>819.18</i>	<i>827.97</i>	<i>..</i>
<i>OPEC</i>	<i>-1 463.85</i>	<i>-1 199.14</i>	<i>- 989.51</i>	<i>-1 302.31</i>	<i>-1 463.35</i>	<i>-1 330.10</i>	<i>-1 318.64</i>	<i>-1 378.95</i>	<i>..</i>

A negative number shows net exports. World shows the discrepancy between total exports and total imports.

1. Please refer to section 'Geographical coverage'.

## Net imports of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>-1 461.78</b>	<b>-1 253.05</b>	<b>-1 090.99</b>	<b>-1 270.95</b>	<b>-1 477.07</b>	<b>-1 183.67</b>	<b>- 964.50</b>	<b>-1 015.21</b>	..
Albania	- 1.32	- 0.44	0.01	0.74	1.06	0.58	0.30	0.07	..
Armenia	..	..	3.84	0.35	0.42	0.43	0.37	0.34	..
Azerbaijan	..	..	- 3.68	- 7.72	- 16.52	- 47.42	- 37.42	- 37.30	..
Belarus	..	..	27.37	5.90	5.88	5.31	6.90	5.30	..
Bosnia and Herzegovina	..	..	2.04	1.17	1.13	1.72	1.43	1.61	..
Bulgaria	11.27	13.40	8.64	4.12	5.23	4.22	4.15	4.59	..
Croatia	..	..	2.10	2.43	3.62	3.04	2.38	2.67	..
Cyprus <sup>1</sup>	0.85	0.97	1.57	2.53	2.77	2.89	2.25	2.40	..
FYR of Macedonia	..	..	1.10	0.94	0.94	0.93	0.90	0.99	..
Georgia	..	..	5.52	0.63	0.73	0.94	1.09	1.24	..
Gibraltar	1.25	1.34	1.77	2.74	4.09	4.30	3.76	3.85	..
Kazakhstan	..	..	- 4.97	- 27.67	- 54.69	- 70.07	- 70.83	- 67.69	..
Kosovo	..	..	..	0.33	0.45	0.54	0.55	0.68	..
Kyrgyzstan	..	..	2.88	0.33	0.59	1.21	1.46	1.75	..
Lithuania	..	..	7.23	2.20	2.66	2.72	2.42	2.87	..
Malta	0.34	0.42	0.61	1.45	1.63	2.36	2.04	2.13	..
Republic of Moldova	..	..	4.87	0.47	0.66	0.73	0.78	0.84	..
Montenegro	..	..	..	..	0.29	0.31	0.29	0.29	..
Romania	- 0.55	7.05	10.67	3.31	3.81	4.63	4.51	4.83	..
Russian Federation	..	..	- 261.26	- 192.21	- 334.92	- 356.33	- 337.19	- 357.76	..
Serbia	..	..	4.20	0.49	3.77	2.94	2.06	2.23	..
Tajikistan	..	..	1.64	0.17	0.27	0.51	0.94	0.93	..
Turkmenistan	..	..	1.41	- 3.40	- 4.82	- 4.27	- 5.80	- 6.06	..
Ukraine	..	..	54.24	8.50	9.58	9.81	7.49	8.01	..
Uzbekistan	..	..	7.30	- 0.40	- 0.29	- 0.23	- 0.19	- 0.18	..
Former Soviet Union	- 104.22	- 156.33	x	x	x	x	x	x	..
Former Yugoslavia	9.26	11.77	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>- 83.11</b>	<b>- 121.83</b>	<b>- 120.88</b>	<b>- 192.60</b>	<b>- 361.67</b>	<b>- 428.22</b>	<b>- 405.37</b>	<b>- 421.39</b>	..
Algeria	- 49.08	- 45.75	- 51.35	- 62.39	- 79.28	- 61.10	- 51.96	- 51.96	..
Angola	- 7.27	- 6.40	- 22.46	- 37.91	- 61.51	- 85.23	- 78.24	- 84.08	..
Benin	0.14	0.14	- 0.11	0.52	0.84	1.68	1.57	1.76	..
Botswana	..	..	0.34	0.59	0.69	0.89	1.03	1.02	..
Cameroon	0.33	- 2.96	- 6.08	- 4.78	- 3.55	- 1.63	- 1.90	- 2.85	..
Congo	- 1.28	- 3.16	- 7.89	- 13.76	- 12.55	- 15.68	- 12.67	- 12.38	..
Côte d'Ivoire	1.08	1.51	1.06	1.10	- 0.58	- 0.82	1.11	0.53	..
Dem. Rep. of the Congo	0.90	- 0.08	- 0.24	- 0.83	- 0.68	- 0.37	0.71	- 0.02	..
Egypt	- 1.87	- 17.64	- 21.52	- 10.43	- 2.27	- 1.27	6.54	4.92	..
Eritrea	..	..	..	0.21	0.23	0.16	0.19	0.20	..
Ethiopia	0.57	0.61	1.00	1.10	1.58	2.24	3.31	3.47	..
Gabon	- 7.14	- 8.21	- 12.16	- 13.49	- 12.85	- 12.37	- 10.05	- 10.61	..
Ghana	0.92	0.85	1.03	2.00	2.37	3.46	- 1.11	- 1.05	..
Kenya	1.75	2.19	2.14	3.45	3.17	4.19	4.32	5.01	..
Libya	- 109.39	- 87.37	- 60.60	- 58.73	- 75.00	- 72.76	- 11.08	- 9.35	..
Mauritius	0.13	0.28	0.40	0.94	1.09	1.11	1.21	1.32	..
Morocco	2.40	4.00	5.68	7.12	9.17	12.71	13.78	13.14	..
Mozambique	0.78	0.68	0.34	0.57	0.51	0.76	1.01	1.23	..
Namibia	..	..	..	0.67	0.84	1.07	1.26	1.34	..
Niger	..	..	..	0.18	0.20	0.40	- 0.17	- 0.08	..
Nigeria	- 101.01	- 95.52	- 79.40	- 105.64	- 117.14	- 116.61	- 98.85	- 95.94	..
Senegal	1.55	1.24	0.85	1.53	1.87	1.90	2.14	2.27	..
South Africa	13.01	15.13	11.31	13.41	15.70	22.81	24.27	26.32	..
South Sudan	..	..	..	..	..	..	- 7.36	- 7.14	..
Sudan	1.60	1.32	1.92	- 6.66	- 11.69	- 18.03	- 1.07	0.21	..
United Rep. of Tanzania	1.00	0.87	0.77	0.85	1.50	1.71	2.86	3.31	..
Togo	0.10	0.13	0.22	0.33	0.36	0.74	0.62	0.64	..
Tunisia	- 2.31	- 2.56	- 1.85	- 0.11	0.67	0.05	1.47	2.39	..
Zambia	0.95	0.74	0.77	0.52	0.70	0.67	0.93	1.11	..
Zimbabwe	0.71	0.68	0.81	1.08	0.70	0.62	1.30	1.28	..
Other Africa	3.75	4.46	4.98	- 0.03	- 20.36	- 12.47	- 10.52	- 10.43	..
<b>Africa</b>	<b>- 247.70</b>	<b>- 234.84</b>	<b>- 230.02</b>	<b>- 278.58</b>	<b>- 355.26</b>	<b>- 341.19</b>	<b>- 215.34</b>	<b>- 214.45</b>	..

A negative number shows net exports.

1. Please refer to section 'Geographical coverage'.

## Net imports of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.90	1.66	1.88	3.14	3.79	3.90	5.60	5.20	..
Brunei Darussalam	- 11.77	- 11.79	- 7.56	- 9.68	- 10.46	- 7.71	- 5.51	- 6.03	..
Cambodia	..	..	..	0.71	0.96	1.62	1.80	2.02	..
DPR of Korea	1.21	2.71	2.66	1.06	0.93	0.83	0.85	0.97	..
India	17.54	23.27	27.39	77.10	90.32	123.53	148.07	171.28	..
Indonesia	- 50.82	- 58.05	- 40.38	- 13.21	12.66	24.29	35.40	31.94	..
Malaysia	0.18	- 5.06	- 18.59	- 11.46	- 11.29	- 7.23	5.81	- 3.68	..
Mongolia	..	..	0.83	0.44	0.55	0.56	0.24	0.05	..
Myanmar	0.05	- 0.07	- 0.02	1.35	0.67	0.24	3.57	4.82	..
Nepal	0.07	0.12	0.26	0.77	0.79	1.06	1.45	1.26	..
Pakistan	3.18	4.68	8.65	16.63	13.79	17.83	20.70	20.23	..
Philippines	9.02	11.03	11.45	16.58	13.70	14.01	16.02	18.28	..
Singapore	12.24	8.00	24.50	39.71	44.63	62.15	64.08	67.30	..
Sri Lanka	1.68	1.65	1.70	3.83	4.18	4.01	4.81	4.66	..
Chinese Taipei	10.35	21.38	28.68	45.08	48.12	47.97	46.92	45.93	..
Thailand	8.28	12.16	17.59	27.51	34.70	31.99	36.34	36.74	..
Viet Nam	5.80	1.85	0.26	- 7.95	- 6.24	2.76	1.95	2.73	..
Other Asia	2.71	3.15	- 1.34	0.19	- 1.14	1.42	3.08	1.81	..
<b>Non-OECD Asia excl. China</b>	<b>10.61</b>	<b>16.70</b>	<b>57.98</b>	<b>191.82</b>	<b>240.64</b>	<b>323.23</b>	<b>391.16</b>	<b>405.51</b>	..
People's Rep. of China	- 1.84	- 17.44	- 24.15	74.68	143.52	252.86	319.92	344.97	..
Hong Kong, China	4.83	6.39	6.45	12.86	13.58	21.25	16.12	18.43	..
<b>China</b>	<b>2.99</b>	<b>- 11.06</b>	<b>- 17.70</b>	<b>87.54</b>	<b>157.10</b>	<b>274.11</b>	<b>336.03</b>	<b>363.40</b>	..
Argentina	3.84	1.32	- 4.12	- 16.89	- 13.26	- 1.72	3.08	2.98	..
Bolivia	- 1.74	- 0.05	- 0.19	- 0.13	- 0.41	0.36	0.20	0.47	..
Brazil	33.41	45.31	28.46	28.48	4.74	0.17	9.39	- 7.17	..
Colombia	- 2.88	1.32	- 12.42	- 23.31	- 15.15	- 26.79	- 33.09	- 37.99	..
Costa Rica	0.59	0.81	1.03	1.81	2.09	2.35	2.55	2.44	..
Cuba	7.09	9.67	10.06	5.92	5.17	7.97	6.64	7.11	..
Curaçao	8.02	8.27	3.14	4.15	4.28	4.38	3.61	3.67	..
Dominican Republic	1.68	2.12	3.09	6.53	5.77	5.58	5.22	5.82	..
Ecuador	- 9.15	- 6.31	- 10.08	- 13.68	- 17.60	- 13.63	- 15.41	- 14.61	..
El Salvador	0.69	0.62	0.79	1.84	2.00	2.03	2.12	2.30	..
Guatemala	1.04	1.35	1.16	1.86	2.66	2.67	3.95	3.76	..
Haiti	0.13	0.22	0.32	0.50	0.69	0.70	0.94	0.98	..
Honduras	0.40	0.56	0.73	1.40	2.04	2.27	2.52	2.30	..
Jamaica	2.93	2.18	2.48	3.58	3.53	2.41	2.59	2.69	..
Nicaragua	0.63	0.64	0.63	1.15	1.35	1.33	1.47	1.72	..
Panama	2.41	2.14	2.50	4.45	4.61	5.86	6.49	6.38	..
Paraguay	0.28	0.50	0.67	1.14	1.14	1.49	1.80	1.95	..
Peru	2.03	- 2.96	- 0.62	2.81	2.50	1.86	2.89	4.22	..
Suriname	..	..	..	- 0.11	- 0.05	- 0.18	- 0.27	- 0.30	..
Trinidad and Tobago	- 5.06	- 9.03	- 6.39	- 4.91	- 5.89	- 4.69	- 3.29	- 2.54	..
Uruguay	1.87	2.13	1.39	2.24	2.05	2.51	2.39	2.47	..
Venezuela	- 181.43	- 103.51	- 100.78	- 157.45	- 169.27	- 125.27	- 117.53	- 121.56	..
Other Non-OECD Americas	8.32	6.53	4.86	4.98	4.51	5.33	6.23	6.35	..
<b>Non-OECD Americas</b>	<b>- 124.90</b>	<b>- 36.15</b>	<b>- 73.29</b>	<b>- 143.64</b>	<b>- 172.51</b>	<b>- 123.00</b>	<b>- 105.50</b>	<b>- 126.58</b>	..
Bahrain	- 7.59	- 8.38	- 8.55	- 8.15	- 6.62	- 6.82	- 8.40	- 8.21	..
Islamic Republic of Iran	- 279.48	- 42.16	- 116.13	- 133.63	- 139.47	- 131.87	- 73.23	- 82.18	..
Iraq	- 97.64	- 125.45	- 88.21	- 108.25	- 70.74	- 86.70	- 112.34	- 138.75	..
Jordan	0.68	1.78	3.51	4.76	5.72	5.12	7.78	6.69	..
Kuwait	- 151.56	- 79.06	- 42.90	- 95.07	- 118.43	- 104.01	- 135.98	- 134.04	..
Lebanon	2.38	2.48	1.86	4.63	4.78	5.96	7.42	7.53	..
Oman	- 13.92	- 13.58	- 33.66	- 48.84	- 38.93	- 38.14	- 41.15	- 43.39	..
Qatar	- 28.11	- 23.21	- 20.54	- 38.06	- 46.13	- 65.12	- 73.93	- 69.49	..
Saudi Arabia	- 367.79	- 497.39	- 307.04	- 373.94	- 444.33	- 349.01	- 407.14	- 423.12	..
Syrian Arab Republic	- 3.11	- 4.05	- 11.14	- 17.81	- 6.98	- 4.90	5.46	5.52	..
United Arab Emirates	- 74.79	- 78.80	- 77.86	- 104.05	- 111.60	- 106.43	- 132.90	- 143.25	..
Yemen	1.27	1.94	- 6.42	- 17.07	- 12.64	- 6.68	- 1.07	0.98	..
<b>Middle East</b>	<b>- 1 019.67</b>	<b>- 865.87</b>	<b>- 707.08</b>	<b>- 935.49</b>	<b>- 985.38</b>	<b>- 888.60</b>	<b>- 965.48</b>	<b>- 1 021.71</b>	..

A negative number shows net exports.



## Net imports of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.85</b>	<b>- 7.12</b>	<b>1.43</b>	<b>- 5.30</b>	<b>- 15.80</b>	<b>2.48</b>	<b>- 14.08</b>	<b>- 14.77</b>	<b>- 11.25</b>
<b>Non-OECD Total</b>	<b>- 11.33</b>	<b>- 66.55</b>	<b>- 143.44</b>	<b>- 240.70</b>	<b>- 312.91</b>	<b>- 337.88</b>	<b>- 326.41</b>	<b>- 320.77</b>	<b>- 327.93</b>
<b>OECD Total</b>	<b>12.17</b>	<b>59.43</b>	<b>144.87</b>	<b>235.40</b>	<b>297.12</b>	<b>340.36</b>	<b>312.32</b>	<b>306.00</b>	<b>316.68</b>
Canada	- 22.77	- 18.37	- 32.51	- 81.33	- 79.55	- 60.36	- 47.35	- 49.69	- 51.67
Chile	-	-	-	3.67	5.27	3.01	2.91	3.13	3.37
Mexico	- 0.05	- 2.42	0.37	2.20	7.47	11.85	23.58	30.14	35.28
United States	22.11	21.68	33.18	82.18	84.16	60.75	27.58	22.45	16.41
<b>OECD Americas</b>	<b>- 0.71</b>	<b>0.89</b>	<b>1.04</b>	<b>6.73</b>	<b>17.35</b>	<b>15.24</b>	<b>6.73</b>	<b>6.04</b>	<b>3.39</b>
Australia	-	-	- 2.35	- 9.26	- 12.38	- 16.04	- 21.21	- 24.15	- 35.53
Israel <sup>1</sup>	-	-	-	-	-	1.73	0.10	0.13	0.29
Japan	2.78	19.53	42.33	63.49	67.78	82.79	104.25	97.65	99.19
Korea	-	-	2.68	17.07	26.10	39.28	44.00	38.93	39.62
New Zealand	-	-	-	-	-	-	-	-	-
<b>OECD Asia Oceania</b>	<b>2.78</b>	<b>19.53</b>	<b>42.67</b>	<b>71.29</b>	<b>81.50</b>	<b>107.76</b>	<b>127.14</b>	<b>112.57</b>	<b>103.57</b>
Austria	1.34	2.66	4.49	5.30	7.15	6.11	6.23	4.99	6.16
Belgium	7.11	8.89	8.21	13.27	14.81	16.79	12.83	13.87	14.35
Czech Republic	0.72	2.41	4.78	7.48	7.53	6.84	5.95	6.16	6.71
Denmark	-	-	- 0.93	- 2.88	- 5.01	- 3.02	- 1.31	- 1.38	- 1.28
Estonia	..	..	1.22	0.66	0.80	0.56	0.44	0.39	0.43
Finland	-	0.77	2.18	3.43	3.61	3.84	2.51	2.24	2.05
France	7.56	16.17	24.36	35.77	40.71	39.54	33.78	34.58	37.90
Germany	12.30	35.31	41.74	56.85	61.92	61.63	56.66	58.66	65.93
Greece	-	-	-	1.69	2.33	3.23	2.47	2.67	3.46
Hungary	0.15	3.19	5.17	7.28	9.80	7.72	6.82	5.22	6.33
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	2.48	3.01	4.48	3.59	3.62	1.70
Italy	1.64	11.76	25.30	46.99	59.82	61.58	45.46	49.98	53.28
Latvia	..	..	2.56	1.11	1.43	0.90	0.78	1.08	0.92
Luxembourg	0.22	0.42	0.43	0.67	1.18	1.20	0.84	0.77	0.71
Netherlands	- 25.25	- 38.47	- 23.79	- 17.19	- 20.93	- 24.20	- 21.22	- 9.37	- 10.63
Norway	-	- 21.90	- 22.17	- 42.13	- 70.95	- 87.46	- 90.02	- 96.73	- 96.76
Poland	1.39	4.30	6.77	6.61	8.53	8.87	9.64	9.94	11.47
Portugal	-	-	-	2.04	3.89	4.50	3.47	4.06	4.26
Slovak Republic	1.17	2.21	5.35	5.71	5.73	5.00	3.95	3.69	3.62
Slovenia	..	..	0.72	0.82	0.93	0.86	0.62	0.66	0.70
Spain	0.93	1.41	3.69	15.46	30.24	30.94	24.50	23.77	24.72
Sweden	-	-	0.58	0.78	0.84	1.47	0.79	0.72	0.82
Switzerland	0.15	0.87	1.63	2.43	2.78	3.01	2.67	2.85	3.00
Turkey	-	-	2.68	12.05	22.13	30.78	40.03	39.35	37.58
United Kingdom	0.67	9.00	6.18	- 9.31	5.97	32.20	26.98	25.59	32.30
<b>OECD Europe</b>	<b>10.10</b>	<b>39.01</b>	<b>101.17</b>	<b>157.38</b>	<b>198.26</b>	<b>217.36</b>	<b>178.45</b>	<b>187.39</b>	<b>209.72</b>
<i>IEA</i>	12.22	61.85	141.22	227.59	282.01	322.01	284.32	270.85	276.11
<i>IEA/Accession/Association</i>	12.17	49.41	115.28	199.71	275.18	337.52	361.29	361.69	387.26
<i>European Union - 28</i>	..	..	135.63	193.44	254.00	277.94	231.19	247.22	271.92
<i>G7</i>	24.29	95.08	140.59	194.65	240.81	278.12	247.36	239.22	253.34
<i>G8</i>	..	..	- 4.65	48.62	79.64	127.49	98.68	81.53	84.72
<i>G20</i>	..	..	12.28	97.63	182.17	279.92	315.65	310.14	317.54
<i>OPEC</i>	- 11.49	- 9.41	- 32.00	- 73.43	- 100.85	- 146.49	- 152.17	- 152.67	- 163.17

A negative number shows net exports. World shows the discrepancy between total exports and total imports.

1. Please refer to section 'Geographical coverage'.

## Net imports of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>- 11.33</b>	<b>- 66.55</b>	<b>- 143.44</b>	<b>- 240.70</b>	<b>- 312.91</b>	<b>- 337.88</b>	<b>- 326.41</b>	<b>- 320.77</b>	<b>- 327.93</b>
Albania	-	-	-	-	-	-	-	-	-
Armenia	..	..	3.59	1.12	1.34	1.37	1.88	1.79	1.54
Azerbaijan	..	..	6.50	0.24	3.79	- 5.19	- 6.79	- 6.84	- 6.75
Belarus	..	..	12.68	14.21	16.70	17.90	16.64	15.60	15.47
Bosnia and Herzegovina	..	..	0.40	0.20	0.30	0.20	0.15	0.18	0.17
Bulgaria	-	3.03	5.43	2.74	2.46	2.13	2.22	2.52	2.59
Croatia	..	..	0.58	0.90	0.56	0.48	0.58	0.56	0.61
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	-
FYR of Macedonia	..	..	-	0.05	0.06	0.10	0.11	0.11	0.17
Georgia	..	..	4.50	0.90	1.04	1.01	1.82	2.01	1.65
Gibraltar	-	-	-	-	-	-	-	-	-
Kazakhstan	..	..	4.92	- 0.83	- 3.52	- 2.28	- 5.31	- 5.77	- 7.97
Kosovo	..	..	..	-	-	-	-	-	-
Kyrgyzstan	..	..	1.45	0.55	0.60	0.23	0.20	0.20	0.20
Lithuania	..	..	4.68	2.06	2.49	2.48	2.15	2.06	1.85
Malta	-	-	-	-	-	-	-	-	-
Republic of Moldova	..	..	3.27	2.12	2.39	2.31	2.05	2.13	2.15
Montenegro	..	..	..	..	-	-	-	-	-
Romania	- 0.16	1.10	5.93	2.71	4.19	1.82	0.47	0.16	0.97
Russian Federation	..	..	- 145.24	- 146.02	- 161.18	- 150.63	- 148.68	- 157.70	- 168.62
Serbia	..	..	2.06	0.91	1.72	1.57	1.11	1.39	1.44
Tajikistan	..	..	1.30	0.60	0.51	0.14	-	-	-
Turkmenistan	..	..	- 56.52	- 27.30	- 37.05	- 19.55	- 44.67	- 46.81	- 42.88
Ukraine	..	..	73.46	47.25	48.25	29.55	15.72	13.29	8.81
Uzbekistan	..	..	- 0.52	- 4.26	- 9.20	- 11.72	- 11.97	- 13.10	- 14.88
Former Soviet Union	3.80	- 42.59	x	x	x	x	x	x	x
Former Yugoslavia	-	1.22	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>3.64</b>	<b>- 37.23</b>	<b>- 71.54</b>	<b>- 101.86</b>	<b>- 124.54</b>	<b>- 128.10</b>	<b>- 172.32</b>	<b>- 188.22</b>	<b>- 203.47</b>
Algeria	- 2.09	- 5.65	- 26.67	- 53.00	- 55.07	- 48.63	- 37.94	- 36.99	- 46.20
Angola	-	-	-	-	-	-	- 0.35	-	- 0.82
Benin	-	-	-	-	-	-	-	-	-
Botswana	..	..	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-
Congo	-	-	-	-	-	-	-	-	-
Côte d'Ivoire	-	-	-	-	-	-	-	-	-
Dem. Rep. of the Congo	-	-	-	-	-	0.02	0.00	0.00	0.00
Egypt	-	-	-	-	- 12.64	- 10.60	0.53	5.48	7.75
Eritrea	..	..	..	-	-	-	-	-	-
Ethiopia	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-
Ghana	-	-	-	-	-	0.35	0.51	0.60	0.60
Kenya	-	-	-	-	-	-	-	-	-
Libya	- 2.57	- 1.58	- 1.01	- 0.65	- 4.47	- 7.96	- 5.32	- 4.29	- 4.05
Mauritius	-	-	-	-	-	-	-	-	-
Morocco	-	-	-	-	0.34	0.52	0.92	0.95	0.97
Mozambique	-	-	-	-	- 1.85	- 2.61	- 3.07	- 3.33	- 3.33
Namibia	..	..	..	-	-	-	-	-	-
Niger	..	..	..	-	-	-	-	-	-
Nigeria	-	-	-	- 4.42	- 10.76	- 17.75	- 20.37	- 20.77	- 18.90
Senegal	-	-	-	-	-	-	-	-	-
South Africa	-	-	-	-	0.98	2.61	2.98	3.23	3.23
South Sudan	..	..	..	..	..	..	-	-	-
Sudan	-	-	-	-	-	-	-	-	-
United Rep. of Tanzania	-	-	-	-	-	-	-	-	-
Togo	-	-	-	-	-	-	-	-	-
Tunisia	-	-	0.90	0.85	1.10	2.01	2.69	2.54	2.79
Zambia	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-
Other Africa	-	-	-	-	0.00	- 4.21	- 3.91	- 4.09	- 4.09
<b>Africa</b>	<b>- 4.66</b>	<b>- 7.23</b>	<b>- 26.78</b>	<b>- 57.22</b>	<b>- 82.37</b>	<b>- 86.25</b>	<b>- 63.33</b>	<b>- 56.68</b>	<b>- 62.05</b>

A negative number shows net exports.

1. Please refer to section 'Geographical coverage'.

## Net imports of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	-
Brunei Darussalam	- 1.27	- 7.76	- 6.26	- 7.63	- 8.16	- 7.59	- 6.98	- 7.19	- 6.63
Cambodia	..	..	..	-	-	-	-	-	-
DPR of Korea	-	-	-	-	-	-	-	-	-
India	-	-	-	-	5.87	11.43	15.74	17.02	21.28
Indonesia	-	- 10.01	- 26.31	- 34.59	- 36.30	- 35.97	- 29.08	- 27.61	- 29.82
Malaysia	-	- 0.01	- 8.68	- 17.83	- 23.49	- 19.81	- 20.47	- 20.30	- 20.64
Mongolia	..	..	-	-	-	-	-	-	-
Myanmar	-	-	-	- 3.98	- 8.01	- 8.88	- 9.87	- 11.74	- 10.30
Nepal	-	-	-	-	-	-	-	-	-
Pakistan	-	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	1.12	5.57	7.21	9.28	9.32	9.70
Sri Lanka	-	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	0.76	5.17	8.35	12.94	14.32	15.34	15.99
Thailand	-	-	-	1.73	7.42	8.23	8.85	11.95	12.73
Viet Nam	-	-	-	-	- 1.30	-	-	-	-
Other Asia	- 2.05	- 2.12	-	-	-	- 4.72	- 5.92	- 7.26	- 7.55
<b>Non-OECD Asia excl. China</b>	<b>- 3.32</b>	<b>- 19.90</b>	<b>- 40.49</b>	<b>- 56.00</b>	<b>- 50.04</b>	<b>- 37.16</b>	<b>- 24.13</b>	<b>- 20.45</b>	<b>- 15.25</b>
People's Rep. of China	-	-	-	- 2.01	- 2.48	9.22	44.75	45.92	57.64
Hong Kong, China	-	-	-	2.45	2.19	3.13	2.08	2.65	2.72
<b>China</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.44</b>	<b>- 0.30</b>	<b>12.35</b>	<b>46.83</b>	<b>48.58</b>	<b>60.37</b>
Argentina	1.45	1.88	1.82	- 3.88	- 4.11	2.61	9.69	9.38	8.54
Bolivia	- 1.60	- 1.90	- 2.13	- 1.68	- 8.29	- 9.79	- 14.97	- 13.14	- 12.06
Brazil	-	-	-	1.84	7.49	10.53	16.09	15.33	9.77
Colombia	-	-	-	-	-	- 1.20	- 1.40	- 0.28	0.35
Costa Rica	-	-	-	-	-	-	-	-	-
Cuba	-	-	-	-	-	-	-	-	-
Curaçao	-	-	-	-	-	-	-	-	-
Dominican Republic	-	-	-	-	0.19	0.65	0.86	0.91	0.81
Ecuador	-	-	-	-	-	-	-	-	-
El Salvador	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-
Haiti	-	-	-	-	-	-	-	-	-
Honduras	-	-	-	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	0.01
Nicaragua	-	-	-	-	-	-	-	-	-
Panama	-	-	-	-	-	-	-	-	-
Paraguay	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	- 2.13	- 5.14	- 4.80	- 4.99
Suriname	..	..	..	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	- 3.62	- 11.79	- 17.47	- 16.26	- 14.65	- 12.90
Uruguay	-	-	-	0.03	0.09	0.06	0.04	0.05	0.05
Venezuela	-	-	-	-	-	1.68	0.73	0.31	- 0.13
Other Non-OECD Americas	-	-	-	0.28	0.57	0.64	0.64	0.65	0.69
<b>Non-OECD Americas</b>	<b>- 0.15</b>	<b>- 0.01</b>	<b>- 0.31</b>	<b>- 7.03</b>	<b>- 15.84</b>	<b>- 14.41</b>	<b>- 9.72</b>	<b>- 6.25</b>	<b>- 9.86</b>
Bahrain	-	-	-	-	-	-	-	-	-
Islamic Republic of Iran	- 6.83	-	- 1.64	2.78	0.37	0.43	- 1.84	- 0.42	- 1.86
Iraq	-	-	- 1.63	-	-	-	-	-	-
Jordan	-	-	-	-	1.20	2.15	0.20	1.84	2.67
Kuwait	-	-	1.63	-	-	2.28	2.70	3.27	3.66
Lebanon	-	-	-	-	-	0.21	-	-	-
Oman	-	-	-	- 3.67	- 10.48	- 8.86	- 7.45	- 7.04	- 7.28
Qatar	-	-	-	- 12.31	- 26.08	- 84.34	- 99.57	- 102.44	- 103.69
Saudi Arabia	-	-	-	-	-	-	-	-	-
Syrian Arab Republic	-	-	-	-	-	0.56	-	-	-
United Arab Emirates	-	- 2.18	- 2.68	- 5.82	- 4.84	7.81	9.78	8.68	8.83
Yemen	-	-	-	-	-	- 4.56	- 7.58	- 1.64	-
<b>Middle East</b>	<b>- 6.83</b>	<b>- 2.18</b>	<b>- 4.32</b>	<b>- 19.02</b>	<b>- 39.83</b>	<b>- 84.31</b>	<b>- 103.75</b>	<b>- 97.74</b>	<b>- 97.67</b>

A negative number shows net exports.

## Net imports of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>- 0.16</b>	<b>0.68</b>	<b>0.20</b>	<b>0.87</b>	<b>- 0.24</b>	<b>0.45</b>	<b>2.12</b>	<b>2.28</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>- 0.70</b>	<b>- 0.66</b>	<b>- 1.39</b>	<b>0.66</b>	<b>- 1.77</b>	<b>- 0.62</b>	<b>1.52</b>	<b>1.76</b>	<b>..</b>
<b>OECD Total</b>	<b>0.54</b>	<b>1.34</b>	<b>1.60</b>	<b>0.20</b>	<b>1.53</b>	<b>1.08</b>	<b>0.59</b>	<b>0.52</b>	<b>0.77</b>
Canada	- 1.21	- 2.34	- 0.03	- 3.07	- 2.03	- 2.15	- 3.92	- 5.12	- 5.54
Chile	0.00	-	-	0.10	0.19	0.08	-	-	-
Mexico	0.03	0.05	- 0.12	0.08	- 0.14	- 0.08	- 0.05	- 0.06	0.00
United States	1.23	2.30	0.17	2.92	2.13	2.23	4.58	5.73	6.10
<b>OECD Americas</b>	<b>0.05</b>	<b>0.01</b>	<b>0.02</b>	<b>0.03</b>	<b>0.13</b>	<b>0.08</b>	<b>0.61</b>	<b>0.56</b>	<b>0.57</b>
Australia	-	-	-	-	-	-	-	-	-
Israel <sup>1</sup>	- 0.00	- 0.01	- 0.04	- 0.13	- 0.14	- 0.34	- 0.42	- 0.45	- 0.45
Japan	-	-	-	-	-	-	-	-	-
Korea	-	-	-	-	-	-	-	-	-
New Zealand	-	-	-	-	-	-	-	-	-
<b>OECD Asia Oceania</b>	<b>- 0.00</b>	<b>- 0.01</b>	<b>- 0.04</b>	<b>- 0.13</b>	<b>- 0.14</b>	<b>- 0.34</b>	<b>- 0.42</b>	<b>- 0.45</b>	<b>- 0.45</b>
Austria	- 0.13	- 0.34	- 0.04	- 0.12	0.23	0.20	0.80	0.86	0.62
Belgium	- 0.06	- 0.23	- 0.32	0.37	0.54	0.05	1.51	1.81	0.53
Czech Republic	- 0.19	- 0.13	- 0.06	- 0.86	- 1.09	- 1.29	- 1.40	- 1.08	- 0.94
Denmark	- 0.02	- 0.11	0.61	0.06	0.12	- 0.10	0.25	0.51	0.43
Estonia	..	..	- 0.60	- 0.08	- 0.14	- 0.28	- 0.24	- 0.08	- 0.18
Finland	0.37	0.10	0.92	1.02	1.46	0.90	1.55	1.40	1.63
France	- 0.25	0.28	- 3.91	- 5.98	- 5.19	- 2.64	- 5.78	- 5.51	- 3.49
Germany	0.99	0.61	0.08	0.26	- 0.39	- 1.29	- 2.91	- 4.15	- 4.35
Greece	0.00	0.05	0.06	- 0.00	0.33	0.49	0.76	0.83	0.76
Hungary	0.40	0.64	0.96	0.30	0.54	0.45	1.15	1.18	1.09
Iceland	-	-	-	-	-	-	-	-	-
Ireland	0.00	-	-	0.01	0.18	0.04	0.18	0.06	- 0.06
Italy	0.08	0.52	2.98	3.81	4.23	3.80	3.76	3.99	3.18
Latvia	..	..	0.31	0.15	0.18	0.08	0.20	0.16	0.09
Luxembourg	0.18	0.24	0.34	0.49	0.28	0.35	0.42	0.48	0.54
Netherlands	- 0.12	- 0.03	0.79	1.63	1.57	0.24	1.27	0.75	0.42
Norway	- 0.45	- 0.04	- 1.37	- 1.64	- 1.04	0.65	- 1.34	- 1.26	- 1.41
Poland	- 0.15	- 0.02	- 0.09	- 0.55	- 0.96	- 0.12	0.19	- 0.03	0.17
Portugal	- 0.00	0.16	0.00	0.08	0.59	0.23	0.08	0.19	- 0.44
Slovak Republic	0.24	0.29	0.45	- 0.23	- 0.28	0.09	0.09	0.21	0.23
Slovenia	..	..	- 0.08	- 0.11	- 0.03	- 0.18	- 0.24	- 0.00	- 0.10
Spain	- 0.17	- 0.12	- 0.04	0.38	- 0.12	- 0.72	- 0.29	- 0.01	0.66
Sweden	0.06	0.05	- 0.15	0.40	- 0.64	0.18	- 1.34	- 1.94	- 1.01
Switzerland	- 0.30	- 0.70	- 0.18	- 0.61	0.55	0.04	- 0.47	- 0.09	0.34
Turkey	-	0.12	- 0.06	0.29	- 0.10	- 0.07	0.45	0.34	0.43
United Kingdom	0.01	0.00	1.03	1.22	0.72	0.23	1.76	1.80	1.51
<b>OECD Europe</b>	<b>0.49</b>	<b>1.35</b>	<b>1.61</b>	<b>0.30</b>	<b>1.54</b>	<b>1.33</b>	<b>0.40</b>	<b>0.41</b>	<b>0.65</b>
<i>IEA</i>	<i>0.51</i>	<i>1.30</i>	<i>1.53</i>	<i>0.11</i>	<i>1.48</i>	<i>1.52</i>	<i>1.09</i>	<i>0.87</i>	<i>1.23</i>
<i>IEA/Accession/Association</i>	<i>0.55</i>	<i>1.41</i>	<i>1.75</i>	<i>0.12</i>	<i>1.51</i>	<i>1.67</i>	<i>1.55</i>	<i>1.23</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>3.91</i>	<i>1.98</i>	<i>1.35</i>	<i>0.64</i>	<i>1.33</i>	<i>1.23</i>	<i>..</i>
<i>G7</i>	<i>0.85</i>	<i>1.37</i>	<i>0.32</i>	<i>- 0.83</i>	<i>- 0.55</i>	<i>0.18</i>	<i>- 2.51</i>	<i>- 3.26</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>- 0.39</i>	<i>- 2.04</i>	<i>- 1.61</i>	<i>- 1.32</i>	<i>- 3.21</i>	<i>- 4.26</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>5.52</i>	<i>6.14</i>	<i>3.79</i>	<i>2.62</i>	<i>5.07</i>	<i>4.56</i>	<i>..</i>
<i>OPEC</i>	<i>- 0.00</i>	<i>- 0.01</i>	<i>- 0.01</i>	<i>- 0.07</i>	<i>0.16</i>	<i>0.21</i>	<i>0.65</i>	<i>0.65</i>	<i>..</i>

A negative number shows net exports. World shows the discrepancy between total exports and total imports.

1. Please refer to section 'Geographical coverage'.

## Net imports of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>- 0.70</b>	<b>- 0.66</b>	<b>- 1.39</b>	<b>0.66</b>	<b>- 1.77</b>	<b>- 0.62</b>	<b>1.52</b>	<b>1.76</b>	<b>..</b>
Albania	- 0.02	- 0.04	0.02	0.09	0.03	- 0.08	0.26	0.12	..
Armenia	..	..	0.08	- 0.04	- 0.07	- 0.07	- 0.10	- 0.11	..
Azerbaijan	..	..	- 0.14	0.04	0.10	- 0.03	- 0.03	- 0.01	..
Belarus	..	..	0.81	0.62	0.35	0.23	0.29	0.23	..
Bosnia and Herzegovina	..	..	-	- 0.09	- 0.12	- 0.33	- 0.24	- 0.18	..
Bulgaria	0.28	0.33	0.33	- 0.40	- 0.65	- 0.73	- 0.81	- 0.91	..
Croatia	..	..	0.58	0.29	0.38	0.34	0.34	0.58	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	0.01	0.01	0.14	0.12	0.25	0.22	..
Georgia	..	..	0.28	0.02	0.12	- 0.11	0.02	0.00	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	1.49	0.26	- 0.01	0.10	- 0.10	0.00	..
Kosovo	..	..	..	0.03	0.02	0.04	0.04	0.01	..
Kyrgyzstan	..	..	- 0.38	- 0.24	- 0.23	- 0.15	0.02	0.05	..
Lithuania	..	..	- 1.03	- 0.11	- 0.26	0.52	0.66	0.62	..
Malta	-	-	-	-	-	-	-	0.09	..
Republic of Moldova	..	..	- 0.26	0.15	0.27	0.13	0.06	0.00	..
Montenegro	..	..	..	..	0.15	0.00	0.02	0.04	..
Romania	- 0.31	0.04	0.81	- 0.06	- 0.25	- 0.20	- 0.61	- 0.58	..
Russian Federation	..	..	- 0.71	- 1.21	- 1.06	- 1.50	- 0.69	- 1.00	- 1.25
Serbia	..	..	- 0.17	0.26	- 0.17	- 0.03	0.13	- 0.08	..
Tajikistan	..	..	0.10	0.11	0.02	0.01	- 0.12	- 0.11	..
Turkmenistan	..	..	- 0.43	- 0.07	- 0.11	- 0.21	- 0.28	- 0.28	..
Ukraine	..	..	- 2.45	- 0.33	- 0.72	- 0.35	- 0.73	- 0.12	..
Uzbekistan	..	..	- 0.19	0.11	0.01	0.01	0.01	- 0.09	..
Former Soviet Union	- 0.83	- 1.64	x	x	x	x	x	x	..
Former Yugoslavia	- 0.00	- 0.04	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>- 0.89</b>	<b>- 1.35</b>	<b>- 1.26</b>	<b>- 0.55</b>	<b>- 2.05</b>	<b>- 2.27</b>	<b>- 1.60</b>	<b>- 1.51</b>	<b>..</b>
Algeria	- 0.00	0.00	- 0.01	- 0.01	0.01	- 0.01	- 0.02	- 0.00	..
Angola	-	-	-	-	-	-	-	-	..
Benin	0.00	0.01	0.02	0.03	0.05	0.09	0.08	0.09	..
Botswana	..	..	0.01	0.08	0.16	0.26	0.14	0.13	..
Cameroon	-	-	-	-	-	-	0.13	0.12	..
Congo	0.00	0.00	0.00	0.02	0.04	0.02	- 0.00	- 0.00	..
Côte d'Ivoire	-	-	0.03	- 0.11	- 0.12	- 0.03	- 0.08	- 0.07	..
Dem. Rep. of the Congo	- 0.00	- 0.01	- 0.00	- 0.11	- 0.14	- 0.06	0.09	- 0.03	..
Egypt	-	-	-	- 0.01	- 0.07	- 0.12	- 0.06	- 0.10	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	- 0.06	- 0.01	..
Gabon	-	-	-	-	-	-	0.03	0.03	..
Ghana	- 0.01	- 0.04	- 0.07	0.04	0.02	- 0.08	- 0.04	- 0.03	..
Kenya	0.03	0.03	0.02	0.02	- 0.00	-	0.00	0.00	..
Libya	-	-	-	-	0.00	- 0.01	0.01	0.01	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	-	-	0.01	0.20	0.07	0.34	0.52	0.43	..
Mozambique	0.01	0.01	0.01	- 0.56	- 0.21	- 0.30	- 0.22	- 0.20	..
Namibia	..	..	..	0.06	0.14	0.21	0.24	0.22	..
Niger	..	..	..	0.02	0.03	0.05	0.06	0.07	..
Nigeria	-	- 0.01	-	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	- 0.02	0.78	- 0.11	1.06	- 0.20	- 0.21	- 0.23	- 0.13	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	0.00	0.00	0.00	0.01	0.01	..
Togo	0.00	0.01	0.02	0.03	0.04	0.06	0.09	0.11	..
Tunisia	-	-	- 0.00	0.00	- 0.00	0.00	- 0.01	- 0.01	..
Zambia	0.17	- 0.22	- 0.14	- 0.11	- 0.02	- 0.05	- 0.11	- 0.03	..
Zimbabwe	0.01	0.25	0.03	0.44	0.26	0.06	- 0.01	- 0.01	..
Other Africa	- 0.02	- 0.01	0.02	0.05	0.10	0.15	0.16	0.16	..
<b>Africa</b>	<b>0.18</b>	<b>0.81</b>	<b>- 0.17</b>	<b>1.15</b>	<b>0.16</b>	<b>0.36</b>	<b>0.75</b>	<b>0.73</b>	<b>..</b>

A negative number shows net exports.

1. Please refer to section 'Geographical coverage'.

## Net imports of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	0.00	0.12	0.16	0.13	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	-0.00	-0.00	0.12	0.11	0.13	0.48	0.05	0.01	..
Indonesia	-	-	-	-	-	0.00	0.00	0.00	..
Malaysia	-	0.01	-0.00	0.00	-0.19	-0.01	0.00	0.00	..
Mongolia	..	..	0.02	0.01	0.01	0.02	0.11	0.12	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	0.00	-0.00	0.01	0.01	0.06	0.12	0.15	..
Pakistan	-	-	-	-	0.01	0.02	0.04	0.04	..
Philippines	-	-	-	-	-	-	-	-	..
Singapore	-	-0.01	-	-	-	-	-	-	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	-	-	-	-	-	-	-	-	..
Thailand	0.01	0.07	0.05	0.24	0.32	0.49	0.92	1.04	..
Viet Nam	-	-	-	-	0.03	0.40	0.12	0.14	..
Other Asia	-0.01	-0.04	-0.16	-0.33	-0.31	-0.14	0.33	0.31	..
<b>Non-OECD Asia excl. China</b>	<b>-0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.04</b>	<b>0.03</b>	<b>1.43</b>	<b>1.85</b>	<b>1.94</b>	..
People's Rep. of China	-	-	0.16	-0.72	-0.53	-1.16	-0.98	-1.07	..
Hong Kong, China	-	-0.03	-0.15	0.78	0.56	0.73	0.78	0.91	..
<b>China</b>	<b>-</b>	<b>-0.03</b>	<b>0.00</b>	<b>0.06</b>	<b>0.03</b>	<b>-0.44</b>	<b>-0.20</b>	<b>-0.16</b>	..
Argentina	0.00	0.00	0.07	0.11	0.33	0.74	0.85	0.77	..
Bolivia	-	-	0.00	0.00	-	-	-	-	..
Brazil	-0.00	-0.02	2.28	3.81	3.36	2.98	2.90	2.96	..
Colombia	-	-	0.02	0.00	-0.15	-0.07	-0.07	-0.04	..
Costa Rica	-	-	0.01	-0.04	0.00	0.00	0.02	-0.01	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	-	-	-	..
Ecuador	-	-	-	-	0.15	0.07	0.07	0.04	..
El Salvador	-	-	0.00	0.06	0.02	0.01	0.03	0.08	..
Guatemala	-	-	-0.00	-0.06	-0.03	0.02	-0.04	-0.04	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	0.00	-0.03	0.02	0.00	0.00	0.03	0.01	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-0.00	0.01	0.01	0.00	-0.00	-0.00	0.00	..
Panama	0.00	0.00	0.01	0.01	-0.00	0.00	0.01	-0.01	..
Paraguay	-0.01	0.00	-2.15	-4.07	-3.77	-3.73	-3.56	-3.54	..
Peru	-	-	-	-	-	-0.01	-0.00	-0.00	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.00	-0.10	-0.22	0.05	0.07	-0.03	-0.11	-0.11	..
Venezuela	-	-	-	-0.00	-0.05	-	-	-0.08	..
Other Non-OECD Americas	-	-	0.00	0.01	0.02	0.01	0.02	0.02	..
<b>Non-OECD Americas</b>	<b>0.00</b>	<b>-0.11</b>	<b>0.00</b>	<b>-0.09</b>	<b>-0.04</b>	<b>0.00</b>	<b>0.14</b>	<b>0.04</b>	..
Bahrain	-	-	-	-	-	0.01	0.00	-0.00	..
Islamic Republic of Iran	-	-	-	-0.06	-0.06	-0.32	-0.51	-0.23	..
Iraq	-	-	-	-	0.11	0.47	1.05	0.89	..
Jordan	0.00	-	-	0.00	0.06	0.05	0.03	0.05	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	0.01	-	0.12	0.04	0.11	0.01	0.02	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-0.01	-	-	-0.06	-0.03	-0.01	-0.02	..
United Arab Emirates	-	-	-	-	-	-	0.01	0.00	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>0.09</b>	<b>0.29</b>	<b>0.59</b>	<b>0.71</b>	..

A negative number shows net exports.

## Total net imports of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>- 74.05</b>	<b>- 28.74</b>	<b>- 6.07</b>	<b>- 31.40</b>	<b>- 76.88</b>	<b>70.88</b>	<b>- 29.78</b>	<b>- 87.58</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>-1 475.01</b>	<b>-1 333.03</b>	<b>-1 265.16</b>	<b>-1 608.23</b>	<b>-1 942.44</b>	<b>-1 615.95</b>	<b>-1 347.89</b>	<b>-1 407.53</b>	<b>..</b>
<b>OECD Total</b>	<b>1 400.95</b>	<b>1 304.30</b>	<b>1 259.09</b>	<b>1 576.83</b>	<b>1 865.55</b>	<b>1 686.83</b>	<b>1 318.11</b>	<b>1 319.95</b>	<b>1 336.40</b>
Canada	- 35.64	- 12.32	- 59.31	- 127.69	- 129.66	- 141.48	- 185.59	- 199.17	- 198.11
Chile	3.70	4.03	7.03	17.74	20.49	22.30	22.79	23.99	25.17
Mexico	5.97	- 49.35	- 69.92	- 72.34	- 79.60	- 40.36	- 14.94	- 1.57	7.40
United States	296.38	307.04	341.89	606.35	736.08	533.38	258.11	257.74	271.24
<b>OECD Americas</b>	<b>270.41</b>	<b>249.40</b>	<b>219.68</b>	<b>424.07</b>	<b>547.31</b>	<b>373.84</b>	<b>80.38</b>	<b>80.98</b>	<b>105.70</b>
Australia	- 8.44	- 16.55	- 64.52	- 127.13	- 148.75	- 185.93	- 235.04	- 249.56	- 257.62
Israel <sup>1</sup>	2.44	8.46	11.40	18.17	17.82	20.48	15.92	16.87	15.01
Japan	316.76	318.78	377.62	429.17	435.82	409.55	420.11	409.09	403.28
Korea	13.56	30.75	70.15	165.73	175.55	221.05	232.84	237.01	246.22
New Zealand	4.54	4.22	2.12	3.35	4.92	2.91	4.56	4.87	5.83
<b>OECD Asia Oceania</b>	<b>328.86</b>	<b>345.65</b>	<b>396.77</b>	<b>489.29</b>	<b>485.37</b>	<b>468.05</b>	<b>438.39</b>	<b>418.27</b>	<b>412.72</b>
Austria	13.90	16.12	17.36	19.14	24.59	21.77	21.64	20.43	21.33
Belgium	43.06	42.25	39.76	50.63	53.66	53.92	47.55	50.81	48.88
Czech Republic	6.97	6.39	7.61	9.39	12.71	11.54	12.73	13.48	13.51
Denmark	20.42	19.19	8.65	- 7.47	- 10.46	- 3.45	2.09	2.27	2.61
Estonia	..	..	4.46	1.64	1.51	0.90	0.68	0.55	1.02
Finland	16.42	18.33	17.83	18.50	19.21	18.02	17.10	15.72	15.66
France	145.45	149.00	119.38	132.64	142.91	131.02	114.31	115.72	117.09
Germany	171.06	183.38	167.27	205.66	211.48	203.94	195.99	198.31	205.42
Greece	12.04	13.65	15.32	21.78	23.14	21.30	16.93	18.38	18.52
Hungary	8.65	14.34	14.16	13.87	17.64	15.11	14.23	13.58	14.47
Iceland	0.69	0.60	0.75	0.95	0.96	0.77	0.84	0.95	1.06
Ireland	5.96	6.64	7.05	12.32	13.87	13.17	11.66	12.66	10.31
Italy	107.79	116.80	127.26	152.43	159.75	148.46	115.06	121.47	121.80
Latvia	..	..	7.47	2.36	3.10	2.22	1.90	2.37	2.13
Luxembourg	4.49	3.62	3.50	3.66	4.69	4.52	4.08	4.02	4.03
Netherlands	17.90	3.37	19.20	35.63	38.73	31.32	30.51	47.47	41.22
Norway	6.72	- 35.84	- 95.69	- 200.29	- 196.15	- 172.88	- 168.07	- 177.31	- 181.39
Poland	- 13.18	1.47	0.87	9.58	16.40	32.11	27.90	28.83	31.03
Portugal	6.46	9.94	14.91	22.06	24.53	18.68	16.39	18.51	17.39
Slovak Republic	12.96	16.24	16.41	11.53	12.34	11.37	9.77	9.75	9.95
Slovenia	..	..	2.62	3.38	3.83	3.58	2.99	3.24	3.34
Spain	43.90	55.33	60.38	100.18	124.52	106.84	91.94	95.38	94.64
Sweden	30.34	27.64	18.34	19.32	20.22	19.70	16.30	14.61	16.79
Switzerland	15.08	14.08	14.98	14.12	16.27	14.94	13.36	13.57	14.08
Turkey	8.85	14.38	28.05	50.86	61.81	75.11	93.68	103.62	105.77
United Kingdom	115.75	12.33	4.73	- 40.36	31.63	60.93	87.79	72.31	67.34
<b>OECD Europe</b>	<b>801.68</b>	<b>709.25</b>	<b>642.65</b>	<b>663.47</b>	<b>832.88</b>	<b>844.94</b>	<b>799.33</b>	<b>820.69</b>	<b>817.98</b>
IEA	1 388.15	1 340.57	1 299.75	1 606.58	1 898.96	1 677.85	1 288.60	1 274.10	1 282.29
IEA/Accession/Association	1 383.26	1 254.34	1 213.28	1 672.81	2 072.50	2 180.19	2 026.53	2 053.81	..
European Union - 28	..	..	752.25	826.76	984.89	957.34	884.62	906.70	..
G7	1 117.55	1 075.00	1 078.85	1 358.21	1 588.00	1 345.81	1 005.78	975.45	..
G8	..	..	666.30	1 008.67	1 048.72	766.71	434.94	373.53	..
G20	..	..	611.26	1 078.30	1 175.91	1 322.88	1 117.89	1 082.37	..
OPEC	-1 474.79	-1 207.72	-1 021.81	-1 380.47	-1 567.82	-1 476.36	-1 468.38	-1 529.18	..

A negative number shows net exports. World shows the discrepancy between total exports and total imports.

1. Please refer to section 'Geographical coverage'.

## Total net imports of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>-1 475.01</b>	<b>-1 333.03</b>	<b>-1 265.16</b>	<b>-1 608.23</b>	<b>-1 942.44</b>	<b>-1 615.95</b>	<b>-1 347.89</b>	<b>-1 407.53</b>	..
Albania	- 1.27	- 0.38	0.17	0.83	1.09	0.61	0.67	0.27	..
Armenia	..	..	7.76	1.43	1.69	1.73	2.15	2.02	..
Azerbaijan	..	..	2.77	- 7.44	- 12.62	- 52.65	- 44.25	- 44.15	..
Belarus	..	..	42.24	21.13	22.97	23.39	24.31	21.45	..
Bosnia and Herzegovina	..	..	2.44	1.26	1.38	2.02	1.71	2.02	..
Bulgaria	15.26	21.03	17.85	8.72	9.56	7.27	6.43	6.92	..
Croatia	..	..	3.87	4.11	5.19	4.45	3.62	4.17	..
Cyprus <sup>1</sup>	0.85	0.97	1.64	2.56	2.82	2.92	2.28	2.44	..
FYR of Macedonia	..	..	1.21	1.10	1.25	1.27	1.39	1.41	..
Georgia	..	..	10.57	1.56	1.90	1.85	3.10	3.40	..
Gibraltar	1.25	1.34	1.77	2.74	4.09	4.30	3.76	3.85	..
Kazakhstan	..	..	- 16.62	- 42.85	- 68.18	- 85.43	- 89.01	- 86.51	..
Kosovo	..	..	..	0.42	0.55	0.61	0.60	0.69	..
Kyrgyzstan	..	..	5.07	0.94	1.39	1.78	2.21	2.58	..
Lithuania	..	..	11.63	4.22	5.06	5.78	5.36	5.65	..
Malta	0.34	0.42	0.80	1.45	1.63	2.36	2.05	2.23	..
Republic of Moldova	..	..	9.89	2.82	3.40	3.26	2.98	3.06	..
Montenegro	..	..	..	..	0.44	0.30	0.29	0.31	..
Romania	1.62	12.64	21.92	7.84	10.65	7.56	5.36	5.44	..
Russian Federation	..	..	- 412.55	- 349.54	- 539.28	- 579.10	- 570.84	- 601.92	..
Serbia	..	..	6.09	1.88	5.87	5.20	3.72	4.10	..
Tajikistan	..	..	3.30	0.89	0.81	0.66	0.82	0.82	..
Turkmenistan	..	..	- 55.23	- 30.76	- 41.97	- 24.02	- 50.74	- 53.13	..
Ukraine	..	..	120.92	57.62	59.74	41.90	27.48	30.13	..
Uzbekistan	..	..	7.72	- 4.22	- 9.45	- 11.92	- 12.17	- 13.38	..
Former Soviet Union	- 110.71	- 211.61	x	x	x	x	x	x	..
Former Yugoslavia	10.84	15.23	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>- 81.82</b>	<b>- 160.35</b>	<b>- 204.78</b>	<b>- 311.29</b>	<b>- 530.04</b>	<b>- 633.90</b>	<b>- 666.72</b>	<b>- 696.14</b>	..
Algeria	- 50.89	- 51.27	- 77.34	- 114.96	- 133.72	- 109.41	- 89.74	- 88.82	..
Angola	- 7.27	- 6.40	- 22.46	- 37.91	- 61.51	- 85.23	- 78.59	- 84.08	..
Benin	0.14	0.15	- 0.09	0.56	0.90	1.76	1.70	1.87	..
Botswana	..	..	0.36	0.72	0.87	1.11	1.06	1.00	..
Cameroon	0.33	- 2.96	- 6.08	- 4.78	- 3.55	- 1.63	- 1.77	- 2.73	..
Congo	- 1.28	- 3.16	- 7.89	- 13.74	- 12.51	- 15.66	- 12.67	- 12.38	..
Côte d'Ivoire	1.08	1.51	1.09	0.99	- 0.70	- 0.85	1.04	0.46	..
Dem. Rep. of the Congo	1.02	0.03	- 0.09	- 0.94	- 0.83	- 0.41	0.80	- 0.06	..
Egypt	- 1.63	- 17.16	- 20.76	- 9.67	- 14.21	- 11.57	7.38	10.64	..
Eritrea	..	..	..	0.21	0.23	0.16	0.19	0.20	..
Ethiopia	0.57	0.61	1.00	1.10	1.58	2.26	3.50	3.71	..
Gabon	- 7.14	- 8.21	- 12.16	- 13.49	- 12.85	- 12.37	- 10.01	- 10.58	..
Ghana	0.91	0.81	0.97	2.04	2.38	3.73	- 0.64	- 0.49	..
Kenya	1.82	2.23	2.25	3.54	3.26	4.35	4.65	5.36	..
Libya	- 111.96	- 88.96	- 61.61	- 59.38	- 79.46	- 80.73	- 16.39	- 13.64	..
Mauritius	0.13	0.28	0.44	1.08	1.33	1.51	1.69	1.82	..
Morocco	2.40	3.96	6.50	9.93	12.78	16.39	19.53	18.78	..
Mozambique	0.91	0.75	0.37	- 0.00	- 1.55	- 2.18	- 5.35	- 5.48	..
Namibia	..	..	..	0.69	0.92	1.16	1.39	1.45	..
Niger	..	..	..	0.20	0.23	0.45	- 0.11	- 0.01	..
Nigeria	- 101.03	- 95.53	- 79.42	- 110.06	- 127.90	- 134.36	- 119.22	- 116.71	..
Senegal	1.55	1.24	0.85	1.53	1.97	2.08	2.36	2.51	..
South Africa	11.69	- 3.19	- 22.59	- 31.81	- 30.21	- 18.51	- 18.84	- 20.80	..
South Sudan	..	..	..	..	..	..	- 7.36	- 7.14	..
Sudan	1.60	1.32	1.92	- 6.66	- 11.69	- 18.03	- 1.07	0.21	..
United Rep. of Tanzania	1.00	0.87	0.77	0.86	1.51	1.71	2.87	3.31	..
Togo	0.10	0.14	0.24	0.36	0.41	0.80	0.71	0.75	..
Tunisia	- 2.24	- 2.49	- 0.87	0.81	1.77	2.06	4.15	4.92	..
Zambia	1.13	0.52	0.59	0.41	0.67	0.62	0.83	1.08	..
Zimbabwe	0.63	0.76	0.83	1.39	0.86	0.59	1.17	1.14	..
Other Africa	3.77	4.51	5.02	0.12	- 20.15	- 16.31	- 13.89	- 13.97	..
<b>Africa</b>	<b>- 252.66</b>	<b>- 259.64</b>	<b>- 288.16</b>	<b>- 376.86</b>	<b>- 479.20</b>	<b>- 466.50</b>	<b>- 320.65</b>	<b>- 317.69</b>	..

A negative number shows net exports.

1. Please refer to section 'Geographical coverage'.



## Total net imports of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	1.02	1.79	2.16	3.47	4.14	4.30	6.10	7.03	..
Brunei Darussalam	- 13.04	- 19.55	- 13.82	- 17.30	- 18.62	- 15.30	- 12.49	- 13.21	..
Cambodia	..	..	..	0.71	0.96	1.75	2.19	2.74	..
DPR of Korea	1.54	3.15	4.31	0.96	- 0.70	- 1.93	- 8.90	- 11.00	..
India	17.28	23.59	31.64	91.43	121.51	204.77	290.32	306.84	..
Indonesia	- 50.84	- 68.14	- 69.04	- 81.30	- 99.86	- 166.75	- 222.18	- 199.32	..
Malaysia	0.18	- 5.00	- 25.86	- 27.38	- 28.44	- 14.14	- 1.18	- 8.30	..
Mongolia	..	..	0.70	0.47	- 0.87	- 10.74	- 13.00	- 9.58	..
Myanmar	0.09	0.07	0.01	- 2.63	- 7.34	- 8.65	- 6.30	- 6.92	..
Nepal	0.12	0.17	0.31	1.03	1.04	1.42	2.04	1.95	..
Pakistan	3.20	4.75	9.25	17.26	15.67	20.67	24.04	23.73	..
Philippines	9.02	11.38	12.33	21.03	18.01	18.31	22.18	26.96	..
Singapore	12.25	8.00	24.52	40.83	50.20	69.37	73.80	77.10	..
Sri Lanka	1.69	1.65	1.70	3.83	4.26	4.09	5.93	5.98	..
Chinese Taipei	10.45	24.50	41.67	79.23	95.07	102.26	101.70	101.49	..
Thailand	8.30	12.29	17.85	32.06	47.87	51.46	59.58	64.91	..
Viet Nam	5.67	1.50	- 0.17	- 9.77	- 17.22	- 7.40	- 0.30	5.65	..
Other Asia	0.73	1.17	- 1.38	0.01	- 1.40	- 3.22	- 2.15	- 4.79	..
<b>Non-OECD Asia excl. China</b>	<b>7.65</b>	<b>1.32</b>	<b>36.18</b>	<b>153.95</b>	<b>184.28</b>	<b>250.26</b>	<b>321.37</b>	<b>371.25</b>	..
People's Rep. of China	- 3.95	- 20.61	- 35.04	27.87	100.16	345.17	509.03	488.98	..
Hong Kong, China	4.85	6.38	11.81	19.82	23.00	31.47	27.48	28.89	..
<b>China</b>	<b>0.91</b>	<b>- 14.23</b>	<b>- 23.22</b>	<b>47.69</b>	<b>123.16</b>	<b>376.64</b>	<b>536.50</b>	<b>517.86</b>	..
Argentina	5.85	3.88	- 1.40	- 20.33	- 16.20	1.33	13.46	13.70	..
Bolivia	- 3.35	- 1.95	- 2.32	- 1.81	- 8.70	- 9.43	- 14.78	- 12.67	..
Brazil	34.78	48.80	39.24	44.38	24.96	24.85	42.80	25.28	..
Colombia	- 2.93	0.36	- 21.24	- 46.43	- 50.16	- 73.16	- 88.27	- 89.80	..
Costa Rica	0.59	0.81	1.04	1.76	2.13	2.42	2.65	2.51	..
Cuba	7.17	9.76	10.20	5.95	5.19	7.98	6.64	7.11	..
Curaçao	8.02	8.27	3.14	4.15	4.28	4.38	3.61	3.67	..
Dominican Republic	1.68	2.12	3.10	6.58	6.39	6.95	7.07	7.77	..
Ecuador	- 9.15	- 6.31	- 10.08	- 13.68	- 17.45	- 13.56	- 15.35	- 14.57	..
El Salvador	0.69	0.62	0.79	1.91	2.03	2.04	2.15	2.38	..
Guatemala	1.04	1.37	1.16	1.94	2.89	3.04	4.35	5.09	..
Haiti	0.13	0.22	0.32	0.50	0.69	0.70	0.94	0.98	..
Honduras	0.40	0.57	0.71	1.51	2.19	2.38	2.69	2.38	..
Jamaica	2.93	2.18	2.51	3.61	3.57	2.44	2.68	2.79	..
Nicaragua	0.63	0.64	0.64	1.16	1.35	1.32	1.47	1.73	..
Panama	2.42	2.14	2.53	4.50	4.61	5.86	6.71	6.58	..
Paraguay	0.27	0.50	- 1.48	- 2.93	- 2.63	- 2.38	- 1.85	- 1.66	..
Peru	2.16	- 2.84	- 0.55	3.40	3.31	0.42	- 1.73	- 0.15	..
Suriname	..	..	..	- 0.09	- 0.03	- 0.17	- 0.25	- 0.28	..
Trinidad and Tobago	- 5.06	- 9.03	- 6.39	- 8.54	- 17.69	- 22.16	- 19.55	- 17.20	..
Uruguay	1.90	2.03	1.18	2.32	2.21	2.55	2.33	2.41	..
Venezuela	- 181.20	- 103.39	- 101.92	- 163.25	- 174.53	- 125.39	- 117.48	- 121.81	..
Other Non-OECD Americas	8.35	6.55	4.87	5.27	5.10	5.99	7.02	7.14	..
<b>Non-OECD Americas</b>	<b>- 122.66</b>	<b>- 32.67</b>	<b>- 73.95</b>	<b>- 168.10</b>	<b>- 216.49</b>	<b>- 171.57</b>	<b>- 152.69</b>	<b>- 166.63</b>	..
Bahrain	- 7.59	- 8.38	- 8.55	- 8.15	- 6.62	- 6.81	- 8.40	- 8.21	..
Islamic Republic of Iran	- 286.28	- 41.58	- 117.61	- 130.25	- 138.52	- 131.00	- 75.32	- 82.48	..
Iraq	- 97.64	- 125.44	- 89.84	- 108.25	- 70.64	- 86.23	- 111.28	- 137.86	..
Jordan	0.69	1.78	3.51	4.77	6.99	7.33	8.37	8.75	..
Kuwait	- 151.54	- 79.06	- 41.27	- 95.07	- 118.43	- 101.73	- 133.28	- 130.77	..
Lebanon	2.39	2.49	1.86	4.88	4.96	6.43	7.61	7.73	..
Oman	- 13.92	- 13.58	- 33.66	- 52.51	- 49.41	- 47.00	- 48.60	- 50.43	..
Qatar	- 28.11	- 23.21	- 20.54	- 50.37	- 72.22	- 149.46	- 173.50	- 171.93	..
Saudi Arabia	- 367.79	- 497.39	- 307.03	- 373.94	- 444.32	- 349.01	- 407.13	- 423.11	..
Syrian Arab Republic	- 3.11	- 4.06	- 11.14	- 17.81	- 7.03	- 4.37	5.45	5.49	..
United Arab Emirates	- 74.79	- 80.98	- 80.54	- 109.86	- 116.27	- 97.91	- 121.09	- 132.81	..
Yemen	1.27	1.94	- 6.42	- 17.07	- 12.64	- 11.14	- 8.54	- 0.57	..
<b>Middle East</b>	<b>- 1 026.43</b>	<b>- 867.46</b>	<b>- 711.22</b>	<b>- 953.63</b>	<b>- 1 024.15</b>	<b>- 970.88</b>	<b>- 1 065.71</b>	<b>- 1 116.19</b>	..

A negative number shows net exports.

## Primary supply of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 496.19</b>	<b>1 782.71</b>	<b>2 219.52</b>	<b>2 310.85</b>	<b>2 993.20</b>	<b>3 654.43</b>	<b>3 926.79</b>	<b>3 836.09</b>	<b>3 753.82</b>
<b>Non-OECD Total</b>	<b>651.73</b>	<b>817.10</b>	<b>1 138.67</b>	<b>1 215.24</b>	<b>1 845.40</b>	<b>2 561.63</b>	<b>2 913.36</b>	<b>2 888.46</b>	<b>2 862.24</b>
<b>OECD Total</b>	<b>844.46</b>	<b>965.62</b>	<b>1 080.85</b>	<b>1 095.61</b>	<b>1 147.79</b>	<b>1 092.80</b>	<b>1 013.43</b>	<b>947.63</b>	<b>898.00</b>
Canada	15.26	20.55	24.28	31.68	28.90	23.21	19.94	18.42	16.25
Chile	1.20	1.22	2.50	3.07	2.70	4.46	6.61	7.17	7.62
Mexico	1.82	2.37	4.13	6.88	12.16	13.26	12.65	13.65	11.84
United States	311.05	376.23	460.25	533.64	558.32	502.59	431.71	374.12	345.44
<b>OECD Americas</b>	<b>329.33</b>	<b>400.37</b>	<b>491.15</b>	<b>575.27</b>	<b>602.08</b>	<b>543.52</b>	<b>470.91</b>	<b>413.36</b>	<b>381.16</b>
Australia	22.58	27.32	35.13	43.14	51.03	50.47	41.51	42.91	45.57
Israel <sup>1</sup>	0.00	0.00	2.29	6.47	7.41	7.41	6.56	6.62	5.52
Japan	57.86	59.56	76.46	97.16	110.05	115.12	118.46	117.46	116.53
Korea	8.14	13.53	25.38	41.95	49.66	73.45	81.70	80.84	83.09
New Zealand	1.13	1.02	1.18	1.11	2.19	1.31	1.40	1.37	1.21
<b>OECD Asia Oceania</b>	<b>89.72</b>	<b>101.43</b>	<b>140.45</b>	<b>189.83</b>	<b>220.34</b>	<b>247.76</b>	<b>249.63</b>	<b>249.20</b>	<b>251.91</b>
Austria	3.87	3.65	4.10	3.60	4.01	3.40	3.04	3.18	3.01
Belgium	11.18	11.39	10.57	8.02	5.17	3.79	3.32	3.20	2.97
Czech Republic	35.58	33.46	31.44	21.57	20.23	18.73	16.03	16.57	16.41
Denmark	1.93	5.88	6.09	3.99	3.71	3.81	2.41	1.73	1.97
Estonia	..	..	6.13	2.97	3.19	3.92	4.46	3.85	4.17
Finland	2.55	4.95	5.32	5.10	4.91	6.88	4.48	4.03	4.39
France	29.30	32.89	20.22	15.04	14.30	12.07	9.33	8.82	8.58
Germany	139.40	141.02	128.57	84.81	81.90	78.95	79.60	79.41	75.39
Greece	2.10	3.26	8.07	9.04	8.95	7.86	6.69	5.61	4.36
Hungary	7.91	8.42	6.23	3.85	3.04	2.72	2.21	2.36	2.18
Iceland	0.00	0.02	0.06	0.10	0.10	0.09	0.09	0.09	0.09
Ireland	1.59	1.91	3.40	2.60	2.66	1.93	1.99	2.19	2.06
Italy	8.10	11.68	14.63	12.56	16.47	13.67	13.08	12.36	10.89
Latvia	..	..	0.71	0.13	0.08	0.11	0.06	0.05	0.04
Luxembourg	2.44	1.82	1.11	0.11	0.08	0.07	0.05	0.05	0.05
Netherlands	2.87	3.79	8.17	7.77	8.09	7.54	9.01	10.93	10.27
Norway	0.91	1.01	0.86	1.05	0.78	0.76	0.85	0.82	0.76
Poland	74.70	99.80	78.87	56.30	54.67	54.66	49.31	48.33	49.55
Portugal	0.51	0.43	2.76	3.81	3.35	1.66	2.68	3.21	2.85
Slovak Republic	7.96	8.19	7.83	4.27	4.24	3.90	3.42	3.28	3.16
Slovenia	..	..	1.58	1.31	1.54	1.45	1.05	1.07	1.12
Spain	9.00	12.43	19.27	20.94	20.57	7.81	11.41	13.34	10.65
Sweden	1.63	1.70	2.96	2.45	2.63	2.49	2.10	2.12	2.06
Switzerland	0.33	0.33	0.36	0.14	0.15	0.15	0.14	0.13	0.11
Turkey	5.15	6.99	16.85	22.47	22.63	32.17	35.84	34.51	36.04
United Kingdom	76.43	68.80	63.11	36.52	37.92	30.94	30.25	23.86	11.80
<b>OECD Europe</b>	<b>425.41</b>	<b>463.82</b>	<b>449.25</b>	<b>330.51</b>	<b>325.37</b>	<b>301.52</b>	<b>292.89</b>	<b>285.07</b>	<b>264.93</b>
<i>IEA</i>	<i>841.44</i>	<i>962.01</i>	<i>1 069.59</i>	<i>1 077.65</i>	<i>1 123.81</i>	<i>1 066.02</i>	<i>986.41</i>	<i>918.98</i>	<i>871.77</i>
<i>IEA/Accession/Association</i>	<i>1 081.21</i>	<i>1 323.47</i>	<i>1 705.03</i>	<i>1 920.58</i>	<i>2 563.36</i>	<i>3 204.19</i>	<i>3 458.45</i>	<i>3 363.44</i>	<i>3 283.76</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>454.79</i>	<i>321.16</i>	<i>318.30</i>	<i>283.12</i>	<i>268.95</i>	<i>262.86</i>	<i>232.81</i>
<i>G7</i>	<i>637.39</i>	<i>710.73</i>	<i>787.52</i>	<i>811.40</i>	<i>847.86</i>	<i>776.55</i>	<i>702.37</i>	<i>634.45</i>	<i>584.89</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>978.57</i>	<i>931.37</i>	<i>960.49</i>	<i>877.48</i>	<i>806.31</i>	<i>750.85</i>	<i>696.73</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>1 994.82</i>	<i>2 139.73</i>	<i>2 786.15</i>	<i>3 417.89</i>	<i>3 676.60</i>	<i>3 585.36</i>	<i>3 496.22</i>
<i>OPEC</i>	<i>1.29</i>	<i>1.58</i>	<i>1.90</i>	<i>2.11</i>	<i>2.64</i>	<i>2.71</i>	<i>3.32</i>	<i>3.09</i>	<i>2.78</i>

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Primary supply of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>651.73</b>	<b>817.10</b>	<b>1 138.67</b>	<b>1 215.24</b>	<b>1 845.40</b>	<b>2 561.63</b>	<b>2 913.36</b>	<b>2 888.46</b>	<b>2 862.24</b>
Albania	0.35	0.61	0.63	0.02	0.01	0.11	0.09	0.10	0.05
Armenia	..	..	0.24	-	-	0.00	-	0.00	0.00
Azerbaijan	..	..	0.09	-	-	-	-	-	..
Belarus	..	..	2.38	0.97	0.61	0.56	0.84	0.76	0.38
Bosnia and Herzegovina	..	..	4.18	2.46	3.03	4.03	4.44	4.51	5.11
Bulgaria	8.34	9.39	8.89	6.40	6.91	6.90	6.39	6.60	5.64
Croatia	..	..	0.81	0.43	0.68	0.68	0.65	0.61	0.64
Cyprus <sup>1</sup>	-	-	0.06	0.03	0.04	0.02	0.00	0.00	0.00
FYR of Macedonia	..	..	1.33	1.34	1.40	1.30	1.08	0.96	0.88
Georgia	..	..	0.89	0.01	0.01	0.05	0.29	0.27	0.18
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	39.95	19.76	28.49	34.51	37.04	34.24	31.78
Kosovo	..	..	..	0.97	1.24	1.67	1.36	1.56	1.64
Kyrgyzstan	..	..	2.53	0.47	0.55	0.70	1.17	1.13	1.53
Lithuania	..	..	0.80	0.09	0.18	0.21	0.23	0.18	0.15
Malta	-	-	0.18	-	-	-	-	-	..
Republic of Moldova	..	..	2.00	0.08	0.08	0.10	0.09	0.10	0.07
Montenegro	..	..	..	..	0.29	0.42	0.36	0.38	0.30
Romania	8.68	12.56	12.93	7.45	8.76	6.95	5.71	5.95	4.83
Russian Federation	..	..	191.05	119.97	112.63	100.93	103.95	116.40	112.09
Serbia	..	..	10.17	8.64	8.07	7.83	6.25	7.76	7.47
Tajikistan	..	..	0.63	0.01	0.04	0.09	0.39	0.46	0.61
Turkmenistan	..	..	0.30	-	-	-	-	-	..
Ukraine	..	..	83.06	38.55	37.31	38.25	35.58	27.34	27.17
Uzbekistan	..	..	3.39	1.25	1.12	1.31	1.56	1.41	1.40
Former Soviet Union	321.16	327.61	x	x	x	x	x	x	x
Former Yugoslavia	9.31	11.96	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>347.84</b>	<b>362.12</b>	<b>366.50</b>	<b>208.90</b>	<b>211.47</b>	<b>206.63</b>	<b>207.46</b>	<b>210.71</b>	<b>201.65</b>
Algeria	0.24	0.13	0.69	0.52	0.77	0.34	0.15	0.14	0.01
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	0.04	0.03	0.07
Botswana	..	..	0.46	0.59	0.56	0.53	1.01	1.03	0.95
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	0.21	0.21	0.22	-	-	-	-	-	..
Egypt	0.28	0.54	0.76	0.83	0.80	0.44	0.39	0.35	0.16
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	0.03	0.25	0.25	0.27
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	0.04	0.01	0.09	0.07	0.09	0.17	0.33	0.35	0.34
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	0.03	0.16	0.22	0.41	0.46	0.44	0.43
Morocco	0.37	0.40	1.13	2.65	3.14	2.79	4.04	4.44	4.28
Mozambique	0.35	0.17	0.03	-	-	0.01	0.11	0.50	1.02
Namibia	..	..	..	0.00	0.01	0.01	-	0.00	0.00
Niger	..	..	..	0.04	0.05	0.08	0.08	0.07	0.08
Nigeria	0.18	0.10	0.04	0.00	0.00	0.02	0.03	0.03	0.03
Senegal	-	-	-	-	0.09	0.18	0.23	0.24	0.26
South Africa	33.84	47.68	66.54	81.78	91.94	100.47	102.03	96.34	94.80
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	0.00	-	-	-	-	-	-	..
United Rep. of Tanzania	-	0.00	0.00	0.05	0.02	-	0.15	0.16	0.17
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.07	0.06	0.08	0.08	-	-	-	-	..
Zambia	0.56	0.36	0.22	0.08	0.08	0.00	0.09	0.09	0.12
Zimbabwe	1.72	1.63	3.44	2.70	2.22	1.74	2.00	2.09	2.21
Other Africa	0.15	0.41	0.22	0.37	0.39	0.56	0.55	0.56	0.50
<b>Africa</b>	<b>38.01</b>	<b>51.71</b>	<b>73.96</b>	<b>89.90</b>	<b>100.41</b>	<b>107.76</b>	<b>111.95</b>	<b>107.12</b>	<b>105.71</b>

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Primary supply of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.12	0.12	0.28	0.33	0.42	0.81	0.93	2.27	2.18
Brunei Darussalam	-	-	-	-	-	-	-	-	-
Cambodia	..	..	..	..	..	0.01	0.24	0.59	0.70
DPR of Korea	17.84	25.88	28.26	16.81	18.23	11.74	6.54	4.91	7.95
India	31.51	44.31	92.70	145.92	184.22	279.03	377.94	378.91	384.84
Indonesia	0.08	0.16	3.55	12.01	22.13	31.84	37.24	41.04	42.58
Malaysia	0.01	0.05	1.36	2.31	6.89	14.60	15.27	17.52	19.56
Mongolia	..	..	2.49	1.82	2.25	2.91	3.78	3.44	3.70
Myanmar	0.05	0.15	0.07	0.32	0.34	0.41	0.41	0.44	0.50
Nepal	0.05	0.05	0.05	0.26	0.25	0.30	0.48	0.56	0.56
Pakistan	0.58	0.69	2.00	1.86	3.73	4.19	4.79	4.98	5.96
Philippines	0.02	0.51	1.53	5.16	5.83	7.63	11.64	12.64	13.19
Singapore	0.00	0.00	0.02	-	0.00	0.01	0.40	0.41	0.43
Sri Lanka	0.00	0.00	0.00	0.00	0.07	0.07	1.02	1.38	1.64
Chinese Taipei	2.28	3.88	11.36	29.91	38.13	41.43	40.85	39.68	40.43
Thailand	0.10	0.47	3.82	7.67	11.50	16.36	15.87	16.89	15.48
Viet Nam	1.55	2.27	2.22	4.37	8.26	14.65	19.91	24.95	28.51
Other Asia	0.97	1.85	0.19	0.34	0.42	1.10	1.40	1.33	1.41
<b>Non-OECD Asia excl. China</b>	<b>55.16</b>	<b>80.41</b>	<b>149.89</b>	<b>229.10</b>	<b>302.69</b>	<b>427.09</b>	<b>538.72</b>	<b>551.93</b>	<b>569.63</b>
People's Rep. of China	204.68	312.53	527.60	664.72	1 203.69	1 790.42	2 017.29	1 981.95	1 951.28
Hong Kong, China	0.01	0.01	5.50	3.73	6.67	6.36	8.50	6.89	6.88
<b>China</b>	<b>204.69</b>	<b>312.53</b>	<b>533.10</b>	<b>668.45</b>	<b>1 210.36</b>	<b>1 796.78</b>	<b>2 025.79</b>	<b>1 988.84</b>	<b>1 958.16</b>
Argentina	0.70	0.96	0.94	0.51	0.84	0.99	1.39	1.38	1.27
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	2.31	5.93	9.67	13.01	12.99	14.47	17.50	17.67	15.15
Colombia	1.85	1.79	3.08	2.63	2.70	3.22	3.86	4.11	4.67
Costa Rica	0.00	0.00	-	0.00	0.04	0.06	0.08	0.08	..
Cuba	0.08	0.10	0.14	0.03	0.02	0.02	0.00	0.00	0.00
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	0.01	0.05	0.48	0.67	1.02	1.04	0.67
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	0.00	-	0.00	0.00	-	-	-	..
Guatemala	-	0.01	-	0.13	0.25	0.30	0.44	0.94	1.11
Haiti	-	-	0.01	-	-	-	-	-	..
Honduras	-	-	0.00	0.08	0.15	0.11	0.13	0.07	0.07
Jamaica	-	-	0.03	0.03	0.04	0.03	0.05	0.06	0.04
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	0.01	-	0.02	0.04	-	-	0.21	0.21	0.19
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.15	0.14	0.15	0.63	0.96	0.87	0.84	0.81	0.56
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Venezuela	0.27	0.16	0.46	0.13	0.04	0.20	0.20	0.14	0.29
Other Non-OECD Americas	0.03	0.02	0.00	0.00	0.01	0.00	0.13	0.13	0.15
<b>Non-OECD Americas</b>	<b>5.42</b>	<b>9.11</b>	<b>14.51</b>	<b>17.29</b>	<b>18.50</b>	<b>20.96</b>	<b>25.86</b>	<b>26.64</b>	<b>24.19</b>
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.60	1.20	0.71	1.46	1.68	1.49	0.97	1.07	0.90
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	0.36	0.17	0.20
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	0.01	0.00	-	0.13	0.13	0.15	0.17	0.17	0.17
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	..
United Arab Emirates	-	-	-	-	0.15	0.66	1.97	1.71	1.54
Yemen	-	-	-	-	-	0.10	0.11	0.08	0.09
<b>Middle East</b>	<b>0.61</b>	<b>1.20</b>	<b>0.71</b>	<b>1.59</b>	<b>1.96</b>	<b>2.40</b>	<b>3.58</b>	<b>3.21</b>	<b>2.90</b>

Where applicable, includes quantities of peat and oil shale except for 2015 provisional figures for non-OECD countries.

## Primary supply of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>2 817.82</b>	<b>3 101.99</b>	<b>3 235.00</b>	<b>3 660.19</b>	<b>4 004.98</b>	<b>4 141.91</b>	<b>4 281.41</b>	<b>4 334.28</b>	..
<b>Non-OECD Total</b>	<b>666.17</b>	<b>977.93</b>	<b>1 157.16</b>	<b>1 269.66</b>	<b>1 494.98</b>	<b>1 810.74</b>	<b>2 039.42</b>	<b>2 058.33</b>	..
<b>OECD Total</b>	<b>1 967.47</b>	<b>1 945.54</b>	<b>1 875.55</b>	<b>2 116.59</b>	<b>2 191.06</b>	<b>1 972.38</b>	<b>1 878.29</b>	<b>1 894.33</b>	<b>1 893.95</b>
Canada	79.39	88.52	76.51	87.10	95.28	97.79	97.21	94.33	97.16
Chile	4.97	5.07	6.47	10.48	11.56	15.01	15.40	15.29	15.43
Mexico	32.47	64.45	80.79	89.33	102.03	94.43	96.58	90.63	86.86
United States	817.49	796.93	756.84	871.15	929.18	805.61	782.28	793.95	790.69
<b>OECD Americas</b>	<b>934.32</b>	<b>954.97</b>	<b>920.62</b>	<b>1 058.05</b>	<b>1 138.05</b>	<b>1 012.84</b>	<b>991.46</b>	<b>994.21</b>	<b>990.15</b>
Australia	26.58	30.07	31.20	34.15	36.91	41.61	43.75	41.89	42.34
Israel <sup>1</sup>	7.72	7.70	8.83	11.27	9.13	10.57	8.57	9.44	8.85
Japan	248.93	233.68	250.31	255.09	243.07	202.30	190.86	184.86	178.60
Korea	13.31	26.65	49.73	99.04	92.49	95.11	96.34	102.68	109.94
New Zealand	4.17	4.01	3.51	5.71	6.12	6.18	6.52	6.77	6.75
<b>OECD Asia Oceania</b>	<b>300.71</b>	<b>302.12</b>	<b>343.58</b>	<b>405.26</b>	<b>387.72</b>	<b>355.78</b>	<b>346.04</b>	<b>345.64</b>	<b>346.48</b>
Austria	12.11	12.08	10.35	11.71	13.80	12.29	11.43	11.49	11.68
Belgium	27.69	23.34	17.61	22.70	23.61	23.41	22.34	22.95	22.65
Czech Republic	8.66	10.84	8.73	7.72	9.67	8.97	8.81	8.60	7.95
Denmark	16.72	12.72	7.65	8.02	7.42	7.02	5.77	5.82	5.89
Estonia	..	..	2.84	0.65	0.77	0.57	0.41	0.29	0.43
Finland	13.26	12.60	9.46	9.09	10.06	9.45	8.75	7.87	8.74
France	119.81	106.32	84.03	82.22	86.33	75.58	70.25	71.00	68.33
Germany	158.70	143.86	121.44	124.81	116.27	104.33	100.66	100.88	101.23
Greece	9.06	10.92	12.07	14.88	16.95	13.85	10.74	11.21	11.45
Hungary	8.15	10.79	8.35	6.63	7.01	6.55	6.39	6.85	6.98
Iceland	0.58	0.58	0.59	0.61	0.64	0.53	0.55	0.56	0.57
Ireland	5.26	5.52	4.47	7.52	7.90	7.04	5.83	6.13	6.43
Italy	90.30	88.23	83.32	86.85	80.25	65.30	51.58	53.56	49.85
Latvia	..	..	3.41	1.26	1.42	1.40	1.32	1.37	1.26
Luxembourg	1.60	1.04	1.48	2.01	2.74	2.45	2.28	2.19	2.14
Netherlands	30.46	28.86	25.61	28.07	32.37	31.48	28.49	27.72	28.77
Norway	7.56	8.74	8.13	9.02	9.90	12.86	9.97	10.90	9.13
Poland	10.68	16.65	13.04	19.16	21.55	25.40	21.99	23.32	25.63
Portugal	5.12	8.00	10.74	14.83	15.16	11.51	9.26	9.37	9.36
Slovak Republic	5.39	7.49	4.49	2.82	3.46	3.62	3.00	3.27	3.57
Slovenia	..	..	1.73	2.37	2.53	2.57	2.31	2.27	2.38
Spain	37.60	49.77	45.47	62.10	68.07	58.16	46.87	49.26	49.91
Sweden	27.91	22.64	14.30	13.57	14.27	13.92	11.61	9.85	11.44
Switzerland	14.45	12.51	12.26	11.02	11.46	10.35	9.40	9.34	8.75
Turkey	12.48	15.62	23.40	30.40	28.74	31.50	32.80	38.71	42.28
United Kingdom	108.90	79.34	76.37	73.22	72.92	63.65	57.99	59.72	60.54
<b>OECD Europe</b>	<b>732.44</b>	<b>688.46</b>	<b>611.35</b>	<b>653.28</b>	<b>665.29</b>	<b>603.76</b>	<b>540.79</b>	<b>554.49</b>	<b>557.32</b>
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.17	204.68	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>1 921.74</i>	<i>1 867.75</i>	<i>1 773.73</i>	<i>2 001.28</i>	<i>2 063.74</i>	<i>1 847.87</i>	<i>1 753.56</i>	<i>1 774.77</i>	<i>1 778.59</i>
<i>IEA/Accession/Association</i>	<i>2 059.61</i>	<i>2 099.15</i>	<i>2 108.96</i>	<i>2 547.82</i>	<i>2 753.35</i>	<i>2 692.71</i>	<i>2 712.16</i>	<i>2 772.50</i>	..
<i>European Union - 28</i>	..	..	<i>607.71</i>	<i>624.64</i>	<i>639.15</i>	<i>570.32</i>	<i>508.00</i>	<i>515.98</i>	..
<i>G7</i>	<i>1 623.51</i>	<i>1 536.88</i>	<i>1 448.83</i>	<i>1 580.44</i>	<i>1 623.30</i>	<i>1 414.56</i>	<i>1 350.83</i>	<i>1 358.30</i>	..
<i>G8</i>	..	..	<i>1 712.61</i>	<i>1 706.55</i>	<i>1 752.50</i>	<i>1 553.64</i>	<i>1 517.04</i>	<i>1 515.04</i>	..
<i>G20</i>	..	..	<i>2 485.52</i>	<i>2 801.71</i>	<i>3 010.74</i>	<i>3 023.63</i>	<i>3 103.41</i>	<i>3 157.18</i>	..
<i>OPEC</i>	<i>47.18</i>	<i>114.06</i>	<i>170.03</i>	<i>241.30</i>	<i>291.48</i>	<i>378.55</i>	<i>411.57</i>	<i>399.01</i>	..

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Primary supply of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>666.17</b>	<b>977.93</b>	<b>1 157.16</b>	<b>1 269.66</b>	<b>1 494.98</b>	<b>1 810.74</b>	<b>2 039.42</b>	<b>2 058.33</b>	..
Albania	0.79	1.56	1.21	1.03	1.42	1.22	1.32	1.19	..
Armenia	..	..	3.64	0.29	0.37	0.38	0.32	0.31	..
Azerbaijan	..	..	8.09	6.28	4.94	3.38	4.44	4.49	..
Belarus	..	..	29.56	7.89	7.71	7.08	8.19	7.01	..
Bosnia and Herzegovina	..	..	2.02	1.16	1.13	1.71	1.47	1.53	..
Bulgaria	11.26	13.37	9.46	4.14	4.80	3.87	3.94	4.24	..
Croatia	..	..	4.67	3.89	4.46	3.66	3.02	3.16	..
Cyprus <sup>1</sup>	0.77	0.86	1.29	2.06	2.13	2.31	1.83	1.85	..
FYR of Macedonia	..	..	1.10	0.94	0.91	0.94	0.89	0.97	..
Georgia	..	..	5.58	0.73	0.76	0.96	1.05	1.20	..
Gibraltar	0.03	0.03	0.06	0.13	0.15	0.17	0.20	0.21	..
Kazakhstan	..	..	20.58	8.36	9.25	11.46	13.05	15.51	..
Kosovo	..	..	..	0.33	0.45	0.53	0.55	0.67	..
Kyrgyzstan	..	..	2.95	0.41	0.53	0.99	1.52	1.62	..
Lithuania	..	..	6.71	2.04	2.65	2.56	2.50	2.69	..
Malta	0.26	0.32	0.51	0.68	0.88	0.83	0.76	0.53	..
Republic of Moldova	..	..	4.79	0.43	0.66	0.76	0.78	0.81	..
Montenegro	..	..	..	..	0.28	0.31	0.26	0.28	..
Romania	13.30	18.22	18.10	9.60	9.70	8.57	7.89	8.53	..
Russian Federation	..	..	263.78	126.11	129.20	139.08	166.21	156.74	..
Serbia	..	..	5.15	1.46	4.38	3.89	3.26	3.40	..
Tajikistan	..	..	1.77	0.19	0.28	0.50	0.90	0.90	..
Turkmenistan	..	..	5.34	4.04	5.03	5.55	6.51	6.55	..
Ukraine	..	..	58.47	11.94	14.38	13.18	10.69	10.55	..
Uzbekistan	..	..	10.11	7.34	5.31	3.74	2.78	2.70	..
Former Soviet Union	298.98	414.32	x	x	x	x	x	x	..
Former Yugoslavia	10.38	15.74	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>335.76</b>	<b>464.41</b>	<b>464.93</b>	<b>201.46</b>	<b>211.75</b>	<b>217.65</b>	<b>244.34</b>	<b>237.62</b>	..
Algeria	2.97	5.22	9.32	9.59	11.00	16.37	19.25	19.44	..
Angola	0.78	0.85	1.06	1.35	1.75	4.63	6.83	6.59	..
Benin	0.14	0.13	0.08	0.51	0.78	1.52	1.53	1.72	..
Botswana	..	..	0.33	0.58	0.68	0.87	1.01	1.00	..
Cameroon	0.26	0.57	0.93	1.03	1.08	1.91	1.83	1.92	..
Congo	0.20	0.23	0.27	0.19	0.34	0.62	0.87	0.85	..
Côte d'Ivoire	0.93	1.23	1.03	1.25	1.19	1.03	2.02	1.86	..
Dem. Rep. of the Congo	0.68	0.68	1.10	0.28	0.42	0.59	1.54	0.90	..
Egypt	6.53	11.33	22.85	22.85	28.38	34.28	41.40	39.33	..
Eritrea	..	..	..	0.20	0.26	0.16	0.19	0.20	..
Ethiopia	0.47	0.50	0.81	1.09	1.51	1.92	2.93	3.04	..
Gabon	0.54	0.75	0.29	0.37	0.49	0.69	0.87	0.85	..
Ghana	0.75	0.76	0.96	1.78	2.21	3.49	4.05	4.54	..
Kenya	1.14	1.49	1.82	2.49	2.38	3.62	3.78	4.36	..
Libya	1.65	4.29	6.99	11.54	12.86	14.87	12.86	11.91	..
Mauritius	0.11	0.18	0.34	0.59	0.67	0.66	0.73	0.75	..
Morocco	2.31	4.02	5.34	6.85	8.99	11.52	11.75	11.76	..
Mozambique	0.54	0.57	0.29	0.48	0.49	0.72	0.96	1.16	..
Namibia	..	..	..	0.63	0.83	1.03	1.20	1.28	..
Niger	..	..	..	0.17	0.19	0.39	0.64	0.62	..
Nigeria	2.55	7.93	10.32	10.11	13.79	12.83	11.13	12.38	..
Senegal	0.48	0.68	0.72	1.21	1.43	1.57	1.81	1.92	..
South Africa	10.14	10.53	10.32	8.69	17.08	19.40	20.46	22.03	..
South Sudan	..	..	..	..	..	..	0.52	0.36	..
Sudan	1.45	1.28	1.85	2.34	3.49	5.18	4.76	5.26	..
United Rep. of Tanzania	0.78	0.72	0.67	0.77	1.38	1.55	2.66	3.09	..
Togo	0.10	0.13	0.19	0.31	0.33	0.69	0.59	0.62	..
Tunisia	1.27	2.35	2.99	3.55	4.09	3.93	4.07	4.64	..
Zambia	0.67	0.66	0.62	0.48	0.66	0.64	1.04	1.07	..
Zimbabwe	0.66	0.60	0.73	1.01	0.69	0.61	1.29	1.25	..
Other Africa	2.62	3.45	4.25	5.20	5.98	7.34	9.03	9.24	..
<b>Africa</b>	<b>40.72</b>	<b>61.12</b>	<b>86.47</b>	<b>97.48</b>	<b>125.44</b>	<b>154.64</b>	<b>173.59</b>	<b>175.96</b>	..

1. Please refer to section 'Geographical coverage'.

## Primary supply of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.92	1.53	1.79	3.20	3.53	3.63	5.14	4.96	..
Brunei Darussalam	0.06	0.18	0.05	0.53	0.38	0.56	0.60	0.58	..
Cambodia	..	..	..	0.69	0.93	1.58	1.71	1.93	..
DPR of Korea	1.21	2.71	2.66	1.02	0.93	0.83	0.85	0.97	..
India	24.28	33.20	61.10	111.99	124.59	161.59	185.66	206.19	..
Indonesia	10.73	20.23	33.35	57.87	65.45	71.79	75.21	71.21	..
Malaysia	4.40	7.88	11.48	19.40	24.89	25.32	33.06	27.65	..
Mongolia	..	..	0.82	0.43	0.56	0.83	1.23	1.23	..
Myanmar	1.05	1.34	0.73	1.97	1.76	1.28	4.34	5.44	..
Nepal	0.07	0.11	0.24	0.71	0.72	0.98	1.33	1.15	..
Pakistan	3.15	4.27	10.52	19.00	16.60	20.10	24.35	25.03	..
Philippines	9.13	10.39	10.84	16.05	13.93	13.60	15.06	17.68	..
Singapore	3.75	5.13	11.43	17.35	15.60	17.61	15.78	15.28	..
Sri Lanka	1.28	1.32	1.33	3.58	4.01	4.13	4.39	4.68	..
Chinese Taipei	9.32	20.04	25.86	38.27	43.36	44.02	42.38	42.30	..
Thailand	7.42	10.71	17.96	31.88	43.57	44.95	53.89	53.62	..
Viet Nam	3.71	1.85	2.71	7.81	12.02	18.66	17.20	18.81	..
Other Asia	2.38	2.88	2.95	3.11	4.11	5.41	6.57	6.20	..
<b>Non-OECD Asia excl. China</b>	<b>82.88</b>	<b>123.78</b>	<b>195.82</b>	<b>334.87</b>	<b>376.95</b>	<b>436.88</b>	<b>488.74</b>	<b>504.93</b>	..
People's Rep. of China	51.93	88.59	118.79	220.81	317.82	427.96	504.33	533.73	..
Hong Kong, China	3.11	4.60	3.21	6.58	3.09	3.36	2.70	3.33	..
<b>China</b>	<b>55.05</b>	<b>93.19</b>	<b>122.00</b>	<b>227.39</b>	<b>320.91</b>	<b>431.31</b>	<b>507.03</b>	<b>537.06</b>	..
Argentina	25.33	26.35	21.07	23.47	22.95	31.44	30.82	32.19	..
Bolivia	0.80	1.37	1.13	1.71	2.36	2.73	3.67	3.85	..
Brazil	37.94	55.64	58.89	88.23	87.11	104.73	126.37	118.29	..
Colombia	6.60	7.56	9.87	11.53	11.74	12.57	13.72	13.26	..
Costa Rica	0.57	0.76	0.98	1.70	1.78	2.14	2.36	2.27	..
Cuba	7.12	10.23	10.57	8.55	8.04	10.22	9.06	9.35	..
Curaçao	5.98	3.93	1.46	2.10	2.09	2.04	1.97	2.05	..
Dominican Republic	1.66	2.11	3.06	6.25	5.37	5.11	4.66	5.33	..
Ecuador	1.27	3.94	4.95	7.41	7.65	9.91	11.72	12.45	..
El Salvador	0.65	0.61	0.78	1.78	1.99	1.97	1.97	2.17	..
Guatemala	0.90	1.41	1.23	2.84	3.19	3.03	4.50	3.79	..
Haiti	0.12	0.21	0.30	0.47	0.66	0.67	0.91	0.96	..
Honduras	0.42	0.56	0.71	1.36	2.11	2.22	2.68	2.91	..
Jamaica	2.67	2.05	2.27	3.19	3.27	2.18	2.22	2.30	..
Nicaragua	0.59	0.63	0.59	1.16	1.37	1.39	1.44	1.71	..
Panama	1.68	0.88	0.85	1.77	2.15	2.94	3.19	3.16	..
Paraguay	0.25	0.48	0.66	1.09	1.15	1.57	1.74	1.91	..
Peru	5.14	6.63	5.61	7.42	7.18	8.31	10.03	10.94	..
Suriname	..	..	..	0.48	0.52	0.57	0.53	0.50	..
Trinidad and Tobago	1.02	1.36	1.23	1.26	1.38	1.70	1.53	1.57	..
Uruguay	1.82	1.97	1.32	1.98	1.78	1.98	2.13	2.16	..
Venezuela	9.14	19.57	18.61	23.20	29.56	43.98	38.69	32.47	..
Other Non-OECD Americas	5.20	5.22	4.51	4.23	3.90	4.89	5.43	5.53	..
<b>Non-OECD Americas</b>	<b>116.87</b>	<b>153.47</b>	<b>150.65</b>	<b>203.18</b>	<b>209.27</b>	<b>258.27</b>	<b>281.34</b>	<b>271.10</b>	..
Bahrain	0.69	0.37	0.80	1.13	2.02	2.13	1.87	2.11	..
Islamic Republic of Iran	16.43	32.58	50.40	68.53	85.26	79.55	87.93	77.92	..
Iraq	3.62	8.60	18.18	23.31	24.29	32.41	42.62	41.03	..
Jordan	0.61	1.52	3.11	4.58	5.15	4.63	7.32	6.28	..
Kuwait	2.15	4.82	4.18	10.88	16.24	20.23	16.81	17.58	..
Lebanon	2.23	2.28	1.81	4.48	4.61	5.70	7.15	7.26	..
Oman	0.10	0.84	1.78	2.18	2.47	3.82	4.69	4.15	..
Qatar	0.14	0.47	0.97	1.45	2.90	4.71	1.61	1.93	..
Saudi Arabia	5.70	21.95	38.51	67.08	76.59	125.60	143.84	150.43	..
Syrian Arab Republic	2.05	4.20	8.86	10.54	15.53	13.66	6.59	6.48	..
United Arab Emirates	0.26	3.11	6.25	6.46	9.11	12.78	17.40	14.04	..
Yemen	0.92	1.21	2.44	4.67	6.50	6.78	6.55	2.46	..
<b>Middle East</b>	<b>34.89</b>	<b>81.96</b>	<b>137.29</b>	<b>205.29</b>	<b>250.65</b>	<b>311.98</b>	<b>344.38</b>	<b>331.66</b>	..

## Primary supply of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>976.73</b>	<b>1 231.51</b>	<b>1 663.13</b>	<b>2 071.21</b>	<b>2 359.86</b>	<b>2 736.15</b>	<b>2 911.26</b>	<b>2 943.72</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>270.41</b>	<b>453.43</b>	<b>818.06</b>	<b>907.52</b>	<b>1 144.81</b>	<b>1 411.03</b>	<b>1 563.99</b>	<b>1 569.68</b>	<b>..</b>
<b>OECD Total</b>	<b>706.32</b>	<b>778.08</b>	<b>845.07</b>	<b>1 163.69</b>	<b>1 215.04</b>	<b>1 325.12</b>	<b>1 347.28</b>	<b>1 374.05</b>	<b>1 414.81</b>
Canada	37.27	45.55	54.73	74.24	80.60	78.61	88.38	87.03	94.55
Chile	0.53	0.72	1.14	5.21	6.80	4.47	3.62	3.98	4.40
Mexico	10.49	19.13	23.12	35.47	46.09	54.22	60.51	64.64	67.06
United States	514.51	476.78	438.23	547.58	507.07	555.92	627.42	646.39	641.16
<b>OECD Americas</b>	<b>562.81</b>	<b>542.19</b>	<b>517.22</b>	<b>662.50</b>	<b>640.56</b>	<b>693.22</b>	<b>779.94</b>	<b>802.04</b>	<b>807.17</b>
Australia	3.38	7.46	14.79	19.27	18.97	28.43	31.69	32.22	35.75
Israel <sup>1</sup>	0.05	0.13	0.03	0.01	1.31	4.40	6.29	6.88	7.87
Japan	5.07	21.40	44.16	65.65	70.57	86.01	106.64	100.03	101.73
Korea	-	-	2.72	17.01	27.37	38.63	43.12	39.34	41.32
New Zealand	0.28	0.79	3.87	5.06	3.23	3.73	4.39	4.09	4.21
<b>OECD Asia Oceania</b>	<b>8.78</b>	<b>29.78</b>	<b>65.57</b>	<b>106.99</b>	<b>121.44</b>	<b>161.20</b>	<b>192.14</b>	<b>182.55</b>	<b>190.89</b>
Austria	3.30	4.15	5.23	6.58	8.08	8.12	6.44	6.88	7.17
Belgium	7.14	8.91	8.17	13.36	14.74	16.74	12.68	13.96	14.27
Czech Republic	1.02	2.59	5.25	7.50	7.70	8.07	6.18	6.48	7.01
Denmark	0.00	0.00	1.82	4.45	4.40	4.42	2.80	2.85	2.86
Estonia	..	..	1.22	0.66	0.80	0.56	0.44	0.39	0.43
Finland	-	0.77	2.18	3.43	3.61	3.84	2.51	2.24	2.05
France	13.50	21.64	26.02	35.76	41.01	42.53	32.59	35.03	38.28
Germany	28.64	51.19	54.96	71.83	77.76	75.88	63.36	65.14	73.16
Greece	-	-	0.14	1.70	2.35	3.23	2.48	2.68	3.49
Hungary	4.17	7.97	8.91	9.65	12.09	9.81	6.98	7.49	8.03
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	0.74	1.87	3.43	3.47	4.69	3.72	3.75	4.19
Italy	14.22	22.72	38.99	57.92	70.63	68.04	50.69	55.29	58.06
Latvia	..	..	2.38	1.09	1.36	1.46	1.08	1.10	1.11
Luxembourg	0.22	0.42	0.43	0.67	1.18	1.20	0.84	0.77	0.71
Netherlands	28.50	30.42	30.72	34.98	35.31	39.20	28.83	28.91	30.16
Norway	-	0.87	1.98	4.14	4.07	7.75	4.94	5.39	5.58
Poland	6.25	8.77	8.94	9.96	12.23	12.80	13.40	13.77	14.63
Portugal	-	-	-	2.03	3.75	4.49	3.47	4.07	4.30
Slovak Republic	1.56	2.32	5.09	5.77	5.88	5.01	3.77	3.88	3.89
Slovenia	..	..	0.76	0.83	0.93	0.86	0.63	0.66	0.70
Spain	0.94	1.45	4.97	15.21	29.84	31.12	23.66	24.53	25.03
Sweden	-	-	0.58	0.78	0.84	1.47	0.79	0.72	0.82
Switzerland	0.15	0.87	1.63	2.43	2.78	3.01	2.67	2.85	3.00
Turkey	-	-	2.85	12.63	22.79	31.39	40.19	39.37	38.24
United Kingdom	25.11	40.31	47.19	87.37	85.45	85.03	60.06	61.26	69.58
<b>OECD Europe</b>	<b>134.73</b>	<b>206.11</b>	<b>262.28</b>	<b>394.20</b>	<b>453.04</b>	<b>470.70</b>	<b>375.20</b>	<b>389.45</b>	<b>416.75</b>
<i>IEA</i>	<i>695.26</i>	<i>758.10</i>	<i>817.64</i>	<i>1 121.09</i>	<i>1 158.55</i>	<i>1 259.70</i>	<i>1 275.15</i>	<i>1 296.77</i>	<i>1 333.66</i>
<i>IEA/Accession/Association</i>	<i>712.30</i>	<i>796.17</i>	<i>886.12</i>	<i>1 250.66</i>	<i>1 343.16</i>	<i>1 541.69</i>	<i>1 620.77</i>	<i>1 653.00</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>296.91</i>	<i>395.87</i>	<i>444.97</i>	<i>446.76</i>	<i>343.19</i>	<i>357.51</i>	<i>..</i>
<i>G7</i>	<i>638.33</i>	<i>679.59</i>	<i>704.29</i>	<i>940.36</i>	<i>933.09</i>	<i>992.02</i>	<i>1 029.13</i>	<i>1 050.16</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>1 071.58</i>	<i>1 259.27</i>	<i>1 282.66</i>	<i>1 375.45</i>	<i>1 414.44</i>	<i>1 414.31</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>1 327.05</i>	<i>1 629.96</i>	<i>1 771.27</i>	<i>2 013.84</i>	<i>2 112.94</i>	<i>2 126.57</i>	<i>..</i>
<i>OPEC</i>	<i>24.91</i>	<i>47.51</i>	<i>99.99</i>	<i>177.46</i>	<i>244.87</i>	<i>330.34</i>	<i>405.24</i>	<i>425.85</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.



## Primary supply of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>270.41</b>	<b>453.43</b>	<b>818.06</b>	<b>907.52</b>	<b>1 144.81</b>	<b>1 411.03</b>	<b>1 563.99</b>	<b>1 569.68</b>	..
Albania	0.16	0.32	0.20	0.01	0.01	0.01	0.02	0.03	..
Armenia	..	..	3.59	1.12	1.34	1.29	1.88	1.76	..
Azerbaijan	..	..	14.46	4.83	8.10	7.85	9.65	9.58	..
Belarus	..	..	12.54	14.26	16.94	18.15	16.95	15.87	..
Bosnia and Herzegovina	..	..	0.40	0.20	0.30	0.20	0.15	0.18	..
Bulgaria	0.17	3.18	5.39	2.93	2.80	2.30	2.36	2.59	..
Croatia	..	..	2.19	2.21	2.37	2.63	2.02	2.08	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	0.05	0.06	0.10	0.11	0.11	..
Georgia	..	..	4.55	0.95	1.06	1.01	1.83	2.02	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	10.68	6.57	12.46	22.31	25.95	27.45	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	1.52	0.57	0.62	0.25	0.23	0.23	..
Lithuania	..	..	4.68	2.06	2.48	2.49	2.06	2.07	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	3.27	2.13	2.39	2.31	2.05	2.13	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	24.14	32.37	28.83	13.68	13.92	10.79	9.35	8.92	..
Russian Federation	..	..	367.29	318.92	349.57	383.43	385.31	364.15	374.98
Serbia	..	..	2.59	1.53	1.95	1.85	1.61	1.75	..
Tajikistan	..	..	1.39	0.63	0.54	0.16	0.00	0.00	..
Turkmenistan	..	..	12.25	10.90	14.25	17.34	20.51	21.34	..
Ukraine	..	..	91.83	62.25	67.44	55.23	33.44	26.05	..
Uzbekistan	..	..	32.48	41.66	39.90	37.22	38.30	37.55	..
Former Soviet Union	196.20	315.91	x	x	x	x	x	x	..
Former Yugoslavia	1.33	2.97	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>222.00</b>	<b>354.75</b>	<b>600.13</b>	<b>487.45</b>	<b>538.48</b>	<b>566.92</b>	<b>553.79</b>	<b>525.86</b>	..
Algeria	1.55	5.83	12.17	16.83	20.52	23.31	32.25	34.41	..
Angola	0.05	0.06	0.44	0.47	0.53	0.60	0.25	0.63	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	0.26	0.25	0.30	..
Congo	0.00	-	-	-	0.02	0.08	0.20	0.20	..
Côte d'Ivoire	-	-	-	1.27	1.25	1.33	1.65	1.69	..
Dem. Rep. of the Congo	-	-	-	-	-	0.02	0.00	0.00	..
Egypt	0.07	1.59	6.73	14.43	29.98	35.80	35.69	36.76	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	0.40	0.01	0.09	0.10	0.12	0.27	0.28	0.31	..
Ghana	-	-	-	-	-	0.35	0.53	1.06	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	0.84	2.64	4.05	4.15	4.76	5.77	4.85	5.18	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	0.06	0.06	0.04	0.04	0.37	0.57	1.01	1.02	..
Mozambique	-	-	-	0.00	0.02	0.07	0.40	0.76	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.35	1.24	3.27	5.76	9.01	8.82	14.27	14.90	..
Senegal	-	-	0.01	0.00	0.01	0.02	0.03	0.04	..
South Africa	-	-	1.50	1.40	2.76	3.87	3.86	4.25	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	0.33	0.64	0.76	0.73	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.11	0.35	1.23	2.73	3.09	5.08	5.28	5.06	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	0.00	0.00	0.00	0.00	0.97	1.29	1.12	0.97	..
<b>Africa</b>	<b>3.44</b>	<b>11.78</b>	<b>29.53</b>	<b>47.18</b>	<b>73.75</b>	<b>88.17</b>	<b>102.69</b>	<b>108.26</b>	..

1. Please refer to section 'Geographical coverage'.

## Primary supply of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.50	1.04	3.73	7.05	10.49	17.21	20.07	21.24	..
Brunei Darussalam	0.27	1.16	1.68	1.85	1.84	2.68	2.96	2.14	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.63	1.26	10.57	23.06	31.80	54.39	43.22	43.21	..
Indonesia	0.33	4.95	15.81	26.56	29.26	38.81	36.60	37.85	..
Malaysia	0.10	2.24	6.80	24.72	31.86	31.19	38.35	37.53	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	0.09	0.29	0.76	1.20	2.29	1.28	2.90	3.03	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	2.86	5.02	10.08	16.67	25.64	26.96	26.32	26.48	..
Philippines	-	-	-	0.01	2.70	3.05	3.06	2.87	..
Singapore	-	-	-	1.12	5.57	7.21	9.19	9.23	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	1.22	1.59	1.40	5.56	8.86	13.28	13.65	14.79	..
Thailand	-	-	4.99	17.36	25.92	32.96	37.83	37.74	..
Viet Nam	-	-	0.00	1.12	4.69	8.12	9.12	9.55	..
Other Asia	0.15	0.09	0.24	0.20	0.22	0.37	0.28	0.28	..
<b>Non-OECD Asia excl. China</b>	<b>6.14</b>	<b>17.64</b>	<b>56.06</b>	<b>126.47</b>	<b>181.14</b>	<b>237.51</b>	<b>243.54</b>	<b>245.94</b>	..
People's Rep. of China	5.01	11.96	12.80	20.75	38.78	89.36	153.64	158.54	..
Hong Kong, China	-	-	-	2.45	2.19	3.13	2.08	2.65	..
<b>China</b>	<b>5.01</b>	<b>11.96</b>	<b>12.80</b>	<b>23.20</b>	<b>40.97</b>	<b>92.49</b>	<b>155.72</b>	<b>161.20</b>	..
Argentina	7.20	10.43	18.83	30.43	35.81	37.97	42.20	42.93	..
Bolivia	0.09	0.24	0.63	2.34	1.97	2.50	3.34	3.14	..
Brazil	0.16	0.82	3.24	7.91	16.72	23.02	35.37	35.20	..
Colombia	1.41	2.39	3.37	5.46	6.12	8.23	8.50	8.78	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	0.01	0.01	0.03	0.46	0.59	0.85	0.95	0.99	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	0.16	0.64	0.88	0.89	..
Ecuador	-	-	-	-	0.28	0.43	0.60	0.56	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.30	0.45	0.41	0.49	1.62	5.49	8.03	7.89	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	1.59	2.44	4.70	8.56	14.70	18.35	18.03	17.81	..
Uruguay	-	-	-	0.03	0.09	0.06	0.04	0.05	..
Venezuela	8.67	11.27	16.74	21.85	19.36	20.83	20.38	19.67	..
Other Non-OECD Americas	0.00	0.01	0.02	0.32	0.59	0.67	0.66	0.67	..
<b>Non-OECD Americas</b>	<b>19.44</b>	<b>28.07</b>	<b>47.97</b>	<b>77.84</b>	<b>98.02</b>	<b>119.05</b>	<b>138.98</b>	<b>138.58</b>	..
Bahrain	1.34	2.43	4.43	6.84	8.42	10.57	12.20	12.16	..
Islamic Republic of Iran	3.22	3.66	17.48	52.62	83.81	122.11	145.86	155.27	..
Iraq	0.99	1.05	1.62	2.57	1.49	4.19	5.52	5.67	..
Jordan	-	-	0.10	0.21	1.38	2.29	0.30	1.94	..
Kuwait	4.96	5.63	4.92	7.84	10.04	11.86	14.98	17.07	..
Lebanon	-	-	-	-	-	0.21	-	-	..
Oman	-	0.31	2.44	5.39	7.44	14.90	19.63	21.23	..
Qatar	1.29	2.84	5.56	9.47	13.77	22.93	42.77	43.52	..
Saudi Arabia	1.54	9.15	19.48	30.77	45.95	59.88	69.52	71.25	..
Syrian Arab Republic	-	0.04	1.37	4.62	4.94	7.80	3.97	3.48	..
United Arab Emirates	1.05	4.12	14.17	25.04	35.21	49.34	53.70	57.41	..
Yemen	-	-	-	-	-	0.82	0.81	0.82	..
<b>Middle East</b>	<b>14.38</b>	<b>29.24</b>	<b>71.56</b>	<b>145.38</b>	<b>212.46</b>	<b>306.90</b>	<b>369.26</b>	<b>389.83</b>	..

## Total primary energy supply (TPES) (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>6 100.90</b>	<b>7 204.91</b>	<b>8 774.03</b>	<b>10 027.53</b>	<b>11 499.12</b>	<b>12 873.06</b>	<b>13 604.57</b>	<b>13 647.37</b>	..
<b>Non-OECD Total</b>	<b>2 176.27</b>	<b>2 958.72</b>	<b>4 036.49</b>	<b>4 453.96</b>	<b>5 648.23</b>	<b>7 080.62</b>	<b>7 967.05</b>	<b>8 006.13</b>	..
<b>OECD Total</b>	<b>3 740.45</b>	<b>4 067.67</b>	<b>4 535.25</b>	<b>5 299.64</b>	<b>5 531.95</b>	<b>5 433.65</b>	<b>5 273.74</b>	<b>5 259.45</b>	<b>5 257.68</b>
Canada	159.35	191.93	211.29	253.62	272.40	265.25	278.82	270.19	278.26
Chile	8.50	9.48	14.01	25.17	28.36	30.85	35.24	36.11	37.52
Mexico	52.56	95.11	123.68	150.81	180.58	178.52	188.16	187.37	183.01
United States	1 729.94	1 804.68	1 915.05	2 273.34	2 318.77	2 215.22	2 216.81	2 188.28	2 158.99
<b>OECD Americas</b>	<b>1 950.34</b>	<b>2 101.20</b>	<b>2 264.03</b>	<b>2 702.94</b>	<b>2 800.11</b>	<b>2 689.84</b>	<b>2 719.03</b>	<b>2 681.95</b>	<b>2 657.78</b>
Australia	57.06	69.60	86.38	103.10	113.48	127.63	125.25	125.30	132.32
Israel <sup>1</sup>	7.76	7.82	11.47	18.23	18.44	23.19	21.46	22.98	22.32
Japan	320.37	344.52	438.59	517.91	519.07	498.53	439.23	429.79	423.76
Korea	21.56	41.26	92.91	188.16	210.29	250.02	268.43	272.69	284.32
New Zealand	7.88	8.98	12.84	17.10	16.94	18.38	20.49	20.63	20.52
<b>OECD Asia Oceania</b>	<b>414.63</b>	<b>472.19</b>	<b>642.18</b>	<b>844.50</b>	<b>878.22</b>	<b>917.77</b>	<b>874.86</b>	<b>871.38</b>	<b>883.24</b>
Austria	21.48	23.15	24.88	28.61	33.54	33.82	32.01	32.79	33.30
Belgium	45.99	46.77	47.94	58.09	58.20	60.11	52.95	53.27	56.47
Czech Republic	45.16	46.96	49.79	41.17	45.24	45.13	41.97	42.15	41.38
Denmark	18.99	19.14	17.36	18.63	18.90	19.48	16.11	16.10	16.54
Estonia	..	..	9.78	4.71	5.21	5.62	5.99	5.42	5.97
Finland	21.03	24.60	28.38	32.39	34.39	36.60	34.11	32.49	33.86
France	180.14	191.77	224.01	251.90	270.86	261.21	242.72	246.51	241.19
Germany	334.70	357.18	351.20	336.58	337.07	325.97	305.72	307.79	311.53
Greece	11.81	14.98	21.44	27.09	30.25	27.60	23.13	23.19	22.91
Hungary	21.27	28.34	28.78	25.00	27.55	26.51	23.83	25.21	25.60
Iceland	1.12	1.50	2.27	3.12	3.12	5.41	5.86	5.58	6.37
Ireland	6.91	8.24	9.91	13.80	14.57	14.37	12.75	13.26	13.75
Italy	119.12	130.84	146.56	171.52	186.35	173.72	146.77	152.60	149.04
Latvia	..	..	7.89	3.83	4.53	4.51	4.34	4.26	4.16
Luxembourg	4.43	3.56	3.39	3.35	4.39	4.22	3.82	3.73	3.68
Netherlands	62.00	64.36	67.20	75.43	81.39	83.48	72.93	73.83	75.21
Norway	14.29	18.35	21.07	26.16	26.83	33.90	27.80	29.62	28.38
Poland	92.88	126.62	103.11	88.77	92.14	100.42	94.04	94.93	99.21
Portugal	6.90	9.99	16.78	24.59	26.46	23.50	21.17	21.97	21.43
Slovak Republic	15.52	19.84	21.33	17.74	18.83	17.83	15.95	16.39	16.52
Slovenia	..	..	5.71	6.41	7.29	7.33	6.65	6.57	6.77
Spain	51.57	67.69	90.07	121.86	141.93	127.75	114.56	118.92	119.04
Sweden	38.84	40.49	47.20	47.56	51.57	50.90	48.22	45.45	48.20
Switzerland	18.91	20.04	24.36	25.01	25.94	26.20	25.06	24.53	23.90
Turkey	24.35	31.45	52.70	75.92	84.21	106.65	121.50	128.81	134.57
United Kingdom	218.07	198.43	205.92	222.95	222.84	203.78	179.89	180.75	177.68
<b>OECD Europe</b>	<b>1 375.47</b>	<b>1 494.27</b>	<b>1 629.04</b>	<b>1 752.19</b>	<b>1 853.61</b>	<b>1 826.04</b>	<b>1 679.85</b>	<b>1 706.12</b>	<b>1 716.66</b>
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.26	204.84	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>3 670.51</i>	<i>3 953.75</i>	<i>4 370.22</i>	<i>5 092.06</i>	<i>5 289.61</i>	<i>5 183.83</i>	<i>5 012.02</i>	<i>4 996.58</i>	<i>4 997.53</i>
<i>IEA/Accession/Association</i>	<i>4 378.97</i>	<i>4 944.62</i>	<i>5 844.04</i>	<i>7 096.40</i>	<i>8 110.65</i>	<i>8 993.74</i>	<i>9 419.66</i>	<i>9 450.03</i>	..
<i>European Union - 28</i>	..	..	<i>1 646.71</i>	<i>1 695.15</i>	<i>1 793.70</i>	<i>1 726.49</i>	<i>1 566.87</i>	<i>1 586.36</i>	..
<i>G7</i>	<i>3 061.67</i>	<i>3 219.35</i>	<i>3 492.62</i>	<i>4 027.83</i>	<i>4 127.36</i>	<i>3 943.67</i>	<i>3 809.96</i>	<i>3 775.91</i>	..
<i>G8</i>	..	..	<i>4 371.80</i>	<i>4 647.10</i>	<i>4 779.06</i>	<i>4 632.07</i>	<i>4 534.48</i>	<i>4 485.64</i>	..
<i>G20</i>	..	..	<i>7 065.37</i>	<i>8 073.15</i>	<i>9 166.41</i>	<i>10 182.07</i>	<i>10 693.95</i>	<i>10 709.83</i>	..
<i>OPEC</i>	<i>112.71</i>	<i>210.59</i>	<i>336.19</i>	<i>505.62</i>	<i>641.61</i>	<i>832.05</i>	<i>954.84</i>	<i>964.55</i>	..

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Total primary energy supply (TPES) (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>2 176.27</b>	<b>2 958.72</b>	<b>4 036.49</b>	<b>4 453.96</b>	<b>5 648.23</b>	<b>7 080.62</b>	<b>7 967.05</b>	<b>8 006.13</b>	..
Albania	1.75	3.07	2.67	1.79	2.17	2.12	2.34	2.19	..
Armenia	..	..	7.71	2.01	2.51	2.48	2.96	3.07	..
Azerbaijan	..	..	22.66	11.30	13.43	11.59	14.32	14.36	..
Belarus	..	..	45.50	24.57	26.76	27.52	27.75	25.27	..
Bosnia and Herzegovina	..	..	7.02	4.35	5.04	6.48	7.82	8.03	..
Bulgaria	20.50	28.39	28.22	18.61	19.90	17.87	17.88	18.61	..
Croatia	..	..	9.46	8.39	9.75	9.39	8.04	8.40	..
Cyprus <sup>1</sup>	0.78	0.86	1.37	2.14	2.22	2.44	1.97	2.01	..
FYR of Macedonia	..	..	2.48	2.67	2.85	2.87	2.69	2.68	..
Georgia	..	..	12.41	2.87	2.84	3.12	4.39	4.63	..
Gibraltar	0.03	0.03	0.06	0.13	0.15	0.17	0.20	0.21	..
Kazakhstan	..	..	73.45	35.68	50.88	69.12	76.67	78.09	..
Kosovo	..	..	..	1.54	1.95	2.49	2.21	2.52	..
Kyrgyzstan	..	..	7.49	2.32	2.57	2.75	4.09	3.98	..
Lithuania	..	..	16.06	7.13	8.85	7.05	7.00	7.22	..
Malta	0.26	0.32	0.69	0.68	0.88	0.84	0.77	0.64	..
Republic of Moldova	..	..	9.89	2.88	3.50	3.51	3.30	3.38	..
Montenegro	..	..	..	..	1.02	1.13	0.96	1.01	..
Romania	47.83	65.23	62.25	36.23	38.60	35.03	31.57	31.91	..
Russian Federation	..	..	879.17	619.27	651.71	688.40	724.52	709.73	..
Serbia	..	..	19.71	13.73	16.07	15.61	13.26	14.76	..
Tajikistan	..	..	5.31	2.15	2.34	2.18	2.58	2.70	..
Turkmenistan	..	..	17.52	14.88	19.18	22.69	26.75	27.63	..
Ukraine	..	..	252.02	133.79	142.88	132.43	105.71	90.09	..
Uzbekistan	..	..	46.37	50.87	47.08	43.21	43.68	42.58	..
Former Soviet Union	848.63	1 109.51	x	x	x	x	x	x	..
Former Yugoslavia	23.23	33.71	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>943.02</b>	<b>1 241.12</b>	<b>1 529.50</b>	<b>999.96</b>	<b>1 075.11</b>	<b>1 112.50</b>	<b>1 133.41</b>	<b>1 105.69</b>	..
Algeria	4.82	11.21	22.19	26.99	32.42	40.09	51.67	54.01	..
Angola	4.13	4.56	5.88	7.19	8.43	12.17	14.68	14.95	..
Benin	1.18	1.35	1.66	1.98	2.50	3.70	4.24	4.56	..
Botswana	..	..	1.22	1.80	1.87	2.15	2.72	2.72	..
Cameroon	2.82	3.66	4.98	6.31	7.27	6.97	7.50	7.79	..
Congo	0.53	0.62	0.79	0.71	1.09	1.68	2.63	2.66	..
Côte d'Ivoire	2.69	3.57	4.35	6.79	9.62	10.16	13.87	12.98	..
Dem. Rep. of the Congo	7.09	8.47	11.80	13.91	16.66	19.85	28.72	28.89	..
Egypt	8.01	15.09	32.25	40.59	61.66	73.23	80.47	79.39	..
Eritrea	..	..	..	0.71	0.76	0.74	0.82	0.85	..
Ethiopia	14.72	16.70	22.93	31.69	36.87	42.64	48.61	49.99	..
Gabon	1.44	1.37	1.18	1.47	3.00	5.08	5.00	5.07	..
Ghana	3.36	4.02	5.29	6.28	5.89	7.58	8.89	9.70	..
Kenya	5.68	7.37	10.71	14.00	16.04	19.56	23.68	25.10	..
Libya	2.60	7.05	11.17	15.83	17.77	20.78	17.87	17.25	..
Mauritius	0.38	0.43	0.67	1.01	1.16	1.32	1.40	1.45	..
Morocco	3.52	5.41	7.62	11.02	14.90	17.15	19.05	19.39	..
Mozambique	6.80	6.72	5.92	7.17	8.49	9.96	11.64	12.95	..
Namibia	..	..	..	1.02	1.33	1.54	1.81	1.87	..
Niger	..	..	..	1.47	1.73	2.23	2.91	2.96	..
Nigeria	35.89	48.86	66.42	86.04	105.26	119.95	134.56	139.37	..
Senegal	1.32	1.56	1.69	2.40	2.79	3.83	3.90	4.09	..
South Africa	49.18	65.38	90.96	109.04	128.23	141.52	145.59	142.03	..
South Sudan	..	..	..	..	..	..	0.71	0.56	..
Sudan	7.37	8.37	10.63	13.31	14.98	16.71	14.98	15.67	..
United Rep. of Tanzania	7.69	8.02	9.73	13.46	17.24	20.66	24.83	25.97	..
Togo	0.75	0.89	1.26	2.11	2.37	3.12	3.32	3.43	..
Tunisia	1.89	3.27	4.95	7.31	8.31	10.28	10.59	10.93	..
Zambia	3.96	4.53	5.42	6.33	7.41	8.42	10.03	10.24	..
Zimbabwe	5.87	6.49	9.30	10.01	9.62	9.60	11.06	11.26	..
Other Africa	23.20	28.01	41.96	47.65	54.31	61.99	67.56	69.53	..
<b>Africa</b>	<b>206.90</b>	<b>272.98</b>	<b>392.91</b>	<b>495.59</b>	<b>599.98</b>	<b>694.65</b>	<b>775.33</b>	<b>787.62</b>	..

1. Please refer to section 'Geographical coverage'.

## Total primary energy supply (TPES) (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	6.35	8.40	12.74	18.26	22.79	30.51	35.42	37.87	..
Brunei Darussalam	0.34	1.35	1.73	2.38	2.22	3.24	3.55	2.72	..
Cambodia	..	..	..	3.41	3.43	5.33	6.36	7.04	..
DPR of Korea	20.59	30.36	33.22	19.72	21.34	14.80	9.61	7.84	..
India	159.76	200.02	305.71	440.90	516.16	693.22	826.19	851.13	..
Indonesia	38.15	55.70	98.65	155.66	179.08	210.62	224.53	225.36	..
Malaysia	6.07	11.89	21.83	48.89	65.73	73.38	89.70	85.86	..
Mongolia	..	..	3.41	2.40	3.00	3.94	5.28	4.94	..
Myanmar	7.92	9.42	10.68	12.84	14.76	13.52	18.52	19.83	..
Nepal	3.87	4.56	5.79	8.11	9.13	10.21	11.66	11.69	..
Pakistan	18.37	24.76	42.90	63.52	75.90	84.41	92.00	93.91	..
Philippines	17.17	22.41	28.71	39.99	38.85	40.40	47.78	52.15	..
Singapore	3.75	5.13	11.53	18.67	21.57	25.42	26.07	25.61	..
Sri Lanka	4.13	4.53	5.52	8.33	9.00	9.74	10.74	11.43	..
Chinese Taipei	13.11	27.90	47.75	84.84	102.37	111.44	110.23	108.82	..
Thailand	15.61	22.00	41.94	72.29	99.01	117.84	134.87	135.22	..
Viet Nam	13.96	14.39	17.87	28.74	41.25	58.91	66.86	73.80	..
Other Asia	6.06	7.75	6.89	8.24	9.51	12.28	14.35	13.93	..
<b>Non-OECD Asia excl. China</b>	<b>335.22</b>	<b>450.59</b>	<b>696.86</b>	<b>1 037.17</b>	<b>1 235.10</b>	<b>1 519.22</b>	<b>1 733.73</b>	<b>1 769.15</b>	..
People's Rep. of China	426.61	598.02	870.68	1 129.84	1 781.39	2 536.28	2 953.52	2 973.25	..
Hong Kong, China	3.17	4.63	8.62	13.59	12.57	13.67	14.16	13.89	..
<b>China</b>	<b>429.78</b>	<b>602.65</b>	<b>879.30</b>	<b>1 143.43</b>	<b>1 793.95</b>	<b>2 549.96</b>	<b>2 967.68</b>	<b>2 987.14</b>	..
Argentina	35.59	41.81	46.06	61.56	66.92	78.67	83.83	85.97	..
Bolivia	1.19	2.44	2.61	4.91	5.19	6.30	8.24	8.28	..
Brazil	81.98	113.85	140.21	187.44	215.33	265.88	303.18	297.98	..
Colombia	13.95	17.71	24.22	25.81	27.08	31.20	33.99	33.78	..
Costa Rica	0.94	1.26	1.68	2.87	3.87	4.65	4.93	4.93	..
Cuba	10.79	14.64	17.41	12.74	10.67	12.34	11.68	12.05	..
Curaçao	5.98	3.93	1.46	2.10	2.09	2.04	1.97	2.05	..
Dominican Republic	2.87	3.43	4.01	7.25	7.05	7.41	7.60	8.24	..
Ecuador	2.35	5.00	6.33	8.82	9.34	11.77	14.18	15.06	..
El Salvador	1.98	2.52	2.47	3.97	4.51	4.36	4.07	4.32	..
Guatemala	2.95	3.79	4.41	7.04	7.80	10.19	13.22	12.69	..
Haiti	1.59	2.08	1.56	2.01	3.41	3.80	4.15	4.27	..
Honduras	1.48	1.87	2.38	2.99	4.11	4.56	5.35	5.68	..
Jamaica	2.92	2.28	2.78	3.81	3.71	2.67	2.81	2.90	..
Nicaragua	1.35	1.53	2.02	2.52	2.86	2.96	3.61	3.91	..
Panama	2.03	1.41	1.49	2.57	2.91	3.61	4.21	4.26	..
Paraguay	1.52	2.08	3.07	3.85	3.96	4.81	5.17	5.41	..
Peru	9.51	11.26	9.73	12.22	13.64	19.53	23.76	24.61	..
Suriname	..	..	..	0.63	0.63	0.72	0.69	0.66	..
Trinidad and Tobago	2.64	3.83	5.99	9.84	16.12	20.07	19.57	19.40	..
Uruguay	2.39	2.64	2.25	3.09	2.96	4.09	4.69	5.03	..
Venezuela	19.08	32.67	39.59	51.27	56.30	72.38	67.50	59.37	..
Other Non-OECD Americas	5.75	5.77	5.09	5.00	5.10	6.09	6.71	6.83	..
<b>Non-OECD Americas</b>	<b>210.81</b>	<b>277.81</b>	<b>326.83</b>	<b>424.31</b>	<b>475.57</b>	<b>580.08</b>	<b>635.11</b>	<b>627.69</b>	..
Bahrain	2.03	2.81	5.23	7.97	10.43	12.71	14.07	14.27	..
Islamic Republic of Iran	20.64	38.06	69.33	123.02	172.67	204.29	237.16	236.53	..
Iraq	4.65	9.72	20.04	25.96	26.43	37.51	49.49	47.86	..
Jordan	0.61	1.52	3.27	4.87	6.68	7.10	8.18	8.62	..
Kuwait	7.13	10.45	9.11	18.72	26.28	32.09	31.79	34.65	..
Lebanon	2.38	2.47	1.95	4.91	5.04	6.38	7.50	7.64	..
Oman	0.10	1.15	4.22	7.57	9.91	18.72	24.33	25.38	..
Qatar	1.43	3.31	6.53	10.92	16.66	27.64	44.39	45.45	..
Saudi Arabia	7.23	31.10	58.00	97.86	122.55	185.49	213.36	221.69	..
Syrian Arab Republic	2.06	4.47	10.47	15.44	20.79	21.66	10.76	9.98	..
United Arab Emirates	1.30	7.23	20.42	31.52	44.50	62.82	73.19	73.29	..
Yemen	0.97	1.27	2.51	4.75	6.59	7.80	7.58	3.48	..
<b>Middle East</b>	<b>50.55</b>	<b>113.57</b>	<b>211.09</b>	<b>353.50</b>	<b>468.53</b>	<b>624.21</b>	<b>721.79</b>	<b>728.84</b>	..

## Primary supply of renewables (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>756.98</b>	<b>900.46</b>	<b>1 121.46</b>	<b>1 288.23</b>	<b>1 398.12</b>	<b>1 590.60</b>	<b>1 784.34</b>	<b>1 822.86</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>584.84</b>	<b>686.77</b>	<b>849.47</b>	<b>967.79</b>	<b>1 051.19</b>	<b>1 165.96</b>	<b>1 290.79</b>	<b>1 318.67</b>	<b>..</b>
<b>OECD Total</b>	<b>172.14</b>	<b>213.69</b>	<b>271.99</b>	<b>320.44</b>	<b>346.93</b>	<b>424.65</b>	<b>493.47</b>	<b>504.03</b>	<b>512.20</b>
Canada	24.55	29.25	36.33	44.58	45.55	44.01	49.05	48.90	48.71
Chile	1.81	2.47	3.90	6.31	7.12	6.83	9.56	9.67	10.06
Mexico	7.74	9.12	14.99	16.91	17.63	15.15	15.93	15.47	14.48
United States	62.43	83.07	96.17	101.96	105.19	125.26	149.52	147.05	152.53
<b>OECD Americas</b>	<b>96.53</b>	<b>123.90</b>	<b>151.39</b>	<b>169.77</b>	<b>175.48</b>	<b>191.24</b>	<b>224.06</b>	<b>221.09</b>	<b>225.78</b>
Australia	4.51	4.75	5.07	6.35	6.46	7.02	8.20	8.20	8.54
Israel <sup>1</sup>	0.00	0.00	0.36	0.61	0.74	1.16	0.45	0.48	0.53
Japan	5.97	8.37	14.95	15.91	15.73	18.95	21.27	22.87	20.46
Korea	0.11	0.17	1.01	0.76	1.08	1.81	3.93	4.00	4.86
New Zealand	2.30	3.17	4.22	5.19	5.35	7.12	8.15	8.37	8.31
<b>OECD Asia Oceania</b>	<b>12.90</b>	<b>16.45</b>	<b>25.62</b>	<b>28.82</b>	<b>29.36</b>	<b>36.05</b>	<b>42.01</b>	<b>43.92</b>	<b>42.71</b>
Austria	2.33	3.61	5.04	6.57	7.03	9.11	9.60	9.65	10.01
Belgium	0.02	0.08	0.48	0.64	1.16	2.83	3.40	3.63	3.77
Czech Republic	0.09	0.21	1.14	1.61	2.09	3.13	4.17	4.28	4.33
Denmark	0.31	0.59	1.03	1.80	2.84	3.92	4.47	4.76	4.96
Estonia	..	..	0.19	0.51	0.59	0.85	0.86	0.91	1.05
Finland	4.85	4.34	5.49	7.75	8.08	9.34	10.30	10.49	10.56
France	13.94	14.68	15.22	15.74	15.67	20.80	21.34	21.81	23.04
Germany	3.81	5.41	5.31	8.98	17.21	27.57	35.40	38.35	39.59
Greece	0.64	0.74	1.10	1.40	1.64	2.13	2.44	2.78	2.76
Hungary	0.65	0.53	0.75	0.83	1.19	2.78	2.86	3.01	2.93
Iceland	0.54	0.90	1.62	2.41	2.38	4.79	5.22	4.93	5.70
Ireland	0.06	0.07	0.17	0.23	0.37	0.66	0.96	1.07	1.08
Italy	5.60	7.10	6.47	10.11	14.11	21.86	26.51	26.27	25.85
Latvia	..	..	1.05	1.19	1.48	1.43	1.61	1.54	1.62
Luxembourg	0.00	0.02	0.02	0.04	0.07	0.13	0.19	0.20	0.21
Netherlands	-	0.23	0.76	1.35	2.26	3.25	3.44	3.65	3.72
Norway	6.27	7.78	11.40	13.49	12.98	11.68	13.06	13.42	13.97
Poland	1.16	1.04	1.58	3.80	4.48	7.27	8.61	8.99	8.43
Portugal	1.27	1.41	3.28	3.76	3.47	5.46	5.51	4.97	5.20
Slovak Republic	0.30	0.36	0.33	0.49	0.81	1.32	1.42	1.58	1.58
Slovenia	..	..	0.52	0.79	0.77	1.12	1.20	1.06	1.13
Spain	2.50	2.81	6.20	6.81	8.40	15.05	17.77	16.62	17.27
Sweden	8.69	9.11	11.53	14.74	14.83	17.00	17.32	19.19	17.81
Switzerland	2.64	3.29	3.63	4.43	4.16	4.98	5.29	5.46	5.33
Turkey	6.72	8.72	9.66	10.10	10.13	11.63	12.08	15.67	17.23
United Kingdom	0.33	0.33	1.03	2.26	3.90	7.28	12.36	14.74	14.58
<b>OECD Europe</b>	<b>62.72</b>	<b>73.34</b>	<b>94.99</b>	<b>121.86</b>	<b>142.09</b>	<b>197.36</b>	<b>227.40</b>	<b>239.02</b>	<b>243.72</b>
International marine bunkers	-	-	-	-	-	-	0.08	0.17	..
<i>IEA</i>	<i>162.05</i>	<i>201.20</i>	<i>249.55</i>	<i>292.22</i>	<i>316.81</i>	<i>394.17</i>	<i>459.49</i>	<i>470.89</i>	<i>478.67</i>
<i>IEA/Accession/Association</i>	<i>475.16</i>	<i>560.25</i>	<i>681.60</i>	<i>766.50</i>	<i>802.59</i>	<i>906.99</i>	<i>1 037.55</i>	<i>1 062.75</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>72.14</i>	<i>98.51</i>	<i>121.27</i>	<i>174.85</i>	<i>203.09</i>	<i>211.04</i>	<i>..</i>
<i>G7</i>	<i>116.64</i>	<i>148.20</i>	<i>175.48</i>	<i>199.56</i>	<i>217.35</i>	<i>265.72</i>	<i>315.45</i>	<i>319.99</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>201.95</i>	<i>217.61</i>	<i>236.04</i>	<i>283.41</i>	<i>333.42</i>	<i>337.41</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>753.06</i>	<i>838.74</i>	<i>894.00</i>	<i>1 019.37</i>	<i>1 145.23</i>	<i>1 172.60</i>	<i>..</i>
<i>OPEC</i>	<i>39.33</i>	<i>47.46</i>	<i>64.28</i>	<i>84.81</i>	<i>102.47</i>	<i>120.23</i>	<i>132.90</i>	<i>135.18</i>	<i>..</i>

Includes hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Primary supply of renewables (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>584.84</b>	<b>686.77</b>	<b>849.47</b>	<b>967.79</b>	<b>1 051.19</b>	<b>1 165.96</b>	<b>1 290.79</b>	<b>1 318.67</b>	<b>..</b>
Albania	0.47	0.63	0.61	0.65	0.69	0.86	0.64	0.75	..
Armenia	..	..	0.15	0.12	0.16	0.23	0.21	0.38	..
Azerbaijan	..	..	0.16	0.15	0.28	0.39	0.23	0.26	..
Belarus	..	..	0.21	0.82	1.13	1.47	1.44	1.38	..
Bosnia and Herzegovina	..	..	0.43	0.62	0.70	0.87	2.00	2.00	..
Bulgaria	0.46	0.52	0.33	0.78	1.10	1.46	1.78	1.99	..
Croatia	..	..	1.22	1.56	1.86	2.06	2.01	1.96	..
Cyprus <sup>1</sup>	0.01	0.01	0.01	0.05	0.05	0.11	0.13	0.15	..
FYR of Macedonia	..	..	0.04	0.33	0.34	0.41	0.35	0.42	..
Georgia	..	..	1.11	1.16	0.90	1.21	1.20	1.14	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	0.75	0.72	0.69	0.74	0.73	0.89	..
Kosovo	..	..	..	0.22	0.23	0.25	0.26	0.28	..
Kyrgyzstan	..	..	0.86	1.11	1.10	0.96	1.15	0.96	..
Lithuania	..	..	0.32	0.67	0.88	1.06	1.28	1.42	..
Malta	-	-	-	-	0.00	0.01	0.02	0.02	..
Republic of Moldova	..	..	0.08	0.09	0.10	0.21	0.31	0.35	..
Montenegro	..	..	..	..	0.30	0.40	0.32	0.31	..
Romania	2.02	2.04	1.58	4.04	4.94	5.86	6.12	5.97	..
Russian Federation	..	..	26.47	18.06	18.70	17.70	17.97	17.41	19.14
Serbia	..	..	1.98	1.83	1.84	2.05	2.00	1.93	..
Tajikistan	..	..	1.42	1.21	1.46	1.41	1.40	1.45	..
Turkmenistan	..	..	0.06	0.01	0.01	0.01	0.01	0.01	..
Ukraine	..	..	1.26	1.23	1.33	2.73	2.80	2.70	..
Uzbekistan	..	..	0.58	0.51	0.75	0.94	1.02	1.02	..
Former Soviet Union	29.99	34.29	x	x	x	x	x	x	..
Former Yugoslavia	2.23	3.08	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>35.18</b>	<b>40.56</b>	<b>39.63</b>	<b>35.92</b>	<b>39.53</b>	<b>43.41</b>	<b>45.39</b>	<b>45.15</b>	<b>..</b>
Algeria	0.07	0.03	0.02	0.06	0.12	0.07	0.03	0.03	..
Angola	3.30	3.65	4.38	5.38	6.14	6.94	7.59	7.74	..
Benin	1.04	1.21	1.56	1.45	1.67	2.10	2.58	2.71	..
Botswana	..	..	0.42	0.54	0.46	0.50	0.54	0.55	..
Cameroon	2.55	3.09	4.05	5.28	6.19	4.80	5.29	5.46	..
Congo	0.33	0.39	0.52	0.50	0.69	0.95	1.56	1.60	..
Côte d'Ivoire	1.76	2.34	3.29	4.38	7.30	7.83	10.27	9.51	..
Dem. Rep. of the Congo	6.20	7.58	10.48	13.73	16.38	19.30	27.09	28.02	..
Egypt	1.12	1.64	1.91	2.50	2.57	2.84	3.05	3.04	..
Eritrea	..	..	..	0.51	0.50	0.58	0.63	0.65	..
Ethiopia	14.25	16.19	22.12	30.60	35.36	40.68	45.49	46.71	..
Gabon	0.51	0.61	0.80	0.99	2.39	4.12	3.81	3.89	..
Ghana	2.63	3.31	4.39	4.46	3.66	3.81	4.35	4.12	..
Kenya	4.47	5.84	8.79	11.43	13.57	15.77	19.57	20.39	..
Libya	0.11	0.13	0.13	0.14	0.15	0.16	0.15	0.15	..
Mauritius	0.27	0.25	0.30	0.26	0.26	0.24	0.22	0.26	..
Morocco	0.78	0.93	1.10	1.28	2.27	1.86	1.67	1.67	..
Mozambique	5.89	5.96	5.58	7.25	8.19	9.47	10.39	10.73	..
Namibia	..	..	..	0.33	0.35	0.30	0.36	0.37	..
Niger	..	..	..	1.24	1.46	1.71	2.13	2.21	..
Nigeria	32.81	39.61	52.79	70.17	82.45	98.27	109.13	112.06	..
Senegal	0.84	0.89	0.96	1.16	1.21	2.04	1.81	1.87	..
South Africa	5.22	6.39	10.50	12.73	13.71	14.83	15.88	16.35	..
South Sudan	..	..	..	..	..	..	0.19	0.20	..
Sudan	5.91	7.09	8.77	10.97	11.49	11.52	10.23	10.41	..
United Rep. of Tanzania	6.91	7.30	9.06	12.64	15.50	18.47	21.26	21.98	..
Togo	0.64	0.75	1.05	1.76	2.00	2.37	2.64	2.71	..
Tunisia	0.43	0.50	0.64	0.94	1.14	1.10	1.17	1.17	..
Zambia	2.57	3.73	4.72	5.89	6.69	7.83	9.00	9.11	..
Zimbabwe	3.47	4.01	5.10	5.87	6.45	7.19	7.79	7.93	..
Other Africa	20.45	24.16	37.47	42.03	46.87	52.66	56.70	58.59	..
<b>Africa</b>	<b>124.55</b>	<b>147.57</b>	<b>200.91</b>	<b>256.48</b>	<b>297.18</b>	<b>340.30</b>	<b>382.59</b>	<b>392.19</b>	<b>..</b>

Includes hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Primary supply of renewables (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	4.81	5.70	6.94	7.68	8.36	8.86	9.29	9.40	..
Brunei Darussalam	0.01	0.01	0.00	-	-	-	0.00	0.00	..
Cambodia	..	..	..	2.72	2.50	3.62	4.26	4.39	..
DPR of Korea	1.54	1.77	2.30	1.88	2.17	2.23	2.21	1.96	..
India	102.71	120.46	139.63	155.41	170.86	190.73	209.58	212.70	..
Indonesia	27.00	30.37	45.94	59.22	62.24	68.18	75.48	75.26	..
Malaysia	1.56	1.72	2.21	2.46	2.28	2.29	3.02	3.16	..
Mongolia	..	..	0.08	0.13	0.17	0.18	0.16	0.16	..
Myanmar	6.73	7.64	9.12	9.35	10.37	10.54	10.87	10.92	..
Nepal	3.76	4.40	5.50	7.13	8.14	8.87	9.73	9.83	..
Pakistan	11.71	14.78	20.22	25.48	29.27	32.25	34.98	35.79	..
Philippines	8.02	11.51	16.34	18.77	16.39	16.11	18.01	18.95	..
Singapore	0.00	0.01	0.04	0.10	0.20	0.29	0.37	0.38	..
Sri Lanka	2.85	3.21	4.19	4.74	4.92	5.54	5.33	5.37	..
Chinese Taipei	0.29	0.25	0.57	0.85	1.10	1.33	1.65	1.85	..
Thailand	8.07	10.76	15.11	15.13	17.68	23.09	26.36	25.93	..
Viet Nam	8.69	10.27	12.93	15.44	16.25	17.08	20.50	20.35	..
Other Asia	2.58	2.96	3.68	4.92	5.07	5.54	5.76	5.81	..
<b>Non-OECD Asia excl. China</b>	<b>190.33</b>	<b>225.82</b>	<b>284.80</b>	<b>331.40</b>	<b>357.98</b>	<b>396.74</b>	<b>437.58</b>	<b>442.21</b>	..
People's Rep. of China	164.99	184.94	211.34	219.91	207.79	206.68	239.10	250.80	..
Hong Kong, China	0.05	0.05	0.05	0.05	0.06	0.10	0.11	0.11	..
<b>China</b>	<b>165.04</b>	<b>184.99</b>	<b>211.39</b>	<b>219.96</b>	<b>207.85</b>	<b>206.78</b>	<b>239.21</b>	<b>250.91</b>	..
Argentina	2.35	3.45	3.26	5.43	5.20	5.65	7.07	6.83	..
Bolivia	0.31	0.83	0.86	0.85	0.87	1.08	1.23	1.29	..
Brazil	41.57	51.48	65.53	72.83	92.42	116.83	116.95	119.95	..
Colombia	4.09	5.96	7.88	6.19	6.67	7.26	7.98	7.66	..
Costa Rica	0.37	0.50	0.68	1.22	2.05	2.44	2.46	2.60	..
Cuba	3.58	4.30	6.67	3.71	2.02	1.25	1.67	1.70	..
Curaçao	-	-	-	0.00	0.00	0.00	0.00	0.00	..
Dominican Republic	1.21	1.33	0.94	0.95	1.04	0.99	1.04	0.99	..
Ecuador	1.08	1.06	1.38	1.40	1.26	1.36	1.79	2.01	..
El Salvador	1.33	1.91	1.69	2.12	2.50	2.38	2.06	2.07	..
Guatemala	2.04	2.37	3.18	4.12	4.38	6.85	8.32	8.00	..
Haiti	1.47	1.88	1.25	1.54	2.74	3.12	3.24	3.31	..
Honduras	1.06	1.31	1.69	1.52	1.85	2.23	2.52	2.69	..
Jamaica	0.25	0.22	0.48	0.59	0.41	0.46	0.54	0.54	..
Nicaragua	0.76	0.91	1.42	1.35	1.49	1.57	2.17	2.20	..
Panama	0.34	0.53	0.61	0.76	0.77	0.67	0.80	0.90	..
Paraguay	1.27	1.61	4.56	6.84	6.58	6.97	6.99	7.04	..
Peru	3.92	4.04	3.57	3.68	3.88	4.87	4.87	4.98	..
Suriname	..	..	..	0.15	0.11	0.15	0.16	0.16	..
Trinidad and Tobago	0.02	0.03	0.07	0.02	0.04	0.01	0.01	0.01	..
Uruguay	0.54	0.77	1.15	1.03	1.02	2.07	2.61	2.94	..
Venezuela	0.99	1.67	3.77	6.09	7.39	7.37	8.23	7.18	..
Other Non-OECD Americas	0.52	0.52	0.55	0.44	0.58	0.51	0.47	0.48	..
<b>Non-OECD Americas</b>	<b>69.07</b>	<b>86.66</b>	<b>111.21</b>	<b>122.84</b>	<b>145.29</b>	<b>176.08</b>	<b>183.20</b>	<b>185.55</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.39	0.62	0.74	0.47	1.97	1.45	1.74	1.74	..
Iraq	0.05	0.08	0.25	0.08	0.55	0.45	0.30	0.27	..
Jordan	0.00	0.00	0.06	0.07	0.08	0.14	0.16	0.18	..
Kuwait	0.02	0.00	0.01	-	-	-	-	-	..
Lebanon	0.14	0.18	0.15	0.17	0.26	0.21	0.17	0.19	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	..
Syrian Arab Republic	0.00	0.23	0.24	0.28	0.38	0.23	0.21	0.04	..
United Arab Emirates	-	-	-	0.02	0.03	0.05	0.12	0.11	..
Yemen	0.05	0.06	0.08	0.08	0.09	0.10	0.11	0.12	..
<b>Middle East</b>	<b>0.66</b>	<b>1.17</b>	<b>1.53</b>	<b>1.18</b>	<b>3.37</b>	<b>2.64</b>	<b>2.81</b>	<b>2.66</b>	..

Includes hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.



## Electricity generation from coal (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>38.20</b>	<b>37.87</b>	<b>37.30</b>	<b>38.82</b>	<b>40.03</b>	<b>40.30</b>	<b>40.66</b>	<b>39.33</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>38.97</b>	<b>31.26</b>	<b>31.76</b>	<b>38.82</b>	<b>43.27</b>	<b>46.46</b>	<b>47.74</b>	<b>47.11</b>	<b>..</b>
<b>OECD Total</b>	<b>37.91</b>	<b>40.92</b>	<b>40.32</b>	<b>38.81</b>	<b>37.64</b>	<b>34.31</b>	<b>32.12</b>	<b>29.73</b>	<b>27.94</b>
Canada	12.92	16.02	17.06	19.42	16.21	13.17	9.92	9.84	8.24
Chile	14.00	16.08	35.52	21.13	13.74	27.91	36.34	37.14	40.98
Mexico	0.56	-	6.71	9.23	13.06	11.72	11.24	10.87	11.10
United States	46.16	51.20	53.07	52.90	50.46	45.80	39.65	34.23	31.42
<b>OECD Americas</b>	<b>41.36</b>	<b>45.31</b>	<b>47.03</b>	<b>46.64</b>	<b>44.19</b>	<b>40.10</b>	<b>34.30</b>	<b>29.86</b>	<b>27.52</b>
Australia	74.88	73.25	78.74	83.03	79.53	71.33	61.16	62.87	63.41
Israel <sup>1</sup>	-	-	50.09	68.80	74.65	58.52	49.56	45.84	37.09
Japan	8.01	9.60	13.49	21.48	27.23	27.16	32.74	33.15	34.11
Korea	9.05	6.66	16.76	38.61	38.36	44.14	42.41	43.08	41.97
New Zealand	8.52	1.89	2.06	3.94	13.65	4.60	4.51	4.25	2.41
<b>OECD Asia Oceania</b>	<b>15.47</b>	<b>17.24</b>	<b>22.61</b>	<b>32.98</b>	<b>37.01</b>	<b>37.40</b>	<b>38.95</b>	<b>39.57</b>	<b>39.67</b>
Austria	10.32	7.02	14.21	11.26	13.16	9.87	7.97	8.23	6.10
Belgium	21.68	29.36	28.25	19.37	12.24	6.35	6.16	6.11	3.19
Czech Republic	85.14	84.75	76.44	75.39	63.79	58.30	51.16	53.06	54.76
Denmark	35.80	81.84	90.67	46.25	42.66	43.76	34.38	24.54	28.85
Estonia	..	..	86.05	92.13	93.27	89.29	87.35	82.53	84.09
Finland	28.07	42.63	23.56	18.77	16.56	26.54	17.36	12.81	15.06
France	19.66	27.35	8.49	5.77	5.38	4.66	2.16	2.16	2.05
Germany	69.00	62.94	58.73	53.15	48.35	43.64	45.81	44.26	42.56
Greece	35.45	44.85	72.37	64.23	59.81	53.68	51.14	42.66	31.58
Hungary	66.01	50.44	30.49	27.58	19.99	16.99	20.80	19.47	18.09
Iceland	-	-	-	-	-	-	-	-	-
Ireland	24.92	16.40	57.37	36.27	34.49	20.35	25.01	26.31	23.89
Italy	3.60	9.95	16.78	11.31	16.65	14.87	16.73	16.12	14.42
Latvia	..	..	0.93	1.89	-	0.03	-	-	-
Luxembourg	58.82	51.63	76.44	-	-	-	-	-	-
Netherlands	6.04	13.69	38.21	30.25	26.95	21.63	31.35	38.65	35.01
Norway	0.03	0.02	0.07	0.05	0.10	0.09	0.11	0.10	0.10
Poland	93.90	94.71	97.49	96.33	92.20	88.09	82.99	80.91	79.99
Portugal	3.94	2.30	32.12	33.87	32.97	13.22	23.00	28.72	22.40
Slovak Republic	64.40	37.86	31.86	19.84	19.07	14.86	12.36	12.51	11.33
Slovenia	..	..	31.26	33.84	34.87	32.53	21.90	29.59	30.90
Spain	18.87	30.01	40.12	36.60	27.90	8.82	16.47	18.96	13.79
Sweden	0.64	0.19	1.09	1.75	1.22	1.80	0.72	0.78	1.04
Switzerland	-	0.13	0.07	-	-	-	-	-	-
Turkey	26.11	25.61	35.07	30.57	26.67	26.06	30.27	29.10	33.59
United Kingdom	62.06	73.18	64.97	32.67	34.48	28.75	30.31	22.81	9.38
<b>OECD Europe</b>	<b>40.98</b>	<b>43.30</b>	<b>38.59</b>	<b>30.00</b>	<b>28.31</b>	<b>24.13</b>	<b>24.99</b>	<b>24.14</b>	<b>22.11</b>
<i>IEA</i>	<i>38.37</i>	<i>41.58</i>	<i>40.90</i>	<i>39.45</i>	<i>38.25</i>	<i>34.88</i>	<i>32.69</i>	<i>30.21</i>	<i>28.36</i>
<i>IEA/Accession/Association</i>	<i>38.79</i>	<i>41.63</i>	<i>43.21</i>	<i>44.42</i>	<i>46.22</i>	<i>47.06</i>	<i>47.89</i>	<i>46.16</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>40.76</i>	<i>32.20</i>	<i>30.27</i>	<i>25.90</i>	<i>26.62</i>	<i>25.78</i>	<i>..</i>
<i>G7</i>	<i>39.47</i>	<i>42.67</i>	<i>41.28</i>	<i>39.73</i>	<i>38.95</i>	<i>35.60</i>	<i>32.79</i>	<i>29.37</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>37.22</i>	<i>37.67</i>	<i>36.63</i>	<i>33.35</i>	<i>30.66</i>	<i>27.63</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>40.53</i>	<i>42.84</i>	<i>44.30</i>	<i>44.69</i>	<i>45.25</i>	<i>43.67</i>	<i>..</i>
<i>OPEC</i>	<i>0.12</i>	<i>0.08</i>	<i>0.03</i>	<i>0.09</i>	<i>0.08</i>	<i>0.04</i>	<i>0.05</i>	<i>0.04</i>	<i>..</i>

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from coal (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>38.97</b>	<b>31.26</b>	<b>31.76</b>	<b>38.82</b>	<b>43.27</b>	<b>46.46</b>	<b>47.74</b>	<b>47.11</b>	..
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	-	-	-	-	-	-	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	-	-	0.01	0.08	0.07	0.11	..
Bosnia and Herzegovina	..	..	71.76	50.70	51.29	52.53	62.82	63.98	..
Bulgaria	77.28	49.15	50.26	42.33	42.36	49.13	45.40	46.21	..
Croatia	..	..	7.43	13.77	17.83	16.12	17.62	20.56	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	89.67	76.48	78.31	65.33	69.54	58.36	..
Georgia	..	..	-	-	-	-	-	-	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	71.12	69.45	73.85	80.65	71.95	71.57	..
Kosovo	..	..	..	97.60	96.88	96.54	96.95	97.47	..
Kyrgyzstan	..	..	13.07	4.29	10.10	4.99	7.36	13.22	..
Lithuania	..	..	-	-	-	-	0.05	-	..
Malta	-	-	55.91	-	-	-	-	-	..
Republic of Moldova	..	..	30.75	2.94	-	-	-	-	..
Montenegro	..	..	..	..	34.85	31.63	44.78	50.35	..
Romania	26.02	31.44	28.77	37.16	37.26	34.22	27.31	27.64	..
Russian Federation	..	..	14.51	20.04	17.39	16.03	14.90	14.88	..
Serbia	..	..	69.06	62.78	64.27	67.06	66.27	72.43	..
Tajikistan	..	..	-	-	-	-	0.97	1.53	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	38.19	30.08	26.90	36.94	38.74	34.58	..
Uzbekistan	..	..	7.38	4.09	4.08	4.09	4.08	4.09	..
Former Soviet Union	42.45	31.46	x	x	x	x	x	x	..
Former Yugoslavia	46.03	42.82	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>42.45</b>	<b>32.23</b>	<b>22.74</b>	<b>23.69</b>	<b>22.35</b>	<b>23.39</b>	<b>22.49</b>	<b>22.23</b>	..
Algeria	-	-	-	-	-	-	-	-	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	88.08	97.63	99.43	100.00	95.68	96.36	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	-	-	-	-	-	..
Eritrea	..	..	..	..	..	..	..	..	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	6.15	20.42	26.85	38.68	42.90	39.44	..
Morocco	27.51	19.48	22.97	68.28	66.00	45.90	55.03	55.53	..
Mozambique	-	17.53	13.88	-	-	-	-	-	..
Namibia	..	..	..	0.78	0.18	4.21	-	0.46	..
Niger	..	..	..	65.53	69.00	68.94	55.76	41.62	..
Nigeria	-	-	0.10	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	98.47	98.96	94.28	93.06	94.64	94.26	93.10	92.71	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	2.71	1.15	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	-	-	-	-	-	..
Zambia	6.71	0.68	0.49	0.18	0.18	-	-	-	..
Zimbabwe	32.58	11.74	53.33	53.40	47.31	31.71	43.86	46.78	..
Other Africa	0.33	15.17	9.84	10.52	11.30	12.46	10.06	9.99	..
<b>Africa</b>	<b>59.80</b>	<b>54.58</b>	<b>52.12</b>	<b>47.27</b>	<b>44.55</b>	<b>38.64</b>	<b>33.82</b>	<b>32.85</b>	..

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from coal (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	0.62	1.89	1.97	1.69	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	3.10	28.18	48.40	..
DPR of Korea	37.00	47.99	40.05	43.31	39.04	35.52	24.13	21.29	..
India	49.39	51.04	65.46	68.50	66.86	67.18	74.49	75.31	..
Indonesia	-	-	29.90	36.43	40.61	40.32	52.45	55.78	..
Malaysia	-	-	12.74	11.11	24.18	34.33	37.86	42.28	..
Mongolia	..	..	92.11	97.01	96.96	95.85	92.34	92.74	..
Myanmar	2.56	1.95	1.61	-	9.79	8.90	2.02	1.78	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	0.79	0.20	0.10	0.35	0.14	0.09	0.14	0.14	..
Philippines	0.09	1.01	7.35	36.79	26.97	34.40	42.78	44.51	..
Singapore	-	-	-	-	-	-	1.10	1.20	..
Sri Lanka	-	-	-	-	-	-	25.70	33.71	..
Chinese Taipei	6.94	13.96	27.70	48.91	55.45	51.35	48.82	46.69	..
Thailand	3.50	9.77	25.02	18.52	15.52	18.84	21.78	19.45	..
Viet Nam	82.13	39.93	23.05	11.80	22.69	20.75	23.25	29.57	..
Other Asia	-	-	-	1.21	2.22	1.46	5.05	5.05	..
<b>Non-OECD Asia excl. China</b>	<b>28.60</b>	<b>29.55</b>	<b>41.34</b>	<b>45.59</b>	<b>45.55</b>	<b>46.86</b>	<b>53.00</b>	<b>54.38</b>	..
People's Rep. of China	57.92	53.04	71.04	78.21	79.20	77.19	72.63	70.31	..
Hong Kong, China	-	-	98.21	60.44	70.30	61.97	76.18	65.44	..
<b>China</b>	<b>55.68</b>	<b>50.90</b>	<b>72.25</b>	<b>77.81</b>	<b>79.06</b>	<b>77.05</b>	<b>72.66</b>	<b>70.28</b>	..
Argentina	2.37	2.06	1.30	2.00	2.07	2.41	2.22	2.03	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	2.16	2.47	2.13	3.15	2.67	2.20	4.53	4.72	..
Colombia	12.45	7.91	10.20	5.10	4.90	6.89	10.18	11.85	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	1.16	-	10.23	12.25	14.02	12.86	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	8.91	13.23	13.16	17.29	21.36	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	0.51	1.04	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	7.40	6.92	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	1.74	3.15	2.37	0.72	0.84	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	-	-	-	-	-	-	-	-	..
<b>Non-OECD Americas</b>	<b>2.11</b>	<b>1.95</b>	<b>1.87</b>	<b>2.08</b>	<b>2.10</b>	<b>2.09</b>	<b>3.49</b>	<b>3.68</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.47	0.50	0.11	0.40	0.32	0.15	0.19	0.16	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>0.21</b>	<b>0.13</b>	<b>0.03</b>	<b>0.11</b>	<b>0.10</b>	<b>0.04</b>	<b>0.05</b>	<b>0.04</b>	..

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

## Electricity generation from oil (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>24.79</b>	<b>20.02</b>	<b>11.45</b>	<b>8.09</b>	<b>6.43</b>	<b>4.57</b>	<b>4.34</b>	<b>4.08</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>23.17</b>	<b>25.46</b>	<b>14.91</b>	<b>10.79</b>	<b>7.70</b>	<b>6.29</b>	<b>5.79</b>	<b>5.44</b>	<b>..</b>
<b>OECD Total</b>	<b>25.40</b>	<b>17.52</b>	<b>9.56</b>	<b>6.51</b>	<b>5.49</b>	<b>2.90</b>	<b>2.59</b>	<b>2.40</b>	<b>2.02</b>
Canada	3.36	3.70	3.42	2.43	2.52	1.30	1.24	1.21	1.02
Chile	20.48	14.74	9.62	4.25	6.46	14.02	6.58	4.19	3.81
Mexico	41.13	57.94	53.58	45.51	27.30	16.18	10.95	10.15	8.25
United States	17.09	10.84	4.08	2.94	3.31	1.10	0.92	0.90	0.79
<b>OECD Americas</b>	<b>15.87</b>	<b>11.03</b>	<b>5.52</b>	<b>4.68</b>	<b>4.41</b>	<b>2.06</b>	<b>1.60</b>	<b>1.53</b>	<b>1.31</b>
Australia	2.61	5.43	2.30	0.85	1.24	2.41	2.02	2.70	2.32
Israel <sup>1</sup>	100.00	100.00	49.89	31.09	13.69	3.66	0.49	0.65	0.63
Japan	73.24	46.23	32.52	16.48	15.78	8.78	11.26	9.90	7.22
Korea	82.29	78.67	17.90	11.99	6.70	3.81	3.19	2.28	2.82
New Zealand	6.11	0.17	0.03	-	0.01	0.00	0.01	0.00	0.02
<b>OECD Asia Oceania</b>	<b>63.75</b>	<b>42.11</b>	<b>26.71</b>	<b>13.72</b>	<b>11.63</b>	<b>6.39</b>	<b>7.24</b>	<b>6.29</b>	<b>4.89</b>
Austria	14.06	13.96	3.81	2.84	2.54	1.88	0.98	1.39	1.48
Belgium	53.72	34.67	1.87	0.96	2.03	0.43	0.30	0.30	0.14
Czech Republic	11.30	9.55	0.87	0.51	0.40	0.23	0.12	0.11	0.11
Denmark	64.07	18.00	3.39	12.31	3.79	1.99	0.98	1.08	0.99
Estonia	..	..	8.38	0.66	0.31	0.32	0.35	1.23	1.25
Finland	31.65	10.84	3.09	0.84	0.71	0.60	0.35	0.31	0.31
France	40.17	18.83	2.08	1.34	1.39	0.98	0.38	0.38	0.37
Germany	11.98	5.73	1.90	0.84	1.95	1.40	0.91	0.97	0.92
Greece	49.54	40.12	22.27	16.63	15.49	10.61	11.01	10.93	9.94
Hungary	17.19	13.89	4.75	12.51	1.27	1.31	0.26	0.25	0.24
Iceland	3.75	1.48	0.13	0.07	0.06	0.01	0.02	0.02	0.02
Ireland	66.32	60.43	10.04	19.59	13.03	2.14	1.00	1.45	0.97
Italy	62.36	57.00	48.19	31.81	15.88	7.27	5.09	4.75	4.21
Latvia	..	..	5.37	2.59	0.12	0.03	-	0.02	0.02
Luxembourg	27.62	10.89	1.44	-	0.03	0.03	-	-	-
Netherlands	12.33	38.42	4.26	2.95	2.26	1.05	1.84	1.30	1.05
Norway	0.19	0.15	0.00	0.01	0.02	0.03	0.02	0.02	0.02
Poland	2.34	2.89	1.17	1.34	1.77	1.84	1.01	1.29	1.33
Portugal	19.21	42.89	33.16	19.42	19.03	5.60	2.61	2.56	2.13
Slovak Republic	17.71	17.94	6.41	0.66	2.36	2.18	1.11	1.44	1.20
Slovenia	..	..	7.88	0.40	0.28	0.05	0.24	0.11	0.06
Spain	33.19	35.19	5.69	10.22	8.44	5.55	5.14	6.21	6.18
Sweden	19.44	10.38	0.89	1.06	0.87	1.19	0.20	0.16	0.47
Switzerland	7.07	1.02	0.70	0.34	0.37	0.10	0.06	0.07	0.08
Turkey	51.36	25.05	6.85	7.45	3.39	1.03	0.85	0.85	0.70
United Kingdom	25.65	11.67	10.91	2.26	1.35	1.31	0.57	0.63	0.83
<b>OECD Europe</b>	<b>25.28</b>	<b>17.75</b>	<b>7.72</b>	<b>5.55</b>	<b>3.90</b>	<b>2.20</b>	<b>1.51</b>	<b>1.60</b>	<b>1.52</b>
<i>IEA</i>	<i>25.14</i>	<i>16.86</i>	<i>8.78</i>	<i>5.58</i>	<i>4.93</i>	<i>2.49</i>	<i>2.34</i>	<i>2.18</i>	<i>1.84</i>
<i>IEA/Accession/Association</i>	<i>24.92</i>	<i>17.99</i>	<i>9.63</i>	<i>6.38</i>	<i>5.06</i>	<i>2.46</i>	<i>1.90</i>	<i>1.71</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>8.70</i>	<i>6.03</i>	<i>4.34</i>	<i>2.61</i>	<i>1.84</i>	<i>1.91</i>	<i>..</i>
<i>G7</i>	<i>26.23</i>	<i>16.53</i>	<i>9.70</i>	<i>5.61</i>	<i>5.16</i>	<i>2.47</i>	<i>2.43</i>	<i>2.22</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>10.03</i>	<i>5.41</i>	<i>4.84</i>	<i>2.29</i>	<i>2.26</i>	<i>2.06</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>9.82</i>	<i>6.39</i>	<i>5.20</i>	<i>3.07</i>	<i>2.78</i>	<i>2.58</i>	<i>..</i>
<i>OPEC</i>	<i>36.52</i>	<i>38.64</i>	<i>35.24</i>	<i>32.27</i>	<i>26.81</i>	<i>30.50</i>	<i>30.43</i>	<i>27.61</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Electricity generation from oil (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>23.17</b>	<b>25.46</b>	<b>14.91</b>	<b>10.79</b>	<b>7.70</b>	<b>6.29</b>	<b>5.79</b>	<b>5.44</b>	<b>..</b>
Albania	33.78	20.59	13.59	3.85	1.29	0.01	-	-	..
Armenia	..	..	68.59	-	-	-	-	-	..
Azerbaijan	..	..	34.42	71.95	25.67	0.12	0.16	6.51	..
Belarus	..	..	47.81	6.57	3.04	2.38	1.09	1.06	..
Bosnia and Herzegovina	..	..	7.34	0.46	1.12	0.28	0.27	0.31	..
Bulgaria	11.02	22.49	2.92	1.63	1.38	0.85	0.45	0.37	..
Croatia	..	..	31.97	14.98	14.21	3.78	0.96	1.97	..
Cyprus <sup>1</sup>	100.00	100.00	100.00	100.00	99.98	98.63	92.71	91.22	..
FYR of Macedonia	..	..	1.81	6.33	0.20	0.84	2.77	2.46	..
Georgia	..	..	29.17	3.69	0.91	0.32	-	-	..
Gibraltar	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	..
Kazakhstan	..	..	9.99	5.20	3.88	0.75	0.97	1.16	..
Kosovo	..	..	..	0.64	0.61	0.43	0.28	0.25	..
Kyrgyzstan	..	..	-	-	0.99	1.71	0.58	0.29	..
Lithuania	..	..	14.61	5.89	2.78	12.96	4.31	6.46	..
Malta	100.00	100.00	44.09	100.00	100.00	99.95	96.66	92.33	..
Republic of Moldova	..	..	25.39	0.57	0.17	0.47	0.26	0.15	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	9.56	9.63	18.38	6.54	3.19	1.14	0.75	0.72	..
Russian Federation	..	..	11.89	3.78	2.23	0.90	1.01	0.95	..
Serbia	..	..	4.60	0.92	1.87	0.30	0.03	0.07	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	16.08	0.69	0.32	0.44	0.12	0.46	..
Uzbekistan	..	..	4.42	10.05	6.63	1.45	0.36	0.26	..
Former Soviet Union	21.92	25.95	x	x	x	x	x	x	..
Former Yugoslavia	5.34	7.97	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>20.67</b>	<b>24.45</b>	<b>13.57</b>	<b>4.90</b>	<b>2.99</b>	<b>1.34</b>	<b>1.16</b>	<b>1.22</b>	<b>..</b>
Algeria	18.25	12.24	5.43	3.04	2.11	2.11	0.99	1.32	..
Angola	17.28	11.85	13.79	36.89	20.35	32.04	46.82	46.83	..
Benin	100.00	100.00	100.00	97.62	99.07	99.13	100.00	94.44	..
Botswana	..	..	11.92	2.37	0.57	-	4.28	3.61	..
Cameroon	4.47	6.06	1.52	1.09	5.79	19.72	18.48	17.89	..
Congo	39.58	35.48	0.61	0.34	-	1.53	-	-	..
Côte d'Ivoire	78.89	22.70	33.33	0.27	0.12	1.42	6.13	5.22	..
Dem. Rep. of the Congo	2.08	4.54	0.44	0.05	0.09	0.08	0.05	0.13	..
Egypt	36.39	27.75	31.69	28.55	13.55	13.48	19.47	21.01	..
Eritrea	..	..	..	99.52	99.65	99.36	99.48	99.51	..
Ethiopia	43.65	29.75	11.65	1.37	0.42	0.62	0.03	0.04	..
Gabon	96.97	50.94	11.25	20.53	27.19	10.65	12.56	10.21	..
Ghana	0.97	0.77	-	8.50	17.07	20.41	17.07	10.26	..
Kenya	42.73	26.38	7.14	53.02	28.34	30.93	18.51	12.49	..
Libya	100.00	100.00	100.00	78.06	72.05	52.87	46.30	46.30	..
Mauritius	47.59	69.01	62.69	49.94	48.15	37.00	36.81	37.84	..
Morocco	31.03	51.65	64.35	25.64	17.48	24.15	13.10	7.17	..
Mozambique	70.20	17.32	23.57	0.43	0.11	0.01	-	0.76	..
Namibia	..	..	..	-	0.06	0.23	0.87	1.76	..
Niger	..	..	..	34.47	30.13	30.03	43.34	57.63	..
Nigeria	17.68	17.69	13.67	-	-	-	-	-	..
Senegal	91.40	94.08	93.02	89.84	79.25	83.65	83.61	83.62	..
South Africa	-	0.03	-	-	0.03	0.08	0.08	0.07	..
South Sudan	..	..	..	..	..	..	99.59	99.39	..
Sudan	30.00	29.99	36.77	53.95	67.04	17.30	21.65	35.46	..
United Rep. of Tanzania	49.14	13.64	4.85	10.92	16.51	3.74	15.48	21.94	..
Togo	62.38	25.49	39.87	42.86	59.79	45.81	13.79	24.69	..
Tunisia	61.07	64.50	35.54	11.60	1.65	0.02	1.82	4.64	..
Zambia	1.34	0.46	0.29	0.44	0.41	0.12	2.84	3.01	..
Zimbabwe	-	-	-	0.94	0.26	0.28	0.54	0.49	..
Other Africa	48.16	38.06	36.63	34.91	37.73	42.08	36.85	36.62	..
<b>Africa</b>	<b>10.77</b>	<b>11.92</b>	<b>12.86</b>	<b>11.65</b>	<b>9.14</b>	<b>9.50</b>	<b>10.86</b>	<b>11.28</b>	<b>..</b>

1. Please refer to section 'Geographical coverage'.

## Electricity generation from oil (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	41.74	26.60	4.31	6.47	5.77	3.62	14.70	16.38	..
Brunei Darussalam	-	1.17	0.94	0.90	0.89	1.00	0.95	1.00	..
Cambodia	..	..	..	99.78	93.88	91.40	10.68	5.19	..
DPR of Korea	5.82	2.01	3.63	4.11	3.64	2.63	3.28	5.92	..
India	7.02	7.28	4.55	5.12	3.54	2.49	1.77	1.66	..
Indonesia	56.54	82.07	46.93	19.65	30.82	20.12	11.48	8.40	..
Malaysia	76.79	84.77	45.86	5.20	2.66	2.94	2.37	1.16	..
Mongolia	..	..	7.89	2.99	3.04	4.15	4.50	4.17	..
Myanmar	20.71	31.34	10.94	13.50	0.57	0.44	0.46	0.34	..
Nepal	22.12	6.45	0.11	1.63	0.63	0.09	0.03	-	..
Pakistan	3.21	1.11	20.57	39.50	20.15	35.16	36.84	37.22	..
Philippines	85.69	67.90	47.23	20.28	10.86	10.48	7.39	7.14	..
Singapore	100.00	100.00	98.92	79.95	23.10	20.20	0.70	0.70	..
Sri Lanka	31.33	11.33	0.16	54.20	62.77	46.88	35.10	17.82	..
Chinese Taipei	76.66	59.92	26.49	16.61	6.84	4.45	3.33	4.98	..
Thailand	69.53	81.40	23.49	10.45	6.60	0.74	1.00	0.57	..
Viet Nam	-	18.26	15.03	17.01	4.04	3.59	0.37	0.49	..
Other Asia	76.36	67.50	45.19	35.59	41.70	28.79	25.61	25.60	..
<b>Non-OECD Asia excl. China</b>	<b>32.34</b>	<b>31.99</b>	<b>18.54</b>	<b>13.52</b>	<b>8.86</b>	<b>6.75</b>	<b>4.92</b>	<b>4.57</b>	..
People's Rep. of China	19.55	27.37	8.11	3.49	2.02	0.35	0.17	0.17	..
Hong Kong, China	100.00	100.00	1.79	0.49	0.39	0.28	0.58	0.49	..
<b>China</b>	<b>22.67</b>	<b>30.30</b>	<b>7.83</b>	<b>3.42</b>	<b>2.00</b>	<b>0.35</b>	<b>0.17</b>	<b>0.17</b>	..
Argentina	61.65	31.64	9.74	3.24	5.45	13.30	13.84	15.42	..
Bolivia	11.61	12.72	8.61	0.77	1.31	1.93	2.00	2.25	..
Brazil	7.24	3.75	2.22	4.35	2.90	3.11	6.00	5.04	..
Colombia	10.58	1.83	1.04	0.23	0.23	0.84	0.51	0.57	..
Costa Rica	15.52	4.31	2.48	0.85	3.28	6.69	10.21	1.00	..
Cuba	86.32	89.01	89.59	84.43	84.19	83.72	81.56	81.51	..
Curaçao	100.00	100.00	100.00	99.29	97.44	97.58	96.41	96.29	..
Dominican Republic	73.06	80.57	88.72	90.85	65.66	54.79	50.05	53.48	..
Ecuador	65.37	74.14	21.45	28.30	33.54	43.28	37.48	34.53	..
El Salvador	46.35	1.51	6.81	41.93	41.76	34.96	40.30	42.18	..
Guatemala	69.60	85.35	8.37	39.37	39.28	23.00	14.14	18.25	..
Haiti	21.31	26.11	20.60	48.26	52.34	69.85	91.29	92.00	..
Honduras	26.13	13.69	1.72	38.09	67.05	52.19	55.66	56.69	..
Jamaica	86.10	76.01	92.43	95.16	96.31	92.31	90.20	89.74	..
Nicaragua	44.10	47.06	38.64	78.60	65.39	63.00	46.13	49.95	..
Panama	91.18	45.58	14.73	29.57	35.70	42.90	36.80	27.76	..
Paraguay	9.52	8.74	0.03	-	-	0.00	0.01	0.00	..
Peru	24.47	27.38	21.49	12.31	6.74	5.84	1.22	1.40	..
Suriname	..	..	..	11.60	47.30	29.81	37.66	39.95	..
Trinidad and Tobago	1.99	2.26	0.08	0.05	0.17	0.28	0.24	0.23	..
Uruguay	38.65	24.17	5.05	6.62	12.46	11.65	9.25	11.44	..
Venezuela	19.06	32.36	11.50	9.27	13.11	15.84	14.02	16.89	..
Other Non-OECD Americas	92.53	94.02	92.81	94.20	87.13	87.08	87.81	87.81	..
<b>Non-OECD Americas</b>	<b>33.63</b>	<b>23.28</b>	<b>13.08</b>	<b>13.40</b>	<b>12.98</b>	<b>12.86</b>	<b>13.33</b>	<b>13.50</b>	..
Bahrain	-	-	-	-	-	-	0.03	0.03	..
Islamic Republic of Iran	58.96	49.58	37.15	20.89	15.77	19.76	21.66	14.43	..
Iraq	26.43	72.56	73.49	79.32	47.37	59.45	73.73	71.85	..
Jordan	100.00	100.00	87.77	89.37	44.45	28.33	92.52	50.59	..
Kuwait	9.75	43.85	55.43	67.06	74.91	65.37	66.25	63.58	..
Lebanon	73.31	69.11	66.67	95.36	91.52	88.38	98.92	97.40	..
Oman	100.00	21.52	18.37	17.17	2.09	2.25	2.60	2.63	..
Qatar	9.52	2.69	-	-	-	-	-	-	..
Saudi Arabia	100.00	28.35	49.01	53.97	43.51	53.86	48.84	44.20	..
Syrian Arab Republic	98.81	31.94	55.96	50.09	50.51	39.45	22.51	29.06	..
United Arab Emirates	-	3.71	3.71	3.09	2.14	1.48	1.26	1.24	..
Yemen	100.00	100.00	100.00	100.00	100.00	73.45	61.44	60.20	..
<b>Middle East</b>	<b>53.17</b>	<b>41.50</b>	<b>43.64</b>	<b>40.77</b>	<b>32.05</b>	<b>34.29</b>	<b>35.27</b>	<b>30.68</b>	..

## Electricity generation from natural gas (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>12.14</b>	<b>12.06</b>	<b>14.77</b>	<b>17.79</b>	<b>20.20</b>	<b>22.45</b>	<b>21.66</b>	<b>22.85</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>13.48</b>	<b>14.58</b>	<b>23.31</b>	<b>21.21</b>	<b>21.78</b>	<b>21.22</b>	<b>19.42</b>	<b>20.13</b>	<b>..</b>
<b>OECD Total</b>	<b>11.64</b>	<b>10.90</b>	<b>10.11</b>	<b>15.80</b>	<b>19.04</b>	<b>23.65</b>	<b>24.36</b>	<b>26.22</b>	<b>27.71</b>
Canada	6.00	2.46	2.00	5.53	6.40	8.61	9.60	10.02	8.39
Chile	1.12	1.30	1.02	26.07	25.91	17.69	14.27	15.06	16.13
Mexico	14.25	15.48	12.48	21.46	40.13	53.35	57.04	59.86	62.36
United States	18.56	15.26	11.92	15.76	18.34	23.38	26.89	31.94	33.03
<b>OECD Americas</b>	<b>16.94</b>	<b>13.55</b>	<b>10.63</b>	<b>14.81</b>	<b>18.04</b>	<b>23.19</b>	<b>26.26</b>	<b>30.58</b>	<b>31.52</b>
Australia	4.27	7.33	9.31	7.74	10.42	17.65	21.91	20.80	19.62
Israel <sup>1</sup>	-	-	-	0.03	11.58	37.47	48.44	51.61	59.53
Japan	2.26	14.17	19.56	23.31	21.59	27.95	41.51	39.59	40.61
Korea	-	-	9.11	10.21	16.02	20.77	23.90	22.37	25.09
New Zealand	1.41	7.54	17.70	24.39	21.92	22.08	16.16	15.53	13.28
<b>OECD Asia Oceania</b>	<b>2.36</b>	<b>12.13</b>	<b>16.90</b>	<b>18.52</b>	<b>18.77</b>	<b>25.00</b>	<b>33.75</b>	<b>32.14</b>	<b>33.28</b>
Austria	14.32	9.19	15.66	13.11	20.20	21.12	8.77	12.60	13.29
Belgium	23.70	11.24	7.69	19.30	26.66	33.49	27.02	32.81	25.41
Czech Republic	0.93	1.14	0.62	2.32	1.79	1.60	2.12	2.74	4.17
Denmark	-	-	2.67	24.34	24.22	20.34	6.49	6.27	7.25
Estonia	..	..	5.57	7.00	5.33	2.34	0.55	0.60	0.58
Finland	-	4.22	8.56	14.48	15.91	13.96	8.11	7.57	5.31
France	5.53	2.72	0.73	2.15	4.04	4.21	2.29	3.51	6.33
Germany	10.94	14.15	7.39	9.17	12.02	14.42	10.01	9.83	12.65
Greece	-	-	0.26	11.08	13.75	17.14	13.46	17.54	27.79
Hungary	16.22	35.21	15.73	18.76	34.62	31.03	14.43	16.83	20.37
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	15.24	27.70	39.13	45.17	64.28	48.96	44.01	50.56
Italy	3.11	5.03	18.63	37.55	50.28	51.12	33.67	39.37	42.30
Latvia	..	..	26.07	27.27	30.29	45.09	45.46	49.81	45.78
Luxembourg	10.19	23.53	5.45	50.95	92.80	90.28	76.17	62.66	32.78
Netherlands	79.53	39.83	50.76	57.48	57.64	63.16	49.82	42.28	45.97
Norway	-	-	-	0.15	0.27	3.95	1.84	1.81	1.75
Poland	1.68	0.12	0.09	0.65	3.32	3.05	3.36	3.89	4.78
Portugal	-	-	-	16.46	29.46	27.75	13.15	20.60	22.07
Slovak Republic	5.26	10.24	7.15	10.86	6.97	8.03	5.96	6.02	5.24
Slovenia	..	..	0.02	2.15	2.24	3.37	2.18	2.73	2.52
Spain	1.01	2.67	1.00	9.13	27.30	31.80	17.19	18.90	19.48
Sweden	-	-	0.27	0.32	0.37	1.94	0.27	0.26	0.80
Switzerland	-	0.61	0.60	1.30	1.51	1.56	0.74	1.00	1.18
Turkey	-	-	17.71	37.00	45.35	46.47	47.85	37.90	32.54
United Kingdom	0.97	0.75	1.57	39.55	38.60	46.33	30.09	29.74	42.73
<b>OECD Europe</b>	<b>7.44</b>	<b>6.73</b>	<b>6.34</b>	<b>15.89</b>	<b>20.65</b>	<b>23.59</b>	<b>16.21</b>	<b>16.43</b>	<b>18.96</b>
<i>IEA</i>	<i>11.66</i>	<i>10.90</i>	<i>10.13</i>	<i>15.73</i>	<i>18.56</i>	<i>22.89</i>	<i>23.40</i>	<i>25.20</i>	<i>26.61</i>
<i>IEA/Accession/Association</i>	<i>11.04</i>	<i>10.14</i>	<i>9.31</i>	<i>14.31</i>	<i>15.95</i>	<i>17.96</i>	<i>16.55</i>	<i>17.67</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>7.47</i>	<i>15.95</i>	<i>20.31</i>	<i>22.93</i>	<i>14.48</i>	<i>15.50</i>	<i>..</i>
<i>G7</i>	<i>12.21</i>	<i>11.94</i>	<i>10.74</i>	<i>16.53</i>	<i>18.55</i>	<i>22.98</i>	<i>24.67</i>	<i>27.39</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>16.29</i>	<i>19.23</i>	<i>21.52</i>	<i>26.12</i>	<i>27.72</i>	<i>30.06</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>13.66</i>	<i>15.98</i>	<i>17.47</i>	<i>19.32</i>	<i>18.28</i>	<i>19.37</i>	<i>..</i>
<i>OPEC</i>	<i>36.26</i>	<i>41.75</i>	<i>45.86</i>	<i>51.68</i>	<i>56.43</i>	<i>57.75</i>	<i>58.20</i>	<i>62.44</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Electricity generation from natural gas (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>13.48</b>	<b>14.58</b>	<b>23.31</b>	<b>21.21</b>	<b>21.78</b>	<b>21.22</b>	<b>19.42</b>	<b>20.13</b>	..
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	16.41	45.18	28.94	22.15	42.44	35.91	..
Azerbaijan	..	..	58.42	19.85	61.17	81.45	93.86	86.08	..
Belarus	..	..	52.14	93.33	96.83	97.15	98.00	97.87	..
Bosnia and Herzegovina	..	..	-	-	-	0.32	0.19	0.19	..
Bulgaria	-	-	7.57	4.70	3.93	4.27	4.56	3.82	..
Croatia	..	..	15.05	13.95	13.89	17.25	7.46	10.65	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	0.01	-	0.34	3.65	3.24	..
Georgia	..	..	15.62	17.38	13.28	7.16	19.63	21.96	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	10.46	10.68	10.69	8.89	19.20	18.39	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	23.46	9.81	3.04	1.50	0.80	1.30	..
Lithuania	..	..	23.83	14.53	20.93	63.80	47.17	46.48	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	42.28	89.76	93.54	92.87	93.53	94.48	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	48.29	40.20	35.10	17.33	16.18	11.98	12.43	14.24	..
Russian Federation	..	..	47.33	42.26	46.19	50.24	50.22	49.71	..
Serbia	..	..	3.21	1.15	0.87	0.87	0.70	0.58	..
Tajikistan	..	..	9.07	1.56	0.72	0.21	-	-	..
Turkmenistan	..	..	95.21	100.00	100.00	100.00	100.00	100.00	..
Ukraine	..	..	16.71	17.49	18.37	8.32	6.99	6.23	..
Uzbekistan	..	..	76.39	73.31	71.74	73.49	74.20	75.01	..
Former Soviet Union	18.45	20.59	x	x	x	x	x	x	..
Former Yugoslavia	1.87	2.05	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>18.80</b>	<b>20.17</b>	<b>37.80</b>	<b>35.24</b>	<b>37.90</b>	<b>39.61</b>	<b>40.67</b>	<b>40.60</b>	..
Algeria	54.95	84.15	93.73	96.75	96.25	97.51	98.61	98.36	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	7.07	6.19	5.99	..
Congo	8.33	-	-	-	18.01	43.75	45.29	46.66	..
Côte d'Ivoire	-	-	-	62.98	72.65	70.29	69.94	78.05	..
Dem. Rep. of the Congo	-	-	-	-	-	1.01	0.08	0.04	..
Egypt	-	20.50	44.80	53.74	74.31	76.48	71.66	70.73	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	-	16.36	17.87	20.71	42.02	47.10	46.05	..
Ghana	-	-	-	-	-	10.78	18.20	38.85	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	21.94	27.95	47.13	53.70	53.70	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	-	-	-	-	10.38	12.52	19.48	18.77	..
Mozambique	-	-	-	0.02	0.05	0.11	8.84	12.83	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	11.54	43.49	53.65	61.78	67.00	75.60	82.41	81.80	..
Senegal	-	-	2.33	0.19	2.56	2.73	4.17	4.17	..
South Africa	-	-	-	-	-	-	-	-	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	32.32	44.58	42.23	43.91	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	32.74	34.68	63.67	87.58	96.87	95.91	93.87	91.44	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	-	0.82	0.77	1.33	1.33	..
<b>Africa</b>	<b>2.03</b>	<b>7.62</b>	<b>14.28</b>	<b>20.75</b>	<b>27.78</b>	<b>32.80</b>	<b>35.72</b>	<b>36.54</b>	..

1. Please refer to section 'Geographical coverage'.



## Electricity generation from natural gas (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	34.69	48.62	84.26	88.78	90.78	92.70	82.01	80.70	..
Brunei Darussalam	100.00	98.83	99.06	99.10	99.11	99.00	99.00	98.95	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.49	0.52	3.40	9.82	10.55	11.57	4.64	4.92	..
Indonesia	-	-	2.25	27.96	14.97	23.71	24.59	25.17	..
Malaysia	-	1.33	24.07	73.64	66.87	56.73	50.07	46.60	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	6.58	13.18	39.31	49.53	39.83	22.99	35.16	39.02	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	40.38	40.48	33.63	31.97	44.10	27.42	26.50	25.73	..
Philippines	-	-	-	0.04	29.81	28.81	24.19	22.91	..
Singapore	-	-	-	18.50	74.40	77.20	95.27	95.03	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	-	-	1.41	9.68	16.54	23.51	27.44	29.85	..
Thailand	-	-	40.22	64.22	72.33	74.82	68.71	71.44	..
Viet Nam	-	-	0.07	16.40	41.60	46.52	33.41	33.21	..
Other Asia	-	-	-	3.62	3.11	5.25	3.21	3.21	..
<b>Non-OECD Asia excl. China</b>	<b>2.83</b>	<b>3.11</b>	<b>9.06</b>	<b>21.11</b>	<b>26.09</b>	<b>27.22</b>	<b>22.04</b>	<b>22.10</b>	..
People's Rep. of China	-	0.23	0.45	0.43	0.49	1.86	2.02	2.49	..
Hong Kong, China	-	-	-	39.07	29.31	37.50	22.98	33.79	..
<b>China</b>	<b>-</b>	<b>0.22</b>	<b>0.43</b>	<b>1.30</b>	<b>0.92</b>	<b>2.18</b>	<b>2.17</b>	<b>2.69</b>	..
Argentina	24.54	22.02	39.16	54.65	52.45	49.98	48.20	49.48	..
Bolivia	4.36	19.64	38.94	47.71	57.43	64.11	69.99	66.35	..
Brazil	-	-	0.15	1.17	4.67	7.07	13.73	13.67	..
Colombia	8.70	19.28	12.37	19.14	14.70	20.14	15.27	19.34	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	-	0.47	0.16	8.69	12.63	13.04	14.43	14.54	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	6.32	21.08	22.60	22.03	..
Ecuador	-	-	-	-	11.35	11.23	13.34	12.67	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.47	1.89	1.70	3.96	17.84	34.07	45.69	45.03	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	95.38	96.46	99.05	99.58	99.52	99.72	99.76	99.77	..
Uruguay	-	-	-	-	0.04	0.73	0.02	-	..
Venezuela	43.08	26.90	26.15	16.99	13.60	16.67	17.72	19.42	..
Other Non-OECD Americas	-	-	0.14	4.38	7.21	8.39	8.29	8.29	..
<b>Non-OECD Americas</b>	<b>9.59</b>	<b>8.25</b>	<b>9.19</b>	<b>11.29</b>	<b>13.23</b>	<b>15.51</b>	<b>19.02</b>	<b>19.68</b>	..
Bahrain	100.00	100.00	100.00	100.00	100.00	100.00	99.97	99.97	..
Islamic Republic of Iran	17.07	24.81	52.45	75.67	74.83	75.92	71.32	79.27	..
Iraq	65.33	21.38	15.68	18.76	32.89	30.81	21.95	24.42	..
Jordan	-	-	11.90	10.06	54.88	71.17	7.11	48.44	..
Kuwait	90.25	56.15	44.57	32.94	25.09	34.63	33.75	36.42	..
Lebanon	-	-	-	-	-	6.28	-	-	..
Oman	-	78.48	81.63	82.83	97.91	97.75	97.40	97.37	..
Qatar	90.48	97.31	100.00	100.00	100.00	100.00	100.00	100.00	..
Saudi Arabia	-	71.65	50.99	46.03	56.49	46.14	51.16	55.80	..
Syrian Arab Republic	-	3.38	20.54	37.10	37.11	54.97	66.38	68.63	..
United Arab Emirates	100.00	96.29	96.29	96.91	97.86	98.52	98.48	98.53	..
Yemen	-	-	-	-	-	26.55	38.56	39.80	..
<b>Middle East</b>	<b>33.50</b>	<b>46.62</b>	<b>51.00</b>	<b>57.25</b>	<b>63.23</b>	<b>63.51</b>	<b>62.21</b>	<b>67.25</b>	..

## Electricity generation from nuclear energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>3.31</b>	<b>8.61</b>	<b>16.97</b>	<b>16.75</b>	<b>15.11</b>	<b>12.82</b>	<b>10.63</b>	<b>10.60</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>0.89</b>	<b>3.54</b>	<b>6.76</b>	<b>5.99</b>	<b>5.35</b>	<b>4.42</b>	<b>4.26</b>	<b>4.48</b>	<b>..</b>
<b>OECD Total</b>	<b>4.22</b>	<b>10.95</b>	<b>22.54</b>	<b>23.02</b>	<b>22.29</b>	<b>20.98</b>	<b>18.31</b>	<b>18.15</b>	<b>18.05</b>
Canada	5.65	10.19	15.14	12.02	14.83	15.01	16.06	15.12	15.82
Chile	-	-	-	-	-	-	-	-	-
Mexico	-	-	2.54	4.00	4.31	2.13	3.21	3.72	3.32
United States	4.54	10.97	19.10	19.81	18.99	19.27	19.23	19.32	19.54
<b>OECD Americas</b>	<b>4.58</b>	<b>10.57</b>	<b>18.00</b>	<b>18.02</b>	<b>17.59</b>	<b>17.67</b>	<b>17.68</b>	<b>17.62</b>	<b>17.83</b>
Australia	-	-	-	-	-	-	-	-	-
Israel <sup>1</sup>	-	-	-	-	-	-	-	-	-
Japan	2.09	14.43	23.18	29.60	26.98	25.28	-	0.91	1.77
Korea	-	9.34	50.19	37.77	37.84	29.92	28.65	30.00	27.61
New Zealand	-	-	-	-	-	-	-	-	-
<b>OECD Asia Oceania</b>	<b>1.70</b>	<b>11.63</b>	<b>21.53</b>	<b>25.83</b>	<b>24.58</b>	<b>21.92</b>	<b>8.01</b>	<b>8.96</b>	<b>9.13</b>
Austria	-	-	-	-	-	-	-	-	-
Belgium	0.19	23.64	60.78	58.18	55.53	51.10	47.14	37.53	53.07
Czech Republic	-	-	20.21	18.64	30.18	32.82	35.64	32.49	29.36
Denmark	-	-	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	-	17.23	35.34	32.12	32.97	28.26	34.63	33.89	33.84
France	8.08	23.80	75.28	77.57	79.05	75.94	78.24	77.63	73.36
Germany	3.23	11.92	27.84	29.64	26.48	22.43	15.62	14.32	13.16
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	48.29	40.29	38.69	42.17	53.24	52.19	50.41
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	2.18	1.20	-	-	-	-	-	-	-
Latvia	..	..	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Netherlands	2.11	6.48	4.87	4.38	4.00	3.33	3.96	3.70	3.45
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	1.89	22.65	47.21	53.56	56.54	53.07	57.09	56.87	57.13
Slovenia	..	..	37.14	34.95	38.92	34.80	37.11	38.12	35.26
Spain	8.65	4.75	35.89	28.16	19.88	20.78	20.84	20.63	21.62
Sweden	2.70	27.50	46.71	39.47	45.70	38.95	42.25	34.80	40.47
Switzerland	17.14	29.78	42.98	39.99	40.39	39.88	39.31	34.93	34.66
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	9.95	13.03	20.69	22.72	20.64	16.42	19.01	20.91	21.37
<b>OECD Europe</b>	<b>4.60</b>	<b>11.24</b>	<b>29.49</b>	<b>29.11</b>	<b>28.03</b>	<b>25.32</b>	<b>25.00</b>	<b>23.97</b>	<b>23.29</b>
<i>IEA</i>	<i>4.27</i>	<i>11.14</i>	<i>22.98</i>	<i>23.64</i>	<i>22.96</i>	<i>21.74</i>	<i>18.99</i>	<i>18.84</i>	<i>18.77</i>
<i>IEA/Accession/Association</i>	<i>4.05</i>	<i>10.21</i>	<i>20.02</i>	<i>19.20</i>	<i>17.25</i>	<i>14.55</i>	<i>11.80</i>	<i>11.76</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>30.85</i>	<i>31.44</i>	<i>30.32</i>	<i>27.49</i>	<i>27.74</i>	<i>26.75</i>	<i>..</i>
<i>G7</i>	<i>4.67</i>	<i>11.89</i>	<i>23.44</i>	<i>24.93</i>	<i>24.10</i>	<i>23.21</i>	<i>19.60</i>	<i>19.69</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>21.55</i>	<i>23.88</i>	<i>23.20</i>	<i>22.43</i>	<i>19.29</i>	<i>19.53</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>18.55</i>	<i>18.44</i>	<i>16.74</i>	<i>14.23</i>	<i>11.75</i>	<i>11.79</i>	<i>..</i>
<i>OPEC</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0.38</i>	<i>0.24</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Electricity generation from nuclear energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>0.89</b>	<b>3.54</b>	<b>6.76</b>	<b>5.99</b>	<b>5.35</b>	<b>4.42</b>	<b>4.26</b>	<b>4.48</b>	<b>..</b>
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	-	33.65	43.00	38.36	31.81	35.75	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	-	-	-	-	-	-	..
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	..
Bulgaria	-	17.70	34.80	44.72	42.42	33.14	33.81	31.56	..
Croatia	..	..	-	-	-	-	-	-	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	-	-	-	-	-	..
Georgia	..	..	-	-	-	-	-	-	..
Gibraltar	..	..	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	-	-	-	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	-	-	-	-	-	-	..
Lithuania	..	..	59.96	75.70	71.71	-	-	-	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	-	-	-	-	-	-	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	-	-	-	10.51	9.35	19.17	17.91	17.66	..
Russian Federation	..	..	10.93	14.91	15.71	16.45	17.02	18.34	..
Serbia	..	..	-	-	-	-	-	-	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	25.51	45.16	47.74	47.21	48.57	54.05	..
Uzbekistan	..	..	-	-	-	-	-	-	..
Former Soviet Union	1.31	5.64	x	x	x	x	x	x	..
Former Yugoslavia	-	-	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>1.17</b>	<b>5.42</b>	<b>11.98</b>	<b>16.95</b>	<b>17.45</b>	<b>17.06</b>	<b>17.16</b>	<b>18.01</b>	<b>..</b>
Algeria	-	-	-	-	-	-	-	-	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	-	-	-	-	-	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	-	-	-	-	-	-	-	-	..
Mozambique	-	-	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	-	-	5.11	6.26	4.67	4.71	5.53	4.96	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	-	-	-	-	-	-	-	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	-	-	-	-	-	..
<b>Africa</b>	<b>-</b>	<b>-</b>	<b>2.67</b>	<b>2.95</b>	<b>2.02</b>	<b>1.80</b>	<b>1.81</b>	<b>1.57</b>	<b>..</b>

1. Please refer to section 'Geographical coverage'.

## Electricity generation from nuclear energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	3.29	2.49	2.10	2.97	2.42	2.68	2.79	2.71	..
Indonesia	-	-	-	-	-	-	-	-	..
Malaysia	-	-	-	-	-	-	-	-	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	3.63	0.01	0.78	2.93	2.65	3.62	5.42	5.48	..
Philippines	-	-	-	-	-	-	-	-	..
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	-	19.24	37.18	21.33	17.88	17.07	16.50	14.30	..
Thailand	-	-	-	-	-	-	-	-	..
Viet Nam	-	-	-	-	-	-	-	-	..
Other Asia	-	-	-	-	-	-	-	-	..
<b>Non-OECD Asia excl. China</b>	<b>1.69</b>	<b>4.10</b>	<b>6.30</b>	<b>4.60</b>	<b>3.70</b>	<b>3.41</b>	<b>3.23</b>	<b>2.92</b>	..
People's Rep. of China	-	-	-	1.23	2.12	1.76	2.34	2.92	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	-	-	-	<b>1.21</b>	<b>2.09</b>	<b>1.74</b>	<b>2.32</b>	<b>2.90</b>	..
Argentina	-	5.89	14.35	6.95	6.52	5.72	4.17	4.92	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	-	-	1.00	1.73	2.45	2.82	2.60	2.53	..
Colombia	-	-	-	-	-	-	-	-	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	-	-	-	-	-	-	-	-	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	-	-	-	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	-	-	-	-	-	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	-	-	-	-	-	-	-	-	..
<b>Non-OECD Americas</b>	-	<b>0.78</b>	<b>1.95</b>	<b>1.60</b>	<b>1.89</b>	<b>2.03</b>	<b>1.74</b>	<b>1.81</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	-	-	-	1.63	1.04	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	-	-	-	-	-	-	<b>0.45</b>	<b>0.28</b>	..

## Electricity generation from hydro energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>20.92</b>	<b>20.73</b>	<b>18.06</b>	<b>16.93</b>	<b>16.01</b>	<b>16.01</b>	<b>16.38</b>	<b>16.03</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>21.98</b>	<b>23.87</b>	<b>22.88</b>	<b>22.41</b>	<b>20.99</b>	<b>19.69</b>	<b>19.22</b>	<b>18.72</b>	<b>..</b>
<b>OECD Total</b>	<b>20.53</b>	<b>19.27</b>	<b>15.43</b>	<b>13.73</b>	<b>12.34</b>	<b>12.44</b>	<b>12.96</b>	<b>12.72</b>	<b>12.87</b>
Canada	72.07	67.28	61.56	59.20	58.32	58.18	57.25	56.74	59.42
Chile	63.83	66.98	48.60	46.20	50.46	35.94	32.28	31.68	24.97
Mexico	43.64	25.22	20.27	16.11	11.05	13.48	12.90	9.90	9.17
United States	13.50	11.49	8.53	6.29	6.38	6.02	6.05	5.84	6.23
<b>OECD Americas</b>	<b>21.12</b>	<b>19.26</b>	<b>15.77</b>	<b>13.60</b>	<b>13.26</b>	<b>12.70</b>	<b>13.17</b>	<b>12.82</b>	<b>13.18</b>
Australia	17.72	13.59	9.17	7.80	6.70	5.34	7.41	5.30	5.86
Israel <sup>1</sup>	-	-	0.01	0.07	0.06	0.05	0.02	0.04	0.04
Japan	14.35	15.42	9.96	7.83	6.77	7.21	7.76	8.23	7.72
Korea	8.66	5.33	6.04	1.39	0.95	0.74	0.50	0.39	0.48
New Zealand	77.25	83.77	71.85	62.25	54.28	55.09	55.89	55.50	59.31
<b>OECD Asia Oceania</b>	<b>16.40</b>	<b>16.51</b>	<b>11.02</b>	<b>7.80</b>	<b>6.47</b>	<b>6.23</b>	<b>6.52</b>	<b>6.44</b>	<b>6.21</b>
Austria	60.65	69.05	63.92	69.87	57.52	56.47	66.56	60.00	61.16
Belgium	0.42	0.52	0.38	0.56	0.34	0.33	0.41	0.46	0.40
Czech Republic	2.63	4.56	1.86	2.41	2.90	3.27	2.24	2.17	2.44
Denmark	0.13	0.11	0.11	0.08	0.06	0.05	0.05	0.06	0.06
Estonia	..	..	-	0.06	0.22	0.21	0.22	0.26	0.30
Finland	40.28	25.07	19.97	20.95	19.53	16.02	19.67	24.45	23.04
France	26.13	27.02	12.91	12.40	9.01	11.11	11.26	9.66	10.69
Germany	4.07	4.09	3.18	3.80	3.19	3.34	3.15	2.96	3.25
Greece	15.00	15.03	5.09	6.91	8.44	13.00	8.89	11.77	11.36
Hungary	0.57	0.47	0.63	0.51	0.56	0.50	1.02	0.77	0.82
Iceland	95.13	96.95	93.22	82.72	80.81	73.81	71.03	73.31	72.63
Ireland	8.76	7.93	4.90	3.57	2.46	2.13	2.75	2.87	2.26
Italy	26.07	24.66	14.84	16.37	12.15	17.11	21.05	16.17	14.43
Latvia	..	..	67.63	68.16	67.79	53.12	38.79	33.62	39.37
Luxembourg	3.37	10.68	11.22	29.38	2.81	3.34	5.67	7.44	14.40
Netherlands	-	-	0.12	0.16	0.09	0.09	0.11	0.08	0.09
Norway	99.78	99.84	99.62	99.51	98.87	94.74	95.90	95.83	96.29
Poland	1.74	1.94	1.05	1.47	1.42	1.86	1.38	1.11	1.29
Portugal	74.81	52.71	32.26	26.11	10.24	30.08	29.96	16.89	23.72
Slovak Republic	10.75	11.30	7.37	14.98	14.79	19.13	15.50	14.52	17.32
Slovenia	..	..	23.71	28.14	22.89	27.79	35.49	25.70	27.78
Spain	38.21	27.05	16.84	12.79	6.35	14.18	14.25	10.13	13.42
Sweden	76.70	61.12	49.67	54.11	45.97	44.72	41.53	46.51	39.87
Switzerland	75.79	68.10	54.18	55.70	54.03	54.59	54.26	57.88	56.75
Turkey	20.95	48.76	40.23	24.72	24.43	24.52	16.13	25.65	24.61
United Kingdom	1.37	1.37	1.64	1.36	1.24	0.94	1.76	1.87	1.60
<b>OECD Europe</b>	<b>21.15</b>	<b>20.29</b>	<b>16.90</b>	<b>17.00</b>	<b>14.06</b>	<b>15.46</b>	<b>16.24</b>	<b>15.99</b>	<b>16.06</b>
<i>IEA</i>	<i>20.25</i>	<i>19.10</i>	<i>15.21</i>	<i>13.50</i>	<i>12.14</i>	<i>12.19</i>	<i>12.76</i>	<i>12.60</i>	<i>12.82</i>
<i>IEA/Accession/Association</i>	<i>20.92</i>	<i>19.62</i>	<i>15.99</i>	<i>13.85</i>	<i>12.93</i>	<i>13.41</i>	<i>14.31</i>	<i>14.26</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>11.27</i>	<i>11.87</i>	<i>9.52</i>	<i>11.30</i>	<i>11.87</i>	<i>10.64</i>	<i>..</i>
<i>G7</i>	<i>17.14</i>	<i>16.56</i>	<i>12.64</i>	<i>11.17</i>	<i>10.42</i>	<i>10.47</i>	<i>11.14</i>	<i>10.76</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>13.05</i>	<i>11.96</i>	<i>11.25</i>	<i>11.12</i>	<i>11.78</i>	<i>11.36</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>15.89</i>	<i>14.66</i>	<i>13.92</i>	<i>14.46</i>	<i>14.91</i>	<i>14.68</i>	<i>..</i>
<i>OPEC</i>	<i>27.10</i>	<i>19.53</i>	<i>18.87</i>	<i>15.95</i>	<i>16.65</i>	<i>11.67</i>	<i>10.84</i>	<i>9.58</i>	<i>..</i>

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from hydro energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>21.98</b>	<b>23.87</b>	<b>22.88</b>	<b>22.41</b>	<b>20.99</b>	<b>19.69</b>	<b>19.22</b>	<b>18.72</b>	..
Albania	66.22	79.41	86.41	96.15	98.71	99.99	100.00	100.00	..
Armenia	..	..	15.01	21.16	28.07	39.38	25.70	28.29	..
Azerbaijan	..	..	7.16	8.20	13.16	18.42	5.26	6.63	..
Belarus	..	..	0.05	0.10	0.12	0.13	0.35	0.31	..
Bosnia and Herzegovina	..	..	20.90	48.84	47.60	46.87	36.73	35.52	..
Bulgaria	11.71	10.66	4.46	6.58	9.86	10.99	9.81	11.61	..
Croatia	..	..	45.43	57.29	53.89	61.68	67.04	56.87	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	8.53	17.18	21.49	33.48	22.46	33.03	..
Georgia	..	..	55.21	78.93	85.81	92.52	80.37	78.04	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	8.43	14.67	11.58	9.71	7.86	8.71	..
Kosovo	..	..	..	1.76	2.51	3.02	2.78	2.29	..
Kyrgyzstan	..	..	63.48	85.90	85.88	91.80	91.26	85.19	..
Lithuania	..	..	1.46	3.06	3.13	10.81	10.76	8.20	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	1.58	6.72	6.29	6.66	5.92	5.06	..
Montenegro	..	..	..	..	65.15	68.37	55.22	49.65	..
Romania	16.13	18.73	17.74	28.46	34.01	32.80	28.84	25.23	..
Russian Federation	..	..	15.33	18.72	18.15	16.07	16.50	15.76	..
Serbia	..	..	23.13	35.15	32.99	31.77	32.90	26.81	..
Tajikistan	..	..	90.93	98.44	99.28	99.79	99.03	98.47	..
Turkmenistan	..	..	4.79	-	-	-	-	-	..
Ukraine	..	..	3.52	6.58	6.65	6.97	4.66	3.33	..
Uzbekistan	..	..	11.80	12.54	17.54	20.98	21.35	20.65	..
Former Soviet Union	13.37	14.27	x	x	x	x	x	x	..
Former Yugoslavia	46.76	47.16	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>14.68</b>	<b>15.89</b>	<b>13.90</b>	<b>19.03</b>	<b>19.10</b>	<b>18.26</b>	<b>17.38</b>	<b>16.65</b>	..
Algeria	26.80	3.61	0.84	0.21	1.64	0.38	0.40	0.21	..
Angola	82.72	88.15	86.21	63.11	79.65	67.96	53.18	53.17	..
Benin	-	-	-	2.38	0.93	-	-	4.09	..
Botswana	..	..	..	-	-	-	-	-	..
Cameroon	95.53	93.94	98.48	98.91	94.21	72.22	74.15	74.99	..
Congo	52.08	64.52	99.39	99.66	81.99	54.72	54.71	53.34	..
Côte d'Ivoire	21.11	77.30	66.67	36.75	25.29	27.12	23.09	15.52	..
Dem. Rep. of the Congo	97.92	95.46	99.56	99.95	99.91	98.91	99.77	99.71	..
Egypt	63.61	51.75	23.50	17.53	11.63	8.89	7.90	7.38	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	56.35	70.25	88.35	98.33	99.58	99.02	94.72	92.69	..
Gabon	3.03	49.06	72.09	61.06	51.59	46.87	39.74	43.18	..
Ghana	99.03	99.23	100.00	91.50	82.93	68.81	64.70	50.87	..
Kenya	45.28	65.03	76.57	33.08	52.13	46.35	35.75	39.24	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	39.57	23.38	10.90	5.40	5.06	3.76	3.10	4.07	..
Morocco	41.46	28.87	12.67	5.58	5.08	14.65	5.69	6.12	..
Mozambique	29.80	65.15	62.56	99.55	99.84	99.89	91.16	86.41	..
Namibia	..	..	..	99.22	99.76	95.56	99.13	97.79	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	70.78	38.82	32.59	38.22	33.00	24.40	17.59	18.20	..
Senegal	-	-	-	-	10.50	8.22	8.64	8.65	..
South Africa	1.53	1.00	0.61	0.53	0.55	0.82	0.39	0.32	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	70.00	70.01	63.23	46.05	32.96	82.70	78.35	64.54	..
United Rep. of Tanzania	50.86	86.36	95.15	86.37	50.01	51.21	41.65	33.49	..
Togo	37.62	74.51	60.13	57.14	39.15	51.96	82.76	69.14	..
Tunisia	6.19	0.82	0.79	0.60	1.15	0.31	0.29	0.35	..
Zambia	91.95	98.86	99.23	99.38	99.41	99.88	97.16	96.99	..
Zimbabwe	67.42	88.26	46.67	45.66	52.43	66.92	54.17	51.40	..
Other Africa	51.51	46.76	52.71	52.99	47.87	42.22	48.38	48.71	..
<b>Africa</b>	<b>27.25</b>	<b>25.77</b>	<b>17.82</b>	<b>16.96</b>	<b>15.92</b>	<b>16.30</b>	<b>16.09</b>	<b>15.44</b>	..

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from hydro energy (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	23.58	24.78	11.43	4.75	2.83	1.79	1.05	0.96	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	4.56	3.20	60.48	45.49	..
DPR of Korea	57.18	50.00	56.32	52.58	57.31	61.85	72.59	72.80	..
India	39.81	38.67	24.48	13.07	15.08	12.57	11.08	9.98	..
Indonesia	43.46	17.93	17.47	10.73	8.41	10.28	6.65	5.87	..
Malaysia	23.21	13.89	17.33	10.06	6.28	5.19	9.08	9.28	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	70.16	53.53	48.14	36.97	49.82	67.68	62.36	58.85	..
Nepal	77.88	93.55	99.89	98.37	99.37	99.91	99.79	99.80	..
Pakistan	51.99	58.19	44.93	25.24	32.96	33.70	30.35	30.67	..
Philippines	14.22	19.56	23.03	17.22	14.83	11.52	11.83	10.51	..
Singapore	-	-	-	-	-	-	-	-	..
Sri Lanka	68.67	88.67	99.84	45.65	37.01	52.16	36.53	45.28	..
Chinese Taipei	16.39	6.87	7.22	2.53	1.78	1.72	1.68	1.75	..
Thailand	26.97	8.82	11.26	6.28	4.39	3.47	3.21	2.67	..
Viet Nam	17.87	41.81	61.85	54.78	31.58	29.03	42.88	36.61	..
Other Asia	23.53	32.13	54.47	58.12	51.71	63.26	64.91	64.90	..
<b>Non-OECD Asia excl. China</b>	<b>34.55</b>	<b>30.47</b>	<b>23.60</b>	<b>13.39</b>	<b>13.70</b>	<b>12.67</b>	<b>12.66</b>	<b>11.65</b>	..
People's Rep. of China	22.53	19.36	20.40	16.41	15.88	16.95	18.55	19.07	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	<b>21.65</b>	<b>18.58</b>	<b>19.49</b>	<b>16.03</b>	<b>15.64</b>	<b>16.80</b>	<b>18.42</b>	<b>18.95</b>	..
Argentina	11.23	38.14	35.23	32.36	32.23	26.81	29.61	26.24	..
Bolivia	83.01	65.66	51.06	50.13	40.11	32.20	25.71	28.88	..
Brazil	89.44	92.49	92.77	87.24	83.73	78.20	63.22	61.85	..
Colombia	68.28	69.87	75.63	74.37	79.07	67.99	70.91	64.96	..
Costa Rica	83.96	95.24	97.52	82.15	79.49	75.78	65.74	74.61	..
Cuba	1.09	0.97	0.61	0.59	0.44	0.56	0.54	0.24	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	23.60	17.13	9.44	8.90	17.63	11.74	8.97	6.37	..
Ecuador	34.63	25.86	78.55	71.70	54.30	44.27	47.14	50.70	..
El Salvador	53.65	64.79	74.30	34.79	34.61	34.83	27.61	22.59	..
Guatemala	25.66	11.99	78.59	41.70	36.51	43.28	45.18	35.04	..
Haiti	68.85	70.06	76.55	51.74	47.66	30.15	8.71	8.00	..
Honduras	73.87	86.31	98.28	61.88	30.66	45.45	32.37	26.10	..
Jamaica	4.53	7.16	3.58	1.74	2.05	3.52	3.30	3.13	..
Nicaragua	54.72	51.14	27.66	8.93	14.19	13.77	8.88	6.44	..
Panama	8.65	53.20	83.16	69.94	63.91	56.81	54.20	60.77	..
Paraguay	79.89	85.92	99.90	100.00	100.00	100.00	99.99	100.00	..
Peru	71.61	69.88	75.82	81.19	70.90	55.84	48.55	49.14	..
Suriname	..	..	..	88.40	52.70	70.19	62.34	60.05	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	61.00	75.63	94.16	92.92	87.00	78.82	74.14	60.16	..
Venezuela	37.85	40.74	62.34	73.75	73.28	67.49	68.26	63.70	..
Other Non-OECD Americas	7.47	5.98	6.80	1.01	4.77	3.54	2.52	2.52	..
<b>Non-OECD Americas</b>	<b>53.33</b>	<b>64.33</b>	<b>72.40</b>	<b>69.81</b>	<b>67.29</b>	<b>63.00</b>	<b>55.80</b>	<b>53.38</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	23.50	25.11	10.29	3.01	9.04	4.09	5.05	5.02	..
Iraq	8.24	6.06	10.83	1.92	19.74	9.75	4.33	3.73	..
Jordan	-	-	0.30	0.53	0.59	0.41	0.32	0.28	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	26.69	30.89	33.33	4.64	8.48	5.34	1.08	2.60	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	1.19	64.67	23.49	12.81	12.38	5.58	11.11	2.31	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>13.13</b>	<b>11.75</b>	<b>5.33</b>	<b>1.86</b>	<b>4.61</b>	<b>2.13</b>	<b>1.95</b>	<b>1.68</b>	..

Excludes hydro pumped storage.

## Electricity generation from other (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.64</b>	<b>0.71</b>	<b>1.45</b>	<b>1.63</b>	<b>2.22</b>	<b>3.85</b>	<b>6.33</b>	<b>7.11</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>1.52</b>	<b>1.28</b>	<b>0.37</b>	<b>0.77</b>	<b>0.90</b>	<b>1.93</b>	<b>3.57</b>	<b>4.12</b>	<b>..</b>
<b>OECD Total</b>	<b>0.31</b>	<b>0.44</b>	<b>2.04</b>	<b>2.13</b>	<b>3.19</b>	<b>5.72</b>	<b>9.66</b>	<b>10.79</b>	<b>11.41</b>
Canada	-	0.35	0.83	1.41	1.72	3.72	5.92	7.07	7.12
Chile	0.58	0.89	5.24	2.35	3.42	4.45	10.54	11.93	14.11
Mexico	0.43	1.37	4.43	3.69	4.15	3.14	4.67	5.50	5.80
United States	0.14	0.24	3.31	2.30	2.52	4.43	7.25	7.76	8.99
<b>OECD Americas</b>	<b>0.13</b>	<b>0.28</b>	<b>3.04</b>	<b>2.25</b>	<b>2.51</b>	<b>4.28</b>	<b>6.99</b>	<b>7.60</b>	<b>8.65</b>
Australia	0.52	0.40	0.49	0.59	2.10	3.27	7.50	8.34	8.79
Israel <sup>1</sup>	-	-	-	-	0.02	0.29	1.49	1.85	2.70
Japan	0.06	0.16	1.30	1.29	1.65	3.62	6.72	8.22	8.57
Korea	-	-	0.00	0.04	0.13	0.61	1.35	1.89	2.04
New Zealand	6.71	6.63	8.36	9.42	10.14	18.23	23.43	24.71	24.98
<b>OECD Asia Oceania</b>	<b>0.32</b>	<b>0.38</b>	<b>1.25</b>	<b>1.14</b>	<b>1.54</b>	<b>3.06</b>	<b>5.53</b>	<b>6.61</b>	<b>6.82</b>
Austria	0.65	0.78	2.39	2.92	6.57	10.66	15.72	17.78	17.97
Belgium	0.29	0.57	1.04	1.63	3.20	8.31	18.98	22.80	17.79
Czech Republic	-	-	-	0.73	0.93	3.78	8.72	9.42	9.17
Denmark	-	0.04	3.16	17.02	29.26	33.85	58.10	68.04	62.85
Estonia	..	..	-	0.15	0.87	7.84	11.53	15.39	13.78
Finland	-	-	9.48	12.84	14.32	14.62	19.89	20.98	22.45
France	0.44	0.28	0.51	0.77	1.14	3.09	5.68	6.66	7.20
Germany	0.78	1.17	0.96	3.41	8.02	14.77	24.50	27.66	27.44
Greece	-	-	0.01	1.15	2.51	5.56	15.50	17.10	19.34
Hungary	-	-	0.12	0.34	4.87	7.98	10.25	10.48	10.09
Iceland	1.12	1.57	6.65	17.22	19.13	26.17	28.95	26.67	27.36
Ireland	-	-	-	1.43	4.85	11.11	22.28	25.36	22.32
Italy	2.67	2.16	1.56	2.96	5.04	9.63	23.46	23.58	24.64
Latvia	..	..	-	0.10	1.79	1.74	15.76	16.56	14.83
Luxembourg	-	3.27	5.45	19.67	4.36	6.35	18.16	29.90	52.83
Netherlands	-	1.58	1.79	4.78	9.05	10.74	12.93	13.98	14.44
Norway	-	-	0.31	0.28	0.75	1.21	2.13	2.24	1.85
Poland	0.35	0.34	0.19	0.21	1.28	5.15	11.26	12.80	12.61
Portugal	2.04	2.10	2.45	4.15	8.30	23.35	31.27	31.24	29.68
Slovak Republic	-	-	-	0.10	0.26	2.73	7.97	8.64	7.78
Slovenia	..	..	-	0.51	0.79	1.45	3.06	3.75	3.48
Spain	0.07	0.33	0.46	3.10	10.13	18.87	26.11	25.17	25.51
Sweden	0.51	0.81	1.38	3.31	5.87	11.39	15.04	17.50	17.36
Switzerland	-	0.36	1.46	2.66	3.70	3.87	5.63	6.12	7.33
Turkey	1.59	0.58	0.14	0.26	0.17	1.91	4.89	6.50	8.56
United Kingdom	-	-	0.22	1.44	3.68	6.26	18.26	24.04	24.08
<b>OECD Europe</b>	<b>0.56</b>	<b>0.68</b>	<b>0.97</b>	<b>2.45</b>	<b>5.04</b>	<b>9.30</b>	<b>16.04</b>	<b>17.86</b>	<b>18.06</b>
<i>IEA</i>	<i>0.31</i>	<i>0.43</i>	<i>2.01</i>	<i>2.09</i>	<i>3.17</i>	<i>5.81</i>	<i>9.82</i>	<i>10.97</i>	<i>11.60</i>
<i>IEA/Accession/Association</i>	<i>0.29</i>	<i>0.41</i>	<i>1.83</i>	<i>1.84</i>	<i>2.59</i>	<i>4.56</i>	<i>7.55</i>	<i>8.45</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.95</i>	<i>2.50</i>	<i>5.24</i>	<i>9.77</i>	<i>17.46</i>	<i>19.42</i>	<i>..</i>
<i>G7</i>	<i>0.29</i>	<i>0.40</i>	<i>2.19</i>	<i>2.04</i>	<i>2.82</i>	<i>5.26</i>	<i>9.37</i>	<i>10.58</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>1.86</i>	<i>1.86</i>	<i>2.55</i>	<i>4.69</i>	<i>8.30</i>	<i>9.35</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>1.55</i>	<i>1.68</i>	<i>2.37</i>	<i>4.22</i>	<i>7.04</i>	<i>7.90</i>	<i>..</i>
<i>OPEC</i>	<i>-</i>	<i>-</i>	<i>0.00</i>	<i>0.01</i>	<i>0.03</i>	<i>0.04</i>	<i>0.10</i>	<i>0.10</i>	<i>..</i>

Includes geothermal, solar, biofuels, waste, tide, wave, ocean, wind and other fuel sources.

1. Please refer to section 'Geographical coverage'.



## Electricity generation from other (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>1.52</b>	<b>1.28</b>	<b>0.37</b>	<b>0.77</b>	<b>0.90</b>	<b>1.93</b>	<b>3.57</b>	<b>4.12</b>	<b>..</b>
Albania	-	-	-	-	-	-	-	-	..
Armenia	..	..	-	-	-	0.11	0.05	0.05	..
Azerbaijan	..	..	-	-	-	0.01	0.72	0.78	..
Belarus	..	..	-	-	0.00	0.27	0.48	0.65	..
Bosnia and Herzegovina	..	..	-	-	-	-	-	-	..
Bulgaria	-	-	-	0.04	0.05	1.62	5.96	6.42	..
Croatia	..	..	0.12	0.01	0.18	1.16	6.92	9.96	..
Cyprus <sup>1</sup>	-	-	-	-	0.02	1.37	7.29	8.78	..
FYR of Macedonia	..	..	-	-	-	-	1.58	2.90	..
Georgia	..	..	-	-	-	-	-	-	..
Gibraltar	..	..	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	-	0.01	0.17	..
Kosovo	..	..	..	-	-	0.02	-	-	..
Kyrgyzstan	..	..	-	-	-	-	-	-	..
Lithuania	..	..	0.13	0.82	1.45	12.43	37.70	38.87	..
Malta	-	-	-	-	-	0.05	3.34	7.67	..
Republic of Moldova	..	..	-	-	-	-	0.28	0.31	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	-	-	-	-	0.01	0.69	12.76	14.52	..
Russian Federation	..	..	0.01	0.30	0.32	0.32	0.36	0.35	..
Serbia	..	..	-	-	-	-	0.10	0.10	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	-	0.00	0.02	0.13	0.93	1.34	..
Uzbekistan	..	..	-	-	-	-	-	-	..
Former Soviet Union	2.49	2.09	x	x	x	x	x	x	..
Former Yugoslavia	-	-	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>2.23</b>	<b>1.85</b>	<b>0.01</b>	<b>0.19</b>	<b>0.21</b>	<b>0.33</b>	<b>1.14</b>	<b>1.31</b>	<b>..</b>
Algeria	-	-	-	-	-	-	-	0.11	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	0.87	-	1.46	..
Botswana	..	..	-	-	-	-	0.04	0.03	..
Cameroon	-	-	-	-	-	1.00	1.17	1.12	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	1.94	1.16	0.84	1.21	..
Dem. Rep. of the Congo	-	-	-	-	-	-	0.10	0.11	..
Egypt	-	-	-	0.18	0.51	1.16	0.97	0.88	..
Eritrea	..	..	..	0.48	0.35	0.64	0.52	0.49	..
Ethiopia	-	-	-	0.30	-	0.36	5.24	7.27	..
Gabon	-	-	0.31	0.53	0.51	0.47	0.60	0.56	..
Ghana	-	-	-	-	-	-	0.03	0.03	..
Kenya	11.99	8.59	16.29	13.90	19.53	22.72	45.73	48.27	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	12.83	7.61	20.26	24.24	19.94	20.57	17.19	18.65	..
Morocco	-	-	-	0.50	1.07	2.78	6.69	12.42	..
Mozambique	..	..	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	0.87	1.02	0.90	0.75	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	8.60	5.92	4.66	9.98	7.70	5.40	3.58	3.57	..
South Africa	-	-	-	0.15	0.11	0.12	0.90	1.93	..
South Sudan	..	..	..	..	..	..	0.41	0.61	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	0.47	0.64	0.67	..
Togo	-	-	-	-	1.06	2.23	3.45	6.17	..
Tunisia	-	-	-	0.22	0.33	3.76	4.02	3.57	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	1.08	1.44	1.33	..
Other Africa	-	-	0.81	1.58	2.28	2.46	3.37	3.35	..
<b>Africa</b>	<b>0.15</b>	<b>0.11</b>	<b>0.25</b>	<b>0.42</b>	<b>0.58</b>	<b>0.95</b>	<b>1.70</b>	<b>2.32</b>	<b>..</b>

Includes geothermal, solar, biofuels, waste, tide, wave, ocean, wind and other fuel sources.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from other (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	0.27	0.27	..
Brunei Darussalam	-	-	-	-	-	-	0.04	0.05	..
Cambodia	..	..	..	0.22	1.56	2.30	0.65	0.93	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	-	-	0.01	0.52	1.55	3.52	5.23	5.42	..
Indonesia	-	-	3.44	5.22	5.20	5.57	4.83	4.78	..
Malaysia	-	-	-	-	0.00	0.81	0.63	0.68	..
Mongolia	..	..	-	-	-	-	3.16	3.08	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	-	-	-	-	-	0.18	0.20	..
Pakistan	-	-	-	-	-	-	0.75	0.76	..
Philippines	-	11.53	22.40	25.67	17.54	14.79	13.81	14.92	..
Singapore	-	-	1.08	1.55	2.50	2.60	2.94	3.08	..
Sri Lanka	-	-	-	0.16	0.21	0.95	2.67	3.19	..
Chinese Taipei	-	-	0.00	0.94	1.51	1.91	2.23	2.43	..
Thailand	-	-	0.00	0.53	1.16	2.14	5.30	5.87	..
Viet Nam	-	-	-	-	0.09	0.11	0.10	0.12	..
Other Asia	0.11	0.38	0.34	1.46	1.26	1.25	1.23	1.23	..
<b>Non-OECD Asia excl. China</b>	<b>0.00</b>	<b>0.77</b>	<b>1.16</b>	<b>1.79</b>	<b>2.09</b>	<b>3.09</b>	<b>4.16</b>	<b>4.37</b>	..
People's Rep. of China	-	-	0.01	0.23	0.30	1.89	4.29	5.05	..
Hong Kong, China	-	-	-	-	-	0.24	0.27	0.28	..
<b>China</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.23</b>	<b>0.29</b>	<b>1.87</b>	<b>4.26</b>	<b>5.01</b>	..
Argentina	0.21	0.24	0.21	0.80	1.29	1.77	1.97	1.90	..
Bolivia	1.02	1.98	1.38	1.39	1.14	1.76	2.30	2.52	..
Brazil	1.16	1.30	1.73	2.36	3.59	6.60	9.92	12.19	..
Colombia	-	1.11	0.75	1.15	1.10	4.13	3.13	3.28	..
Costa Rica	0.52	0.45	-	17.00	17.23	17.53	24.05	24.39	..
Cuba	12.60	9.55	9.64	6.28	2.74	2.68	3.48	3.71	..
Curaçao	-	-	-	0.71	2.56	2.42	3.59	3.71	..
Dominican Republic	3.34	2.30	0.68	0.24	0.16	0.15	4.37	5.27	..
Ecuador	-	-	-	-	0.81	1.23	2.04	2.10	..
El Salvador	-	33.70	18.89	23.28	23.64	30.21	32.09	35.23	..
Guatemala	4.74	2.66	13.04	10.02	10.97	20.57	23.39	25.35	..
Haiti	9.84	3.82	2.85	-	-	-	-	-	..
Honduras	-	-	-	0.03	2.28	2.36	11.46	16.17	..
Jamaica	9.37	16.83	3.99	3.10	1.64	4.17	6.50	7.13	..
Nicaragua	1.18	1.79	33.70	12.46	20.42	23.23	44.98	43.61	..
Panama	0.17	1.21	2.10	0.49	0.39	0.30	1.59	4.56	..
Paraguay	10.58	5.35	0.07	-	-	-	-	-	..
Peru	3.45	0.85	0.98	0.80	1.37	1.88	3.82	3.59	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	2.62	1.28	0.87	0.37	0.31	-	-	-	..
Uruguay	0.35	0.20	0.79	0.46	0.51	8.80	16.59	28.40	..
Venezuela	-	-	-	-	-	-	-	-	..
Other Non-OECD Americas	0.01	0.01	0.25	0.42	0.89	0.99	1.38	1.38	..
<b>Non-OECD Americas</b>	<b>1.34</b>	<b>1.41</b>	<b>1.52</b>	<b>1.82</b>	<b>2.50</b>	<b>4.50</b>	<b>6.62</b>	<b>7.95</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	0.03	0.04	0.07	0.15	0.08	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	0.03	0.04	0.08	0.08	0.04	0.69	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	0.00	0.00	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	0.26	0.23	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.07</b>	<b>0.06</b>	..

Includes geothermal, solar, biofuels, waste, tide, wave, ocean, wind and other fuel sources.

## Total electricity generation (GWh)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>6 131 143</b>	<b>8 283 485</b>	<b>11 863 590</b>	<b>15 470 887</b>	<b>18 324 256</b>	<b>21 501 523</b>	<b>23 851 342</b>	<b>24 254 840</b>	..
<b>Non-OECD Total</b>	<b>1 659 619</b>	<b>2 615 259</b>	<b>4 190 775</b>	<b>5 698 511</b>	<b>7 775 515</b>	<b>10 595 830</b>	<b>13 033 553</b>	<b>13 396 469</b>	..
<b>OECD Total</b>	<b>4 471 524</b>	<b>5 668 226</b>	<b>7 672 815</b>	<b>9 772 376</b>	<b>10 548 741</b>	<b>10 905 693</b>	<b>10 817 789</b>	<b>10 858 371</b>	<b>10 896 651</b>
Canada	270 081	373 278	482 041	605 596	620 524	603 856	668 016	670 740	653 097
Chile	8 766	11 751	18 372	40 078	52 484	60 434	71 566	75 387	78 312
Mexico	37 100	66 962	115 837	205 675	250 768	275 537	301 496	311 138	317 859
United States	1 965 509	2 427 320	3 202 813	4 025 885	4 268 887	4 354 363	4 319 156	4 297 048	4 297 281
<b>OECD Americas</b>	<b>2 281 456</b>	<b>2 879 311</b>	<b>3 819 063</b>	<b>4 877 234</b>	<b>5 192 663</b>	<b>5 294 190</b>	<b>5 360 234</b>	<b>5 354 313</b>	<b>5 346 549</b>
Australia	64 411	95 234	154 287	209 864	228 347	252 651	248 264	252 276	257 491
Israel <sup>1</sup>	8 720	12 404	20 898	42 661	48 602	58 591	60 813	64 226	66 168
Japan	465 387	572 531	872 557	1 088 092	1 129 365	1 140 064	1 054 223	1 035 266	1 017 792
Korea	14 825	37 239	105 371	288 526	387 874	496 718	545 866	549 226	586 814
New Zealand	18 531	22 596	32 265	39 247	42 968	44 904	43 505	44 205	43 811
<b>OECD Asia Oceania</b>	<b>571 874</b>	<b>740 004</b>	<b>1 185 378</b>	<b>1 668 390</b>	<b>1 837 156</b>	<b>1 992 928</b>	<b>1 952 671</b>	<b>1 945 199</b>	<b>1 972 076</b>
Austria	30 916	41 600	49 296	59 874	64 487	67 934	61 616	61 763	65 291
Belgium	40 615	53 091	70 292	82 773	85 709	93 833	71 502	69 548	82 011
Czech Republic	41 174	52 656	62 271	72 911	81 931	85 312	85 096	82 616	82 100
Denmark	19 120	26 765	25 982	36 053	36 246	38 862	32 184	28 947	30 087
Estonia	..	..	17 181	8 513	10 205	12 964	12 446	10 417	12 050
Finland	26 102	40 747	54 377	69 976	70 582	80 674	68 094	68 597	68 596
France	182 508	257 308	417 199	535 184	571 210	564 285	557 897	563 494	549 602
Germany	374 352	466 340	547 650	572 313	615 800	626 583	621 938	640 967	642 894
Greece	14 817	22 653	34 775	53 425	59 427	57 367	50 343	51 822	48 810
Hungary	17 643	23 876	28 436	35 191	35 756	37 371	29 392	30 342	31 848
Iceland	2 320	3 184	4 510	7 684	8 686	17 059	18 123	18 799	18 547
Ireland	7 348	10 566	14 229	23 673	25 626	28 176	25 808	28 099	30 137
Italy	143 916	183 474	213 147	269 941	296 840	298 773	278 116	281 562	284 130
Latvia	..	..	6 648	4 136	4 906	6 627	5 141	5 533	6 426
Luxembourg	1 394	918	624	422	3 348	3 230	1 905	1 331	778
Netherlands	52 627	64 806	71 968	89 631	99 921	119 270	103 418	110 070	114 910
Norway	73 029	83 750	121 611	142 511	137 245	123 238	141 226	143 922	148 956
Poland	83 908	120 941	134 415	143 174	155 359	157 089	158 508	164 341	166 175
Portugal	9 792	15 206	28 342	43 372	46 188	53 691	51 959	51 281	56 591
Slovak Republic	12 299	19 967	25 497	30 798	31 352	27 464	27 148	26 632	25 859
Slovenia	..	..	12 444	13 624	15 117	16 255	17 163	14 817	16 209
Spain	75 660	109 226	151 206	220 921	289 445	298 320	274 949	277 792	271 160
Sweden	78 060	96 316	145 984	145 231	158 365	148 460	153 554	161 931	154 839
Switzerland	36 817	48 175	54 992	66 124	57 789	66 052	70 102	66 097	61 006
Turkey	12 425	23 275	57 543	124 922	161 956	211 208	251 963	261 783	273 388
United Kingdom	281 352	284 071	317 755	374 375	395 426	378 478	335 293	336 356	335 626
<b>OECD Europe</b>	<b>1 618 194</b>	<b>2 048 911</b>	<b>2 668 374</b>	<b>3 226 752</b>	<b>3 518 922</b>	<b>3 618 575</b>	<b>3 504 884</b>	<b>3 558 859</b>	<b>3 578 026</b>
<i>IEA</i>	<i>4 414 618</i>	<i>5 573 925</i>	<i>7 494 106</i>	<i>9 458 518</i>	<i>10 168 178</i>	<i>10 471 190</i>	<i>10 343 487</i>	<i>10 368 471</i>	<i>10 393 130</i>
<i>IEA/Accession/Association</i>	<i>4 717 904</i>	<i>6 107 843</i>	<i>8 644 500</i>	<i>11 863 527</i>	<i>14 004 781</i>	<i>16 382 091</i>	<i>18 154 530</i>	<i>18 475 137</i>	..
<i>European Union - 28</i>	..	..	<i>2 576 709</i>	<i>3 005 762</i>	<i>3 290 720</i>	<i>3 334 880</i>	<i>3 159 338</i>	<i>3 204 254</i>	..
<i>G7</i>	<i>3 683 105</i>	<i>4 564 322</i>	<i>6 053 162</i>	<i>7 471 386</i>	<i>7 898 052</i>	<i>7 966 402</i>	<i>7 834 639</i>	<i>7 825 433</i>	..
<i>G8</i>	..	..	<i>7 135 314</i>	<i>8 347 854</i>	<i>8 849 211</i>	<i>9 002 518</i>	<i>8 896 972</i>	<i>8 891 056</i>	..
<i>G20</i>	..	..	<i>10 133 069</i>	<i>13 252 720</i>	<i>15 598 405</i>	<i>18 227 878</i>	<i>20 127 937</i>	<i>20 458 211</i>	..
<i>OPEC</i>	<i>48 780</i>	<i>131 432</i>	<i>299 910</i>	<i>515 139</i>	<i>705 985</i>	<i>949 906</i>	<i>1 170 424</i>	<i>1 217 921</i>	..

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Total electricity generation (GWh)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>1 659 619</b>	<b>2 615 259</b>	<b>4 190 775</b>	<b>5 698 511</b>	<b>7 775 515</b>	<b>10 595 830</b>	<b>13 033 553</b>	<b>13 396 469</b>	..
Albania	1 702	3 715	3 296	4 778	5 443	7 568	4 724	5 895	..
Armenia	..	..	10 362	5 958	6 317	6 491	7 750	7 799	..
Azerbaijan	..	..	23 152	18 699	22 872	18 710	24 728	24 688	..
Belarus	..	..	39 526	26 101	30 961	34 895	34 735	34 082	..
Bosnia and Herzegovina	..	..	14 632	10 429	12 602	17 124	16 160	15 629	..
Bulgaria	21 956	34 835	42 141	40 646	43 972	46 017	46 927	48 742	..
Croatia	..	..	9 062	11 263	13 057	14 796	13 436	11 238	..
Cyprus <sup>1</sup>	830	1 034	1 974	3 370	4 377	5 322	4 350	4 533	..
FYR of Macedonia	..	..	5 758	6 811	6 942	7 260	5 374	5 646	..
Georgia	..	..	13 724	7 424	7 267	10 124	10 371	10 833	..
Gibraltar	49	54	79	125	145	177	198	207	..
Kazakhstan	..	..	87 379	51 324	67 847	82 646	105 068	106 468	..
Kosovo	..	..	..	2 957	4 458	5 168	5 436	6 119	..
Kyrgyzstan	..	..	15 732	14 931	14 891	12 100	14 572	13 030	..
Lithuania	..	..	28 405	11 121	14 415	4 994	3 708	4 258	..
Malta	365	527	1 100	1 917	2 240	2 114	2 245	1 303	..
Republic of Moldova	..	..	16 221	5 606	5 990	6 113	5 351	6 091	..
Montenegro	..	..	..	..	2 864	4 022	3 173	3 003	..
Romania	46 779	67 486	64 309	51 934	59 413	60 619	65 202	65 922	..
Russian Federation	..	..	1 082 152	876 468	951 159	1 036 116	1 062 333	1 065 623	..
Serbia	..	..	40 948	34 140	36 474	37 423	33 446	37 595	..
Tajikistan	..	..	18 146	14 247	17 090	16 435	16 472	17 162	..
Turkmenistan	..	..	14 610	9 845	12 820	16 660	20 400	22 534	..
Ukraine	..	..	298 626	171 269	185 913	188 828	181 975	162 108	..
Uzbekistan	..	..	56 325	46 864	49 200	51 700	55 400	57 280	..
Former Soviet Union	914 600	1 294 000	x	x	x	x	x	x	..
Former Yugoslavia	35 062	59 716	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>1 021 343</b>	<b>1 461 367</b>	<b>1 887 659</b>	<b>1 428 227</b>	<b>1 578 729</b>	<b>1 693 422</b>	<b>1 743 534</b>	<b>1 737 788</b>	..
Algeria	2 806	7 123	16 104	25 412	33 915	45 734	64 242	68 798	..
Angola	984	675	841	1 445	2 786	5 449	9 480	9 764	..
Benin	9	10	21	84	107	115	239	342	..
Botswana	..	..	906	1 140	1 052	532	2 313	2 967	..
Cameroon	1 118	1 453	2 697	3 480	4 004	5 899	6 152	6 758	..
Congo	96	155	493	296	433	784	1 740	1 734	..
Côte d'Ivoire	796	1 749	1 983	4 800	5 681	5 965	8 286	8 711	..
Dem. Rep. of the Congo	3 848	4 445	5 650	5 982	7 374	7 905	8 840	8 942	..
Egypt	8 106	18 939	42 256	78 143	108 690	146 796	174 875	181 977	..
Eritrea	..	..	..	210	288	311	388	406	..
Ethiopia	591	689	1 202	1 674	2 845	4 980	9 515	10 437	..
Gabon	165	530	978	1 315	1 574	1 935	1 998	2 126	..
Ghana	3 910	5 317	5 721	7 223	6 788	10 167	12 963	11 491	..
Kenya	901	1 630	3 235	4 006	5 805	7 394	9 258	9 651	..
Libya	1 147	4 800	10 169	15 496	22 672	32 558	37 731	37 713	..
Mauritius	187	355	780	1 778	2 272	2 689	2 937	2 997	..
Morocco	2 875	5 247	9 628	12 863	19 290	23 672	28 746	30 820	..
Mozambique	641	462	454	9 696	13 285	16 666	17 744	19 913	..
Namibia	..	..	..	1 407	1 660	1 305	1 498	1 536	..
Niger	..	..	..	206	229	293	443	531	..
Nigeria	2 625	7 169	13 463	14 727	23 539	26 121	30 390	31 426	..
Senegal	442	676	945	1 604	2 544	3 076	3 715	3 955	..
South Africa	64 390	98 951	165 385	207 837	242 055	256 648	249 471	246 736	..
South Sudan	..	..	..	..	..	..	488	330	..
Sudan	610	817	1 515	2 569	3 826	7 499	11 376	13 047	..
United Rep. of Tanzania	582	792	1 628	2 472	3 555	5 274	6 219	6 295	..
Togo	101	51	158	175	189	179	145	81	..
Tunisia	1 179	2 924	5 811	10 596	12 661	16 372	19 203	19 676	..
Zambia	3 368	9 300	8 013	7 798	8 936	10 448	14 452	13 439	..
Zimbabwe	5 172	4 541	9 362	6 995	9 374	8 665	10 026	9 709	..
Other Africa	3 912	5 160	6 674	10 115	12 746	15 676	17 995	18 471	..
<b>Africa</b>	<b>110 561</b>	<b>183 960</b>	<b>316 072</b>	<b>441 544</b>	<b>560 175</b>	<b>671 107</b>	<b>762 868</b>	<b>780 779</b>	..

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Total electricity generation (GWh)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	1 404	2 353	7 732	15 771	26 447	40 790	55 845	59 011	..
Brunei Darussalam	246	343	1 172	2 543	3 264	3 792	4 506	4 200	..
Cambodia	..	..	..	448	964	1 000	3 062	4 397	..
DPR of Korea	16 580	21 200	27 700	19 400	22 912	21 664	17 909	13 737	..
India	72 796	120 409	292 732	569 688	715 656	979 416	1 293 682	1 383 004	..
Indonesia	2 370	7 502	32 667	93 325	127 529	169 755	227 876	233 984	..
Malaysia	4 773	10 049	23 016	69 255	82 673	124 786	147 469	150 123	..
Mongolia	..	..	3 348	2 946	3 419	4 313	5 376	5 513	..
Myanmar	821	1 487	2 478	5 118	6 016	7 543	14 157	15 970	..
Nepal	104	217	878	1 659	2 533	3 208	3 797	3 503	..
Pakistan	8 377	14 974	37 673	68 116	93 629	94 384	106 988	110 861	..
Philippines	13 186	18 009	26 327	45 290	56 567	67 742	77 262	82 413	..
Singapore	3 719	6 991	15 714	31 665	38 213	45 361	49 380	50 415	..
Sri Lanka	1 031	1 668	3 150	7 004	9 324	10 801	12 461	13 182	..
Chinese Taipei	20 735	42 607	88 398	180 552	223 523	243 935	256 904	254 990	..
Thailand	6 971	14 426	44 176	95 977	132 197	159 522	172 552	177 760	..
Viet Nam	2 350	3 559	8 681	26 561	53 656	94 903	139 565	153 283	..
Other Asia	4 691	7 175	8 431	13 769	16 702	20 941	22 585	21 412	..
<b>Non-OECD Asia excl. China</b>	<b>160 154</b>	<b>272 969</b>	<b>624 273</b>	<b>1 249 087</b>	<b>1 615 224</b>	<b>2 093 856</b>	<b>2 611 376</b>	<b>2 737 758</b>	..
People's Rep. of China	168 689	300 630	621 268	1 355 738	2 500 466	4 197 204	5 665 745	5 844 158	..
Hong Kong, China	6 799	12 634	28 938	31 331	38 451	38 387	39 909	38 030	..
<b>China</b>	<b>175 488</b>	<b>313 264</b>	<b>650 206</b>	<b>1 387 069</b>	<b>2 538 917</b>	<b>4 235 591</b>	<b>5 705 654</b>	<b>5 882 188</b>	..
Argentina	26 661	39 706	50 740	88 910	105 491	125 263	138 142	144 957	..
Bolivia	1 171	1 619	2 311	3 880	4 896	6 777	8 755	8 528	..
Brazil	64 726	139 380	222 821	348 910	403 033	515 745	590 651	581 652	..
Colombia	11 627	20 446	36 357	43 125	50 337	59 424	70 111	69 017	..
Costa Rica	1 347	2 226	3 468	6 919	8 260	9 583	10 217	10 812	..
Cuba	5 708	9 989	15 024	15 032	15 342	17 397	19 366	20 288	..
Curaçao	775	850	790	1 121	1 248	1 323	891	862	..
Dominican Republic	2 246	3 258	3 698	13 107	13 444	15 073	17 662	18 457	..
Ecuador	1 256	3 372	6 349	10 612	12 675	19 509	24 307	25 830	..
El Salvador	917	1 460	2 218	3 377	4 823	5 984	6 223	5 989	..
Guatemala	908	1 952	2 186	6 048	8 049	8 893	10 730	11 058	..
Haiti	122	314	597	547	556	587	1 033	1 038	..
Honduras	486	906	2 319	3 652	5 603	6 777	8 038	8 965	..
Jamaica	2 187	1 676	2 458	6 606	7 422	4 320	4 124	4 122	..
Nicaragua	678	1 005	1 457	2 351	3 051	3 659	4 446	4 579	..
Panama	1 179	1 812	2 661	4 887	5 827	7 383	9 287	10 296	..
Paraguay	378	767	27 185	53 492	51 166	54 066	55 282	55 744	..
Peru	6 660	10 031	13 808	19 914	25 499	35 890	45 726	48 251	..
Suriname	..	..	..	1 172	1 518	1 724	2 180	2 258	..
Trinidad and Tobago	1 105	2 035	3 577	5 459	7 058	8 485	9 895	10 300	..
Uruguay	2 551	4 600	7 444	7 588	7 682	10 995	13 015	13 740	..
Venezuela	16 445	35 803	59 321	85 271	105 384	113 765	127 733	117 590	..
Other Non-OECD Americas	15 306	17 769	22 189	31 073	36 934	36 097	36 498	37 090	..
<b>Non-OECD Americas</b>	<b>164 439</b>	<b>300 976</b>	<b>488 978</b>	<b>763 053</b>	<b>885 298</b>	<b>1 068 719</b>	<b>1 214 312</b>	<b>1 211 423</b>	..
Bahrain	500	1 660	7 989	13 859	19 373	23 824	27 253	28 484	..
Islamic Republic of Iran	12 093	22 380	59 102	121 369	178 088	232 959	274 609	280 633	..
Iraq	3 519	11 383	24 000	31 900	30 400	48 908	67 768	68 922	..
Jordan	315	1 070	3 638	7 375	9 654	14 777	18 220	19 014	..
Kuwait	3 651	9 023	18 477	32 323	43 734	57 029	65 140	67 918	..
Lebanon	1 791	2 752	1 500	9 675	12 339	15 712	17 952	18 396	..
Oman	47	818	4 501	9 111	12 663	19 819	29 128	32 758	..
Qatar	420	2 416	4 818	9 134	14 396	28 144	38 692	41 499	..
Saudi Arabia	2 949	20 452	69 208	126 191	176 124	240 067	311 806	338 336	..
Syrian Arab Republic	1 423	3 960	11 611	25 217	34 935	46 413	21 067	17 881	..
United Arab Emirates	720	6 306	17 080	39 944	60 698	97 728	116 528	127 366	..
Yemen	206	503	1 663	3 433	4 768	7 755	7 646	5 326	..
<b>Middle East</b>	<b>27 634</b>	<b>82 723</b>	<b>223 587</b>	<b>429 531</b>	<b>597 172</b>	<b>833 135</b>	<b>995 809</b>	<b>1 046 533</b>	..

Excludes hydro pumped storage.

## Electricity generation from renewables (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>21.56</b>	<b>21.40</b>	<b>19.38</b>	<b>18.34</b>	<b>17.98</b>	<b>19.58</b>	<b>22.41</b>	<b>22.82</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>23.49</b>	<b>25.15</b>	<b>23.25</b>	<b>23.11</b>	<b>21.82</b>	<b>21.47</b>	<b>22.63</b>	<b>22.69</b>	<b>..</b>
<b>OECD Total</b>	<b>20.84</b>	<b>19.67</b>	<b>17.26</b>	<b>15.55</b>	<b>15.15</b>	<b>17.73</b>	<b>22.13</b>	<b>22.97</b>	<b>23.75</b>
Canada	72.07	67.63	62.38	60.60	60.03	61.40	62.82	63.01	65.73
Chile	64.41	67.88	53.84	48.55	53.88	40.20	42.41	43.60	39.08
Mexico	44.07	26.58	24.69	19.80	15.20	16.60	17.54	15.39	14.93
United States	13.64	11.72	11.53	8.21	8.58	10.12	12.95	13.23	14.87
<b>OECD Americas</b>	<b>21.25</b>	<b>19.55</b>	<b>18.55</b>	<b>15.53</b>	<b>15.50</b>	<b>16.65</b>	<b>19.82</b>	<b>20.02</b>	<b>21.44</b>
Australia	18.24	13.99	9.66	8.38	8.80	8.61	14.91	13.64	14.65
Israel <sup>1</sup>	-	-	0.01	0.07	0.08	0.29	1.51	1.89	2.74
Japan	14.41	15.58	11.25	9.12	8.41	10.53	14.06	15.98	15.87
Korea	8.66	5.33	6.04	1.42	1.04	1.25	1.57	1.89	2.16
New Zealand	83.96	90.39	80.01	71.50	64.24	73.18	79.20	80.08	84.16
<b>OECD Asia Oceania</b>	<b>16.72</b>	<b>16.88</b>	<b>12.26</b>	<b>8.93</b>	<b>7.99</b>	<b>9.08</b>	<b>11.74</b>	<b>12.69</b>	<b>12.71</b>
Austria	61.30	69.83	66.20	72.54	63.63	66.21	81.06	76.49	77.65
Belgium	0.71	1.09	0.79	1.26	2.46	6.92	17.08	20.80	16.46
Czech Republic	2.63	4.56	1.86	3.13	3.82	6.92	10.78	11.40	11.42
Denmark	0.13	0.15	3.18	15.46	27.07	31.98	55.90	65.51	60.64
Estonia	..	..	-	0.21	1.09	8.05	11.16	14.42	12.82
Finland	40.28	25.07	29.45	33.41	33.25	29.99	38.58	44.50	44.51
France	26.57	27.30	13.37	12.97	9.86	13.86	16.46	15.86	17.34
Germany	4.85	4.70	3.49	6.20	10.15	16.73	26.13	29.23	29.28
Greece	15.00	15.03	5.09	7.76	10.78	18.34	24.19	28.66	30.47
Hungary	0.57	0.47	0.69	0.69	5.23	8.08	10.68	10.58	10.08
Iceland	96.25	98.52	99.87	99.93	99.94	99.99	99.98	99.98	99.98
Ireland	8.76	7.93	4.90	5.01	7.31	13.23	24.76	27.97	24.35
Italy	28.74	26.82	16.38	18.85	16.32	25.76	43.39	38.68	38.07
Latvia	..	..	67.63	68.25	69.59	54.85	54.54	50.17	54.20
Luxembourg	3.37	12.31	13.30	41.00	6.30	8.27	20.94	32.38	58.23
Netherlands	-	1.58	1.12	3.32	7.45	9.39	11.32	12.44	12.94
Norway	99.78	99.84	99.79	99.72	99.47	95.73	97.66	97.71	97.83
Poland	2.00	2.15	1.10	1.63	2.48	6.93	12.52	13.80	13.73
Portugal	76.85	54.81	34.72	29.67	17.88	52.81	60.74	47.53	52.84
Slovak Republic	10.75	11.30	7.37	14.98	14.91	21.63	22.94	22.68	24.84
Slovenia	..	..	23.71	28.66	23.65	29.22	38.52	29.39	31.20
Spain	38.29	27.39	17.22	15.61	14.60	32.78	40.11	34.95	38.58
Sweden	77.21	61.87	51.00	57.25	51.29	55.30	55.84	63.26	56.65
Switzerland	75.79	68.45	54.98	57.00	55.86	56.73	58.02	62.20	61.96
Turkey	22.54	49.34	40.37	24.94	24.54	26.38	20.89	31.96	32.94
United Kingdom	1.37	1.37	1.83	2.66	4.28	6.81	19.26	24.84	24.66
<b>OECD Europe</b>	<b>21.71</b>	<b>20.84</b>	<b>17.64</b>	<b>19.00</b>	<b>18.36</b>	<b>24.08</b>	<b>31.46</b>	<b>33.02</b>	<b>33.29</b>
<i>IEA</i>	<i>20.56</i>	<i>19.48</i>	<i>17.00</i>	<i>15.28</i>	<i>14.91</i>	<i>17.55</i>	<i>22.07</i>	<i>23.01</i>	<i>23.87</i>
<i>IEA/Accession/Association</i>	<i>21.21</i>	<i>19.98</i>	<i>17.63</i>	<i>15.43</i>	<i>15.22</i>	<i>17.63</i>	<i>21.50</i>	<i>22.32</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>12.00</i>	<i>13.93</i>	<i>14.01</i>	<i>20.37</i>	<i>28.48</i>	<i>29.20</i>	<i>..</i>
<i>G7</i>	<i>17.42</i>	<i>16.90</i>	<i>14.60</i>	<i>12.88</i>	<i>12.89</i>	<i>15.28</i>	<i>20.00</i>	<i>20.78</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>14.71</i>	<i>13.49</i>	<i>13.46</i>	<i>15.38</i>	<i>19.59</i>	<i>20.19</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>17.28</i>	<i>16.10</i>	<i>16.02</i>	<i>18.37</i>	<i>21.61</i>	<i>22.24</i>	<i>..</i>
<i>OPEC</i>	<i>27.10</i>	<i>19.53</i>	<i>18.87</i>	<i>15.96</i>	<i>16.68</i>	<i>11.72</i>	<i>10.94</i>	<i>9.67</i>	<i>..</i>

Includes electricity from hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from renewables (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>23.49</b>	<b>25.15</b>	<b>23.25</b>	<b>23.11</b>	<b>21.82</b>	<b>21.47</b>	<b>22.63</b>	<b>22.69</b>	..
Albania	66.22	79.41	86.41	96.15	98.71	99.99	100.00	100.00	..
Armenia	..	..	15.01	21.16	28.07	39.49	25.75	28.34	..
Azerbaijan	..	..	7.16	8.20	13.16	18.42	5.63	7.04	..
Belarus	..	..	0.05	0.10	0.12	0.37	0.72	0.82	..
Bosnia and Herzegovina	..	..	20.90	48.84	47.60	46.87	36.73	35.52	..
Bulgaria	11.71	10.66	4.46	6.58	9.87	12.58	15.74	17.99	..
Croatia	..	..	45.55	57.30	54.07	62.84	73.96	66.83	..
Cyprus <sup>1</sup>	-	-	-	-	0.02	1.37	7.29	8.78	..
FYR of Macedonia	..	..	8.53	17.18	21.49	33.48	24.04	35.94	..
Georgia	..	..	55.21	78.93	85.81	92.52	80.37	78.04	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	8.43	14.67	11.58	9.71	7.88	8.87	..
Kosovo	..	..	..	1.76	2.51	3.04	2.78	2.29	..
Kyrgyzstan	..	..	63.48	85.90	85.88	91.80	91.26	85.19	..
Lithuania	..	..	1.46	3.06	3.19	18.24	40.75	39.41	..
Malta	-	-	-	-	-	0.05	3.34	7.67	..
Republic of Moldova	..	..	1.58	6.72	6.29	6.66	6.20	5.37	..
Montenegro	..	..	..	..	65.15	68.37	55.22	49.65	..
Romania	16.13	18.73	17.74	28.46	34.02	33.49	41.61	39.75	..
Russian Federation	..	..	15.34	18.73	18.20	16.12	16.57	15.86	..
Serbia	..	..	23.13	35.15	32.99	31.77	32.98	26.91	..
Tajikistan	..	..	90.93	98.44	99.28	99.79	99.03	98.47	..
Turkmenistan	..	..	4.79	-	-	-	-	-	..
Ukraine	..	..	3.52	6.59	6.67	7.09	5.59	4.38	..
Uzbekistan	..	..	11.80	12.54	17.54	20.98	21.35	20.65	..
Former Soviet Union	15.86	16.36	x	x	x	x	x	x	..
Former Yugoslavia	46.76	47.16	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>16.91</b>	<b>17.74</b>	<b>13.90</b>	<b>19.04</b>	<b>19.14</b>	<b>18.42</b>	<b>18.32</b>	<b>17.74</b>	..
Algeria	26.80	3.61	0.84	0.21	1.64	0.38	0.40	0.32	..
Angola	82.72	88.15	86.21	63.11	79.65	67.96	53.18	53.17	..
Benin	-	-	-	2.38	0.93	0.87	-	5.56	..
Botswana	..	..	..	-	-	-	0.04	0.03	..
Cameroon	95.53	93.94	98.48	98.91	94.21	73.22	75.33	76.12	..
Congo	52.08	64.52	99.39	99.66	81.99	54.72	54.71	53.34	..
Côte d'Ivoire	21.11	77.30	66.67	36.75	27.23	28.28	23.93	16.73	..
Dem. Rep. of the Congo	97.92	95.46	99.56	99.95	99.91	98.91	99.88	99.82	..
Egypt	63.61	51.75	23.50	17.70	12.14	10.05	8.87	8.26	..
Eritrea	..	..	..	0.48	0.35	0.64	0.52	0.49	..
Ethiopia	56.35	70.25	88.35	98.63	99.58	99.38	99.97	99.96	..
Gabon	3.03	49.06	72.39	61.60	52.10	47.34	40.34	43.74	..
Ghana	99.03	99.23	100.00	91.50	82.93	68.81	64.73	50.89	..
Kenya	57.27	73.62	92.86	46.98	71.66	69.07	81.49	87.51	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	52.41	30.99	31.15	29.64	25.00	24.32	20.29	22.72	..
Morocco	41.46	28.87	12.67	6.08	6.14	17.43	12.39	14.31	..
Mozambique	29.80	65.15	62.56	99.55	99.84	99.89	91.16	86.41	..
Namibia	..	..	..	99.22	99.76	95.56	99.13	97.79	..
Niger	..	..	..	-	0.87	1.02	0.90	0.75	..
Nigeria	70.78	38.82	32.59	38.22	33.00	24.40	17.59	18.20	..
Senegal	8.60	5.92	4.66	3.30	12.66	10.73	10.42	10.42	..
South Africa	1.53	1.00	0.61	0.68	0.67	0.95	1.29	2.26	..
South Sudan	..	..	..	..	..	..	0.41	0.61	..
Sudan	70.00	70.01	63.23	46.05	32.96	82.70	78.35	64.54	..
United Rep. of Tanzania	50.86	86.36	95.15	86.37	50.01	51.69	42.29	34.15	..
Togo	37.62	74.51	60.13	57.14	40.21	54.19	86.21	75.31	..
Tunisia	6.19	0.82	0.79	0.82	1.48	1.16	3.06	2.84	..
Zambia	91.95	98.86	99.23	99.38	99.41	99.88	97.16	96.99	..
Zimbabwe	67.42	88.26	46.67	45.66	52.43	68.01	55.61	52.72	..
Other Africa	51.51	46.76	53.52	54.57	50.15	44.69	51.75	52.06	..
<b>Africa</b>	<b>27.40</b>	<b>25.88</b>	<b>18.07</b>	<b>17.36</b>	<b>16.48</b>	<b>17.17</b>	<b>17.75</b>	<b>17.55</b>	..

Includes electricity from hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

1. Please refer to section 'Geographical coverage'.

## Electricity generation from renewables (% of total)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	23.58	24.78	11.43	4.75	2.83	1.79	1.32	1.23	..
Brunei Darussalam	-	-	-	-	-	-	0.04	0.05	..
Cambodia	..	..	..	0.22	6.12	5.50	61.14	46.42	..
DPR of Korea	57.18	50.00	56.32	52.58	57.31	61.85	72.59	72.80	..
India	39.81	38.67	24.49	13.59	16.62	16.04	16.25	15.34	..
Indonesia	43.46	17.93	20.92	15.96	13.61	15.85	11.48	10.65	..
Malaysia	23.21	13.89	17.33	10.06	6.28	5.99	9.71	9.96	..
Mongolia	..	..	-	-	-	-	3.16	3.08	..
Myanmar	70.16	53.53	48.14	36.97	49.82	67.68	62.36	58.85	..
Nepal	77.88	93.55	99.89	98.37	99.37	99.91	99.97	100.00	..
Pakistan	51.99	58.19	44.93	25.24	32.96	33.70	31.10	31.43	..
Philippines	14.22	31.09	45.42	42.89	32.37	26.30	25.60	25.41	..
Singapore	-	-	0.54	0.77	1.25	1.31	1.66	1.82	..
Sri Lanka	68.67	88.67	99.84	45.80	37.23	53.12	39.20	48.48	..
Chinese Taipei	16.39	6.87	7.22	3.11	2.65	3.00	3.28	3.53	..
Thailand	26.97	8.82	11.26	6.81	5.54	5.61	8.51	8.54	..
Viet Nam	17.87	41.81	61.85	54.78	31.67	29.14	42.98	36.73	..
Other Asia	23.64	32.50	54.81	59.58	52.97	64.51	66.13	66.13	..
<b>Non-OECD Asia excl. China</b>	<b>34.55</b>	<b>31.25</b>	<b>24.75</b>	<b>15.11</b>	<b>15.67</b>	<b>15.64</b>	<b>16.69</b>	<b>15.91</b>	..
People's Rep. of China	22.53	19.36	20.41	16.64	16.18	18.62	22.61	23.93	..
Hong Kong, China	-	-	-	-	-	0.24	0.27	0.28	..
<b>China</b>	<b>21.65</b>	<b>18.58</b>	<b>19.50</b>	<b>16.26</b>	<b>15.93</b>	<b>18.46</b>	<b>22.45</b>	<b>23.77</b>	..
Argentina	11.44	38.38	35.44	33.16	33.53	28.59	31.58	28.14	..
Bolivia	84.03	67.63	52.44	51.52	41.26	33.95	28.01	31.40	..
Brazil	90.60	93.78	94.50	89.49	87.12	84.72	73.08	73.97	..
Colombia	68.28	70.98	76.38	75.52	80.17	72.12	74.04	68.24	..
Costa Rica	84.48	95.69	97.52	99.15	96.72	93.31	89.79	99.00	..
Cuba	13.68	10.52	10.25	6.87	3.18	3.24	4.02	3.95	..
Curaçao	-	-	-	0.71	2.56	2.42	3.59	3.71	..
Dominican Republic	26.94	19.43	10.11	9.15	17.79	11.89	13.34	11.63	..
Ecuador	34.63	25.86	78.55	71.70	55.12	45.49	49.18	52.80	..
El Salvador	53.65	98.49	93.19	58.07	58.24	65.04	59.70	57.82	..
Guatemala	30.40	14.65	91.63	51.72	47.48	63.85	68.57	60.39	..
Haiti	78.69	73.89	79.40	51.74	47.66	30.15	8.71	8.00	..
Honduras	73.87	86.31	98.28	61.91	32.95	47.81	43.83	42.28	..
Jamaica	13.90	23.99	7.57	4.84	3.69	7.69	9.80	10.26	..
Nicaragua	55.90	52.94	61.36	21.40	34.61	37.00	53.87	50.05	..
Panama	8.82	54.42	85.27	70.43	64.30	57.10	55.80	65.33	..
Paraguay	90.48	91.26	99.97	100.00	100.00	100.00	99.99	100.00	..
Peru	75.06	70.73	76.80	81.99	72.27	57.72	52.37	52.73	..
Suriname	..	..	..	88.40	52.70	70.19	62.34	60.05	..
Trinidad and Tobago	2.62	1.28	0.87	0.37	0.31	-	-	-	..
Uruguay	61.35	75.83	94.95	93.38	87.50	87.62	90.73	88.56	..
Venezuela	37.85	40.74	62.34	73.75	73.28	67.49	68.26	63.70	..
Other Non-OECD Americas	7.47	5.98	7.05	1.42	5.66	4.53	3.90	3.90	..
<b>Non-OECD Americas</b>	<b>54.66</b>	<b>65.74</b>	<b>73.91</b>	<b>71.58</b>	<b>69.70</b>	<b>67.47</b>	<b>62.39</b>	<b>61.30</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	23.50	25.11	10.29	3.04	9.08	4.16	5.20	5.10	..
Iraq	8.24	6.06	10.83	1.92	19.74	9.75	4.33	3.73	..
Jordan	-	-	0.33	0.57	0.67	0.49	0.36	0.97	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	26.69	30.89	33.33	4.64	8.48	5.34	1.08	2.60	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	0.00	0.00	..
Syrian Arab Republic	1.19	64.67	23.49	12.81	12.38	5.58	11.11	2.31	..
United Arab Emirates	-	-	-	-	-	-	0.26	0.23	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>13.13</b>	<b>11.75</b>	<b>5.33</b>	<b>1.87</b>	<b>4.62</b>	<b>2.16</b>	<b>2.02</b>	<b>1.75</b>	..

Includes electricity from hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.



## Final consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>631.43</b>	<b>702.53</b>	<b>753.97</b>	<b>547.63</b>	<b>791.85</b>	<b>1 004.77</b>	<b>1 060.82</b>	<b>1 044.09</b>	..
<b>Non-OECD Total</b>	<b>328.16</b>	<b>443.66</b>	<b>521.05</b>	<b>408.87</b>	<b>659.96</b>	<b>878.97</b>	<b>948.43</b>	<b>933.10</b>	..
<b>OECD Total</b>	<b>303.27</b>	<b>258.87</b>	<b>232.92</b>	<b>138.76</b>	<b>131.89</b>	<b>125.80</b>	<b>112.38</b>	<b>110.99</b>	..
Canada	5.41	4.33	3.21	3.59	3.65	3.12	2.88	2.51	..
Chile	0.70	0.57	0.63	0.64	0.60	0.42	0.24	0.33	..
Mexico	1.37	1.61	1.09	0.89	2.80	4.04	2.61	3.88	..
United States <sup>2</sup>	74.09	56.16	55.66	32.58	31.34	26.85	22.20	19.51	..
<b>OECD Americas</b>	<b>81.58</b>	<b>62.67</b>	<b>60.58</b>	<b>37.69</b>	<b>38.39</b>	<b>34.44</b>	<b>27.93</b>	<b>26.24</b>	..
Australia	5.20	4.51	4.56	4.20	3.90	2.54	2.43	2.33	..
Israel <sup>1</sup>	0.00	0.00	0.01	0.02	-	-	-	-	..
Japan	24.08	25.25	30.46	24.40	26.90	23.51	24.17	23.63	..
Korea	6.49	9.74	11.72	9.07	7.75	9.54	10.88	11.80	..
New Zealand	0.86	0.82	0.67	0.52	0.57	0.60	0.62	0.61	..
<b>OECD Asia Oceania</b>	<b>36.62</b>	<b>40.32</b>	<b>47.42</b>	<b>38.20</b>	<b>39.11</b>	<b>36.19</b>	<b>38.11</b>	<b>38.36</b>	..
Austria	2.35	1.97	1.44	0.94	0.62	0.48	0.45	0.43	..
Belgium	5.71	4.23	3.54	2.79	1.52	1.17	1.19	1.13	..
Czech Republic	20.25	19.63	12.32	4.78	3.63	2.68	2.38	2.34	..
Denmark	0.46	0.58	0.43	0.31	0.27	0.15	0.14	0.13	..
Estonia	..	..	0.71	0.15	0.14	0.10	0.11	0.07	..
Finland	1.07	1.11	1.56	0.98	0.81	0.81	0.55	0.54	..
France	13.96	8.61	7.78	4.43	4.02	3.46	2.35	2.57	..
Germany	55.69	49.20	39.25	8.96	6.82	7.18	6.79	7.60	..
Greece	0.52	0.47	1.22	0.88	0.44	0.30	0.23	0.22	..
Hungary	4.08	3.54	2.36	0.58	0.62	0.41	0.29	0.33	..
Iceland	0.00	0.02	0.06	0.10	0.10	0.09	0.09	0.09	..
Ireland	1.03	1.36	1.68	0.66	0.74	0.60	0.51	0.50	..
Italy	3.68	3.82	3.57	2.68	2.68	1.89	1.65	1.32	..
Latvia	..	..	0.31	0.06	0.07	0.09	0.05	0.04	..
Luxembourg	0.98	1.04	0.52	0.11	0.08	0.07	0.05	0.05	..
Netherlands	1.08	0.78	1.49	0.83	0.83	0.71	0.70	0.68	..
Norway	0.82	0.87	0.78	0.95	0.67	0.59	0.62	0.61	..
Poland	29.02	31.96	17.34	13.18	12.52	13.81	11.86	11.31	..
Portugal	0.24	0.25	0.65	0.48	0.02	0.05	0.01	0.01	..
Slovak Republic	3.84	4.09	4.11	1.41	1.14	1.18	0.97	0.89	..
Slovenia	..	..	0.23	0.09	0.11	0.05	0.05	0.05	..
Spain	4.16	2.78	3.39	1.37	1.47	1.02	0.76	0.67	..
Sweden	1.03	0.92	1.07	0.77	0.95	0.85	0.72	0.74	..
Switzerland	0.42	0.33	0.35	0.14	0.15	0.15	0.14	0.13	..
Turkey	2.97	4.20	7.63	10.91	10.84	14.24	10.53	11.21	..
United Kingdom	31.72	14.14	11.11	4.33	3.12	3.03	3.15	2.72	..
<b>OECD Europe</b>	<b>185.08</b>	<b>155.88</b>	<b>124.91</b>	<b>62.86</b>	<b>54.39</b>	<b>55.16</b>	<b>46.35</b>	<b>46.39</b>	..
<i>IEA</i>	<i>301.19</i>	<i>256.68</i>	<i>230.58</i>	<i>136.96</i>	<i>128.20</i>	<i>121.10</i>	<i>109.34</i>	<i>106.60</i>	..
<i>IEA/Accession/Association</i>	<i>468.94</i>	<i>497.32</i>	<i>582.90</i>	<i>456.19</i>	<i>689.41</i>	<i>893.97</i>	<i>949.81</i>	<i>937.74</i>	..
<i>European Union - 28</i>	..	..	<i>122.07</i>	<i>52.47</i>	<i>44.91</i>	<i>41.64</i>	<i>36.33</i>	<i>35.70</i>	..
<i>G7</i>	<i>208.63</i>	<i>161.51</i>	<i>151.03</i>	<i>80.96</i>	<i>78.51</i>	<i>69.04</i>	<i>63.19</i>	<i>59.86</i>	..
<i>G8</i>	..	..	<i>205.74</i>	<i>98.93</i>	<i>91.75</i>	<i>83.29</i>	<i>74.24</i>	<i>72.10</i>	..
<i>G20</i>	..	..	<i>660.23</i>	<i>491.73</i>	<i>721.63</i>	<i>923.98</i>	<i>982.86</i>	<i>968.90</i>	..
<i>OPEC</i>	<i>0.57</i>	<i>0.50</i>	<i>0.82</i>	<i>0.54</i>	<i>0.96</i>	<i>1.26</i>	<i>2.65</i>	<i>2.40</i>	..

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

2. For the United States, coal used by autoproducers of electricity and heat has been included in final consumption prior to 1992.

## Final consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>328.16</b>	<b>443.66</b>	<b>521.05</b>	<b>408.87</b>	<b>659.96</b>	<b>878.97</b>	<b>948.43</b>	<b>933.10</b>	<b>..</b>
Albania	0.31	0.52	0.58	0.01	0.01	0.11	0.09	0.10	..
Armenia	..	..	0.24	-	-	0.00	-	-	..
Azerbaijan	..	..	0.09	-	-	-	-	-	..
Belarus	..	..	1.67	0.60	0.39	0.35	0.70	0.62	..
Bosnia and Herzegovina	..	..	1.91	0.33	0.42	0.35	0.42	0.45	..
Bulgaria	3.79	3.57	1.61	0.74	0.76	0.47	0.38	0.39	..
Croatia	..	..	0.53	0.08	0.16	0.15	0.10	0.08	..
Cyprus <sup>1</sup>	-	-	0.06	0.03	0.04	0.02	0.00	0.00	..
FYR of Macedonia	..	..	0.11	0.10	0.14	0.11	0.10	0.10	..
Georgia	..	..	0.65	0.01	0.01	0.02	0.29	0.27	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	15.78	3.85	7.37	14.98	12.19	10.58	..
Kosovo	..	..	..	0.04	0.04	0.08	0.06	0.05	..
Kyrgyzstan	..	..	2.08	0.20	0.20	0.37	0.58	0.48	..
Lithuania	..	..	0.75	0.08	0.17	0.20	0.22	0.18	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.87	0.06	0.08	0.09	0.09	0.10	..
Montenegro	..	..	..	..	0.02	0.01	0.01	0.01	..
Romania	2.98	5.65	3.01	0.77	1.16	0.71	0.66	0.71	..
Russian Federation	..	..	54.71	17.97	13.23	14.24	11.05	12.24	..
Serbia	..	..	0.95	1.24	0.99	0.88	0.52	0.59	..
Tajikistan	..	..	0.63	0.01	0.04	0.09	0.34	0.39	..
Turkmenistan	..	..	0.30	-	-	-	-	-	..
Ukraine	..	..	25.61	9.97	11.96	7.99	9.15	6.30	..
Uzbekistan	..	..	1.27	0.39	0.23	0.37	0.56	0.37	..
Former Soviet Union	109.75	139.89	x	x	x	x	x	x	..
Former Yugoslavia	4.20	2.62	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>121.03</b>	<b>152.24</b>	<b>113.42</b>	<b>36.49</b>	<b>37.43</b>	<b>41.61</b>	<b>37.51</b>	<b>34.01</b>	<b>..</b>
Algeria	0.07	0.03	0.25	0.08	0.17	0.12	0.03	0.04	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	0.04	0.03	..
Botswana	..	..	0.10	0.17	0.15	0.03	0.06	0.05	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	0.18	0.18	0.19	-	-	-	-	-	..
Egypt	0.14	0.29	0.35	0.39	0.42	0.23	0.20	0.18	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	0.03	0.25	0.25	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	0.04	0.01	0.09	0.07	0.09	0.17	0.33	0.35	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	0.01	0.01	0.01	0.02	0.02	0.02	..
Morocco	0.08	0.02	0.35	0.53	0.02	0.02	0.02	0.02	..
Mozambique	0.35	0.15	0.02	-	-	0.00	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.17	0.10	0.04	0.00	0.00	0.02	0.03	0.03	..
Senegal	-	-	-	-	0.09	0.18	0.23	0.24	..
South Africa	16.91	18.89	16.35	15.93	18.83	16.44	19.40	18.29	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	0.00	-	-	-	-	-	-	..
United Rep. of Tanzania	-	0.00	0.00	0.03	0.01	-	0.15	0.16	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.05	0.05	0.05	0.04	-	-	-	-	..
Zambia	0.48	0.34	0.20	0.07	0.08	0.00	0.09	0.09	..
Zimbabwe	1.18	1.24	1.60	1.21	0.52	0.65	0.27	0.26	..
Other Africa	0.03	0.20	0.05	0.11	0.09	0.09	0.11	0.11	..
<b>Africa</b>	<b>19.70</b>	<b>21.50</b>	<b>19.66</b>	<b>18.65</b>	<b>20.48</b>	<b>17.99</b>	<b>21.21</b>	<b>20.12</b>	<b>..</b>

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

1. Please refer to section 'Geographical coverage'.

## Final consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.12	0.12	0.28	0.33	0.42	0.56	0.64	2.00	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	..	..	0.00	0.01	0.01	..
DPR of Korea	14.36	20.44	22.24	14.12	15.38	9.95	5.53	4.22	..
India	20.45	24.68	38.57	34.52	45.89	90.53	112.65	108.24	..
Indonesia	0.05	0.09	2.19	4.65	8.34	7.97	7.65	9.60	..
Malaysia	0.01	0.05	0.51	0.99	1.34	1.83	1.71	1.78	..
Mongolia	..	..	1.00	0.29	0.44	0.72	0.73	0.53	..
Myanmar	0.04	0.14	0.05	0.32	0.18	0.23	0.34	0.38	..
Nepal	0.05	0.05	0.04	0.26	0.25	0.30	0.48	0.56	..
Pakistan	0.54	0.64	1.52	1.38	3.42	3.95	4.52	4.71	..
Philippines	0.00	0.22	0.61	0.77	1.12	1.88	2.34	2.29	..
Singapore	0.00	0.00	0.02	-	0.00	0.01	0.17	0.15	..
Sri Lanka	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.06	..
Chinese Taipei	2.09	2.19	3.59	4.96	5.97	8.04	7.55	7.65	..
Thailand	0.02	0.09	1.31	3.54	6.75	9.21	6.40	8.16	..
Viet Nam	1.01	1.51	1.33	3.22	5.27	9.81	11.41	11.75	..
Other Asia	1.00	1.88	0.21	0.30	0.33	1.02	1.11	1.05	..
<b>Non-OECD Asia excl. China</b>	<b>39.74</b>	<b>52.12</b>	<b>73.49</b>	<b>69.65</b>	<b>95.17</b>	<b>146.08</b>	<b>163.32</b>	<b>163.14</b>	..
People's Rep. of China	145.07	213.57	308.16	274.46	496.78	660.67	710.74	700.75	..
Hong Kong, China	0.01	0.00	0.00	-	0.53	0.94	1.57	1.26	..
<b>China</b>	<b>145.08</b>	<b>213.57</b>	<b>308.16</b>	<b>274.46</b>	<b>497.32</b>	<b>661.61</b>	<b>712.30</b>	<b>702.01</b>	..
Argentina	0.27	0.21	0.19	0.38	0.42	0.39	0.27	0.26	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	0.72	2.07	3.67	5.72	5.52	7.31	7.51	7.67	..
Colombia	1.07	1.35	1.61	2.25	1.71	1.53	1.68	1.70	..
Costa Rica	0.00	0.00	-	0.00	0.02	0.03	0.05	0.04	..
Cuba	0.06	0.08	0.13	0.02	0.02	0.02	0.00	0.00	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	0.05	0.15	0.27	0.36	0.44	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	0.00	-	0.00	0.00	-	-	-	..
Guatemala	-	0.01	-	-	-	-	-	-	..
Haiti	-	-	0.01	-	-	-	-	-	..
Honduras	-	-	0.00	0.08	0.15	0.11	0.11	0.05	..
Jamaica	-	-	0.03	0.03	0.04	0.03	0.05	0.06	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	0.01	-	0.02	0.04	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.09	0.09	0.11	0.45	0.60	0.61	0.69	0.73	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	..
Venezuela	0.16	0.10	0.35	0.13	0.04	0.20	0.20	0.14	..
Other Non-OECD Americas	0.03	0.02	0.00	0.00	0.01	0.00	0.13	0.13	..
<b>Non-OECD Americas</b>	<b>2.43</b>	<b>3.95</b>	<b>6.13</b>	<b>9.16</b>	<b>8.67</b>	<b>10.50</b>	<b>11.05</b>	<b>11.21</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.17	0.28	0.18	0.33	0.61	0.26	0.42	0.48	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	0.36	0.17	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	0.01	0.00	-	0.13	0.13	0.15	0.17	0.17	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	..
United Arab Emirates	-	-	-	-	0.15	0.66	1.97	1.71	..
Yemen	-	-	-	-	-	0.10	0.11	0.08	..
<b>Middle East</b>	<b>0.18</b>	<b>0.28</b>	<b>0.18</b>	<b>0.46</b>	<b>0.89</b>	<b>1.18</b>	<b>3.03</b>	<b>2.62</b>	..

Where applicable, this table includes peat and oil shale except for 2015 provisional figures for non-OECD countries.

## Final consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>2 252.43</b>	<b>2 446.03</b>	<b>2 598.92</b>	<b>3 115.02</b>	<b>3 437.88</b>	<b>3 597.36</b>	<b>3 755.53</b>	<b>3 839.59</b>	..
<b>Non-OECD Total</b>	<b>484.23</b>	<b>693.97</b>	<b>811.82</b>	<b>1 002.19</b>	<b>1 210.42</b>	<b>1 464.92</b>	<b>1 683.81</b>	<b>1 724.23</b>	..
<b>OECD Total</b>	<b>1 584.02</b>	<b>1 573.54</b>	<b>1 584.81</b>	<b>1 838.90</b>	<b>1 908.51</b>	<b>1 773.65</b>	<b>1 708.01</b>	<b>1 733.74</b>	..
Canada	75.65	79.99	68.79	80.46	88.43	89.29	88.75	89.04	..
Chile	3.84	4.03	5.49	9.19	9.56	12.09	13.64	13.87	..
Mexico	22.18	39.69	51.14	61.08	67.48	74.51	73.07	72.71	..
United States	693.49	689.14	683.29	793.42	842.42	760.53	744.42	757.88	..
<b>OECD Americas</b>	<b>795.17</b>	<b>812.85</b>	<b>808.71</b>	<b>944.16</b>	<b>1 007.88</b>	<b>936.43</b>	<b>919.88</b>	<b>933.51</b>	..
Australia	24.26	26.92	29.00	34.72	36.55	39.00	42.60	42.57	..
Israel <sup>1</sup>	2.91	3.44	5.00	8.03	7.56	9.45	7.89	8.22	..
Japan	171.06	156.56	170.74	194.48	185.06	163.51	153.52	152.33	..
Korea	9.90	18.73	43.66	79.88	79.64	81.87	86.53	90.30	..
New Zealand	3.49	3.62	4.03	5.31	5.96	5.90	6.07	6.21	..
<b>OECD Asia Oceania</b>	<b>211.62</b>	<b>209.26</b>	<b>252.43</b>	<b>322.41</b>	<b>314.77</b>	<b>299.73</b>	<b>296.62</b>	<b>299.64</b>	..
Austria	9.95	9.76	8.83	10.37	12.51	11.07	10.61	10.75	..
Belgium	20.16	16.85	16.20	21.08	21.87	20.93	20.54	21.58	..
Czech Republic	7.75	9.23	8.27	7.30	9.27	8.60	8.52	8.34	..
Denmark	13.31	11.32	6.85	6.57	6.71	6.19	5.10	5.20	..
Estonia	..	..	1.85	0.79	1.01	0.98	1.02	1.04	..
Finland	11.26	10.01	9.29	8.27	8.58	8.15	7.16	7.15	..
France	96.03	87.36	75.20	81.19	80.26	71.54	67.27	67.23	..
Germany	133.30	122.68	111.21	114.08	104.01	94.67	92.10	92.06	..
Greece	6.46	8.07	9.78	12.41	14.13	12.18	8.39	8.92	..
Hungary	6.46	9.00	7.12	5.20	6.53	6.06	5.96	6.51	..
Iceland	0.54	0.55	0.56	0.61	0.64	0.53	0.55	0.56	..
Ireland	3.55	3.90	3.74	6.65	7.80	6.77	5.57	5.75	..
Italy	69.94	64.20	61.45	62.30	63.46	54.43	47.83	47.14	..
Latvia	..	..	2.07	1.10	1.37	1.40	1.31	1.38	..
Luxembourg	1.46	1.01	1.48	2.01	2.72	2.45	2.29	2.19	..
Netherlands	23.47	24.35	21.69	23.67	27.95	28.19	25.54	24.49	..
Norway	7.31	8.09	7.36	7.51	8.19	8.55	7.94	8.05	..
Poland	8.96	13.00	10.94	17.51	19.75	23.24	20.94	21.84	..
Portugal	4.21	5.77	8.36	12.22	12.26	10.12	8.25	8.19	..
Slovak Republic	3.83	5.04	4.89	3.01	3.00	3.07	2.68	2.74	..
Slovenia	..	..	1.50	2.33	2.52	2.57	2.29	2.26	..
Spain	28.86	36.73	38.15	52.16	57.84	49.98	38.48	40.20	..
Sweden	24.38	20.16	14.02	14.17	12.95	11.24	9.70	9.36	..
Switzerland	13.41	12.04	11.26	11.11	11.22	10.77	9.12	9.04	..
Turkey	9.54	12.69	20.37	26.13	26.10	28.39	30.54	35.08	..
United Kingdom	73.09	59.62	61.24	62.58	63.20	55.41	51.79	53.54	..
<b>OECD Europe</b>	<b>577.22</b>	<b>551.43</b>	<b>523.67</b>	<b>572.33</b>	<b>585.86</b>	<b>537.49</b>	<b>491.51</b>	<b>500.59</b>	..
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.17	204.68	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>1 554.54</i>	<i>1 525.84</i>	<i>1 519.06</i>	<i>1 756.55</i>	<i>1 819.39</i>	<i>1 673.10</i>	<i>1 609.26</i>	<i>1 634.74</i>	..
<i>IEA/Accession/Association</i>	<i>1 659.46</i>	<i>1 684.18</i>	<i>1 760.02</i>	<i>2 190.05</i>	<i>2 385.06</i>	<i>2 388.28</i>	<i>2 442.33</i>	<i>2 513.62</i>	..
<i>European Union - 28</i>	..	..	<i>506.35</i>	<i>542.56</i>	<i>557.92</i>	<i>505.13</i>	<i>459.48</i>	<i>464.90</i>	..
<i>G7</i>	<i>1 312.56</i>	<i>1 259.54</i>	<i>1 231.93</i>	<i>1 388.51</i>	<i>1 426.84</i>	<i>1 289.39</i>	<i>1 245.68</i>	<i>1 259.23</i>	..
<i>G8</i>	..	..	<i>1 376.93</i>	<i>1 479.07</i>	<i>1 518.73</i>	<i>1 399.09</i>	<i>1 380.14</i>	<i>1 393.96</i>	..
<i>G20</i>	..	..	<i>1 995.75</i>	<i>2 393.22</i>	<i>2 585.95</i>	<i>2 636.41</i>	<i>2 738.29</i>	<i>2 813.88</i>	..
<i>OPEC</i>	<i>34.67</i>	<i>87.05</i>	<i>128.08</i>	<i>176.61</i>	<i>216.87</i>	<i>260.62</i>	<i>287.97</i>	<i>280.60</i>	..

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Final consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>484.23</b>	<b>693.97</b>	<b>811.82</b>	<b>1 002.19</b>	<b>1 210.42</b>	<b>1 464.92</b>	<b>1 683.81</b>	<b>1 724.23</b>	..
Albania	0.47	1.23	0.89	0.90	1.25	1.18	1.25	1.17	..
Armenia	..	..	2.36	0.29	0.37	0.38	0.33	0.32	..
Azerbaijan	..	..	4.06	1.93	2.81	2.66	3.70	3.52	..
Belarus	..	..	15.61	5.26	5.53	5.68	6.55	5.30	..
Bosnia and Herzegovina	..	..	1.56	1.06	1.06	1.53	1.26	1.32	..
Bulgaria	9.04	8.22	5.52	3.58	4.01	3.15	3.15	3.50	..
Croatia	..	..	2.97	2.84	3.33	3.00	2.63	2.76	..
Cyprus <sup>1</sup>	0.48	0.53	0.66	1.11	1.16	1.17	0.94	0.95	..
FYR of Macedonia	..	..	0.89	0.64	0.77	0.82	0.85	0.93	..
Georgia	..	..	2.88	0.63	0.70	0.96	1.05	1.20	..
Gibraltar	0.02	0.02	0.04	0.10	0.12	0.13	0.15	0.16	..
Kazakhstan	..	..	15.08	6.38	7.79	9.12	10.40	12.32	..
Kosovo	..	..	..	0.32	0.44	0.52	0.54	0.67	..
Kyrgyzstan	..	..	2.95	0.41	0.47	0.93	1.49	1.56	..
Lithuania	..	..	4.15	1.44	1.78	1.73	1.83	1.95	..
Malta	0.12	0.12	0.19	0.18	0.15	0.25	0.25	0.27	..
Republic of Moldova	..	..	3.60	0.38	0.64	0.74	0.77	0.80	..
Montenegro	..	..	..	..	0.28	0.31	0.26	0.28	..
Romania	10.62	14.67	8.74	6.43	7.77	6.57	7.31	7.61	..
Russian Federation	..	..	145.00	90.57	91.90	109.70	134.46	134.73	..
Serbia	..	..	4.31	1.18	3.43	3.22	2.93	2.95	..
Tajikistan	..	..	1.68	0.19	0.28	0.50	0.88	0.87	..
Turkmenistan	..	..	4.73	3.62	4.77	5.25	6.19	6.23	..
Ukraine	..	..	42.66	10.59	12.94	12.56	10.15	9.46	..
Uzbekistan	..	..	7.33	4.85	3.72	3.40	2.60	2.54	..
Former Soviet Union	203.08	274.02	x	x	x	x	x	x	..
Former Yugoslavia	8.54	10.83	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>232.36</b>	<b>309.65</b>	<b>277.87</b>	<b>144.87</b>	<b>157.46</b>	<b>175.45</b>	<b>201.93</b>	<b>203.36</b>	..
Algeria	2.26	4.61	8.04	8.36	10.37	14.28	18.09	18.38	..
Angola	0.63	0.65	0.85	1.03	1.43	3.83	5.24	5.17	..
Benin	0.13	0.13	0.08	0.46	0.87	1.50	1.48	1.65	..
Botswana	..	..	0.30	0.57	0.68	0.87	1.01	1.04	..
Cameroon	0.25	0.53	0.91	0.94	0.95	1.15	1.45	1.53	..
Congo	0.18	0.21	0.22	0.18	0.28	0.55	0.75	0.77	..
Côte d'Ivoire	0.66	0.96	0.76	0.95	0.80	0.98	1.53	1.75	..
Dem. Rep. of the Congo	0.56	0.70	0.69	0.28	0.42	0.60	1.54	0.90	..
Egypt	5.69	10.13	16.26	20.26	23.23	29.53	30.15	30.03	..
Eritrea	..	..	..	0.11	0.11	0.07	0.08	0.09	..
Ethiopia	0.35	0.38	0.65	1.08	1.51	1.93	2.98	3.04	..
Gabon	0.16	0.38	0.20	0.35	0.38	0.62	0.79	0.77	..
Ghana	0.67	0.72	0.90	1.53	1.82	2.57	3.48	3.76	..
Kenya	0.95	1.27	1.60	1.81	1.84	2.80	3.23	3.95	..
Libya	0.81	2.59	3.58	6.23	6.54	9.17	8.11	7.18	..
Mauritius	0.09	0.13	0.23	0.40	0.45	0.47	0.51	0.53	..
Morocco	2.01	3.21	3.58	5.68	7.50	9.64	10.61	10.95	..
Mozambique	0.33	0.39	0.30	0.42	0.49	0.72	0.96	1.12	..
Namibia	..	..	..	0.63	0.83	1.02	1.20	1.27	..
Niger	..	..	..	0.14	0.17	0.35	0.51	0.49	..
Nigeria	2.29	7.10	6.35	9.66	12.12	12.02	10.44	11.59	..
Senegal	0.33	0.46	0.43	0.71	0.80	0.92	1.06	1.12	..
South Africa	10.39	11.23	15.08	15.95	18.88	22.76	24.82	26.02	..
South Sudan	..	..	..	..	..	..	0.34	0.23	..
Sudan	1.42	1.12	1.67	1.49	2.51	4.55	3.87	3.92	..
United Rep. of Tanzania	0.49	0.44	0.46	0.72	1.18	1.49	2.35	2.66	..
Togo	0.08	0.12	0.17	0.28	0.31	0.66	0.58	0.61	..
Tunisia	0.95	1.62	2.33	3.34	3.99	3.87	4.08	4.35	..
Zambia	0.63	0.60	0.55	0.46	0.60	0.57	0.90	0.93	..
Zimbabwe	0.66	0.62	0.87	0.98	0.68	0.61	1.23	1.20	..
Other Africa	2.86	3.50	3.67	4.25	4.77	5.81	7.05	7.19	..
<b>Africa</b>	<b>35.84</b>	<b>53.80</b>	<b>70.70</b>	<b>89.29</b>	<b>106.52</b>	<b>135.92</b>	<b>150.41</b>	<b>154.18</b>	..

1. Please refer to section 'Geographical coverage'.

## Final consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.59	1.24	1.57	2.71	3.17	3.21	3.74	3.78	..
Brunei Darussalam	0.06	0.18	0.26	0.36	0.40	0.58	0.62	0.64	..
Cambodia	..	..	..	0.53	0.63	1.27	1.62	1.87	..
DPR of Korea	0.80	2.42	2.11	0.66	0.55	0.57	0.57	0.60	..
India	19.91	26.55	50.17	94.36	105.57	134.24	156.33	174.38	..
Indonesia	7.69	17.29	27.24	47.96	52.29	61.13	64.46	63.17	..
Malaysia	3.27	5.28	9.32	18.32	21.41	23.96	29.40	27.61	..
Mongolia	..	..	0.72	0.40	0.52	0.77	1.07	1.07	..
Myanmar	0.96	1.15	0.59	1.53	1.96	1.04	4.32	5.43	..
Nepal	0.06	0.10	0.24	0.69	0.72	0.99	1.33	1.15	..
Pakistan	2.85	4.15	7.75	11.80	11.55	11.56	14.50	15.17	..
Philippines	6.62	7.04	8.15	13.11	11.89	11.46	12.94	15.07	..
Singapore	1.11	1.60	3.81	5.86	9.90	10.70	11.91	11.65	..
Sri Lanka	1.04	1.07	1.18	2.50	2.84	2.96	3.25	4.12	..
Chinese Taipei	4.88	11.80	18.34	28.32	35.47	38.77	37.49	37.94	..
Thailand	5.53	7.28	14.93	29.00	39.72	43.84	51.78	51.72	..
Viet Nam	3.71	1.66	2.33	6.51	11.33	16.64	16.55	18.02	..
Other Asia	1.90	2.03	2.01	2.05	2.37	3.76	4.55	4.31	..
<b>Non-OECD Asia excl. China</b>	<b>60.99</b>	<b>90.85</b>	<b>150.72</b>	<b>266.67</b>	<b>312.28</b>	<b>367.45</b>	<b>416.44</b>	<b>437.68</b>	..
People's Rep. of China	42.62	58.69	84.60	180.37	273.66	369.03	451.26	480.43	..
Hong Kong, China	1.46	1.83	2.79	5.65	2.84	3.00	2.94	3.24	..
<b>China</b>	<b>44.08</b>	<b>60.52</b>	<b>87.39</b>	<b>186.02</b>	<b>276.50</b>	<b>372.03</b>	<b>454.20</b>	<b>483.67</b>	..
Argentina	17.13	19.07	15.54	22.14	22.40	24.59	25.28	25.77	..
Bolivia	0.70	1.11	1.12	1.62	1.88	2.62	3.54	3.75	..
Brazil	33.48	49.65	53.46	80.06	78.99	93.86	109.56	102.64	..
Colombia	5.76	6.51	8.74	11.13	10.71	10.12	12.74	12.52	..
Costa Rica	0.44	0.67	0.80	1.54	1.70	1.94	2.11	2.25	..
Cuba	5.16	6.74	7.00	5.26	3.93	5.25	4.44	4.37	..
Curaçao	2.15	1.04	0.58	0.79	0.84	0.90	0.63	0.64	..
Dominican Republic	0.88	1.08	1.50	3.21	3.25	3.47	2.95	3.10	..
Ecuador	1.05	2.75	4.22	5.29	6.74	8.16	10.03	9.61	..
El Salvador	0.45	0.54	0.69	1.36	1.60	1.51	1.46	1.67	..
Guatemala	0.66	0.86	1.02	2.08	2.45	2.58	3.98	3.44	..
Haiti	0.12	0.18	0.22	0.41	0.61	0.60	0.65	0.75	..
Honduras	0.36	0.48	0.69	1.03	1.40	1.52	1.57	1.86	..
Jamaica	1.90	1.69	1.65	1.38	1.90	1.31	1.44	1.37	..
Nicaragua	0.43	0.45	0.43	0.71	0.83	0.84	1.01	1.18	..
Panama	0.48	0.60	0.65	1.18	1.67	2.07	2.47	2.52	..
Paraguay	0.22	0.42	0.64	1.09	1.15	1.57	1.74	1.91	..
Peru	4.30	5.02	4.80	6.52	6.15	7.57	8.56	9.08	..
Suriname	..	..	..	0.39	0.32	0.38	0.39	0.38	..
Trinidad and Tobago	0.50	0.73	0.62	0.73	1.10	1.36	1.33	1.42	..
Uruguay	1.35	1.41	1.07	1.48	1.31	1.60	1.79	1.78	..
Venezuela	7.57	12.67	14.36	18.03	21.85	27.50	27.81	22.36	..
Other Non-OECD Americas	2.07	1.70	2.49	2.51	2.29	2.71	2.90	2.95	..
<b>Non-OECD Americas</b>	<b>87.15</b>	<b>115.34</b>	<b>122.28</b>	<b>169.94</b>	<b>175.06</b>	<b>204.04</b>	<b>228.40</b>	<b>217.32</b>	..
Bahrain	0.09	0.26	0.40	0.74	1.43	1.57	1.69	1.78	..
Islamic Republic of Iran	13.51	23.95	40.78	56.98	67.36	65.84	67.42	61.24	..
Iraq	2.22	6.31	12.46	15.13	16.37	15.78	16.21	13.76	..
Jordan	0.45	1.09	2.01	2.95	3.75	3.31	3.40	3.82	..
Kuwait	0.96	2.72	1.51	3.39	5.31	8.57	8.45	8.25	..
Lebanon	1.45	1.17	0.93	2.21	2.28	2.29	3.08	3.15	..
Oman	0.08	0.49	1.22	2.06	3.03	4.14	6.38	6.68	..
Qatar	0.12	0.43	0.98	1.48	2.90	6.20	8.29	8.57	..
Saudi Arabia	2.84	19.81	28.54	43.44	55.84	75.87	90.26	98.67	..
Syrian Arab Republic	1.36	3.58	6.14	6.67	10.05	8.92	5.15	4.90	..
United Arab Emirates	0.26	3.09	6.22	7.25	9.64	12.78	16.83	15.03	..
Yemen	0.47	0.92	1.66	3.10	4.63	4.77	5.28	2.15	..
<b>Middle East</b>	<b>23.80</b>	<b>63.82</b>	<b>102.85</b>	<b>145.40</b>	<b>182.60</b>	<b>210.04</b>	<b>232.44</b>	<b>228.01</b>	..

## Final consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>651.57</b>	<b>814.49</b>	<b>944.82</b>	<b>1 116.67</b>	<b>1 189.80</b>	<b>1 336.82</b>	<b>1 415.26</b>	<b>1 401.13</b>	..
<b>Non-OECD Total</b>	<b>153.09</b>	<b>255.76</b>	<b>354.39</b>	<b>372.23</b>	<b>474.56</b>	<b>609.29</b>	<b>683.74</b>	<b>683.03</b>	..
<b>OECD Total</b>	<b>498.48</b>	<b>558.73</b>	<b>590.44</b>	<b>744.44</b>	<b>715.23</b>	<b>727.52</b>	<b>731.52</b>	<b>718.10</b>	..
Canada	23.72	36.22	43.30	53.41	46.69	42.23	48.88	47.28	..
Chile	0.04	0.10	0.90	3.29	3.51	2.35	1.29	1.51	..
Mexico	7.26	12.84	13.91	12.57	11.56	12.94	14.19	13.93	..
United States <sup>2</sup>	366.97	337.41	302.99	359.89	309.00	321.54	351.81	333.16	..
<b>OECD Americas</b>	<b>398.00</b>	<b>386.57</b>	<b>361.10</b>	<b>429.15</b>	<b>370.75</b>	<b>379.07</b>	<b>416.17</b>	<b>395.88</b>	..
Australia	2.11	5.03	8.65	11.39	12.33	12.57	13.49	13.51	..
Israel <sup>1</sup>	0.05	0.13	0.03	0.00	-	0.06	0.53	0.56	..
Japan	3.11	5.84	15.24	21.71	27.05	30.01	29.72	29.45	..
Korea	-	-	0.67	10.92	15.98	20.58	22.21	20.50	..
New Zealand	0.12	0.35	1.80	3.01	1.33	1.78	3.01	2.69	..
<b>OECD Asia Oceania</b>	<b>5.39</b>	<b>11.34</b>	<b>26.39</b>	<b>47.03</b>	<b>56.69</b>	<b>65.00</b>	<b>68.96</b>	<b>66.72</b>	..
Austria	1.45	2.83	3.04	4.27	4.93	5.11	4.54	4.67	..
Belgium	4.60	7.08	6.82	10.14	10.37	10.98	9.15	9.86	..
Czech Republic	0.81	1.18	4.24	5.91	6.18	6.18	4.90	5.12	..
Denmark	-	-	1.12	1.65	1.69	1.73	1.43	1.45	..
Estonia	..	..	0.44	0.28	0.38	0.21	0.22	0.22	..
Finland	-	0.43	0.96	0.92	0.85	0.82	0.69	0.64	..
France	10.27	19.27	23.92	32.14	34.55	32.99	27.07	27.47	..
Germany	18.58	33.48	39.05	55.12	55.07	56.37	49.94	51.66	..
Greece	-	-	0.10	0.38	0.71	1.14	1.18	1.32	..
Hungary	2.80	4.61	6.20	6.69	8.05	6.46	5.50	5.72	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	0.35	1.00	1.58	1.36	1.59	1.62	1.72	..
Italy	12.35	19.73	30.39	38.58	41.57	39.05	31.40	33.55	..
Latvia	..	..	0.70	0.33	0.51	0.50	0.33	0.32	..
Luxembourg	0.18	0.36	0.42	0.60	0.63	0.68	0.57	0.60	..
Netherlands	19.29	24.25	23.71	23.09	22.27	23.79	17.90	18.78	..
Norway	-	-	-	0.59	0.74	0.74	0.95	0.97	..
Poland	4.42	6.96	7.69	8.16	9.93	10.54	10.41	10.61	..
Portugal	-	-	-	0.79	1.31	1.56	1.55	1.64	..
Slovak Republic	1.40	1.63	3.91	4.17	4.31	3.70	2.76	2.87	..
Slovenia	..	..	0.71	0.69	0.79	0.70	0.52	0.56	..
Spain	0.45	0.72	4.32	12.29	18.13	14.81	14.78	13.65	..
Sweden	-	-	0.33	0.44	0.51	0.66	0.62	0.67	..
Switzerland	0.11	0.71	1.39	2.13	2.45	2.69	2.53	2.67	..
Turkey	-	-	0.71	4.91	10.05	13.13	19.23	20.84	..
United Kingdom	18.37	37.24	41.77	52.42	50.44	47.31	36.61	37.93	..
<b>OECD Europe</b>	<b>95.09</b>	<b>160.82</b>	<b>202.95</b>	<b>268.26</b>	<b>287.79</b>	<b>283.46</b>	<b>246.40</b>	<b>255.50</b>	..
<i>IEA</i>	<i>491.13</i>	<i>545.67</i>	<i>574.19</i>	<i>727.57</i>	<i>698.87</i>	<i>710.97</i>	<i>714.66</i>	<i>701.22</i>	..
<i>IEA/Accession/Association</i>	<i>501.18</i>	<i>568.11</i>	<i>609.77</i>	<i>778.27</i>	<i>770.92</i>	<i>833.25</i>	<i>890.81</i>	<i>876.52</i>	..
<i>European Union - 28</i>	..	..	226.66	271.96	287.20	277.71	234.14	241.08	..
<i>G7</i>	<i>453.39</i>	<i>489.19</i>	<i>496.67</i>	<i>613.25</i>	<i>564.37</i>	<i>569.50</i>	<i>575.43</i>	<i>560.51</i>	..
<i>G8</i>	..	..	639.75	730.39	692.39	712.69	713.24	701.68	..
<i>G20</i>	..	..	794.26	930.06	947.33	1 036.79	1 087.84	1 070.70	..
<i>OPEC</i>	<i>10.35</i>	<i>16.82</i>	<i>41.65</i>	<i>79.04</i>	<i>110.14</i>	<i>162.44</i>	<i>185.38</i>	<i>185.39</i>	..

1. Please refer to section 'Geographical coverage'.

2. For the United States, gas used by autoproducers of electricity and heat has been included in final consumption prior to 1989.

## Final consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>153.09</b>	<b>255.76</b>	<b>354.39</b>	<b>372.23</b>	<b>474.56</b>	<b>609.29</b>	<b>683.74</b>	<b>683.03</b>	..
Albania	0.16	0.32	0.20	0.00	-	0.00	0.01	0.01	..
Armenia	..	..	2.75	0.44	0.93	1.02	1.18	1.11	..
Azerbaijan	..	..	9.28	3.07	3.23	3.06	3.28	3.48	..
Belarus	..	..	4.31	3.21	3.95	4.69	4.70	4.39	..
Bosnia and Herzegovina	..	..	0.35	0.16	0.25	0.14	0.11	0.13	..
Bulgaria	0.17	3.18	2.60	1.71	1.68	1.25	1.42	1.59	..
Croatia	..	..	1.24	1.45	1.62	1.69	1.35	1.39	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	0.01	0.05	0.04	0.03	0.03	..
Georgia	..	..	2.59	0.46	0.57	0.61	1.28	1.36	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	7.77	2.67	2.26	3.32	2.92	3.19	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	0.61	0.16	0.30	0.12	0.10	0.12	..
Lithuania	..	..	2.13	0.91	1.10	1.10	1.40	1.46	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.98	0.47	0.74	0.69	0.62	0.55	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	13.89	27.25	19.85	7.28	8.26	6.78	6.29	5.63	..
Russian Federation	..	..	143.08	117.14	128.02	143.19	137.81	141.17	..
Serbia	..	..	2.36	1.16	1.24	1.15	0.77	0.87	..
Tajikistan	..	..	0.73	0.38	0.29	0.15	0.00	0.00	..
Turkmenistan	..	..	6.74	4.98	6.45	8.28	10.44	10.44	..
Ukraine	..	..	33.22	28.51	34.54	28.40	20.96	16.02	..
Uzbekistan	..	..	19.68	26.33	24.33	21.32	21.32	20.12	..
Former Soviet Union	116.20	181.67	x	x	x	x	x	x	..
Former Yugoslavia	0.98	2.12	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>131.41</b>	<b>214.55</b>	<b>260.46</b>	<b>200.50</b>	<b>219.80</b>	<b>226.98</b>	<b>215.99</b>	<b>213.06</b>	..
Algeria	0.27	0.81	3.36	5.31	7.70	9.11	13.01	14.73	..
Angola	0.05	0.06	0.44	0.47	0.53	0.60	0.22	0.63	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	0.49	0.14	0.18	0.25	0.25	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	0.75	2.42	3.95	9.08	10.95	9.04	10.03	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	0.26	1.01	1.29	2.15	2.07	2.21	0.14	0.13	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	0.06	0.06	0.04	0.04	0.03	0.04	0.08	0.07	..
Mozambique	-	-	-	0.00	0.02	0.06	0.08	0.14	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.03	0.04	0.72	0.97	2.81	1.21	3.78	3.94	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	-	-	-	-	-	0.82	1.70	1.74	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	0.05	0.10	0.15	0.14	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.01	0.08	0.31	0.61	0.84	1.49	1.34	1.29	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	0.00	0.95	0.90	0.73	0.56	..
<b>Africa</b>	<b>0.68</b>	<b>2.80</b>	<b>8.58</b>	<b>13.99</b>	<b>24.24</b>	<b>27.70</b>	<b>30.54</b>	<b>33.64</b>	..

1. Please refer to section 'Geographical coverage'.



## Final consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.33	0.66	1.85	3.57	4.67	7.41	8.20	8.80	..
Brunei Darussalam	-	-	-	-	-	0.48	0.52	0.05	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.29	0.68	5.64	9.67	13.26	27.21	29.30	28.93	..
Indonesia	0.12	2.36	6.02	11.56	13.63	15.86	17.03	17.04	..
Malaysia	0.01	0.04	1.09	3.86	6.98	6.25	9.64	9.56	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	0.03	0.08	0.22	0.32	0.43	0.60	0.70	0.71	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	1.80	3.02	6.01	10.18	15.54	19.12	17.90	18.01	..
Philippines	-	-	-	-	0.01	0.07	0.08	0.05	..
Singapore	0.02	0.05	0.06	0.11	0.51	1.11	1.28	1.24	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	0.94	1.35	0.88	1.55	1.78	2.11	2.71	2.83	..
Thailand	-	-	0.14	1.11	1.86	4.59	7.44	7.17	..
Viet Nam	-	-	-	0.02	0.54	0.49	1.46	1.49	..
Other Asia	0.15	0.09	0.24	0.10	0.11	0.13	0.12	0.14	..
<b>Non-OECD Asia excl. China</b>	<b>3.69</b>	<b>8.33</b>	<b>22.16</b>	<b>42.04</b>	<b>59.31</b>	<b>85.44</b>	<b>96.36</b>	<b>96.01</b>	..
People's Rep. of China	2.25	6.36	8.87	12.37	27.70	58.18	105.54	105.42	..
Hong Kong, China	0.03	0.08	0.32	0.56	0.59	0.59	0.62	0.61	..
<b>China</b>	<b>2.28</b>	<b>6.44</b>	<b>9.19</b>	<b>12.93</b>	<b>28.29</b>	<b>58.77</b>	<b>106.16</b>	<b>106.03</b>	..
Argentina	3.68	5.41	9.57	15.59	18.71	20.13	21.50	22.07	..
Bolivia	0.00	0.04	0.17	0.35	0.53	0.99	1.46	1.33	..
Brazil	0.22	0.89	2.42	4.86	9.61	12.76	12.66	12.71	..
Colombia	0.21	0.54	0.91	1.62	2.83	3.58	3.89	4.29	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	0.03	0.05	0.06	0.20	0.20	0.38	0.37	0.37	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	0.03	0.11	0.10	..
Ecuador	-	-	-	-	-	-	0.03	0.01	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.04	0.07	0.07	0.00	0.15	1.13	1.86	1.92	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	0.52	0.86	2.82	6.06	9.69	11.96	11.60	11.51	..
Uruguay	-	-	-	0.03	0.07	0.05	0.04	0.04	..
Venezuela	3.16	6.07	6.73	8.86	12.04	13.57	8.55	7.88	..
Other Non-OECD Americas	-	0.01	0.01	0.02	0.01	0.01	0.01	0.01	..
<b>Non-OECD Americas</b>	<b>7.86</b>	<b>13.94</b>	<b>22.75</b>	<b>37.59</b>	<b>53.84</b>	<b>64.59</b>	<b>62.09</b>	<b>62.26</b>	..
Bahrain	0.59	0.87	1.05	1.19	1.21	1.63	2.18	2.12	..
Islamic Republic of Iran	1.92	1.61	9.35	29.21	46.61	75.57	93.91	95.28	..
Iraq	0.49	0.52	0.81	1.29	0.07	0.20	1.58	1.22	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	2.77	3.16	1.61	3.03	4.44	3.28	4.80	5.63	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	0.32	0.40	1.13	6.73	10.12	11.26	..
Qatar	0.58	1.30	2.40	3.68	4.52	4.91	7.63	7.90	..
Saudi Arabia	-	0.24	6.21	11.56	15.96	27.33	28.02	21.24	..
Syrian Arab Republic	-	-	0.75	2.30	1.77	1.72	0.66	0.58	..
United Arab Emirates	0.82	2.00	8.73	12.51	13.37	24.43	23.69	26.81	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>7.17</b>	<b>9.71</b>	<b>31.24</b>	<b>65.18</b>	<b>89.10</b>	<b>145.81</b>	<b>172.60</b>	<b>172.03</b>	..

## Final consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>439.78</b>	<b>586.17</b>	<b>835.44</b>	<b>1 092.01</b>	<b>1 302.32</b>	<b>1 539.73</b>	<b>1 709.37</b>	<b>1 737.23</b>	..
<b>Non-OECD Total</b>	<b>115.35</b>	<b>176.80</b>	<b>281.21</b>	<b>373.74</b>	<b>519.39</b>	<b>729.73</b>	<b>904.81</b>	<b>929.06</b>	..
<b>OECD Total</b>	<b>324.43</b>	<b>409.37</b>	<b>554.23</b>	<b>718.27</b>	<b>782.93</b>	<b>809.99</b>	<b>804.56</b>	<b>808.17</b>	..
Canada	18.93	26.08	35.95	41.41	43.81	42.40	43.89	43.26	..
Chile	0.63	0.84	1.33	3.16	4.16	4.71	5.75	5.75	..
Mexico	2.71	4.92	8.62	12.50	16.31	18.55	21.69	22.14	..
United States	143.39	174.19	226.49	300.95	320.91	325.80	325.75	325.15	..
<b>OECD Americas</b>	<b>165.66</b>	<b>206.03</b>	<b>272.39</b>	<b>358.02</b>	<b>385.19</b>	<b>391.45</b>	<b>397.08</b>	<b>396.30</b>	..
Australia	4.51	6.81	11.11	14.86	16.27	18.06	17.89	18.17	..
Israel <sup>1</sup>	0.65	0.94	1.56	3.32	3.65	4.19	4.41	4.68	..
Japan	35.70	44.14	66.32	83.32	86.13	87.85	82.72	81.63	..
Korea	1.10	2.82	8.12	22.63	30.76	38.64	41.87	42.60	..
New Zealand	1.37	1.68	2.43	2.95	3.27	3.37	3.31	3.37	..
<b>OECD Asia Oceania</b>	<b>43.34</b>	<b>56.39</b>	<b>89.54</b>	<b>127.07</b>	<b>140.08</b>	<b>152.12</b>	<b>150.20</b>	<b>150.45</b>	..
Austria	2.18	2.84	3.68	4.43	4.94	5.19	5.22	5.23	..
Belgium	2.94	3.73	4.99	6.67	6.90	7.16	6.98	7.03	..
Czech Republic	2.54	3.26	4.14	4.25	4.76	4.66	4.59	4.68	..
Denmark	1.38	1.86	2.44	2.79	2.88	2.76	2.63	2.64	..
Estonia	..	..	0.59	0.43	0.52	0.59	0.59	0.59	..
Finland	2.32	3.20	5.07	6.51	6.94	7.18	6.81	6.75	..
France	12.78	17.98	25.99	33.10	36.36	38.19	35.67	36.54	..
Germany	26.91	33.70	39.14	41.58	44.91	45.79	44.10	44.27	..
Greece	1.09	1.71	2.45	3.71	4.38	4.57	4.26	4.37	..
Hungary	1.51	2.20	2.72	2.53	2.78	2.94	2.99	3.11	..
Iceland	0.18	0.25	0.34	0.59	0.67	1.35	1.45	1.50	..
Ireland	0.53	0.74	1.02	1.74	2.09	2.19	2.08	2.16	..
Italy	10.58	13.74	18.46	23.48	25.88	25.74	24.21	24.72	..
Latvia	..	..	0.72	0.39	0.49	0.53	0.57	0.56	..
Luxembourg	0.26	0.31	0.36	0.50	0.53	0.57	0.53	0.54	..
Netherlands	3.81	4.94	6.15	8.18	8.98	9.27	8.72	8.87	..
Norway	5.23	6.43	8.33	9.42	9.52	9.76	9.38	9.53	..
Poland	5.01	7.31	8.28	8.43	9.03	10.21	10.78	10.99	..
Portugal	0.70	1.23	2.02	3.30	3.98	4.29	3.89	3.94	..
Slovak Republic	1.06	1.64	2.01	1.89	1.97	2.08	2.08	2.10	..
Slovenia	..	..	0.79	0.90	1.10	1.03	1.07	1.10	..
Spain	5.08	7.72	10.82	16.21	20.83	21.05	19.51	19.96	..
Sweden	5.95	7.30	10.35	11.07	11.24	11.28	10.51	10.74	..
Switzerland	2.49	3.03	4.01	4.50	4.93	5.14	4.94	5.01	..
Turkey	0.85	1.68	3.87	8.25	11.06	14.62	17.67	18.47	..
United Kingdom	20.04	20.15	23.60	28.33	29.99	28.29	26.06	26.05	..
<b>OECD Europe</b>	<b>115.43</b>	<b>146.95</b>	<b>192.31</b>	<b>233.18</b>	<b>257.65</b>	<b>266.43</b>	<b>257.27</b>	<b>261.42</b>	..
IEA	320.25	402.42	540.87	697.41	756.55	779.64	769.62	772.45	..
IEA/Accession/Association	341.35	439.85	615.90	852.40	1 014.90	1 193.24	1 323.07	1 347.20	..
European Union - 28	..	..	185.88	217.37	239.44	244.10	232.41	235.71	..
G7	268.34	329.99	435.95	552.17	587.99	594.06	582.41	581.63	..
G8	..	..	507.04	604.50	643.89	656.55	645.86	644.09	..
G20	..	..	717.68	942.64	1 114.02	1 310.21	1 450.57	1 474.23	..
OPEC	3.27	8.51	20.02	34.09	45.91	64.41	77.90	79.13	..

1. Please refer to section 'Geographical coverage'.

## Final consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>115.35</b>	<b>176.80</b>	<b>281.21</b>	<b>373.74</b>	<b>519.39</b>	<b>729.73</b>	<b>904.81</b>	<b>929.06</b>	<b>..</b>
Albania	0.11	0.25	0.14	0.37	0.44	0.49	0.56	0.51	..
Armenia	..	..	0.78	0.31	0.36	0.40	0.46	0.46	..
Azerbaijan	..	..	1.36	1.24	1.55	1.05	1.45	1.52	..
Belarus	..	..	3.41	2.30	2.38	2.53	2.60	2.52	..
Bosnia and Herzegovina	..	..	0.87	0.50	0.67	0.89	0.91	0.92	..
Bulgaria	1.78	2.55	3.03	2.09	2.21	2.33	2.38	2.44	..
Croatia	..	..	1.14	1.02	1.24	1.36	1.28	1.32	..
Cyprus <sup>1</sup>	0.06	0.08	0.15	0.26	0.34	0.42	0.34	0.35	..
FYR of Macedonia	..	..	0.40	0.45	0.54	0.58	0.58	0.57	..
Georgia	..	..	1.16	0.54	0.53	0.63	0.84	0.85	..
Gibraltar	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	..
Kazakhstan	..	..	8.30	3.03	5.23	4.94	5.93	5.87	..
Kosovo	..	..	..	0.20	0.27	0.35	0.40	0.40	..
Kyrgyzstan	..	..	0.85	0.69	0.58	0.61	0.94	0.91	..
Lithuania	..	..	1.03	0.53	0.69	0.72	0.79	0.80	..
Malta	0.03	0.04	0.08	0.13	0.16	0.16	0.17	0.18	..
Republic of Moldova	..	..	0.89	0.47	0.58	0.48	0.39	0.39	..
Montenegro	..	..	..	..	0.32	0.28	0.22	0.23	..
Romania	2.89	4.65	4.66	2.92	3.34	3.55	3.60	3.70	..
Russian Federation	..	..	71.09	52.33	55.90	62.49	63.45	62.46	..
Serbia	..	..	2.78	2.35	2.21	2.37	2.25	2.33	..
Tajikistan	..	..	1.53	1.14	1.25	1.21	1.06	1.07	..
Turkmenistan	..	..	0.72	0.50	0.64	0.79	0.95	1.07	..
Ukraine	..	..	17.68	9.76	10.59	11.54	11.04	10.23	..
Uzbekistan	..	..	3.69	3.42	3.50	3.68	3.94	4.00	..
Former Soviet Union	62.41	82.85	x	x	x	x	x	x	..
Former Yugoslavia	2.46	4.21	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>69.75</b>	<b>94.63</b>	<b>125.78</b>	<b>86.56</b>	<b>95.52</b>	<b>103.86</b>	<b>106.58</b>	<b>105.11</b>	<b>..</b>
Algeria	0.17	0.43	1.06	1.60	2.29	2.88	3.93	4.31	..
Angola	0.06	0.04	0.05	0.10	0.17	0.40	0.70	0.72	..
Benin	0.00	0.01	0.01	0.03	0.05	0.07	0.08	0.10	..
Botswana	..	..	0.07	0.15	0.20	0.27	0.30	0.30	..
Cameroon	0.09	0.12	0.20	0.23	0.28	0.42	0.47	0.50	..
Congo	0.01	0.01	0.03	0.02	0.03	0.04	0.07	0.07	..
Côte d'Ivoire	0.05	0.12	0.16	0.24	0.25	0.35	0.48	0.52	..
Dem. Rep. of the Congo	0.30	0.34	0.18	0.39	0.42	0.54	0.68	0.62	..
Egypt	0.60	1.34	3.11	5.56	7.92	10.76	12.61	13.26	..
Eritrea	..	..	..	0.01	0.02	0.02	0.03	0.03	..
Ethiopia	0.05	0.05	0.08	0.12	0.20	0.33	0.57	0.72	..
Gabon	0.01	0.04	0.07	0.09	0.10	0.13	0.15	0.16	..
Ghana	0.31	0.39	0.38	0.55	0.45	0.59	0.82	0.74	..
Kenya	0.09	0.14	0.25	0.28	0.40	0.53	0.66	0.68	..
Libya	0.07	0.26	0.50	0.87	1.64	1.70	0.94	0.84	..
Mauritius	0.01	0.02	0.06	0.14	0.17	0.21	0.23	0.24	..
Morocco	0.20	0.37	0.70	1.10	1.52	2.03	2.48	2.57	..
Mozambique	0.05	0.04	0.04	0.18	0.78	0.85	1.17	1.16	..
Namibia	..	..	..	0.16	0.25	0.29	0.32	0.33	..
Niger	..	..	..	0.03	0.04	0.06	0.08	0.08	..
Nigeria	0.18	0.40	0.68	0.74	1.48	1.78	2.10	2.16	..
Senegal	0.03	0.05	0.06	0.08	0.15	0.22	0.28	0.29	..
South Africa	4.74	7.96	11.91	14.98	16.61	17.45	17.09	17.07	..
South Sudan	..	..	..	..	..	..	0.04	0.02	..
Sudan	0.04	0.06	0.11	0.19	0.26	0.52	0.84	0.91	..
United Rep. of Tanzania	0.04	0.06	0.11	0.17	0.22	0.35	0.43	0.45	..
Togo	0.01	0.01	0.03	0.04	0.05	0.07	0.10	0.10	..
Tunisia	0.08	0.21	0.42	0.77	0.97	1.17	1.31	1.33	..
Zambia	0.44	0.50	0.51	0.52	0.69	0.67	0.92	0.98	..
Zimbabwe	0.42	0.60	0.77	0.90	0.90	0.63	0.71	0.59	..
Other Africa	0.31	0.41	0.54	0.78	1.00	1.24	1.39	1.42	..
<b>Africa</b>	<b>8.36</b>	<b>13.97</b>	<b>22.10</b>	<b>31.02</b>	<b>39.51</b>	<b>46.57</b>	<b>51.97</b>	<b>53.28</b>	<b>..</b>

1. Please refer to section 'Geographical coverage'.

## Final consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.09	0.12	0.40	1.07	1.91	2.97	3.95	4.18	..
Brunei Darussalam	0.02	0.03	0.09	0.21	0.23	0.25	0.29	0.29	..
Cambodia	..	..	..	0.03	0.07	0.18	0.35	0.43	..
DPR of Korea	1.21	1.55	2.03	1.25	1.47	1.39	1.15	0.88	..
India	4.77	7.80	18.49	32.35	42.09	62.35	82.39	88.32	..
Indonesia	0.17	0.56	2.43	6.81	9.26	12.73	17.08	17.44	..
Malaysia	0.35	0.75	1.72	5.26	6.94	9.53	11.41	11.40	..
Mongolia	..	..	0.23	0.16	0.22	0.29	0.44	0.46	..
Myanmar	0.05	0.09	0.15	0.28	0.32	0.54	0.97	1.15	..
Nepal	0.01	0.01	0.05	0.11	0.17	0.24	0.33	0.34	..
Pakistan	0.53	0.89	2.48	4.18	5.83	6.64	7.39	7.64	..
Philippines	1.03	1.47	1.82	3.14	3.88	4.75	5.45	5.83	..
Singapore	0.25	0.47	1.11	2.35	3.05	3.63	3.99	4.09	..
Sri Lanka	0.08	0.12	0.22	0.42	0.53	0.79	0.95	1.01	..
Chinese Taipei	1.50	3.17	6.59	13.76	17.10	18.78	19.95	19.85	..
Thailand	0.53	1.12	3.30	7.56	10.43	12.84	14.52	15.04	..
Viet Nam	0.16	0.23	0.53	1.93	4.05	7.48	11.05	12.34	..
Other Asia	0.38	0.52	0.52	0.76	1.00	1.52	2.05	1.94	..
<b>Non-OECD Asia excl. China</b>	<b>11.10</b>	<b>18.90</b>	<b>42.17</b>	<b>81.65</b>	<b>108.56</b>	<b>146.89</b>	<b>183.69</b>	<b>192.62</b>	..
People's Rep. of China	11.83	21.35	39.03	89.15	171.54	296.76	405.55	419.40	..
Hong Kong, China	0.52	0.94	2.05	3.12	3.44	3.61	3.78	3.79	..
<b>China</b>	<b>12.35</b>	<b>22.29</b>	<b>41.08</b>	<b>92.27</b>	<b>174.98</b>	<b>300.37</b>	<b>409.33</b>	<b>423.19</b>	..
Argentina	1.96	2.83	3.47	6.49	7.76	9.70	10.86	11.15	..
Bolivia	0.07	0.12	0.15	0.30	0.37	0.53	0.64	0.68	..
Brazil	4.66	10.19	18.13	27.62	31.10	37.66	43.07	42.28	..
Colombia	0.77	1.37	2.31	2.87	3.35	4.06	4.41	4.46	..
Costa Rica	0.10	0.17	0.28	0.49	0.63	0.74	0.79	0.81	..
Cuba	0.38	0.61	1.03	1.01	1.04	1.18	1.32	1.39	..
Curaçao	0.05	0.05	0.05	0.07	0.08	0.08	0.06	0.06	..
Dominican Republic	0.16	0.21	0.27	0.94	0.98	1.09	1.28	1.34	..
Ecuador	0.08	0.25	0.41	0.68	0.93	1.45	1.85	1.97	..
El Salvador	0.07	0.11	0.16	0.31	0.37	0.43	0.48	0.49	..
Guatemala	0.07	0.14	0.17	0.33	0.52	0.65	0.71	0.79	..
Haiti	0.01	0.02	0.03	0.03	0.03	0.02	0.04	0.04	..
Honduras	0.04	0.07	0.15	0.28	0.37	0.44	0.48	0.67	..
Jamaica	0.16	0.09	0.14	0.52	0.55	0.27	0.26	0.26	..
Nicaragua	0.05	0.08	0.09	0.13	0.17	0.23	0.29	0.29	..
Panama	0.08	0.13	0.18	0.33	0.41	0.54	0.67	0.73	..
Paraguay	0.02	0.07	0.17	0.38	0.41	0.59	0.84	0.91	..
Peru	0.52	0.75	1.01	1.49	1.96	2.95	3.41	3.64	..
Suriname	..	..	..	0.09	0.12	0.13	0.17	0.17	..
Trinidad and Tobago	0.07	0.15	0.27	0.41	0.55	0.68	0.80	0.83	..
Uruguay	0.16	0.24	0.33	0.57	0.56	0.80	0.87	0.91	..
Venezuela	1.00	2.37	3.87	5.23	6.12	7.02	6.68	6.17	..
Other Non-OECD Americas	1.30	1.51	1.86	2.41	2.84	2.74	2.90	2.94	..
<b>Non-OECD Americas</b>	<b>11.77</b>	<b>21.51</b>	<b>34.54</b>	<b>52.96</b>	<b>61.22</b>	<b>73.97</b>	<b>82.87</b>	<b>82.98</b>	..
Bahrain	0.04	0.14	0.65	1.12	1.58	1.91	2.25	2.39	..
Islamic Republic of Iran	0.91	1.67	4.24	8.12	11.65	16.00	19.04	18.15	..
Iraq	0.29	0.93	1.96	2.51	1.94	3.03	3.78	3.06	..
Jordan	0.01	0.07	0.26	0.52	0.76	1.10	1.32	1.39	..
Kuwait	0.18	0.37	0.83	1.72	2.42	3.20	3.70	3.72	..
Lebanon	0.13	0.20	0.12	0.83	0.96	1.30	1.39	1.43	..
Oman	0.00	0.06	0.30	0.59	0.82	1.39	2.16	2.49	..
Qatar	0.04	0.19	0.39	0.66	1.04	2.12	2.91	3.13	..
Saudi Arabia	0.23	1.09	4.72	8.51	11.61	17.44	23.40	25.18	..
Syrian Arab Republic	0.11	0.26	0.71	1.25	2.02	2.89	1.31	1.11	..
United Arab Emirates	0.05	0.48	1.23	3.26	4.52	7.26	8.70	9.55	..
Yemen	0.02	0.04	0.11	0.18	0.28	0.43	0.38	0.27	..
<b>Middle East</b>	<b>2.01</b>	<b>5.51</b>	<b>15.52</b>	<b>29.28</b>	<b>39.61</b>	<b>58.07</b>	<b>70.36</b>	<b>71.87</b>	..

## Total final consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>4 661.19</b>	<b>5 367.77</b>	<b>6 268.20</b>	<b>7 036.07</b>	<b>7 936.87</b>	<b>8 781.05</b>	<b>9 289.96</b>	<b>9 383.60</b>	..
<b>Non-OECD Total</b>	<b>1 661.45</b>	<b>2 247.68</b>	<b>2 956.86</b>	<b>3 126.24</b>	<b>3 865.50</b>	<b>4 726.84</b>	<b>5 307.18</b>	<b>5 366.31</b>	..
<b>OECD Total</b>	<b>2 815.56</b>	<b>2 941.57</b>	<b>3 109.04</b>	<b>3 635.90</b>	<b>3 752.43</b>	<b>3 695.42</b>	<b>3 619.00</b>	<b>3 635.50</b>	..
Canada	131.43	155.06	161.79	191.53	195.72	188.08	196.25	193.42	..
Chile	6.52	7.29	11.10	20.38	21.84	23.86	24.98	25.15	..
Mexico	39.74	65.92	83.32	95.27	105.99	117.25	118.72	119.81	..
United States <sup>2</sup>	1 315.37	1 311.29	1 293.50	1 546.23	1 563.04	1 512.42	1 531.43	1 520.14	..
<b>OECD Americas</b>	<b>1 493.06</b>	<b>1 539.57</b>	<b>1 549.71</b>	<b>1 853.41</b>	<b>1 886.59</b>	<b>1 841.61</b>	<b>1 871.37</b>	<b>1 858.52</b>	..
Australia	39.58	46.79	56.65	69.58	72.23	76.56	80.89	81.30	..
Israel <sup>1</sup>	3.61	4.51	6.97	11.98	11.95	14.83	13.20	13.82	..
Japan	233.98	231.89	287.02	328.23	329.17	308.88	294.49	291.41	..
Korea	17.49	31.29	64.91	127.11	140.45	157.69	170.29	174.21	..
New Zealand	5.83	6.91	9.72	12.95	12.55	12.93	14.20	14.08	..
<b>OECD Asia Oceania</b>	<b>300.49</b>	<b>321.38</b>	<b>425.27</b>	<b>549.85</b>	<b>566.35</b>	<b>570.89</b>	<b>573.08</b>	<b>574.82</b>	..
Austria	16.61	18.64	19.80	23.59	27.27	27.70	26.46	27.00	..
Belgium	33.73	32.29	32.14	41.70	41.86	42.55	40.22	41.83	..
Czech Republic	31.35	34.66	32.98	26.12	28.09	27.05	25.35	25.52	..
Denmark	15.31	14.74	13.17	14.23	14.92	14.96	12.86	13.31	..
Estonia	..	..	5.85	2.58	3.05	2.96	2.89	2.84	..
Finland	19.19	19.34	22.32	24.45	25.30	26.45	24.67	24.35	..
France	142.22	141.29	143.16	163.21	168.59	161.38	145.63	147.83	..
Germany	241.71	248.66	240.78	231.39	230.67	228.89	216.32	220.17	..
Greece	8.53	10.70	14.49	18.45	20.79	19.43	15.45	16.38	..
Hungary	16.53	21.57	20.69	17.22	19.97	18.97	17.76	18.87	..
Iceland	1.02	1.28	1.36	1.77	1.92	2.53	2.74	2.85	..
Ireland	5.11	6.34	7.55	10.76	12.18	11.45	10.14	10.49	..
Italy	96.56	102.23	114.94	128.83	141.28	133.74	116.57	119.21	..
Latvia	..	..	6.42	3.30	4.06	4.07	3.87	3.79	..
Luxembourg	2.87	2.71	2.78	3.25	4.09	3.94	3.64	3.57	..
Netherlands	47.65	54.31	54.56	60.00	64.52	65.97	56.75	56.55	..
Norway	13.36	15.98	17.44	19.80	20.45	21.32	20.17	20.55	..
Poland	60.55	78.01	61.43	57.77	61.86	69.97	65.23	66.15	..
Portugal	5.74	7.91	13.39	19.36	20.46	18.95	16.19	16.27	..
Slovak Republic	10.86	13.03	15.75	11.42	11.71	11.44	9.74	10.03	..
Slovenia	..	..	3.69	4.65	5.16	5.22	4.71	4.79	..
Spain	38.54	48.12	60.61	85.49	102.06	92.24	78.64	79.77	..
Sweden	34.82	34.60	32.12	35.30	34.54	34.86	31.90	32.27	..
Switzerland	16.67	16.62	18.31	19.37	20.44	20.79	18.66	18.94	..
Turkey	19.86	26.32	40.17	57.91	65.53	77.88	85.55	93.54	..
United Kingdom	143.23	131.28	138.16	150.73	148.71	138.21	122.45	125.29	..
<b>OECD Europe</b>	<b>1 022.01</b>	<b>1 080.61</b>	<b>1 134.07</b>	<b>1 232.64</b>	<b>1 299.49</b>	<b>1 282.92</b>	<b>1 174.54</b>	<b>1 202.16</b>	..
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.26	204.84	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>2 764.66</i>	<i>2 862.56</i>	<i>2 996.19</i>	<i>3 498.55</i>	<i>3 601.51</i>	<i>3 527.65</i>	<i>3 450.78</i>	<i>3 465.28</i>	..
<i>IEA/Accession/Association</i>	<i>3 367.21</i>	<i>3 668.01</i>	<i>4 107.52</i>	<i>4 898.35</i>	<i>5 501.91</i>	<i>5 989.26</i>	<i>6 309.36</i>	<i>6 386.49</i>	..
<i>European Union - 28</i>	..	..	<i>1 135.88</i>	<i>1 179.86</i>	<i>1 242.52</i>	<i>1 208.11</i>	<i>1 093.92</i>	<i>1 113.56</i>	..
<i>G7</i>	<i>2 304.50</i>	<i>2 321.69</i>	<i>2 379.35</i>	<i>2 740.16</i>	<i>2 777.18</i>	<i>2 671.59</i>	<i>2 623.14</i>	<i>2 617.47</i>	..
<i>G8</i>	..	..	<i>3 004.33</i>	<i>3 157.99</i>	<i>3 189.10</i>	<i>3 118.18</i>	<i>3 081.88</i>	<i>3 074.37</i>	..
<i>G20</i>	..	..	<i>4 962.76</i>	<i>5 559.81</i>	<i>6 182.33</i>	<i>6 764.97</i>	<i>7 134.08</i>	<i>7 207.97</i>	..
<i>OPEC</i>	<i>85.19</i>	<i>155.98</i>	<i>247.89</i>	<i>363.94</i>	<i>459.72</i>	<i>590.88</i>	<i>665.14</i>	<i>661.64</i>	..

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

2. For the United States, fuels used by autoproducers of electricity and heat have been included in final consumption for some years.

## Total final consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>1 661.45</b>	<b>2 247.68</b>	<b>2 956.86</b>	<b>3 126.24</b>	<b>3 865.50</b>	<b>4 726.84</b>	<b>5 307.18</b>	<b>5 366.31</b>	..
Albania	1.42	2.69	2.18	1.54	1.94	2.00	2.13	2.03	..
Armenia	..	..	6.47	1.11	1.71	1.83	2.00	2.07	..
Azerbaijan	..	..	16.70	6.53	8.06	6.92	8.64	8.72	..
Belarus	..	..	34.45	17.90	18.90	19.67	20.36	18.31	..
Bosnia and Herzegovina	..	..	4.89	2.26	2.61	3.22	4.21	4.37	..
Bulgaria	15.78	19.61	17.48	9.55	10.37	9.12	9.37	9.96	..
Croatia	..	..	7.04	6.60	7.85	7.72	6.67	7.01	..
Cyprus <sup>1</sup>	0.55	0.61	0.88	1.44	1.59	1.71	1.39	1.43	..
FYR of Macedonia	..	..	1.51	1.57	1.78	1.82	1.84	1.92	..
Georgia	..	..	8.98	2.30	2.22	2.66	3.93	4.10	..
Gibraltar	0.02	0.03	0.05	0.11	0.13	0.15	0.17	0.18	..
Kazakhstan	..	..	59.63	21.61	30.60	38.78	38.26	38.42	..
Kosovo	..	..	..	0.77	0.98	1.19	1.26	1.38	..
Kyrgyzstan	..	..	6.91	1.71	1.84	2.27	3.36	3.36	..
Lithuania	..	..	10.41	4.39	5.34	5.40	5.79	5.89	..
Malta	0.15	0.16	0.27	0.32	0.31	0.41	0.44	0.46	..
Republic of Moldova	..	..	6.68	1.60	2.37	2.40	2.35	2.33	..
Montenegro	..	..	..	..	0.76	0.76	0.66	0.69	..
Romania	35.34	57.89	43.02	23.77	25.91	23.34	22.82	22.53	..
Russian Federation	..	..	624.98	417.83	411.92	446.59	458.74	456.90	..
Serbia	..	..	12.12	7.14	9.74	9.47	8.12	8.49	..
Tajikistan	..	..	4.68	1.80	1.94	1.96	2.31	2.37	..
Turkmenistan	..	..	12.48	9.22	12.02	14.52	17.83	17.99	..
Ukraine	..	..	150.15	72.34	82.81	73.94	61.43	50.83	..
Uzbekistan	..	..	34.96	37.54	34.16	31.03	30.79	29.42	..
Former Soviet Union	562.48	767.84	x	x	x	x	x	x	..
Former Yugoslavia	17.00	20.44	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>632.75</b>	<b>869.28</b>	<b>1 066.90</b>	<b>650.94</b>	<b>677.87</b>	<b>708.87</b>	<b>714.88</b>	<b>701.15</b>	..
Algeria	2.78	5.88	12.72	15.40	20.61	26.44	35.08	37.46	..
Angola	3.13	3.42	4.53	5.54	6.57	9.77	11.50	11.96	..
Benin	1.03	1.18	1.44	1.67	2.26	3.03	3.37	3.59	..
Botswana	..	..	0.89	1.41	1.49	1.67	1.90	1.94	..
Cameroon	2.69	3.47	4.75	5.94	6.84	5.82	6.62	6.85	..
Congo	0.44	0.51	0.62	0.48	0.75	1.25	2.02	2.07	..
Côte d'Ivoire	1.80	2.48	2.91	4.33	5.04	5.71	7.59	6.78	..
Dem. Rep. of the Congo	6.64	8.11	10.60	13.67	16.33	19.09	21.51	21.50	..
Egypt	7.11	13.29	23.20	31.47	42.09	53.04	53.71	55.25	..
Eritrea	..	..	..	0.53	0.48	0.49	0.54	0.56	..
Ethiopia	11.83	13.42	18.44	25.69	29.94	34.67	39.77	40.89	..
Gabon	0.68	1.01	1.01	1.36	2.80	4.78	4.68	4.74	..
Ghana	2.92	3.42	4.32	5.39	4.77	5.36	6.73	6.93	..
Kenya	4.02	5.23	7.43	9.43	10.60	12.93	14.71	15.75	..
Libya	1.24	3.99	5.49	9.39	10.41	13.24	9.34	8.30	..
Mauritius	0.36	0.39	0.53	0.65	0.72	0.74	0.80	0.83	..
Morocco	3.02	4.44	5.65	8.54	11.28	13.29	14.62	14.95	..
Mozambique	5.37	5.27	4.75	6.52	7.78	9.07	10.26	10.41	..
Namibia	..	..	..	0.95	1.21	1.40	1.65	1.73	..
Niger	..	..	..	1.37	1.62	2.07	2.65	2.72	..
Nigeria	34.37	45.87	59.31	78.37	93.52	106.08	116.49	120.53	..
Senegal	0.88	1.05	1.08	1.47	1.72	2.56	2.66	2.78	..
South Africa	37.09	43.74	51.05	56.09	64.28	68.21	74.48	74.79	..
South Sudan	..	..	..	..	..	..	0.54	0.42	..
Sudan	4.37	4.66	6.07	7.49	9.30	11.66	10.40	10.66	..
United Rep. of Tanzania	6.83	7.12	8.74	12.08	14.84	17.83	21.46	22.46	..
Togo	0.48	0.59	0.85	1.28	1.45	2.03	2.13	2.21	..
Tunisia	1.45	2.36	3.64	5.51	6.70	7.43	7.64	7.88	..
Zambia	3.28	3.64	4.31	5.02	5.90	6.63	8.01	8.26	..
Zimbabwe	5.43	6.11	7.95	8.66	8.09	8.45	9.46	9.49	..
Other Africa	23.13	27.57	39.54	43.10	47.66	53.36	56.66	58.24	..
<b>Africa</b>	<b>172.37</b>	<b>218.22</b>	<b>291.81</b>	<b>368.81</b>	<b>437.06</b>	<b>508.09</b>	<b>559.01</b>	<b>572.95</b>	..

1. Please refer to section 'Geographical coverage'.

## Total final consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	5.92	7.78	10.88	15.16	18.31	22.79	25.59	27.92	..
Brunei Darussalam	0.10	0.21	0.35	0.57	0.63	1.31	1.44	0.98	..
Cambodia	..	..	..	2.95	2.87	4.56	5.49	5.93	..
DPR of Korea	16.94	25.14	27.19	16.83	18.23	12.77	8.13	6.58	..
India	143.35	173.58	243.19	315.33	361.10	480.51	556.04	577.68	..
Indonesia	34.12	49.64	79.88	120.22	132.69	147.49	162.07	162.77	..
Malaysia	4.58	7.16	13.91	29.77	38.00	42.48	53.29	51.58	..
Mongolia	..	..	2.80	1.47	2.00	2.67	3.26	3.11	..
Myanmar	7.15	8.36	9.40	11.47	12.90	12.47	16.39	17.73	..
Nepal	3.86	4.55	5.76	8.04	9.05	10.11	11.53	11.56	..
Pakistan	16.86	22.49	36.20	51.05	62.43	70.20	75.79	77.67	..
Philippines	14.19	16.55	19.65	23.92	22.79	23.71	27.00	29.60	..
Singapore	1.40	2.13	5.01	8.31	13.46	15.46	17.35	17.12	..
Sri Lanka	3.90	4.28	5.30	7.36	8.05	8.79	9.11	9.94	..
Chinese Taipei	9.41	18.52	29.42	48.69	60.44	67.86	68.01	68.57	..
Thailand	10.88	15.18	28.87	50.57	69.89	84.90	96.63	98.04	..
Viet Nam	13.12	13.06	16.06	25.09	35.14	48.24	54.89	58.18	..
Other Asia	5.86	7.23	6.04	7.12	7.84	10.59	12.14	11.86	..
<b>Non-OECD Asia excl. China</b>	<b>291.65</b>	<b>375.84</b>	<b>539.91</b>	<b>743.93</b>	<b>875.82</b>	<b>1 066.90</b>	<b>1 204.16</b>	<b>1 236.84</b>	..
People's Rep. of China	363.51	487.28	654.31	781.16	1 184.16	1 578.85	1 868.17	1 905.68	..
Hong Kong, China	2.06	2.91	5.22	9.38	7.46	8.20	8.97	8.96	..
<b>China</b>	<b>365.57</b>	<b>490.18</b>	<b>659.53</b>	<b>790.54</b>	<b>1 191.62</b>	<b>1 587.05</b>	<b>1 877.14</b>	<b>1 914.64</b>	..
Argentina	24.81	29.30	30.07	47.21	50.81	56.70	60.56	61.83	..
Bolivia	0.99	1.96	2.16	2.87	3.41	4.94	6.55	6.71	..
Brazil	72.72	95.90	111.34	153.35	171.84	210.92	231.82	226.87	..
Colombia	11.19	14.38	18.93	21.11	21.68	22.43	25.62	25.94	..
Costa Rica	0.81	1.14	1.47	2.27	2.97	3.49	3.56	3.70	..
Cuba	8.71	11.16	13.93	9.70	6.91	7.77	7.42	7.45	..
Curaçao	2.20	1.09	0.63	0.87	0.92	0.99	0.69	0.69	..
Dominican Republic	2.01	2.34	2.38	4.98	5.15	5.63	5.48	5.72	..
Ecuador	2.18	3.98	5.58	6.72	8.06	10.09	12.47	12.19	..
El Salvador	1.81	2.06	2.03	3.00	3.30	2.40	2.30	2.48	..
Guatemala	2.58	3.29	4.04	5.97	6.33	8.35	10.43	10.29	..
Haiti	1.33	1.70	1.23	1.71	2.68	2.91	3.13	3.27	..
Honduras	1.41	1.78	2.33	2.72	3.57	3.98	4.23	4.74	..
Jamaica	2.09	1.79	1.96	2.16	2.79	1.85	2.06	1.99	..
Nicaragua	1.18	1.34	1.47	1.91	1.99	2.05	2.34	2.52	..
Panama	0.89	1.13	1.23	1.99	2.47	2.86	3.43	3.50	..
Paraguay	1.43	1.97	2.93	3.65	3.66	4.32	4.67	4.93	..
Peru	8.19	9.16	8.56	10.60	10.98	15.11	17.10	17.95	..
Suriname	..	..	..	0.54	0.48	0.56	0.60	0.60	..
Trinidad and Tobago	1.10	1.76	3.71	7.22	11.35	14.01	13.75	13.77	..
Uruguay	1.92	2.12	1.93	2.51	2.38	3.63	4.20	4.49	..
Venezuela	12.34	21.61	25.89	32.93	40.79	49.05	43.97	37.29	..
Other Non-OECD Americas	3.83	3.66	4.75	5.29	5.50	5.78	6.22	6.32	..
<b>Non-OECD Americas</b>	<b>165.71</b>	<b>214.63</b>	<b>248.54</b>	<b>331.28</b>	<b>370.03</b>	<b>439.83</b>	<b>472.62</b>	<b>465.25</b>	..
Bahrain	0.72	1.27	2.09	3.05	4.23	5.12	6.12	6.29	..
Islamic Republic of Iran	16.60	27.58	54.71	94.78	126.81	158.29	181.30	175.65	..
Iraq	3.02	7.77	15.25	18.94	18.40	19.03	21.60	18.07	..
Jordan	0.46	1.16	2.33	3.54	4.58	4.54	5.24	5.55	..
Kuwait	3.93	6.26	3.95	8.15	12.17	15.05	16.96	17.60	..
Lebanon	1.69	1.48	1.14	3.30	3.53	3.86	4.77	4.88	..
Oman	0.09	0.55	1.84	3.05	4.98	12.26	18.66	20.43	..
Qatar	0.73	1.92	3.77	5.82	8.46	13.23	18.82	19.60	..
Saudi Arabia	3.07	21.14	39.48	63.52	83.42	120.65	141.69	145.10	..
Syrian Arab Republic	1.47	3.85	7.61	10.24	13.85	13.54	7.13	6.60	..
United Arab Emirates	1.13	5.56	16.19	23.03	27.70	45.18	51.24	53.16	..
Yemen	0.51	0.99	1.81	3.32	4.96	5.36	5.83	2.56	..
<b>Middle East</b>	<b>33.41</b>	<b>79.54</b>	<b>150.17</b>	<b>240.73</b>	<b>313.10</b>	<b>416.10</b>	<b>479.37</b>	<b>475.48</b>	..

## Industry consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>361.65</b>	<b>426.10</b>	<b>486.28</b>	<b>424.97</b>	<b>645.19</b>	<b>846.08</b>	<b>902.53</b>	<b>887.01</b>	..
<b>Non-OECD Total</b>	<b>175.77</b>	<b>263.51</b>	<b>325.17</b>	<b>305.14</b>	<b>532.39</b>	<b>745.10</b>	<b>808.72</b>	<b>794.90</b>	..
<b>OECD Total</b>	<b>185.88</b>	<b>162.59</b>	<b>161.11</b>	<b>119.83</b>	<b>112.81</b>	<b>100.97</b>	<b>93.81</b>	<b>92.12</b>	..
Canada	4.89	4.22	3.16	3.55	3.60	3.09	2.86	2.50	..
Chile	0.46	0.44	0.52	0.59	0.57	0.40	0.23	0.32	..
Mexico	1.37	1.61	0.94	0.76	2.68	3.90	2.47	3.77	..
United States	60.25	48.25	46.02	30.36	28.80	25.34	21.35	18.84	..
<b>OECD Americas</b>	<b>66.97</b>	<b>54.52</b>	<b>50.64</b>	<b>35.26</b>	<b>35.65</b>	<b>32.74</b>	<b>26.91</b>	<b>25.44</b>	..
Australia	4.89	4.09	4.28	4.04	3.62	2.43	2.43	2.32	..
Israel <sup>1</sup>	0.00	0.00	0.01	0.02	-	-	-	-	..
Japan	18.65	21.42	29.54	23.88	26.60	23.33	23.78	23.23	..
Korea	0.39	1.35	3.05	8.50	6.79	8.69	10.16	11.14	..
New Zealand	0.68	0.56	0.54	0.43	0.48	0.52	0.54	0.53	..
<b>OECD Asia Oceania</b>	<b>24.62</b>	<b>27.41</b>	<b>37.43</b>	<b>36.88</b>	<b>37.50</b>	<b>34.96</b>	<b>36.91</b>	<b>37.23</b>	..
Austria	0.76	0.92	0.74	0.70	0.51	0.42	0.43	0.41	..
Belgium	3.54	3.20	3.01	2.59	1.39	1.04	1.10	1.04	..
Czech Republic	11.43	11.69	7.21	3.32	2.84	1.67	1.50	1.47	..
Denmark	0.23	0.39	0.32	0.27	0.21	0.11	0.11	0.11	..
Estonia	..	..	0.37	0.11	0.11	0.09	0.10	0.06	..
Finland	0.94	1.01	1.54	0.95	0.77	0.75	0.50	0.50	..
France	7.28	5.40	5.86	3.64	3.47	3.01	2.27	2.48	..
Germany	29.51	26.48	21.08	7.66	6.12	6.09	6.16	6.82	..
Greece	0.46	0.42	1.18	0.85	0.44	0.30	0.23	0.22	..
Hungary	1.57	1.29	0.57	0.33	0.36	0.26	0.18	0.23	..
Iceland	-	0.02	0.06	0.10	0.10	0.09	0.09	0.09	..
Ireland	0.07	0.12	0.24	0.10	0.21	0.11	0.11	0.11	..
Italy	2.66	2.98	3.29	2.45	2.51	1.75	1.56	1.25	..
Latvia	..	..	0.03	0.01	0.03	0.05	0.03	0.02	..
Luxembourg	0.94	1.02	0.52	0.11	0.08	0.07	0.05	0.05	..
Netherlands	0.76	0.69	1.47	0.83	0.83	0.70	0.70	0.68	..
Norway	0.76	0.84	0.77	0.95	0.67	0.59	0.62	0.61	..
Poland	10.80	10.85	6.74	7.48	4.83	3.82	3.81	3.50	..
Portugal	0.14	0.20	0.59	0.43	0.02	0.05	0.01	0.01	..
Slovak Republic	2.66	1.79	1.93	1.16	1.06	0.84	0.84	0.76	..
Slovenia	..	..	0.12	0.09	0.11	0.05	0.05	0.05	..
Spain	3.59	2.18	2.81	1.11	1.19	0.77	0.64	0.56	..
Sweden	0.89	0.83	1.00	0.74	0.92	0.84	0.71	0.74	..
Switzerland	0.11	0.23	0.31	0.11	0.10	0.14	0.13	0.12	..
Turkey	1.14	2.17	4.60	8.89	8.37	7.42	5.50	5.44	..
United Kingdom	14.04	5.96	6.67	2.72	2.42	2.27	2.55	2.14	..
<b>OECD Europe</b>	<b>94.30</b>	<b>80.66</b>	<b>73.04</b>	<b>47.70</b>	<b>39.66</b>	<b>33.28</b>	<b>29.99</b>	<b>29.45</b>	..
<i>IEA</i>	<i>184.05</i>	<i>160.52</i>	<i>159.42</i>	<i>118.27</i>	<i>109.33</i>	<i>96.48</i>	<i>90.94</i>	<i>87.86</i>	..
<i>IEA/Accession/Association</i>	<i>281.94</i>	<i>308.09</i>	<i>381.27</i>	<i>355.17</i>	<i>563.36</i>	<i>754.81</i>	<i>810.86</i>	<i>798.30</i>	..
<i>European Union - 28</i>	..	..	<i>70.75</i>	<i>38.98</i>	<i>32.32</i>	<i>26.25</i>	<i>24.68</i>	<i>24.23</i>	..
<i>G7</i>	<i>137.28</i>	<i>114.71</i>	<i>115.61</i>	<i>74.25</i>	<i>73.53</i>	<i>64.88</i>	<i>60.54</i>	<i>57.28</i>	..
<i>G8</i>	..	..	<i>130.17</i>	<i>82.25</i>	<i>81.09</i>	<i>75.02</i>	<i>68.97</i>	<i>65.96</i>	..
<i>G20</i>	..	..	<i>413.22</i>	<i>378.76</i>	<i>584.75</i>	<i>776.95</i>	<i>834.18</i>	<i>819.91</i>	..
<i>OPEC</i>	<i>0.47</i>	<i>0.50</i>	<i>0.82</i>	<i>0.53</i>	<i>0.96</i>	<i>1.25</i>	<i>2.64</i>	<i>2.39</i>	..

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.



## Industry consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>175.77</b>	<b>263.51</b>	<b>325.17</b>	<b>305.14</b>	<b>532.39</b>	<b>745.10</b>	<b>808.72</b>	<b>794.90</b>	<b>..</b>
Albania	0.20	0.34	0.17	0.01	0.01	0.11	0.08	0.09	..
Armenia	..	..	-	-	-	-	-	-	..
Azerbaijan	..	..	-	-	-	-	-	-	..
Belarus	..	..	0.07	0.07	0.07	0.08	0.51	0.47	..
Bosnia and Herzegovina	..	..	0.76	0.30	0.15	0.19	0.25	0.25	..
Bulgaria	2.43	2.55	0.87	0.49	0.51	0.27	0.24	0.24	..
Croatia	..	..	0.38	0.06	0.14	0.14	0.10	0.08	..
Cyprus <sup>1</sup>	-	-	0.06	0.03	0.04	0.02	0.00	0.00	..
FYR of Macedonia	..	..	0.11	0.10	0.13	0.11	0.10	0.10	..
Georgia	..	..	0.58	-	0.01	0.01	0.29	0.27	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	15.78	3.84	7.33	10.89	8.56	7.74	..
Kosovo	..	..	..	0.03	0.03	0.05	0.02	0.02	..
Kyrgyzstan	..	..	2.08	0.20	0.06	0.07	0.16	0.21	..
Lithuania	..	..	0.05	0.01	0.09	0.09	0.12	0.10	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.20	0.01	0.00	0.03	0.03	0.04	..
Montenegro	..	..	..	..	0.01	0.00	0.00	0.01	..
Romania	1.74	3.43	2.08	0.73	1.14	0.70	0.58	0.62	..
Russian Federation	..	..	14.56	8.00	7.55	10.14	8.43	8.68	..
Serbia	..	..	0.38	0.68	0.45	0.44	0.30	0.36	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	17.98	7.30	9.65	7.29	8.80	5.92	..
Uzbekistan	..	..	-	0.07	0.09	0.09	0.25	0.22	..
Former Soviet Union	42.09	66.61	x	x	x	x	x	x	..
Former Yugoslavia	3.05	1.58	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>49.50</b>	<b>74.50</b>	<b>56.13</b>	<b>21.93</b>	<b>27.44</b>	<b>30.70</b>	<b>28.83</b>	<b>25.43</b>	<b>..</b>
Algeria	0.06	0.03	0.25	0.08	0.17	0.12	0.03	0.04	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	0.04	0.03	..
Botswana	..	..	0.10	0.15	0.15	0.03	0.05	0.04	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	0.18	0.13	0.14	-	-	-	-	-	..
Egypt	0.12	0.24	0.35	0.39	0.41	0.22	0.20	0.18	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	0.03	0.25	0.25	..
Gabon	-	-	-	-	-	-	-	-	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	0.01	0.01	0.09	0.07	0.09	0.17	0.33	0.35	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	0.01	0.01	0.01	0.02	0.02	0.02	..
Morocco	0.07	0.02	0.35	0.53	0.02	0.02	0.02	0.02	..
Mozambique	0.35	0.15	0.02	-	-	0.00	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.08	0.09	0.04	0.00	0.00	0.02	0.03	0.03	..
Senegal	-	-	-	-	0.09	0.18	0.23	0.24	..
South Africa	10.96	15.31	13.87	14.35	14.07	13.08	12.68	12.66	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	0.00	-	-	-	-	-	-	..
United Rep. of Tanzania	-	0.00	0.00	0.03	0.01	-	0.15	0.16	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.05	0.04	0.05	0.04	-	-	-	-	..
Zambia	0.47	0.31	0.18	0.06	0.07	0.00	0.09	0.09	..
Zimbabwe	0.68	0.77	1.03	0.61	0.31	0.28	0.23	0.23	..
Other Africa	0.03	0.17	0.02	0.09	0.06	0.04	0.05	0.05	..
<b>Africa</b>	<b>13.06</b>	<b>17.30</b>	<b>16.50</b>	<b>16.41</b>	<b>15.47</b>	<b>14.20</b>	<b>14.40</b>	<b>14.40</b>	<b>..</b>

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Industry consumption of coal (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.12	0.12	0.28	0.33	0.42	0.56	0.64	2.00	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	..	..	0.00	0.01	0.01	..
DPR of Korea	11.33	16.23	18.09	10.68	11.74	7.50	4.17	3.21	..
India	9.73	13.45	26.38	25.77	35.96	74.97	98.09	94.21	..
Indonesia	0.03	0.08	2.19	4.65	8.34	7.97	7.65	9.60	..
Malaysia	0.01	0.05	0.51	0.99	1.34	1.83	1.71	1.78	..
Mongolia	..	..	0.54	0.09	0.07	0.18	0.17	0.08	..
Myanmar	0.04	0.14	0.05	0.30	0.17	0.22	0.33	0.36	..
Nepal	0.05	0.05	0.04	0.26	0.24	0.30	0.48	0.56	..
Pakistan	0.50	0.62	1.52	1.38	3.42	3.95	4.52	4.71	..
Philippines	0.00	0.22	0.61	0.77	1.12	1.88	2.34	2.29	..
Singapore	0.00	0.00	0.02	-	0.00	0.01	0.17	0.15	..
Sri Lanka	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.06	..
Chinese Taipei	1.83	2.10	3.58	4.96	5.97	8.04	7.55	7.65	..
Thailand	0.02	0.09	1.31	3.54	6.75	9.21	6.40	8.16	..
Viet Nam	0.00	0.93	1.02	2.34	3.96	8.23	9.89	10.26	..
Other Asia	0.97	1.85	0.19	0.30	0.33	1.02	1.11	1.05	..
<b>Non-OECD Asia excl. China</b>	<b>24.64</b>	<b>35.94</b>	<b>56.36</b>	<b>56.34</b>	<b>79.92</b>	<b>125.94</b>	<b>145.29</b>	<b>146.12</b>	..
People's Rep. of China	86.21	131.87	190.14	201.07	399.71	561.85	604.90	594.21	..
Hong Kong, China	0.01	0.00	0.00	-	0.53	0.94	1.57	1.26	..
<b>China</b>	<b>86.22</b>	<b>131.87</b>	<b>190.14</b>	<b>201.07</b>	<b>400.24</b>	<b>562.79</b>	<b>606.47</b>	<b>595.47</b>	..
Argentina	0.27	0.21	0.19	0.38	0.42	0.39	0.27	0.26	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	0.67	1.93	3.55	5.58	5.36	7.17	7.36	7.54	..
Colombia	0.91	1.18	1.48	2.17	1.65	1.47	1.61	1.62	..
Costa Rica	0.00	0.00	-	0.00	0.02	0.03	0.05	0.04	..
Cuba	0.06	0.08	0.13	0.02	0.02	0.02	0.00	0.00	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	0.05	0.15	0.27	0.36	0.44	..
Ecuador	-	-	-	-	-	-	-	-	..
El Salvador	-	0.00	-	0.00	0.00	-	-	-	..
Guatemala	-	0.01	-	-	-	-	-	-	..
Haiti	-	-	0.01	-	-	-	-	-	..
Honduras	-	-	0.00	0.08	0.15	0.11	0.11	0.05	..
Jamaica	-	-	0.03	0.03	0.04	0.03	0.05	0.06	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	0.01	-	0.02	0.04	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.09	0.09	0.10	0.44	0.60	0.61	0.69	0.72	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	..
Venezuela	0.16	0.10	0.35	0.13	0.04	0.20	0.20	0.14	..
Other Non-OECD Americas	-	-	-	-	-	-	-	-	..
<b>Non-OECD Americas</b>	<b>2.17</b>	<b>3.62</b>	<b>5.87</b>	<b>8.93</b>	<b>8.44</b>	<b>10.30</b>	<b>10.70</b>	<b>10.87</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	0.17	0.28	0.18	0.31	0.60	0.25	0.41	0.47	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	0.36	0.17	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	0.01	0.00	-	0.13	0.13	0.15	0.17	0.17	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	..
United Arab Emirates	-	-	-	-	0.15	0.66	1.97	1.71	..
Yemen	-	-	-	-	-	0.10	0.11	0.08	..
<b>Middle East</b>	<b>0.18</b>	<b>0.28</b>	<b>0.18</b>	<b>0.45</b>	<b>0.88</b>	<b>1.17</b>	<b>3.03</b>	<b>2.61</b>	..

Includes non-energy use for industry/transformation/energy.

## Industry consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>701.48</b>	<b>764.66</b>	<b>680.20</b>	<b>784.67</b>	<b>863.55</b>	<b>892.67</b>	<b>878.30</b>	<b>881.69</b>	..
<b>Non-OECD Total</b>	<b>184.22</b>	<b>269.36</b>	<b>265.30</b>	<b>325.77</b>	<b>381.43</b>	<b>454.81</b>	<b>488.08</b>	<b>494.45</b>	..
<b>OECD Total</b>	<b>517.26</b>	<b>495.30</b>	<b>414.90</b>	<b>458.90</b>	<b>482.12</b>	<b>437.86</b>	<b>390.22</b>	<b>387.23</b>	..
Canada	20.85	20.28	17.13	20.48	22.35	20.92	19.91	19.86	..
Chile	1.21	1.26	1.51	2.13	2.24	3.33	4.39	4.03	..
Mexico	5.34	9.10	14.12	13.81	12.51	12.66	11.31	10.98	..
United States	157.11	187.39	144.53	156.44	180.45	153.65	126.01	121.29	..
<b>OECD Americas</b>	<b>184.51</b>	<b>218.03</b>	<b>177.30</b>	<b>192.86</b>	<b>217.55</b>	<b>190.57</b>	<b>161.62</b>	<b>156.17</b>	..
Australia	7.94	7.93	6.38	7.63	7.22	6.90	8.67	7.75	..
Israel <sup>1</sup>	1.12	1.44	1.68	2.25	1.70	2.32	1.98	2.06	..
Japan	95.20	67.00	68.80	70.35	67.19	60.53	54.04	55.74	..
Korea	6.40	10.07	17.61	35.49	37.64	43.16	48.50	49.67	..
New Zealand	0.99	0.83	0.60	0.64	0.71	0.77	0.78	0.76	..
<b>OECD Asia Oceania</b>	<b>111.64</b>	<b>87.26</b>	<b>95.07</b>	<b>116.37</b>	<b>114.46</b>	<b>113.66</b>	<b>113.96</b>	<b>115.98</b>	..
Austria	3.06	1.89	1.80	1.85	2.08	2.00	2.10	2.04	..
Belgium	7.79	4.45	4.17	7.57	7.63	7.96	9.09	9.09	..
Czech Republic	5.04	5.93	4.50	2.59	3.05	2.63	2.58	2.11	..
Denmark	3.38	2.52	1.17	1.00	1.00	0.77	0.60	0.60	..
Estonia	..	..	0.76	0.13	0.18	0.13	0.15	0.14	..
Finland	5.00	3.73	2.67	2.55	2.66	2.53	2.38	2.41	..
France	34.42	29.97	17.22	18.84	18.77	15.45	14.89	14.40	..
Germany	46.05	36.06	26.40	27.39	26.04	23.56	21.73	21.20	..
Greece	2.37	3.04	2.05	2.50	2.36	2.06	1.46	1.46	..
Hungary	2.22	3.24	2.08	1.53	2.10	1.75	1.90	2.08	..
Iceland	0.13	0.15	0.11	0.14	0.17	0.05	0.08	0.06	..
Ireland	1.61	1.59	0.84	1.34	1.46	0.97	0.61	0.67	..
Italy	29.40	22.25	16.50	13.48	13.46	12.14	8.46	8.42	..
Latvia	..	..	0.48	0.21	0.16	0.14	0.13	0.13	..
Luxembourg	0.80	0.20	0.29	0.09	0.05	0.04	0.04	0.04	..
Netherlands	10.08	13.74	11.13	11.72	15.41	15.92	14.98	13.60	..
Norway	2.99	3.55	2.77	2.43	2.73	2.79	2.58	2.67	..
Poland	2.92	4.61	2.98	3.86	3.73	4.15	3.53	3.59	..
Portugal	1.74	2.54	3.80	4.55	3.87	2.70	2.10	2.02	..
Slovak Republic	1.73	2.90	2.89	1.48	1.11	0.89	0.61	0.71	..
Slovenia	..	..	0.23	0.39	0.35	0.24	0.25	0.21	..
Spain	13.32	15.83	10.93	14.30	13.01	11.22	5.97	6.38	..
Sweden	8.13	6.08	3.97	4.61	3.92	3.09	2.61	2.45	..
Switzerland	3.61	2.71	1.49	1.30	1.24	1.06	0.78	0.78	..
Turkey	2.59	4.17	6.04	7.95	7.60	7.43	5.39	7.17	..
United Kingdom	32.75	18.86	15.23	15.89	15.99	11.97	9.65	10.62	..
<b>OECD Europe</b>	<b>221.12</b>	<b>190.01</b>	<b>142.53</b>	<b>149.67</b>	<b>150.12</b>	<b>133.63</b>	<b>114.65</b>	<b>115.09</b>	..
<i>IEA</i>	<i>509.46</i>	<i>483.36</i>	<i>396.76</i>	<i>439.97</i>	<i>464.99</i>	<i>419.12</i>	<i>372.09</i>	<i>369.77</i>	..
<i>IEA/Accession/Association</i>	<i>550.73</i>	<i>540.13</i>	<i>480.86</i>	<i>584.12</i>	<i>646.97</i>	<i>637.61</i>	<i>602.05</i>	<i>609.95</i>	..
<i>European Union - 28</i>	..	..	<i>139.48</i>	<i>143.09</i>	<i>143.45</i>	<i>125.13</i>	<i>108.57</i>	<i>107.38</i>	..
<i>G7</i>	<i>415.77</i>	<i>381.81</i>	<i>305.81</i>	<i>322.86</i>	<i>344.24</i>	<i>298.22</i>	<i>254.70</i>	<i>251.55</i>	..
<i>G8</i>	..	..	<i>349.43</i>	<i>358.50</i>	<i>376.68</i>	<i>341.43</i>	<i>313.49</i>	<i>312.27</i>	..
<i>G20</i>	..	..	<i>555.15</i>	<i>662.60</i>	<i>714.34</i>	<i>724.49</i>	<i>701.62</i>	<i>716.75</i>	..
<i>OPEC</i>	<i>10.06</i>	<i>29.84</i>	<i>37.99</i>	<i>52.68</i>	<i>64.44</i>	<i>85.78</i>	<i>92.81</i>	<i>86.63</i>	..

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Industry consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>184.22</b>	<b>269.36</b>	<b>265.30</b>	<b>325.77</b>	<b>381.43</b>	<b>454.81</b>	<b>488.08</b>	<b>494.45</b>	<b>..</b>
Albania	0.06	0.66	0.56	0.18	0.21	0.26	0.22	0.15	..
Armenia	..	..	0.74	0.02	0.04	0.04	0.06	0.04	..
Azerbaijan	..	..	1.36	0.90	1.09	0.55	0.74	0.77	..
Belarus	..	..	9.21	2.24	2.22	1.51	2.13	1.31	..
Bosnia and Herzegovina	..	..	0.75	0.06	0.09	0.17	0.14	0.17	..
Bulgaria	0.35	0.66	1.84	1.50	1.33	0.51	0.44	0.47	..
Croatia	..	..	0.94	0.66	0.80	0.50	0.40	0.41	..
Cyprus <sup>1</sup>	0.19	0.27	0.20	0.45	0.30	0.23	0.18	0.16	..
FYR of Macedonia	..	..	0.41	0.19	0.23	0.23	0.23	0.23	..
Georgia	..	..	0.92	0.07	0.10	0.10	0.15	0.17	..
Gibraltar	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	..
Kazakhstan	..	..	7.38	2.00	3.07	2.50	2.62	4.07	..
Kosovo	..	..	..	0.08	0.10	0.12	0.14	0.21	..
Kyrgyzstan	..	..	-	0.01	0.04	0.14	0.24	0.31	..
Lithuania	..	..	1.41	0.26	0.28	0.20	0.15	0.19	..
Malta	-	0.00	0.01	-	0.02	0.02	0.01	0.02	..
Republic of Moldova	..	..	0.00	0.01	0.01	0.03	0.05	0.04	..
Montenegro	..	..	..	..	0.11	0.08	0.07	0.07	..
Romania	2.16	3.72	2.96	2.37	2.34	1.37	1.56	1.73	..
Russian Federation	..	..	43.62	35.64	32.44	43.22	58.79	60.72	..
Serbia	..	..	2.47	0.31	1.13	0.88	0.75	0.77	..
Tajikistan	..	..	-	-	-	-	0.00	0.00	..
Turkmenistan	..	..	-	-	-	-	-	-	..
Ukraine	..	..	15.44	2.42	3.43	2.22	1.32	1.43	..
Uzbekistan	..	..	1.92	0.97	0.70	0.53	0.41	0.40	..
Former Soviet Union	89.45	119.16	x	x	x	x	x	x	..
Former Yugoslavia	3.76	5.24	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>95.98</b>	<b>129.73</b>	<b>92.17</b>	<b>50.36</b>	<b>50.12</b>	<b>55.44</b>	<b>70.84</b>	<b>73.86</b>	<b>..</b>
Algeria	0.48	0.95	1.45	1.57	1.58	1.80	2.04	1.37	..
Angola	0.10	0.10	0.29	0.33	0.28	0.46	0.57	0.46	..
Benin	0.00	0.01	0.01	0.05	0.04	0.04	0.05	0.09	..
Botswana	..	..	0.03	0.09	0.11	0.16	0.20	0.19	..
Cameroon	0.02	0.05	0.09	0.09	0.08	0.12	0.14	0.15	..
Congo	0.05	0.02	0.03	0.02	0.02	0.03	0.06	0.06	..
Côte d'Ivoire	0.26	0.26	0.19	0.27	0.14	0.20	0.28	0.31	..
Dem. Rep. of the Congo	0.00	0.00	0.10	0.02	0.04	0.05	0.04	0.02	..
Egypt	2.62	4.76	7.60	6.93	7.52	7.66	7.09	6.34	..
Eritrea	..	..	..	0.02	0.03	0.01	0.01	0.01	..
Ethiopia	0.12	0.11	0.21	0.29	0.41	0.56	0.92	0.83	..
Gabon	0.13	0.27	0.05	0.19	0.19	0.30	0.39	0.38	..
Ghana	0.16	0.16	0.17	0.28	0.39	0.53	0.70	0.75	..
Kenya	0.22	0.35	0.38	0.45	0.55	0.76	0.64	0.76	..
Libya	0.13	0.75	1.04	1.65	1.38	2.36	1.20	0.75	..
Mauritius	0.01	0.03	0.04	0.10	0.09	0.09	0.08	0.08	..
Morocco	0.91	1.57	1.43	1.36	2.13	2.48	2.30	2.50	..
Mozambique	0.04	0.00	0.02	0.03	0.08	0.10	0.13	0.14	..
Namibia	..	..	..	0.06	0.08	0.10	0.12	0.13	..
Niger	..	..	..	0.02	0.03	0.08	0.10	0.07	..
Nigeria	0.64	1.37	0.97	0.52	0.47	0.33	0.46	0.46	..
Senegal	0.13	0.18	0.09	0.18	0.13	0.08	0.08	0.08	..
South Africa	2.36	3.00	3.60	1.85	2.28	4.48	4.64	5.53	..
South Sudan	..	..	..	..	..	..	0.00	0.00	..
Sudan	0.54	0.34	0.32	0.33	0.42	1.10	0.71	0.73	..
United Rep. of Tanzania	0.14	0.12	0.12	0.13	0.11	0.10	0.25	0.20	..
Togo	-	-	0.01	0.08	0.04	0.07	0.05	0.06	..
Tunisia	0.30	0.59	0.78	0.89	1.25	0.92	1.04	1.13	..
Zambia	0.30	0.23	0.21	0.16	0.21	0.28	0.42	0.44	..
Zimbabwe	0.11	0.10	0.12	0.12	0.09	0.06	0.07	0.07	..
Other Africa	1.25	1.36	1.16	0.79	0.68	1.00	1.38	1.40	..
<b>Africa</b>	<b>11.03</b>	<b>16.65</b>	<b>20.49</b>	<b>18.84</b>	<b>20.86</b>	<b>26.29</b>	<b>26.16</b>	<b>25.49</b>	<b>..</b>

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Industry consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.27	0.41	0.27	0.72	0.19	0.21	0.21	0.32	..
Brunei Darussalam	0.03	0.06	0.06	0.07	0.06	0.16	0.12	0.15	..
Cambodia	..	..	..	0.02	0.04	0.06	0.05	0.06	..
DPR of Korea	0.09	0.36	0.37	0.07	0.08	0.09	0.09	0.09	..
India	8.26	8.61	16.54	36.06	36.67	36.73	43.04	52.35	..
Indonesia	1.81	5.37	8.82	12.25	14.60	16.70	11.47	10.29	..
Malaysia	1.53	2.70	3.71	6.02	6.18	6.29	5.14	4.86	..
Mongolia	..	..	0.22	0.09	0.15	0.28	0.38	0.36	..
Myanmar	0.27	0.43	0.14	0.20	0.22	0.24	0.94	1.03	..
Nepal	0.00	0.01	0.02	0.04	0.04	0.02	0.02	0.02	..
Pakistan	0.37	0.43	1.47	2.27	2.31	1.70	1.68	1.76	..
Philippines	2.30	2.34	2.51	2.74	1.79	1.52	1.66	2.43	..
Singapore	0.45	0.58	2.02	3.99	7.95	8.26	9.54	9.35	..
Sri Lanka	0.21	0.19	0.15	0.32	0.35	0.32	0.28	0.88	..
Chinese Taipei	2.38	6.87	8.57	13.79	19.52	24.28	23.12	23.22	..
Thailand	1.90	2.26	3.20	9.95	16.55	19.73	26.98	25.76	..
Viet Nam	0.01	0.50	0.48	1.65	2.86	4.38	4.77	5.26	..
Other Asia	0.11	0.18	0.19	0.57	0.71	0.34	0.47	0.45	..
<b>Non-OECD Asia excl. China</b>	<b>19.98</b>	<b>31.30</b>	<b>48.73</b>	<b>90.82</b>	<b>110.27</b>	<b>121.33</b>	<b>129.98</b>	<b>138.65</b>	..
People's Rep. of China	21.39	28.02	36.45	64.60	89.33	118.58	120.92	124.92	..
Hong Kong, China	0.76	0.75	1.09	1.68	0.65	0.69	0.64	0.73	..
<b>China</b>	<b>22.14</b>	<b>28.77</b>	<b>37.54</b>	<b>66.28</b>	<b>89.98</b>	<b>119.27</b>	<b>121.56</b>	<b>125.65</b>	..
Argentina	4.42	4.34	2.78	6.86	7.45	7.41	7.50	7.39	..
Bolivia	0.16	0.16	0.14	0.16	0.12	0.12	0.16	0.17	..
Brazil	11.09	19.48	16.93	26.59	23.48	27.29	27.40	25.52	..
Colombia	1.46	1.33	1.54	3.29	2.80	1.67	1.23	1.26	..
Costa Rica	0.13	0.19	0.22	0.33	0.31	0.28	0.29	0.31	..
Cuba	2.51	3.38	3.50	3.45	2.06	3.55	2.82	2.72	..
Curaçao	1.59	0.39	0.20	0.28	0.30	0.32	0.23	0.22	..
Dominican Republic	0.28	0.38	0.37	0.93	0.88	1.05	0.84	0.60	..
Ecuador	0.18	0.79	1.08	1.59	1.98	2.01	2.13	1.78	..
El Salvador	0.18	0.21	0.21	0.36	0.40	0.27	0.26	0.28	..
Guatemala	0.22	0.24	0.24	0.43	0.53	0.46	1.54	0.62	..
Haiti	0.05	0.07	0.06	0.09	0.13	0.17	0.22	0.20	..
Honduras	0.11	0.17	0.24	0.23	0.42	0.39	0.25	0.35	..
Jamaica	1.19	1.24	1.14	0.60	0.97	0.53	0.75	0.67	..
Nicaragua	0.08	0.08	0.12	0.15	0.22	0.17	0.20	0.23	..
Panama	0.13	0.19	0.14	0.27	0.56	0.62	0.86	0.79	..
Paraguay	0.04	0.04	0.06	0.09	0.08	0.06	0.05	0.06	..
Peru	1.30	1.71	1.15	1.83	1.79	1.49	1.54	1.48	..
Suriname	..	..	..	0.22	0.02	0.02	0.02	0.02	..
Trinidad and Tobago	0.06	0.19	0.10	0.10	0.30	0.21	0.19	0.20	..
Uruguay	0.45	0.48	0.23	0.27	0.20	0.22	0.30	0.30	..
Venezuela	1.77	2.53	3.21	5.20	5.60	9.77	9.11	5.72	..
Other Non-OECD Americas	0.04	0.07	0.20	0.33	0.26	0.25	0.29	0.30	..
<b>Non-OECD Americas</b>	<b>27.44</b>	<b>37.66</b>	<b>33.87</b>	<b>53.66</b>	<b>50.86</b>	<b>58.35</b>	<b>58.18</b>	<b>51.18</b>	..
Bahrain	-	0.02	0.02	0.16	0.51	0.44	0.46	0.48	..
Islamic Republic of Iran	4.85	7.45	12.37	12.55	15.11	17.65	17.03	12.43	..
Iraq	0.51	1.65	3.02	3.24	3.14	2.74	3.26	2.34	..
Jordan	0.09	0.26	0.53	0.82	1.04	0.79	0.33	0.39	..
Kuwait	0.13	0.82	0.48	1.21	2.38	4.16	3.82	3.74	..
Lebanon	0.47	-	0.10	0.28	0.43	0.14	0.18	0.19	..
Oman	0.01	0.06	0.51	0.93	1.30	0.70	1.34	1.36	..
Qatar	-	-	0.45	0.62	1.26	2.64	3.48	3.52	..
Saudi Arabia	1.13	12.37	11.21	21.83	29.03	39.02	44.82	49.47	..
Syrian Arab Republic	0.43	1.82	1.37	1.56	2.13	2.39	1.26	1.23	..
United Arab Emirates	-	0.79	2.39	2.20	2.03	2.52	4.51	4.22	..
Yemen	-	-	0.06	0.42	0.96	0.92	0.88	0.27	..
<b>Middle East</b>	<b>7.63</b>	<b>25.24</b>	<b>32.49</b>	<b>45.82</b>	<b>59.34</b>	<b>74.12</b>	<b>81.36</b>	<b>79.63</b>	..

Includes non-energy use for industry/transformation/energy.

## Industry consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>374.66</b>	<b>459.13</b>	<b>449.88</b>	<b>529.57</b>	<b>546.30</b>	<b>638.39</b>	<b>702.72</b>	<b>690.22</b>	..
<b>Non-OECD Total</b>	<b>118.65</b>	<b>191.02</b>	<b>188.02</b>	<b>202.60</b>	<b>269.93</b>	<b>358.85</b>	<b>406.86</b>	<b>399.64</b>	..
<b>OECD Total</b>	<b>256.01</b>	<b>268.11</b>	<b>261.86</b>	<b>326.97</b>	<b>276.38</b>	<b>279.55</b>	<b>295.86</b>	<b>290.57</b>	..
Canada	11.87	18.53	20.23	23.40	17.22	15.70	17.35	17.13	..
Chile	0.00	0.01	0.74	2.98	3.04	1.82	0.70	0.90	..
Mexico	6.87	12.37	13.10	11.96	10.64	11.95	13.08	12.88	..
United States <sup>2</sup>	177.21	151.53	123.77	155.30	111.53	121.64	135.24	133.25	..
<b>OECD Americas</b>	<b>195.95</b>	<b>182.44</b>	<b>157.85</b>	<b>193.65</b>	<b>142.43</b>	<b>151.11</b>	<b>166.37</b>	<b>164.16</b>	..
Australia	1.49	3.73	6.02	7.46	8.24	8.14	8.63	8.52	..
Israel <sup>1</sup>	0.05	0.13	0.03	0.00	-	0.06	0.50	0.50	..
Japan	1.64	2.14	4.00	7.95	11.39	14.31	11.58	11.43	..
Korea	-	-	0.07	2.88	4.17	7.09	8.82	7.41	..
New Zealand	0.03	0.26	1.53	2.67	0.98	1.47	2.65	2.32	..
<b>OECD Asia Oceania</b>	<b>3.21</b>	<b>6.26</b>	<b>11.65</b>	<b>20.96</b>	<b>24.78</b>	<b>31.06</b>	<b>32.18</b>	<b>30.17</b>	..
Austria	1.29	2.10	1.97	2.38	2.70	2.93	2.75	2.82	..
Belgium	3.15	3.63	3.30	5.31	4.86	4.78	4.52	4.72	..
Czech Republic	0.46	0.28	2.42	2.60	2.42	2.40	2.09	2.17	..
Denmark	-	-	0.53	0.78	0.71	0.71	0.68	0.65	..
Estonia	..	..	0.37	0.22	0.28	0.11	0.10	0.09	..
Finland	-	0.40	0.92	0.84	0.76	0.73	0.62	0.57	..
France	5.65	9.43	11.09	14.67	10.92	10.08	10.58	10.83	..
Germany	12.51	19.51	19.30	21.40	21.72	22.02	21.23	21.07	..
Greece	-	-	0.10	0.36	0.55	0.73	0.81	0.78	..
Hungary	2.22	3.50	3.76	1.70	1.62	1.33	1.75	1.69	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	0.35	0.79	0.85	0.46	0.44	0.68	0.77	..
Italy	8.64	11.10	14.64	17.60	14.85	10.91	9.05	8.84	..
Latvia	..	..	0.44	0.21	0.29	0.24	0.12	0.12	..
Luxembourg	0.14	0.25	0.28	0.30	0.33	0.31	0.28	0.28	..
Netherlands	8.14	8.41	9.05	8.40	7.77	7.21	6.52	6.74	..
Norway	-	-	-	0.59	0.70	0.64	0.78	0.81	..
Poland	4.00	5.40	4.43	4.12	4.81	4.75	5.26	5.35	..
Portugal	-	-	-	0.66	0.96	1.05	1.06	1.14	..
Slovak Republic	0.82	0.60	1.33	1.12	1.35	1.10	1.11	1.17	..
Slovenia	..	..	0.57	0.61	0.67	0.56	0.40	0.41	..
Spain	0.39	0.60	3.77	9.62	13.76	8.23	9.24	7.33	..
Sweden	-	-	0.25	0.30	0.34	0.43	0.43	0.50	..
Switzerland	0.01	0.35	0.42	0.73	0.80	0.89	0.95	0.93	..
Turkey	-	-	0.67	1.76	3.19	6.50	8.67	8.73	..
United Kingdom	9.42	13.50	11.96	15.26	12.33	8.28	7.64	7.72	..
<b>OECD Europe</b>	<b>56.86</b>	<b>79.41</b>	<b>92.36</b>	<b>112.36</b>	<b>109.17</b>	<b>97.37</b>	<b>97.31</b>	<b>96.25</b>	..
<i>IEA</i>	<i>249.09</i>	<i>255.60</i>	<i>246.98</i>	<i>311.21</i>	<i>261.74</i>	<i>264.91</i>	<i>281.06</i>	<i>275.77</i>	..
<i>IEA/Accession/Association</i>	<i>258.58</i>	<i>277.12</i>	<i>279.60</i>	<i>356.98</i>	<i>319.96</i>	<i>349.85</i>	<i>396.08</i>	<i>385.72</i>	..
<i>European Union - 28</i>	..	..	<i>113.13</i>	<i>117.28</i>	<i>112.72</i>	<i>95.52</i>	<i>93.12</i>	<i>91.52</i>	..
<i>G7</i>	<i>226.93</i>	<i>225.74</i>	<i>204.99</i>	<i>255.57</i>	<i>199.97</i>	<i>202.94</i>	<i>212.68</i>	<i>210.26</i>	..
<i>G8</i>	..	..	<i>256.59</i>	<i>298.32</i>	<i>251.50</i>	<i>269.27</i>	<i>281.33</i>	<i>278.63</i>	..
<i>G20</i>	..	..	<i>363.94</i>	<i>422.94</i>	<i>404.24</i>	<i>460.61</i>	<i>508.51</i>	<i>491.47</i>	..
<i>OPEC</i>	<i>8.28</i>	<i>13.28</i>	<i>37.22</i>	<i>56.55</i>	<i>73.23</i>	<i>111.27</i>	<i>125.51</i>	<i>122.72</i>	..

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

2. For the United States, gas used by autoproducers of electricity and heat has been included in final consumption prior to 1989.

## Industry consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>118.65</b>	<b>191.02</b>	<b>188.02</b>	<b>202.60</b>	<b>269.93</b>	<b>358.85</b>	<b>406.86</b>	<b>399.64</b>	<b>..</b>
Albania	-	-	0.16	0.00	-	0.00	0.01	0.01	..
Armenia	..	..	0.97	0.31	0.58	0.22	0.21	0.17	..
Azerbaijan	..	..	6.26	0.80	0.74	0.54	0.91	0.94	..
Belarus	..	..	2.93	1.81	2.45	2.80	2.57	2.34	..
Bosnia and Herzegovina	..	..	0.32	0.12	0.19	0.07	0.06	0.07	..
Bulgaria	-	-	2.58	1.52	1.36	0.89	1.00	1.19	..
Croatia	..	..	0.99	0.95	0.92	0.92	0.77	0.75	..
Cyprus <sup>1</sup>	-	-	-	-	-	-	-	-	..
FYR of Macedonia	..	..	-	0.01	0.05	0.04	0.03	0.03	..
Georgia	..	..	1.31	0.20	0.27	0.27	0.30	0.32	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	-	-	-	1.59	1.80	2.08	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	-	-	0.18	0.04	0.02	0.02	..
Lithuania	..	..	1.53	0.75	0.87	0.82	1.17	1.23	..
Malta	-	-	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.53	0.18	0.40	0.34	0.32	0.25	..
Montenegro	..	..	..	..	-	-	-	-	..
Romania	11.45	27.25	16.76	4.78	5.11	3.55	3.28	2.57	..
Russian Federation	..	..	51.60	42.75	51.53	66.33	68.65	68.37	..
Serbia	..	..	0.78	0.86	1.03	0.82	0.48	0.56	..
Tajikistan	..	..	-	-	-	-	-	-	..
Turkmenistan	..	..	0.31	0.28	0.36	0.65	1.00	1.00	..
Ukraine	..	..	23.29	11.95	16.30	10.55	5.97	5.04	..
Uzbekistan	..	..	-	7.66	6.45	6.34	6.34	5.98	..
Former Soviet Union	88.80	128.28	x	x	x	x	x	x	..
Former Yugoslavia	0.86	1.80	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>101.11</b>	<b>157.34</b>	<b>110.33</b>	<b>74.92</b>	<b>88.79</b>	<b>96.78</b>	<b>94.89</b>	<b>92.92</b>	<b>..</b>
Algeria	0.18	0.45	2.02	2.60	3.13	4.27	5.65	6.54	..
Angola	0.05	0.06	0.44	0.47	0.53	0.60	0.22	0.63	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	0.18	0.25	0.25	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	0.75	2.35	3.62	8.26	9.76	7.20	8.17	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	0.26	1.01	1.29	2.15	2.07	2.21	0.14	0.13	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	0.06	0.06	0.04	0.04	0.03	0.04	0.08	0.07	..
Mozambique	-	-	-	-	0.02	0.06	0.08	0.13	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	0.03	0.04	0.72	0.97	2.81	1.21	3.78	3.94	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	-	-	-	-	-	0.82	1.70	1.74	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	0.05	0.10	0.15	0.14	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	0.01	0.08	0.26	0.45	0.62	0.81	0.86	0.80	..
Zambia	-	-	-	-	-	-	-	-	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	0.00	0.95	0.90	0.73	0.56	..
<b>Africa</b>	<b>0.59</b>	<b>2.45</b>	<b>7.11</b>	<b>10.30</b>	<b>18.48</b>	<b>20.98</b>	<b>20.86</b>	<b>23.10</b>	<b>..</b>

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Industry consumption of natural gas (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.33	0.56	1.56	2.78	3.23	4.34	4.64	4.78	..
Brunei Darussalam	-	-	-	-	-	0.46	0.51	0.04	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.27	0.63	5.52	9.19	11.91	24.61	25.56	25.03	..
Indonesia	0.12	2.36	6.00	11.50	13.58	15.70	16.79	16.79	..
Malaysia	-	0.00	1.08	3.84	6.86	5.97	9.34	9.28	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	0.03	0.08	0.22	0.32	0.39	0.41	0.51	0.51	..
Nepal	-	-	-	-	-	-	-	-	..
Pakistan	1.69	2.58	4.25	6.49	10.22	10.64	9.46	9.51	..
Philippines	-	-	-	-	0.01	0.07	0.08	0.05	..
Singapore	-	-	-	-	0.40	0.97	1.13	1.09	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	0.87	1.09	0.34	0.74	0.80	1.01	1.49	1.59	..
Thailand	-	-	0.14	1.11	1.81	3.12	4.88	4.71	..
Viet Nam	-	-	-	0.02	0.54	0.49	1.46	1.49	..
Other Asia	-	-	-	-	-	-	-	-	..
<b>Non-OECD Asia excl. China</b>	<b>3.31</b>	<b>7.31</b>	<b>19.12</b>	<b>35.98</b>	<b>49.76</b>	<b>67.78</b>	<b>75.82</b>	<b>74.87</b>	..
People's Rep. of China	2.16	6.09	7.07	8.99	16.81	26.72	52.81	48.49	..
Hong Kong, China	0.00	0.00	0.01	0.02	0.02	0.02	0.04	0.04	..
<b>China</b>	<b>2.16</b>	<b>6.10</b>	<b>7.08</b>	<b>9.01</b>	<b>16.83</b>	<b>26.74</b>	<b>52.84</b>	<b>48.52</b>	..
Argentina	2.31	3.02	4.30	6.59	7.78	8.08	8.62	8.85	..
Bolivia	0.00	0.04	0.17	0.32	0.38	0.54	0.76	0.68	..
Brazil	0.09	0.74	2.22	4.35	7.54	10.15	9.84	10.06	..
Colombia	0.21	0.54	0.79	0.98	1.70	1.93	1.82	2.44	..
Costa Rica	-	-	-	-	-	-	-	-	..
Cuba	0.00	0.00	0.00	0.13	0.13	0.33	0.31	0.32	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	0.02	0.08	0.08	..
Ecuador	-	-	-	-	-	-	0.03	0.01	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	0.00	0.04	0.03	-	0.14	0.70	0.98	1.07	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	0.52	0.86	2.82	5.94	9.60	11.88	11.52	11.44	..
Uruguay	-	-	-	0.03	0.05	0.01	0.01	0.01	..
Venezuela	2.75	5.57	6.24	7.73	10.65	12.32	7.52	6.70	..
Other Non-OECD Americas	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	..
<b>Non-OECD Americas</b>	<b>5.89</b>	<b>10.80</b>	<b>16.56</b>	<b>26.07</b>	<b>37.98</b>	<b>45.97</b>	<b>41.50</b>	<b>41.67</b>	..
Bahrain	0.59	0.87	1.05	1.19	1.21	1.63	2.18	2.12	..
Islamic Republic of Iran	1.91	0.94	6.74	10.57	15.66	30.50	42.43	41.96	..
Iraq	0.49	0.52	0.81	1.29	0.07	0.20	1.58	1.22	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	1.20	1.15	1.61	3.03	4.44	3.28	4.80	5.63	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	0.25	0.19	1.08	6.58	9.96	11.10	..
Qatar	0.58	1.30	2.40	3.68	4.52	4.91	7.63	7.90	..
Saudi Arabia	-	0.24	6.21	11.56	15.96	27.33	28.02	21.24	..
Syrian Arab Republic	-	-	-	2.30	1.77	1.72	0.66	0.58	..
United Arab Emirates	0.82	2.00	8.73	12.51	13.37	24.43	23.69	26.81	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	<b>5.59</b>	<b>7.02</b>	<b>27.81</b>	<b>46.32</b>	<b>58.09</b>	<b>100.59</b>	<b>120.95</b>	<b>118.56</b>	..

Includes non-energy use for industry/transformation/energy.



## Industry consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>234.94</b>	<b>297.93</b>	<b>388.49</b>	<b>462.72</b>	<b>536.86</b>	<b>636.13</b>	<b>726.66</b>	<b>730.66</b>	..
<b>Non-OECD Total</b>	<b>76.43</b>	<b>111.35</b>	<b>158.68</b>	<b>183.06</b>	<b>266.84</b>	<b>379.78</b>	<b>470.28</b>	<b>475.48</b>	..
<b>OECD Total</b>	<b>158.51</b>	<b>186.58</b>	<b>229.81</b>	<b>279.66</b>	<b>270.03</b>	<b>256.35</b>	<b>256.38</b>	<b>255.18</b>	..
Canada	9.10	11.67	14.44	17.48	18.08	15.09	14.68	14.49	..
Chile	0.41	0.55	0.87	2.21	2.80	3.08	3.73	3.63	..
Mexico	1.56	2.60	4.59	7.11	9.40	10.55	12.24	12.04	..
United States	55.54	64.17	74.52	98.22	77.24	71.07	70.61	69.34	..
<b>OECD Americas</b>	<b>66.61</b>	<b>78.98</b>	<b>94.43</b>	<b>125.02</b>	<b>107.52</b>	<b>99.80</b>	<b>101.26</b>	<b>99.50</b>	..
Australia	1.99	2.80	5.09	6.62	6.37	7.06	6.84	6.61	..
Israel <sup>1</sup>	0.20	0.30	0.45	0.90	1.01	1.07	1.31	1.16	..
Japan	25.06	28.19	36.39	34.39	32.35	28.93	26.34	26.24	..
Korea	0.76	1.95	4.97	12.93	15.82	19.62	22.33	22.56	..
New Zealand	0.48	0.66	0.96	1.21	1.32	1.27	1.19	1.19	..
<b>OECD Asia Oceania</b>	<b>28.50</b>	<b>33.90</b>	<b>47.86</b>	<b>56.05</b>	<b>56.88</b>	<b>57.95</b>	<b>58.00</b>	<b>57.77</b>	..
Austria	1.04	1.22	1.55	1.78	2.14	2.22	2.33	2.34	..
Belgium	1.93	2.06	2.62	3.43	3.39	3.28	3.25	3.26	..
Czech Republic	1.61	1.91	2.32	1.63	1.99	1.87	1.92	1.95	..
Denmark	0.40	0.50	0.72	0.86	0.88	0.73	0.71	0.72	..
Estonia	..	..	0.23	0.16	0.19	0.18	0.18	0.18	..
Finland	1.55	1.96	2.80	3.69	3.70	3.47	3.28	3.26	..
France	7.22	8.20	9.86	11.58	12.00	10.10	9.25	9.20	..
Germany	15.34	17.16	18.62	18.20	19.83	19.31	19.67	19.34	..
Greece	0.63	0.90	1.04	1.17	1.24	1.22	1.11	1.09	..
Hungary	0.92	1.19	1.18	0.76	0.80	0.84	1.26	1.32	..
Iceland	0.13	0.17	0.22	0.45	0.51	1.16	1.26	1.30	..
Ireland	0.19	0.28	0.39	0.66	0.66	0.78	0.81	0.85	..
Italy	6.63	8.09	9.54	12.20	12.45	11.00	9.71	9.69	..
Latvia	..	..	0.27	0.12	0.15	0.14	0.14	0.15	..
Luxembourg	0.20	0.21	0.24	0.28	0.29	0.31	0.26	0.27	..
Netherlands	1.95	2.41	2.87	3.48	3.57	3.37	2.85	2.95	..
Norway	3.20	3.43	3.94	4.43	4.47	3.83	3.82	3.88	..
Poland	3.28	4.48	3.68	3.43	3.52	3.56	4.09	4.26	..
Portugal	0.44	0.71	1.05	1.37	1.48	1.50	1.32	1.33	..
Slovak Republic	0.72	1.11	1.29	0.84	0.95	0.94	1.05	1.00	..
Slovenia	..	..	0.51	0.48	0.62	0.47	0.52	0.53	..
Spain	3.26	4.64	5.44	7.37	9.03	6.32	6.16	6.54	..
Sweden	3.40	3.49	4.64	4.90	4.95	4.68	4.36	4.32	..
Switzerland	0.95	1.02	1.48	1.55	1.63	1.66	1.55	1.55	..
Turkey	0.55	1.05	2.35	3.96	5.22	6.65	8.24	8.69	..
United Kingdom	7.85	7.51	8.66	9.81	9.98	9.00	7.99	7.95	..
<b>OECD Europe</b>	<b>63.41</b>	<b>73.69</b>	<b>87.51</b>	<b>98.58</b>	<b>105.63</b>	<b>98.60</b>	<b>97.12</b>	<b>97.91</b>	..
<i>IEA</i>	156.22	182.96	222.88	268.39	255.54	239.87	237.18	236.37	..
<i>IEA/Accession/Association</i>	171.22	208.56	270.65	358.49	412.83	496.31	575.07	581.75	..
<i>European Union - 28</i>	..	..	85.44	91.15	97.31	88.34	85.32	85.69	..
<i>G7</i>	126.74	144.98	172.02	201.89	181.93	164.50	158.26	156.25	..
<i>G8</i>	..	..	213.45	228.75	210.30	192.61	186.96	184.54	..
<i>G20</i>	..	..	329.06	400.09	458.44	545.27	625.36	630.76	..
<i>OPEC</i>	1.57	3.04	6.00	9.09	10.94	15.31	19.25	17.42	..

1. Please refer to section 'Geographical coverage'.

## Industry consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>76.43</b>	<b>111.35</b>	<b>158.68</b>	<b>183.06</b>	<b>266.84</b>	<b>379.78</b>	<b>470.28</b>	<b>475.48</b>	..
Albania	-	-	0.04	0.08	0.06	0.09	0.13	0.11	..
Armenia	..	..	0.29	0.06	0.08	0.09	0.13	0.14	..
Azerbaijan	..	..	0.61	0.06	0.25	0.15	0.27	0.27	..
Belarus	..	..	1.94	1.11	1.14	1.14	1.11	1.04	..
Bosnia and Herzegovina	..	..	0.52	0.10	0.21	0.33	0.34	0.34	..
Bulgaria	1.21	1.42	1.60	0.74	0.85	0.67	0.75	0.77	..
Croatia	..	..	0.51	0.25	0.29	0.30	0.28	0.29	..
Cyprus <sup>1</sup>	0.02	0.02	0.03	0.04	0.05	0.05	0.04	0.04	..
FYR of Macedonia	..	..	0.22	0.13	0.18	0.17	0.19	0.17	..
Georgia	..	..	0.65	0.08	0.06	0.18	0.24	0.24	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	5.50	1.82	3.79	3.45	3.92	3.88	..
Kosovo	..	..	..	0.02	0.03	0.10	0.11	0.12	..
Kyrgyzstan	..	..	0.44	0.24	0.17	0.15	0.10	0.20	..
Lithuania	..	..	0.47	0.20	0.24	0.23	0.27	0.28	..
Malta	-	-	-	0.04	0.04	0.03	0.03	0.04	..
Republic of Moldova	..	..	0.39	0.24	0.22	0.24	0.14	0.12	..
Montenegro	..	..	..	..	0.22	0.16	0.07	0.07	..
Romania	2.30	3.46	3.32	1.71	2.04	1.75	1.71	1.77	..
Russian Federation	..	..	41.43	26.87	28.37	28.11	28.70	28.29	..
Serbia	..	..	1.19	0.54	0.52	0.63	0.62	0.64	..
Tajikistan	..	..	0.99	0.46	0.57	0.64	0.36	0.36	..
Turkmenistan	..	..	0.34	0.18	0.23	0.29	0.34	0.39	..
Ukraine	..	..	12.50	5.19	5.65	5.67	4.68	4.30	..
Uzbekistan	..	..	1.87	1.31	1.34	1.41	1.51	1.53	..
Former Soviet Union	43.77	55.65	x	x	x	x	x	x	..
Former Yugoslavia	1.35	2.32	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>48.64</b>	<b>62.88</b>	<b>74.85</b>	<b>41.48</b>	<b>46.60</b>	<b>46.03</b>	<b>46.02</b>	<b>45.39</b>	..
Algeria	0.08	0.24	0.52	0.59	0.76	1.09	1.38	1.50	..
Angola	0.01	0.01	0.01	0.03	0.05	0.14	0.24	0.24	..
Benin	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	..
Botswana	..	..	0.05	0.07	0.10	0.12	0.13	0.13	..
Cameroon	0.07	0.07	0.12	0.13	0.13	0.24	0.26	0.28	..
Congo	0.00	0.01	0.02	0.01	0.01	0.02	0.03	0.03	..
Côte d'Ivoire	0.02	0.04	0.04	0.08	0.11	0.09	0.15	0.16	..
Dem. Rep. of the Congo	-	0.22	0.09	0.16	0.27	0.34	0.37	0.34	..
Egypt	0.36	0.86	1.45	2.11	2.81	3.50	3.29	3.37	..
Eritrea	..	..	..	0.01	0.00	0.01	0.01	0.01	..
Ethiopia	0.03	0.03	0.04	0.05	0.08	0.12	0.22	0.24	..
Gabon	0.00	0.02	0.03	0.02	0.03	0.03	0.04	0.04	..
Ghana	0.28	0.34	0.31	0.37	0.22	0.27	0.40	0.36	..
Kenya	0.05	0.07	0.17	0.18	0.25	0.30	0.36	0.36	..
Libya	0.01	0.07	0.14	0.26	0.27	0.18	0.13	0.12	..
Mauritius	0.00	0.01	0.02	0.06	0.07	0.08	0.08	0.08	..
Morocco	0.10	0.20	0.35	0.52	0.62	0.76	0.90	0.93	..
Mozambique	0.02	0.02	0.02	0.13	0.72	0.74	0.85	0.81	..
Namibia	..	..	..	0.05	0.05	0.07	0.06	0.05	..
Niger	..	..	..	0.01	0.02	0.01	0.02	0.02	..
Nigeria	0.11	0.15	0.17	0.16	0.18	0.28	0.35	0.36	..
Senegal	0.02	0.03	0.04	0.03	0.05	0.06	0.08	0.08	..
South Africa	3.06	5.06	7.08	8.34	9.46	10.35	10.41	10.45	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	0.02	0.02	0.02	0.05	0.04	0.08	0.14	0.13	..
United Rep. of Tanzania	0.02	0.02	0.03	0.03	0.06	0.09	0.11	0.12	..
Togo	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.03	..
Tunisia	0.05	0.13	0.24	0.38	0.43	0.44	0.47	0.47	..
Zambia	0.36	0.42	0.38	0.36	0.48	0.35	0.55	0.59	..
Zimbabwe	0.29	0.41	0.49	0.46	0.40	0.27	0.29	0.22	..
Other Africa	0.05	0.10	0.13	0.21	0.22	0.27	0.51	0.52	..
<b>Africa</b>	<b>5.03</b>	<b>8.55</b>	<b>11.97</b>	<b>14.88</b>	<b>17.94</b>	<b>20.34</b>	<b>21.88</b>	<b>22.08</b>	..

1. Please refer to section 'Geographical coverage'.

## Industry consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.07	0.08	0.23	0.46	0.97	1.69	2.20	2.33	..
Brunei Darussalam	0.00	0.01	0.02	0.02	0.01	0.02	0.02	0.02	..
Cambodia	..	..	..	0.00	0.01	0.03	0.06	0.08	..
DPR of Korea	0.60	0.77	1.01	0.62	0.74	0.70	0.58	0.44	..
India	3.24	4.75	9.08	13.62	18.14	27.52	35.60	38.82	..
Indonesia	0.03	0.15	1.25	2.93	3.67	4.40	5.67	5.51	..
Malaysia	0.20	0.38	0.83	2.81	3.37	4.53	5.44	5.20	..
Mongolia	..	..	0.16	0.10	0.13	0.18	0.27	0.28	..
Myanmar	0.03	0.05	0.07	0.12	0.12	0.20	0.26	0.18	..
Nepal	0.00	0.00	0.02	0.04	0.07	0.09	0.12	0.10	..
Pakistan	0.31	0.35	0.89	1.23	1.72	1.83	2.15	2.25	..
Philippines	0.41	0.71	0.86	1.13	1.33	1.60	1.84	1.94	..
Singapore	0.12	0.21	0.47	0.92	1.21	1.45	1.60	1.62	..
Sri Lanka	0.04	0.06	0.08	0.19	0.21	0.27	0.32	0.33	..
Chinese Taipei	1.01	2.05	3.80	7.47	9.33	10.68	11.62	11.46	..
Thailand	0.34	0.54	1.54	3.45	4.89	5.47	6.35	6.57	..
Viet Nam	-	0.13	0.24	0.78	1.96	4.00	5.95	6.63	..
Other Asia	0.04	0.20	0.23	0.34	0.42	0.57	0.82	0.77	..
<b>Non-OECD Asia excl. China</b>	<b>6.44</b>	<b>10.44</b>	<b>20.79</b>	<b>36.25</b>	<b>48.31</b>	<b>65.21</b>	<b>80.84</b>	<b>84.54</b>	..
People's Rep. of China	9.20	16.60	29.61	59.34	116.55	203.21	271.81	276.25	..
Hong Kong, China	0.21	0.36	0.60	0.42	0.35	0.26	0.27	0.27	..
<b>China</b>	<b>9.41</b>	<b>16.96</b>	<b>30.21</b>	<b>59.77</b>	<b>116.90</b>	<b>203.47</b>	<b>272.08</b>	<b>276.52</b>	..
Argentina	1.06	1.49	1.84	3.00	3.72	4.16	4.42	4.34	..
Bolivia	0.05	0.07	0.06	0.11	0.11	0.15	0.17	0.18	..
Brazil	2.54	5.87	9.66	12.62	15.08	17.49	17.71	16.91	..
Colombia	0.30	0.43	0.68	0.98	1.08	1.22	1.41	1.40	..
Costa Rica	0.03	0.06	0.07	0.12	0.15	0.16	0.16	0.16	..
Cuba	0.19	0.23	0.49	0.34	0.31	0.33	0.32	0.33	..
Curaçao	0.03	0.03	0.03	0.04	0.04	0.05	0.03	0.03	..
Dominican Republic	0.06	0.08	0.05	0.34	0.38	0.45	0.44	0.49	..
Ecuador	0.03	0.10	0.13	0.19	0.26	0.62	0.73	0.77	..
El Salvador	0.03	0.04	0.05	0.15	0.18	0.19	0.19	0.18	..
Guatemala	0.03	0.07	0.06	0.13	0.23	0.26	0.29	0.31	..
Haiti	0.00	0.01	0.02	0.01	0.01	0.01	0.02	0.02	..
Honduras	0.02	0.03	0.07	0.08	0.10	0.11	0.13	0.18	..
Jamaica	0.13	0.05	0.02	0.32	0.41	0.05	0.09	0.10	..
Nicaragua	0.03	0.03	0.03	0.03	0.03	0.08	0.10	0.10	..
Panama	0.02	0.02	0.03	0.04	0.03	0.07	0.08	0.07	..
Paraguay	0.01	0.03	0.05	0.08	0.11	0.14	0.17	0.18	..
Peru	0.33	0.45	0.62	0.85	1.08	1.44	1.87	2.02	..
Suriname	..	..	..	0.05	0.06	0.07	0.08	0.08	..
Trinidad and Tobago	0.04	0.09	0.16	0.26	0.36	0.41	0.48	0.50	..
Uruguay	0.06	0.09	0.13	0.14	0.15	0.22	0.25	0.28	..
Venezuela	0.48	1.19	2.12	2.38	2.97	3.17	2.88	2.67	..
Other Non-OECD Americas	0.50	0.58	0.74	1.28	1.53	1.41	1.25	1.27	..
<b>Non-OECD Americas</b>	<b>5.96</b>	<b>11.06</b>	<b>17.10</b>	<b>23.52</b>	<b>28.38</b>	<b>32.23</b>	<b>33.28</b>	<b>32.55</b>	..
Bahrain	0.01	0.02	0.42	0.72	1.03	0.99	1.17	1.20	..
Islamic Republic of Iran	0.59	0.75	1.24	2.83	3.92	5.42	6.51	4.77	..
Iraq	0.10	0.33	0.78	1.03	0.38	0.60	0.87	0.55	..
Jordan	0.01	0.02	0.10	0.16	0.22	0.27	0.32	0.32	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	0.22	0.25	0.34	0.37	0.37	..
Oman	0.00	0.00	0.01	0.03	0.05	0.13	0.36	0.41	..
Qatar	-	0.04	0.05	0.14	0.24	0.67	0.99	1.02	..
Saudi Arabia	0.15	0.11	0.71	1.07	1.32	2.46	4.17	4.26	..
Syrian Arab Republic	0.08	0.15	0.36	0.58	0.73	0.97	0.44	0.37	..
United Arab Emirates	0.00	0.03	0.09	0.37	0.55	0.65	0.96	1.12	..
Yemen	0.00	0.00	-	-	0.03	0.00	0.01	0.01	..
<b>Middle East</b>	<b>0.94</b>	<b>1.45</b>	<b>3.76</b>	<b>7.16</b>	<b>8.71</b>	<b>12.51</b>	<b>16.17</b>	<b>14.40</b>	..

## Total industry consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 811.29</b>	<b>2 108.44</b>	<b>2 271.22</b>	<b>2 464.71</b>	<b>2 875.00</b>	<b>3 319.22</b>	<b>3 525.23</b>	<b>3 507.08</b>	..
<b>Non-OECD Total</b>	<b>640.47</b>	<b>930.79</b>	<b>1 150.28</b>	<b>1 190.85</b>	<b>1 642.23</b>	<b>2 153.19</b>	<b>2 392.51</b>	<b>2 384.88</b>	..
<b>OECD Total</b>	<b>1 170.82</b>	<b>1 177.65</b>	<b>1 120.93</b>	<b>1 273.86</b>	<b>1 232.77</b>	<b>1 166.03</b>	<b>1 132.72</b>	<b>1 122.20</b>	..
Canada	52.51	61.21	61.29	73.62	71.02	61.35	61.69	60.44	..
Chile	2.32	2.79	4.33	9.04	9.71	9.73	11.24	10.82	..
Mexico	16.46	27.21	34.70	35.03	36.62	39.96	40.01	40.57	..
United States	478.67	485.28	397.90	480.46	432.70	405.57	387.61	376.70	..
<b>OECD Americas</b>	<b>549.97</b>	<b>576.49</b>	<b>498.21</b>	<b>598.14</b>	<b>550.04</b>	<b>516.62</b>	<b>500.55</b>	<b>488.53</b>	..
Australia	17.81	20.45	23.26	28.22	27.09	27.14	29.18	28.07	..
Israel <sup>1</sup>	1.37	1.87	2.17	3.17	2.71	3.46	3.79	3.71	..
Japan	140.54	118.74	141.22	139.18	140.10	129.82	119.03	119.97	..
Korea	7.55	13.37	25.99	62.99	68.73	82.64	94.85	95.88	..
New Zealand	2.18	2.62	4.22	5.90	4.65	5.04	6.10	5.76	..
<b>OECD Asia Oceania</b>	<b>169.45</b>	<b>157.06</b>	<b>196.86</b>	<b>239.46</b>	<b>243.29</b>	<b>248.10</b>	<b>252.95</b>	<b>253.38</b>	..
Austria	6.19	6.34	6.75	7.67	8.74	9.34	9.29	9.30	..
Belgium	16.73	13.70	13.49	19.70	18.21	18.32	19.24	19.37	..
Czech Republic	18.54	19.82	17.52	11.10	11.49	9.85	9.34	8.98	..
Denmark	4.06	3.56	2.93	3.17	3.09	2.63	2.30	2.32	..
Estonia	..	..	2.76	0.75	0.94	0.66	0.66	0.62	..
Finland	7.57	7.22	10.56	12.67	12.39	12.07	11.50	11.51	..
France	55.75	54.13	45.53	50.29	46.74	40.10	38.37	38.39	..
Germany	105.02	101.22	88.59	76.00	78.45	77.55	76.69	76.21	..
Greece	3.47	4.36	4.56	5.11	4.83	4.54	3.77	3.81	..
Hungary	7.41	9.86	7.82	4.89	5.37	4.61	5.61	5.86	..
Iceland	0.28	0.36	0.40	0.70	0.79	1.31	1.44	1.48	..
Ireland	1.87	2.34	2.32	3.06	2.95	2.47	2.42	2.60	..
Italy	47.33	44.53	44.19	46.01	46.40	39.37	32.02	31.57	..
Latvia	..	..	2.02	0.63	0.77	0.83	0.87	0.87	..
Luxembourg	2.09	1.68	1.33	0.78	0.80	0.78	0.68	0.68	..
Netherlands	20.94	25.25	25.46	27.37	30.87	29.58	27.29	26.07	..
Norway	6.95	8.00	7.87	9.03	9.03	8.33	8.11	8.28	..
Poland	29.46	36.75	27.15	21.03	18.91	18.25	19.10	19.25	..
Portugal	2.64	3.77	6.65	8.40	8.01	7.13	5.80	5.75	..
Slovak Republic	6.13	6.59	7.64	4.93	4.85	4.26	4.17	4.37	..
Slovenia	..	..	1.54	1.66	1.93	1.47	1.38	1.35	..
Spain	20.57	23.42	24.81	33.70	38.35	27.69	23.15	22.16	..
Sweden	15.36	13.42	13.71	15.23	14.06	13.72	12.67	12.78	..
Switzerland	4.69	4.46	3.98	4.29	4.40	4.37	4.04	4.04	..
Turkey	4.28	7.38	13.67	23.05	25.35	29.35	30.10	32.62	..
United Kingdom	64.06	45.95	42.60	45.06	41.72	32.73	29.21	30.05	..
<b>OECD Europe</b>	<b>451.40</b>	<b>444.11</b>	<b>425.86</b>	<b>436.26</b>	<b>439.44</b>	<b>401.32</b>	<b>379.23</b>	<b>380.29</b>	..
IEA	1 150.38	1 145.42	1 075.77	1 223.64	1 180.23	1 109.27	1 074.01	1 063.40	..
IEA/Accession/Association	1 333.74	1 425.71	1 508.11	1 800.57	2 102.61	2 414.95	2 579.17	2 574.10	..
European Union - 28	..	..	442.92	418.13	420.11	372.81	350.34	348.45	..
G7	943.89	911.06	821.32	910.61	857.13	786.49	744.62	733.34	..
G8	..	..	1 070.16	1 074.72	1 024.40	979.15	947.20	936.81	..
G20	..	..	1 874.51	2 079.18	2 392.82	2 757.34	2 929.19	2 920.72	..
OPEC	21.45	47.89	83.46	121.77	154.97	223.42	247.87	237.04	..

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Total industry consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>640.47</b>	<b>930.79</b>	<b>1 150.28</b>	<b>1 190.85</b>	<b>1 642.23</b>	<b>2 153.19</b>	<b>2 392.51</b>	<b>2 384.88</b>	..
Albania	0.26	1.00	0.94	0.33	0.29	0.46	0.45	0.38	..
Armenia	..	..	2.10	0.42	0.72	0.36	0.39	0.35	..
Azerbaijan	..	..	9.56	1.98	2.46	1.24	1.92	1.98	..
Belarus	..	..	19.29	7.40	7.94	7.38	7.87	6.58	..
Bosnia and Herzegovina	..	..	2.36	0.58	0.64	0.76	0.83	0.88	..
Bulgaria	4.57	5.80	10.45	4.57	4.51	2.99	3.14	3.33	..
Croatia	..	..	2.93	2.04	2.26	1.97	1.64	1.62	..
Cyprus <sup>1</sup>	0.21	0.30	0.30	0.52	0.39	0.31	0.24	0.22	..
FYR of Macedonia	..	..	0.78	0.53	0.61	0.57	0.56	0.53	..
Georgia	..	..	4.26	0.38	0.46	0.58	0.97	1.01	..
Gibraltar	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	..
Kazakhstan	..	..	28.65	10.40	18.07	21.39	18.87	19.66	..
Kosovo	..	..	..	0.16	0.20	0.28	0.28	0.36	..
Kyrgyzstan	..	..	2.52	0.45	0.49	0.43	0.54	0.75	..
Lithuania	..	..	4.18	1.42	1.75	1.59	2.02	2.08	..
Malta	..	0.00	0.01	0.04	0.06	0.05	0.05	0.05	..
Republic of Moldova	..	..	1.12	0.50	0.74	0.70	0.60	0.49	..
Montenegro	..	..	..	..	0.35	0.24	0.15	0.15	..
Romania	17.64	37.87	25.12	10.36	11.28	7.94	7.71	7.28	..
Russian Federation	..	..	248.84	164.11	167.27	192.66	202.57	203.47	..
Serbia	..	..	5.04	2.40	3.74	3.17	2.47	2.71	..
Tajikistan	..	..	0.99	0.46	0.57	0.64	0.36	0.36	..
Turkmenistan	..	..	0.65	0.46	0.59	0.94	1.34	1.39	..
Ukraine	..	..	85.63	33.99	41.79	30.40	24.01	19.65	..
Uzbekistan	..	..	3.80	10.00	8.59	8.37	8.51	8.13	..
Former Soviet Union	304.59	405.22	x	x	x	x	x	x	..
Former Yugoslavia	9.02	10.94	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>336.31</b>	<b>461.13</b>	<b>459.52</b>	<b>253.52</b>	<b>275.77</b>	<b>285.44</b>	<b>287.53</b>	<b>283.43</b>	..
Algeria	0.81	1.68	4.24	4.88	5.70	7.31	9.10	9.45	..
Angola	0.23	0.24	0.82	0.92	0.97	1.31	1.16	1.46	..
Benin	0.00	0.01	0.02	0.07	0.05	0.06	0.12	0.15	..
Botswana	..	..	0.19	0.31	0.36	0.31	0.38	0.36	..
Cameroon	0.10	0.15	0.25	0.22	0.21	0.35	0.40	0.42	..
Congo	0.05	0.03	0.04	0.03	0.04	0.05	0.09	0.09	..
Côte d'Ivoire	0.27	0.30	0.23	0.35	0.25	0.48	0.69	0.72	..
Dem. Rep. of the Congo	1.37	1.81	2.34	2.89	3.54	4.13	3.37	3.42	..
Egypt	3.10	6.61	11.75	13.05	19.00	21.14	17.77	18.06	..
Eritrea	..	..	..	0.02	0.03	0.01	0.02	0.02	..
Ethiopia	0.15	0.14	0.25	0.34	0.50	0.71	1.38	1.32	..
Gabon	0.24	0.41	0.23	0.39	1.70	3.44	3.16	3.19	..
Ghana	0.63	0.74	0.76	1.34	1.10	1.19	1.51	1.51	..
Kenya	0.28	0.42	0.64	0.69	0.89	1.22	1.32	1.48	..
Libya	0.40	1.84	2.47	4.06	3.73	4.75	1.48	1.00	..
Mauritius	0.25	0.24	0.26	0.25	0.25	0.23	0.21	0.22	..
Morocco	1.15	1.84	2.17	2.51	2.96	3.48	3.48	3.62	..
Mozambique	0.94	0.71	0.56	0.76	1.50	1.69	1.95	1.99	..
Namibia	..	..	..	0.11	0.13	0.17	0.21	0.21	..
Niger	..	..	..	0.03	0.04	0.09	0.12	0.09	..
Nigeria	1.36	2.29	2.48	3.54	6.78	7.76	8.66	8.94	..
Senegal	0.16	0.21	0.13	0.21	0.28	0.34	0.42	0.45	..
South Africa	17.12	24.39	25.94	26.13	27.54	30.58	31.40	32.39	..
South Sudan	..	..	..	..	..	..	0.00	0.00	..
Sudan	1.00	0.88	0.99	1.36	1.32	1.97	1.68	1.71	..
United Rep. of Tanzania	0.78	0.79	0.96	1.24	1.73	2.29	3.27	3.40	..
Togo	0.00	0.00	0.02	0.09	0.06	0.10	0.08	0.09	..
Tunisia	0.40	0.83	1.32	1.76	2.30	2.17	2.37	2.40	..
Zambia	1.39	1.29	1.23	1.19	1.58	1.87	2.63	2.73	..
Zimbabwe	1.14	1.35	1.73	1.29	0.91	0.73	0.73	0.66	..
Other Africa	2.16	2.42	4.20	3.01	2.80	3.27	3.86	3.77	..
<b>Africa</b>	<b>35.48</b>	<b>51.64</b>	<b>66.20</b>	<b>73.02</b>	<b>88.24</b>	<b>103.21</b>	<b>103.01</b>	<b>105.34</b>	..

Includes non-energy use for industry/transformation/energy.

1. Please refer to section 'Geographical coverage'.

## Total industry consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.79	1.17	2.34	4.29	4.81	6.80	7.69	9.42	..
Brunei Darussalam	0.03	0.06	0.08	0.09	0.07	0.64	0.65	0.20	..
Cambodia	..	..	..	0.61	0.70	0.75	0.95	1.04	..
DPR of Korea	12.03	17.37	19.48	11.37	12.56	8.28	4.84	3.74	..
India	38.40	47.09	80.03	110.20	129.98	193.20	233.21	241.71	..
Indonesia	1.99	7.96	25.51	39.93	46.47	51.10	48.18	48.74	..
Malaysia	1.91	3.34	6.40	14.00	18.13	18.62	21.63	21.11	..
Mongolia	..	..	1.17	0.47	0.58	0.85	1.04	0.95	..
Myanmar	0.36	0.70	0.49	1.24	1.22	1.38	2.34	2.40	..
Nepal	0.06	0.09	0.11	0.39	0.41	0.46	0.68	0.74	..
Pakistan	4.08	5.47	10.12	13.98	20.56	21.33	21.31	21.81	..
Philippines	3.03	3.66	4.88	5.62	5.41	6.53	7.58	8.48	..
Singapore	0.57	0.80	2.52	4.91	9.56	10.68	12.43	12.21	..
Sri Lanka	0.68	0.67	0.81	1.78	2.06	2.18	2.38	3.04	..
Chinese Taipei	6.10	12.11	16.29	26.99	35.65	44.05	43.95	44.12	..
Thailand	3.52	4.21	9.08	22.35	35.44	44.55	52.93	53.22	..
Viet Nam	1.97	3.85	4.57	7.99	12.30	19.68	24.76	26.36	..
Other Asia	1.12	2.23	0.74	1.35	1.60	2.07	2.68	2.57	..
<b>Non-OECD Asia excl. China</b>	<b>76.63</b>	<b>110.77</b>	<b>184.62</b>	<b>267.58</b>	<b>337.51</b>	<b>433.17</b>	<b>489.24</b>	<b>501.87</b>	..
People's Rep. of China	118.95	188.40	274.00	352.96	651.64	952.97	1 103.69	1 099.80	..
Hong Kong, China	0.98	1.12	1.70	2.12	1.56	1.91	2.51	2.29	..
<b>China</b>	<b>119.93</b>	<b>189.52</b>	<b>275.70</b>	<b>355.09</b>	<b>653.20</b>	<b>954.88</b>	<b>1 106.20</b>	<b>1 102.09</b>	..
Argentina	9.42	10.52	10.20	18.96	20.40	20.95	21.77	21.67	..
Bolivia	0.26	0.35	0.51	0.88	0.93	1.22	1.56	1.52	..
Brazil	24.05	40.41	49.22	69.62	79.94	96.50	96.05	92.97	..
Colombia	3.09	4.15	5.41	8.13	7.98	7.02	6.81	7.49	..
Costa Rica	0.31	0.42	0.50	0.63	0.79	0.91	0.95	0.96	..
Cuba	4.87	6.18	8.44	6.09	3.35	4.84	4.41	4.37	..
Curaçao	1.62	0.42	0.23	0.32	0.35	0.37	0.26	0.25	..
Dominican Republic	0.85	0.96	0.55	1.57	1.68	2.07	2.01	1.85	..
Ecuador	0.33	1.09	1.51	2.15	2.30	2.84	3.20	2.93	..
El Salvador	0.34	0.39	0.55	0.80	0.80	0.50	0.47	0.49	..
Guatemala	0.36	0.50	0.48	0.88	0.76	0.72	1.82	0.92	..
Haiti	0.17	0.22	0.15	0.34	0.27	0.26	0.32	0.29	..
Honduras	0.26	0.43	0.58	0.60	1.03	0.96	0.73	0.71	..
Jamaica	1.32	1.29	1.19	0.95	1.50	0.67	0.99	0.92	..
Nicaragua	0.27	0.28	0.24	0.32	0.31	0.31	0.36	0.39	..
Panama	0.20	0.32	0.26	0.43	0.68	0.77	1.03	0.94	..
Paraguay	0.42	0.63	0.96	1.31	1.24	1.30	1.32	1.34	..
Peru	2.07	2.67	1.97	3.12	3.61	4.25	5.11	5.32	..
Suriname	..	..	..	0.28	0.09	0.10	0.11	0.11	..
Trinidad and Tobago	0.62	1.15	3.09	6.31	10.25	12.50	12.20	12.14	..
Uruguay	0.58	0.70	0.58	0.54	0.54	1.29	1.66	1.93	..
Venezuela	5.45	9.59	12.24	15.80	19.66	25.89	20.16	15.69	..
Other Non-OECD Americas	0.93	1.04	1.14	1.86	2.04	1.86	1.73	1.76	..
<b>Non-OECD Americas</b>	<b>57.79</b>	<b>83.73</b>	<b>100.00</b>	<b>141.91</b>	<b>160.49</b>	<b>188.10</b>	<b>185.02</b>	<b>176.95</b>	..
Bahrain	0.60	0.91	1.48	2.07	2.75	3.05	3.80	3.80	..
Islamic Republic of Iran	7.51	9.41	20.53	26.26	35.29	53.82	66.39	59.63	..
Iraq	1.10	2.50	4.61	5.56	3.59	3.54	5.70	4.11	..
Jordan	0.10	0.29	0.63	0.97	1.26	1.06	1.01	0.88	..
Kuwait	1.33	1.98	2.09	4.24	6.82	7.45	8.62	9.37	..
Lebanon	0.49	0.00	0.10	0.63	0.82	0.63	0.72	0.73	..
Oman	0.01	0.06	0.77	1.15	2.43	7.42	11.65	12.87	..
Qatar	0.58	1.34	2.90	4.44	6.03	8.22	12.10	12.43	..
Saudi Arabia	1.28	12.71	18.14	34.47	46.31	68.81	77.00	74.97	..
Syrian Arab Republic	0.51	1.97	1.73	4.45	4.63	5.09	2.36	2.18	..
United Arab Emirates	0.83	2.82	11.21	15.08	16.10	28.27	31.14	33.86	..
Yemen	0.00	0.00	0.06	0.42	0.99	1.03	1.01	0.36	..
<b>Middle East</b>	<b>14.34</b>	<b>34.00</b>	<b>64.24</b>	<b>99.74</b>	<b>127.02</b>	<b>188.39</b>	<b>221.51</b>	<b>215.20</b>	..

Includes non-energy use for industry/transformation/energy.

## Transport consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 028.06</b>	<b>1 198.46</b>	<b>1 488.18</b>	<b>1 882.44</b>	<b>2 102.20</b>	<b>2 257.67</b>	<b>2 427.91</b>	<b>2 500.84</b>	..
<b>Non-OECD Total</b>	<b>171.92</b>	<b>256.83</b>	<b>365.20</b>	<b>489.40</b>	<b>611.61</b>	<b>776.05</b>	<b>934.23</b>	<b>962.88</b>	..
<b>OECD Total</b>	<b>671.96</b>	<b>763.11</b>	<b>920.69</b>	<b>1 119.12</b>	<b>1 171.64</b>	<b>1 122.83</b>	<b>1 129.98</b>	<b>1 156.34</b>	..
Canada	33.19	42.49	40.22	47.06	49.83	54.51	55.77	55.60	..
Chile	1.69	2.02	3.02	5.64	6.11	7.09	7.78	8.34	..
Mexico	12.38	22.76	28.24	35.74	44.13	50.98	51.17	50.98	..
United States	400.90	414.29	476.68	574.32	600.31	554.28	567.85	583.24	..
<b>OECD Americas</b>	<b>448.16</b>	<b>481.57</b>	<b>548.16</b>	<b>662.77</b>	<b>700.37</b>	<b>666.86</b>	<b>682.58</b>	<b>698.17</b>	..
Australia	12.85	16.74	20.87	25.06	26.28	29.12	30.81	31.53	..
Israel <sup>1</sup>	1.15	1.39	2.69	4.45	4.49	5.48	5.35	5.65	..
Japan	39.79	52.92	67.58	83.61	78.57	72.72	70.69	70.51	..
Korea	2.48	4.74	14.49	26.57	29.26	29.07	30.57	32.14	..
New Zealand	1.94	2.28	2.89	4.06	4.53	4.56	4.61	4.81	..
<b>OECD Asia Oceania</b>	<b>58.22</b>	<b>78.07</b>	<b>108.52</b>	<b>143.76</b>	<b>143.14</b>	<b>140.95</b>	<b>142.04</b>	<b>144.64</b>	..
Austria	3.85	4.03	4.56	6.05	7.98	7.20	7.12	7.25	..
Belgium	4.34	5.42	6.82	8.10	8.57	8.39	8.00	8.56	..
Czech Republic	2.12	2.19	2.52	4.14	5.81	5.58	5.52	5.81	..
Denmark	2.69	3.02	3.46	4.03	4.46	4.33	3.77	3.83	..
Estonia	..	..	0.80	0.55	0.71	0.74	0.73	0.75	..
Finland	2.39	2.78	3.91	3.89	4.18	4.11	3.57	3.59	..
France	24.52	30.10	38.28	44.09	43.24	40.50	39.68	40.05	..
Germany	33.97	43.41	53.77	58.27	51.50	49.02	51.06	52.05	..
Greece	2.05	3.18	5.15	6.42	7.35	7.36	5.48	5.58	..
Hungary	1.84	2.66	2.83	2.95	3.98	3.88	3.63	3.98	..
Iceland	0.13	0.16	0.21	0.21	0.23	0.28	0.27	0.28	..
Ireland	1.17	1.58	1.68	3.54	4.29	3.84	3.61	3.66	..
Italy	18.37	23.68	32.18	39.11	40.86	35.74	34.33	33.51	..
Latvia	..	..	1.04	0.73	1.02	1.06	0.97	1.03	..
Luxembourg	0.23	0.43	0.88	1.61	2.37	2.14	2.03	1.89	..
Netherlands	6.46	7.60	9.16	10.78	11.54	11.36	9.81	10.01	..
Norway	2.25	2.83	3.35	4.00	4.32	4.62	4.51	4.60	..
Poland	5.01	6.96	6.53	9.30	11.63	15.69	14.43	15.30	..
Portugal	1.60	2.30	3.28	5.89	6.32	6.10	5.16	5.18	..
Slovak Republic	1.62	1.21	1.35	1.35	1.69	2.05	1.92	1.90	..
Slovenia	..	..	0.88	1.19	1.43	1.72	1.74	1.73	..
Spain	10.71	14.90	21.23	30.08	36.16	32.31	26.87	27.88	..
Sweden	5.17	5.73	6.78	7.29	7.68	7.24	6.60	6.53	..
Switzerland	3.42	3.56	4.97	5.64	5.60	5.76	5.64	5.40	..
Turkey	3.85	5.29	9.31	11.93	12.67	15.05	20.60	24.17	..
United Kingdom	27.84	30.46	39.08	41.43	42.55	38.94	38.29	39.01	..
<b>OECD Europe</b>	<b>165.58</b>	<b>203.47</b>	<b>264.01</b>	<b>312.59</b>	<b>328.13</b>	<b>315.02</b>	<b>305.36</b>	<b>313.53</b>	..
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.17	204.68	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>656.61</i>	<i>736.78</i>	<i>884.60</i>	<i>1 071.15</i>	<i>1 114.24</i>	<i>1 056.23</i>	<i>1 062.69</i>	<i>1 088.32</i>	..
<i>IEA/Accession/Association</i>	<i>694.34</i>	<i>800.01</i>	<i>980.65</i>	<i>1 267.65</i>	<i>1 383.42</i>	<i>1 419.45</i>	<i>1 509.97</i>	<i>1 563.04</i>	..
<i>European Union - 28</i>	..	..	<i>255.85</i>	<i>298.94</i>	<i>315.69</i>	<i>300.64</i>	<i>286.12</i>	<i>291.42</i>	..
<i>G7</i>	<i>578.59</i>	<i>637.35</i>	<i>747.78</i>	<i>887.90</i>	<i>906.86</i>	<i>845.73</i>	<i>857.67</i>	<i>873.97</i>	..
<i>G8</i>	..	..	<i>820.69</i>	<i>930.21</i>	<i>954.44</i>	<i>902.03</i>	<i>918.06</i>	<i>933.57</i>	..
<i>G20</i>	..	..	<i>1 103.45</i>	<i>1 370.34</i>	<i>1 495.90</i>	<i>1 562.27</i>	<i>1 681.42</i>	<i>1 731.66</i>	..
<i>OPEC</i>	<i>15.95</i>	<i>40.52</i>	<i>65.68</i>	<i>93.46</i>	<i>120.02</i>	<i>145.59</i>	<i>168.76</i>	<i>169.45</i>	..

Includes non-energy use in transport.

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Transport consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>171.92</b>	<b>256.83</b>	<b>365.20</b>	<b>489.40</b>	<b>611.61</b>	<b>776.05</b>	<b>934.23</b>	<b>962.88</b>	<b>..</b>
Albania	0.26	0.49	0.23	0.48	0.78	0.73	0.81	0.79	..
Armenia	..	..	1.02	0.20	0.19	0.20	0.26	0.24	..
Azerbaijan	..	..	1.99	0.80	1.37	1.70	2.58	2.39	..
Belarus	..	..	3.71	2.03	2.41	3.38	3.52	3.12	..
Bosnia and Herzegovina	..	..	0.73	0.70	0.76	1.11	0.98	1.02	..
Bulgaria	1.39	1.42	2.17	1.70	2.37	2.45	2.54	2.82	..
Croatia	..	..	1.23	1.47	1.83	1.95	1.85	1.95	..
Cyprus <sup>1</sup>	0.25	0.21	0.38	0.58	0.67	0.75	0.59	0.61	..
FYR of Macedonia	..	..	0.26	0.34	0.35	0.46	0.54	0.62	..
Georgia	..	..	1.25	0.32	0.50	0.74	0.87	0.98	..
Gibraltar	0.01	0.01	0.03	0.08	0.10	0.11	0.13	0.14	..
Kazakhstan	..	..	4.90	3.19	3.25	4.48	4.67	5.01	..
Kosovo	..	..	..	0.19	0.27	0.32	0.34	0.37	..
Kyrgyzstan	..	..	2.01	0.29	0.37	0.66	1.07	0.91	..
Lithuania	..	..	1.85	1.05	1.38	1.42	1.57	1.66	..
Malta	0.08	0.09	0.15	0.15	0.11	0.19	0.18	0.19	..
Republic of Moldova	..	..	0.83	0.21	0.39	0.58	0.59	0.64	..
Montenegro	..	..	..	..	0.16	0.23	0.17	0.19	..
Romania	2.39	2.37	3.90	3.19	4.01	4.58	5.06	5.11	..
Russian Federation	..	..	72.90	42.30	47.58	56.30	60.38	59.59	..
Serbia	..	..	1.48	0.77	2.18	2.17	1.97	1.94	..
Tajikistan	..	..	0.25	0.01	0.03	0.08	0.84	0.81	..
Turkmenistan	..	..	1.39	1.26	1.65	2.14	2.64	2.64	..
Ukraine	..	..	18.13	6.74	7.66	8.84	7.33	6.56	..
Uzbekistan	..	..	1.97	2.40	1.90	1.83	1.39	1.35	..
Former Soviet Union	59.96	84.11	x	x	x	x	x	x	..
Former Yugoslavia	3.51	4.31	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>67.84</b>	<b>93.01</b>	<b>122.77</b>	<b>70.44</b>	<b>82.26</b>	<b>97.40</b>	<b>102.85</b>	<b>101.65</b>	<b>..</b>
Algeria	1.00	2.08	5.03	5.08	7.07	9.99	14.01	14.90	..
Angola	0.47	0.33	0.34	0.36	0.82	2.13	2.81	3.03	..
Benin	0.10	0.09	0.05	0.31	0.52	1.06	1.36	1.53	..
Botswana	..	..	0.22	0.41	0.51	0.65	0.74	0.80	..
Cameroon	0.21	0.39	0.58	0.62	0.70	0.90	1.10	1.17	..
Congo	0.12	0.17	0.17	0.14	0.24	0.49	0.66	0.68	..
Côte d'Ivoire	0.31	0.52	0.40	0.42	0.40	0.50	0.87	1.04	..
Dem. Rep. of the Congo	0.17	0.21	0.19	0.26	0.37	0.55	1.49	0.88	..
Egypt	1.49	2.73	5.36	9.57	9.94	14.55	17.45	17.97	..
Eritrea	..	..	..	0.07	0.06	0.05	0.06	0.06	..
Ethiopia	0.19	0.21	0.31	0.52	0.71	0.93	1.45	1.61	..
Gabon	0.01	0.08	0.11	0.11	0.12	0.21	0.27	0.26	..
Ghana	0.37	0.42	0.54	0.98	1.20	1.71	2.42	2.62	..
Kenya	0.50	0.64	0.90	0.89	0.94	1.65	2.17	2.69	..
Libya	0.55	1.57	2.07	3.71	4.27	6.06	6.33	6.01	..
Mauritius	0.06	0.08	0.15	0.25	0.28	0.31	0.36	0.37	..
Morocco	0.67	0.86	1.28	2.66	3.31	4.43	4.98	5.17	..
Mozambique	0.10	0.10	0.20	0.28	0.34	0.56	0.72	0.84	..
Namibia	..	..	..	0.38	0.52	0.60	0.67	0.71	..
Niger	..	..	..	0.12	0.13	0.27	0.39	0.40	..
Nigeria	1.27	4.54	3.97	7.41	9.74	9.41	7.30	8.43	..
Senegal	0.17	0.24	0.24	0.38	0.48	0.67	0.79	0.85	..
South Africa	6.54	6.92	9.91	11.86	14.50	16.09	17.55	17.88	..
South Sudan	..	..	..	..	..	..	0.32	0.22	..
Sudan	0.80	0.75	1.29	0.87	1.62	2.91	2.60	2.61	..
United Rep. of Tanzania	0.27	0.23	0.23	0.48	0.88	1.14	1.97	2.33	..
Togo	0.07	0.11	0.14	0.14	0.21	0.53	0.46	0.48	..
Tunisia	0.35	0.58	0.82	1.33	1.51	2.03	2.07	2.20	..
Zambia	0.24	0.29	0.26	0.24	0.33	0.22	0.38	0.39	..
Zimbabwe	0.42	0.40	0.52	0.63	0.43	0.39	0.83	0.82	..
Other Africa	0.46	1.11	1.64	2.44	2.95	3.79	4.52	4.61	..
<b>Africa</b>	<b>16.92</b>	<b>25.65</b>	<b>36.91</b>	<b>52.92</b>	<b>65.11</b>	<b>84.74</b>	<b>99.13</b>	<b>103.57</b>	<b>..</b>

Includes non-energy use in transport.

1. Please refer to section 'Geographical coverage'.



## Transport consumption of oil (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.08	0.32	0.54	1.00	1.59	1.68	2.15	2.23	..
Brunei Darussalam	0.03	0.11	0.19	0.27	0.32	0.40	0.46	0.46	..
Cambodia	..	..	..	0.44	0.50	1.03	1.28	1.43	..
DPR of Korea	0.67	1.84	1.56	0.56	0.43	0.44	0.45	0.47	..
India	6.80	11.62	18.20	31.07	37.09	61.68	74.81	81.89	..
Indonesia	3.06	5.94	10.71	20.83	23.68	33.92	42.90	43.14	..
Malaysia	1.56	2.14	4.88	10.80	13.58	14.66	21.73	20.42	..
Mongolia	..	..	0.47	0.30	0.35	0.45	0.64	0.65	..
Myanmar	0.43	0.63	0.44	1.16	1.52	0.64	2.48	3.39	..
Nepal	0.02	0.05	0.11	0.27	0.27	0.64	0.86	0.75	..
Pakistan	1.08	2.21	4.50	8.26	8.20	9.02	11.81	12.36	..
Philippines	3.28	3.46	4.52	8.10	8.29	7.85	8.81	10.19	..
Singapore	0.60	0.95	1.34	1.73	1.85	2.31	2.26	2.19	..
Sri Lanka	0.54	0.68	0.82	1.68	2.07	2.28	2.63	2.86	..
Chinese Taipei	1.11	2.83	6.58	11.46	12.71	12.04	12.03	12.34	..
Thailand	2.39	3.21	9.01	14.60	18.05	17.79	18.30	19.72	..
Viet Nam	0.97	0.59	1.37	3.50	6.37	10.14	9.79	10.67	..
Other Asia	0.71	0.93	0.95	1.18	1.42	2.87	3.59	3.40	..
<b>Non-OECD Asia excl. China</b>	<b>23.34</b>	<b>37.51</b>	<b>66.19</b>	<b>117.20</b>	<b>138.30</b>	<b>179.83</b>	<b>217.00</b>	<b>228.56</b>	..
People's Rep. of China	10.14	15.88	24.24	84.23	134.97	185.03	245.06	263.29	..
Hong Kong, China	0.50	0.82	1.50	3.76	2.04	2.19	2.20	2.43	..
<b>China</b>	<b>10.64</b>	<b>16.70</b>	<b>25.74</b>	<b>87.99</b>	<b>137.01</b>	<b>187.22</b>	<b>247.26</b>	<b>265.72</b>	..
Argentina	8.76	10.45	9.34	11.49	10.13	11.79	12.33	12.78	..
Bolivia	0.39	0.71	0.75	0.96	1.08	1.51	2.05	2.17	..
Brazil	18.84	24.20	27.00	41.18	43.86	53.66	68.67	63.54	..
Colombia	2.63	4.01	5.70	6.24	6.67	6.77	9.34	9.40	..
Costa Rica	0.28	0.44	0.53	1.00	1.25	1.52	1.66	1.77	..
Cuba	1.48	1.77	1.77	0.78	0.68	0.45	0.46	0.49	..
Curaçao	0.45	0.51	0.29	0.44	0.47	0.51	0.36	0.35	..
Dominican Republic	0.53	0.60	0.78	1.76	1.89	1.86	1.57	1.90	..
Ecuador	0.70	1.34	2.59	2.91	3.22	4.16	5.36	5.64	..
El Salvador	0.22	0.29	0.42	0.84	1.02	1.00	0.95	1.12	..
Guatemala	0.32	0.45	0.57	1.29	1.71	1.89	2.16	2.49	..
Haiti	0.06	0.10	0.14	0.24	0.39	0.36	0.39	0.47	..
Honduras	0.18	0.21	0.35	0.70	0.75	1.00	1.15	1.37	..
Jamaica	0.54	0.29	0.37	0.66	0.75	0.63	0.59	0.57	..
Nicaragua	0.28	0.29	0.25	0.48	0.48	0.53	0.63	0.74	..
Panama	0.30	0.35	0.43	0.78	0.95	1.17	1.29	1.45	..
Paraguay	0.16	0.36	0.53	0.92	1.00	1.41	1.59	1.75	..
Peru	2.10	2.04	2.38	3.20	3.31	5.15	5.90	6.39	..
Suriname	..	..	..	0.10	0.17	0.22	0.23	0.23	..
Trinidad and Tobago	0.38	0.48	0.46	0.55	0.72	1.07	1.07	1.13	..
Uruguay	0.59	0.55	0.50	0.80	0.76	1.03	1.15	1.17	..
Venezuela	4.96	9.19	9.71	11.57	14.30	16.40	16.98	15.46	..
Other Non-OECD Americas	0.15	0.35	0.64	1.37	1.44	1.70	1.92	1.95	..
<b>Non-OECD Americas</b>	<b>44.28</b>	<b>58.98</b>	<b>65.49</b>	<b>90.24</b>	<b>96.98</b>	<b>115.79</b>	<b>137.77</b>	<b>134.32</b>	..
Bahrain	0.08	0.21	0.34	0.52	0.84	1.06	1.15	1.20	..
Islamic Republic of Iran	3.44	7.12	13.03	25.38	34.56	34.92	40.99	40.08	..
Iraq	0.98	3.26	7.25	8.77	8.69	9.35	9.68	8.47	..
Jordan	0.24	0.55	0.91	1.20	1.61	1.75	2.35	2.61	..
Kuwait	0.75	1.79	0.97	2.06	2.78	4.22	4.44	4.29	..
Lebanon	0.55	0.64	0.64	1.38	1.39	1.74	1.89	1.91	..
Oman	0.04	0.22	0.58	0.90	1.24	2.76	4.20	4.44	..
Qatar	0.11	0.35	0.50	0.81	1.57	3.46	4.68	4.93	..
Saudi Arabia	1.45	6.59	16.40	20.37	25.32	35.23	43.92	47.51	..
Syrian Arab Republic	0.58	1.21	2.42	2.79	4.48	4.11	2.21	2.14	..
United Arab Emirates	0.26	2.30	3.72	4.92	7.56	10.05	11.98	10.43	..
Yemen	0.41	0.76	1.35	1.49	1.90	2.42	2.74	1.05	..
<b>Middle East</b>	<b>8.88</b>	<b>24.99</b>	<b>48.10</b>	<b>70.60</b>	<b>91.94</b>	<b>111.07</b>	<b>130.22</b>	<b>129.08</b>	..

Includes non-energy use in transport.

## Transport consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>10.596</b>	<b>13.865</b>	<b>20.926</b>	<b>18.570</b>	<b>22.797</b>	<b>30.197</b>	<b>35.304</b>	<b>35.902</b>	..
<b>Non-OECD Total</b>	<b>5.292</b>	<b>7.799</b>	<b>13.291</b>	<b>9.604</b>	<b>13.904</b>	<b>21.607</b>	<b>26.554</b>	<b>26.655</b>	..
<b>OECD Total</b>	<b>5.303</b>	<b>6.066</b>	<b>7.635</b>	<b>8.966</b>	<b>8.892</b>	<b>8.590</b>	<b>8.750</b>	<b>9.247</b>	..
Canada	0.278	0.196	0.281	0.389	0.366	0.355	0.410	0.444	..
Chile	0.017	0.017	0.018	0.019	0.022	0.037	0.058	0.079	..
Mexico	0.031	0.037	0.069	0.095	0.094	0.102	0.097	0.098	..
United States	0.369	0.266	0.355	0.380	0.535	0.552	0.654	0.763	..
<b>OECD Americas</b>	<b>0.694</b>	<b>0.517</b>	<b>0.723</b>	<b>0.883</b>	<b>1.016</b>	<b>1.046</b>	<b>1.219</b>	<b>1.383</b>	..
Australia	0.057	0.077	0.155	0.201	0.297	0.316	0.410	0.471	..
Israel <sup>1</sup>	-	-	-	-	-	-	-	-	..
Japan	1.138	1.310	1.407	1.562	1.639	1.614	1.533	1.542	..
Korea	0.011	0.034	0.087	0.175	0.224	0.188	0.172	0.191	..
New Zealand	0.003	0.003	0.005	0.006	0.006	0.005	0.005	0.005	..
<b>OECD Asia Oceania</b>	<b>1.209</b>	<b>1.423</b>	<b>1.655</b>	<b>1.943</b>	<b>2.165</b>	<b>2.123</b>	<b>2.121</b>	<b>2.209</b>	..
Austria	0.151	0.196	0.238	0.298	0.295	0.295	0.263	0.267	..
Belgium	0.070	0.083	0.107	0.124	0.146	0.149	0.135	0.139	..
Czech Republic	0.163	0.197	0.272	0.201	0.188	0.140	0.134	0.138	..
Denmark	0.009	0.012	0.018	0.030	0.032	0.035	0.033	0.034	..
Estonia	..	..	0.030	0.008	0.009	0.008	0.004	0.004	..
Finland	0.005	0.019	0.037	0.046	0.056	0.064	0.062	0.060	..
France	0.550	0.595	0.643	0.807	0.848	0.863	0.857	0.875	..
Germany	0.848	1.030	1.175	1.368	1.132	1.042	0.997	0.970	..
Greece	0.004	0.008	0.011	0.020	0.017	0.016	0.029	0.033	..
Hungary	0.068	0.093	0.102	0.087	0.094	0.095	0.099	0.100	..
Iceland	-	-	-	-	-	-	0.000	0.002	..
Ireland	-	-	0.001	0.002	0.005	0.004	0.003	0.004	..
Italy	0.325	0.413	0.578	0.732	0.853	0.917	0.900	0.934	..
Latvia	..	..	0.022	0.013	0.013	0.011	0.010	0.009	..
Luxembourg	0.003	0.004	0.005	0.005	0.008	0.010	0.011	0.011	..
Netherlands	0.077	0.084	0.111	0.141	0.139	0.151	0.148	0.151	..
Norway	0.045	0.059	0.056	0.054	0.052	0.059	0.066	0.074	..
Poland	0.298	0.415	0.471	0.400	0.343	0.287	0.259	0.267	..
Portugal	0.019	0.021	0.027	0.031	0.041	0.041	0.026	0.026	..
Slovak Republic	0.054	0.084	0.100	0.083	0.049	0.046	0.049	0.052	..
Slovenia	..	..	0.019	0.023	0.017	0.015	0.012	0.013	..
Spain	0.125	0.164	0.316	0.358	0.461	0.277	0.358	0.522	..
Sweden	0.179	0.195	0.213	0.275	0.242	0.207	0.225	0.223	..
Switzerland	0.174	0.180	0.221	0.227	0.257	0.272	0.264	0.270	..
Turkey	0.009	0.013	0.030	0.066	0.065	0.051	0.079	0.091	..
United Kingdom	0.225	0.261	0.454	0.742	0.349	0.366	0.387	0.385	..
<b>OECD Europe</b>	<b>3.400</b>	<b>4.125</b>	<b>5.257</b>	<b>6.140</b>	<b>5.711</b>	<b>5.421</b>	<b>5.410</b>	<b>5.655</b>	..
<i>IEA</i>	<i>5.256</i>	<i>6.011</i>	<i>7.507</i>	<i>8.816</i>	<i>8.747</i>	<i>8.425</i>	<i>8.573</i>	<i>9.047</i>	..
<i>IEA/Accession/Association</i>	<i>5.569</i>	<i>6.498</i>	<i>8.491</i>	<i>10.964</i>	<i>13.025</i>	<i>20.129</i>	<i>25.076</i>	<i>26.373</i>	..
<i>European Union - 28</i>	..	..	<i>5.337</i>	<i>6.025</i>	<i>5.551</i>	<i>5.219</i>	<i>5.145</i>	<i>5.369</i>	..
<i>G7</i>	<i>3.733</i>	<i>4.071</i>	<i>4.894</i>	<i>5.979</i>	<i>5.722</i>	<i>5.709</i>	<i>5.738</i>	<i>5.913</i>	..
<i>G8</i>	..	..	<i>13.818</i>	<i>11.218</i>	<i>12.875</i>	<i>13.043</i>	<i>13.500</i>	<i>12.975</i>	..
<i>G20</i>	..	..	<i>17.980</i>	<i>16.734</i>	<i>20.581</i>	<i>27.594</i>	<i>32.966</i>	<i>33.512</i>	..
<i>OPEC</i>	<i>0.002</i>	<i>0.001</i>	<i>0.047</i>	<i>0.055</i>	<i>0.073</i>	<i>0.105</i>	<i>0.129</i>	<i>0.152</i>	..

1. Please refer to section 'Geographical coverage'.

## Transport consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>5.292</b>	<b>7.799</b>	<b>13.291</b>	<b>9.604</b>	<b>13.904</b>	<b>21.607</b>	<b>26.554</b>	<b>26.655</b>	..
Albania	-	-	-	-	0.001	-	-	-	..
Armenia	..	..	0.033	0.011	0.011	0.010	0.010	0.009	..
Azerbaijan	..	..	0.069	0.046	0.050	0.047	0.046	0.041	..
Belarus	..	..	0.254	0.158	0.173	0.139	0.110	0.106	..
Bosnia and Herzegovina	..	..	-	-	-	0.012	0.007	0.008	..
Bulgaria	-	0.089	0.112	0.045	0.043	0.034	0.026	0.030	..
Croatia	..	..	0.032	0.021	0.022	0.023	0.020	0.021	..
Cyprus <sup>1</sup>	0.003	0.000	-	-	-	-	-	-	..
FYR of Macedonia	..	..	0.002	0.002	0.002	0.002	0.002	0.001	..
Georgia	..	..	0.093	0.039	0.031	0.047	0.023	0.025	..
Gibraltar	..	..	-	-	-	-	-	-	..
Kazakhstan	..	..	0.556	0.130	0.297	0.269	0.216	0.307	..
Kosovo	..	..	..	-	-	-	-	-	..
Kyrgyzstan	..	..	0.012	0.010	-	-	0.020	0.015	..
Lithuania	..	..	0.018	0.007	0.009	0.007	0.005	0.006	..
Malta	..	..	-	-	-	-	-	-	..
Republic of Moldova	..	..	0.007	0.008	0.007	0.004	0.004	0.004	..
Montenegro	..	..	..	..	0.002	0.002	0.003	0.003	..
Romania	-	0.165	0.225	0.160	0.138	0.117	0.091	0.093	..
Russian Federation	..	..	8.924	5.239	7.153	7.334	7.762	7.062	..
Serbia	..	..	0.039	0.022	0.021	0.019	0.029	0.030	..
Tajikistan	..	..	0.017	0.004	0.002	0.003	0.004	0.004	..
Turkmenistan	..	..	0.089	0.013	0.017	0.020	0.025	0.028	..
Ukraine	..	..	1.245	0.794	0.816	0.772	0.694	0.585	..
Uzbekistan	..	..	0.107	0.113	0.115	0.121	0.130	0.131	..
Former Soviet Union	4.627	6.536	x	x	x	x	x	x	..
Former Yugoslavia	0.062	0.077	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>4.692</b>	<b>6.868</b>	<b>11.837</b>	<b>6.820</b>	<b>8.909</b>	<b>8.980</b>	<b>9.226</b>	<b>8.512</b>	..
Algeria	0.002	0.001	0.024	0.030	0.041	0.055	0.075	0.084	..
Angola	-	-	-	-	-	-	-	-	..
Benin	-	-	-	-	-	-	-	-	..
Botswana	..	..	-	-	-	-	-	-	..
Cameroon	-	-	-	-	-	-	-	-	..
Congo	-	-	-	-	-	-	-	-	..
Côte d'Ivoire	-	-	-	-	-	-	-	-	..
Dem. Rep. of the Congo	-	-	-	-	-	-	-	-	..
Egypt	-	-	-	-	-	-	0.044	0.052	..
Eritrea	..	..	..	-	-	-	-	-	..
Ethiopia	-	-	-	-	-	-	-	-	..
Gabon	-	-	-	0.000	0.000	0.001	0.001	0.001	..
Ghana	-	-	-	-	-	-	-	-	..
Kenya	-	-	-	-	-	-	-	-	..
Libya	-	-	-	-	-	-	-	-	..
Mauritius	-	-	-	-	-	-	-	-	..
Morocco	0.007	0.009	0.017	0.018	0.018	0.024	0.029	0.030	..
Mozambique	-	-	-	-	-	-	-	-	..
Namibia	..	..	..	-	-	-	-	-	..
Niger	..	..	..	-	-	-	-	-	..
Nigeria	-	-	-	-	-	-	-	-	..
Senegal	-	-	-	-	-	-	-	-	..
South Africa	0.249	0.372	0.340	0.463	0.468	0.309	0.318	0.296	..
South Sudan	..	..	..	..	..	..	-	-	..
Sudan	-	-	-	-	-	-	-	-	..
United Rep. of Tanzania	-	-	-	-	-	-	-	-	..
Togo	-	-	-	-	-	-	-	-	..
Tunisia	-	0.004	0.009	0.016	0.020	0.007	0.008	0.008	..
Zambia	-	-	0.001	0.001	0.001	0.002	0.003	0.003	..
Zimbabwe	-	-	-	-	-	-	-	-	..
Other Africa	-	-	-	0.001	0.001	0.001	0.002	0.002	..
<b>Africa</b>	<b>0.259</b>	<b>0.387</b>	<b>0.391</b>	<b>0.530</b>	<b>0.549</b>	<b>0.397</b>	<b>0.478</b>	<b>0.475</b>	..

1. Please refer to section 'Geographical coverage'.

## Transport consumption of electricity (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	-	-	-	-	-	-	-	-	..
Brunei Darussalam	-	-	-	-	-	-	-	-	..
Cambodia	..	..	..	-	-	-	-	-	..
DPR of Korea	-	-	-	-	-	-	-	-	..
India	0.132	0.195	0.354	0.706	0.855	1.146	1.391	1.447	..
Indonesia	-	-	-	-	-	-	-	-	..
Malaysia	-	-	-	0.004	0.005	0.018	0.022	0.023	..
Mongolia	..	..	-	-	-	-	-	-	..
Myanmar	-	-	-	-	-	-	-	-	..
Nepal	-	0.000	0.000	0.001	0.001	0.001	0.001	0.001	..
Pakistan	0.002	0.003	0.003	0.001	0.001	0.000	-	-	..
Philippines	-	-	-	0.005	0.008	0.010	0.010	0.008	..
Singapore	-	-	0.016	0.025	0.103	0.181	0.210	0.210	..
Sri Lanka	-	-	-	-	-	-	-	-	..
Chinese Taipei	0.000	0.018	0.017	0.039	0.045	0.100	0.114	0.116	..
Thailand	-	-	-	0.003	0.005	0.006	0.014	0.015	..
Viet Nam	-	-	-	-	-	-	-	-	..
Other Asia	-	-	-	-	-	-	-	-	..
<b>Non-OECD Asia excl. China</b>	<b>0.134</b>	<b>0.216</b>	<b>0.391</b>	<b>0.785</b>	<b>1.023</b>	<b>1.461</b>	<b>1.761</b>	<b>1.820</b>	..
People's Rep. of China	0.126	0.228	0.510	1.282	3.181	10.208	14.704	15.449	..
Hong Kong, China	-	-	-	-	-	-	-	-	..
<b>China</b>	<b>0.126</b>	<b>0.228</b>	<b>0.510</b>	<b>1.282</b>	<b>3.181</b>	<b>10.208</b>	<b>14.704</b>	<b>15.449</b>	..
Argentina	0.025	0.023	0.027	0.045	0.052	0.058	0.051	0.052	..
Bolivia	-	-	-	-	-	-	-	-	..
Brazil	0.052	0.071	0.103	0.108	0.102	0.143	0.240	0.238	..
Colombia	-	-	-	0.004	0.004	0.005	0.007	0.007	..
Costa Rica	0.001	0.001	0.001	-	-	-	-	-	..
Cuba	0.003	0.006	0.008	0.008	0.009	0.022	0.026	0.027	..
Curaçao	-	-	-	-	-	-	-	-	..
Dominican Republic	-	-	-	-	-	0.002	0.004	0.005	..
Ecuador	-	-	-	0.001	0.001	0.001	0.001	0.001	..
El Salvador	-	-	-	-	-	-	-	-	..
Guatemala	-	-	-	-	-	-	-	-	..
Haiti	-	-	-	-	-	-	-	-	..
Honduras	-	-	-	-	-	-	-	-	..
Jamaica	-	-	-	-	-	-	-	-	..
Nicaragua	-	-	-	-	-	-	-	-	..
Panama	-	-	-	-	-	-	-	-	..
Paraguay	-	-	-	-	-	-	-	-	..
Peru	-	-	-	-	-	0.233	0.003	0.004	..
Suriname	..	..	..	-	-	-	-	-	..
Trinidad and Tobago	-	-	-	-	-	-	-	-	..
Uruguay	-	-	-	-	-	-	-	-	..
Venezuela	-	-	0.024	0.022	0.022	0.024	0.021	0.020	..
Other Non-OECD Americas	-	-	-	-	0.043	0.046	-	-	..
<b>Non-OECD Americas</b>	<b>0.081</b>	<b>0.100</b>	<b>0.162</b>	<b>0.187</b>	<b>0.233</b>	<b>0.534</b>	<b>0.353</b>	<b>0.353</b>	..
Bahrain	-	-	-	-	-	-	-	-	..
Islamic Republic of Iran	-	-	-	0.001	0.009	0.026	0.031	0.047	..
Iraq	-	-	-	-	-	-	-	-	..
Jordan	-	-	-	-	-	-	-	-	..
Kuwait	-	-	-	-	-	-	-	-	..
Lebanon	-	-	-	-	-	-	-	-	..
Oman	-	-	-	-	-	-	-	-	..
Qatar	-	-	-	-	-	-	-	-	..
Saudi Arabia	-	-	-	-	-	-	-	-	..
Syrian Arab Republic	-	-	-	-	-	-	-	-	..
United Arab Emirates	-	-	-	-	-	-	-	-	..
Yemen	-	-	-	-	-	-	-	-	..
<b>Middle East</b>	-	-	-	<b>0.001</b>	<b>0.009</b>	<b>0.026</b>	<b>0.031</b>	<b>0.047</b>	..

## Total transport consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 088.50</b>	<b>1 256.28</b>	<b>1 583.82</b>	<b>1 972.94</b>	<b>2 222.30</b>	<b>2 436.87</b>	<b>2 633.35</b>	<b>2 712.85</b>	..
<b>Non-OECD Total</b>	<b>202.71</b>	<b>289.03</b>	<b>434.18</b>	<b>545.85</b>	<b>689.37</b>	<b>884.52</b>	<b>1 057.03</b>	<b>1 090.67</b>	..
<b>OECD Total</b>	<b>701.60</b>	<b>788.73</b>	<b>947.35</b>	<b>1 153.16</b>	<b>1 213.99</b>	<b>1 193.56</b>	<b>1 212.54</b>	<b>1 240.39</b>	..
Canada	33.60	44.32	43.40	52.34	54.66	58.50	61.52	61.40	..
Chile	1.84	2.09	3.05	5.67	6.16	7.14	7.87	8.45	..
Mexico	12.41	22.80	28.31	35.84	44.24	51.09	51.29	51.09	..
United States	418.11	429.31	492.45	593.07	623.08	595.41	617.33	633.71	..
<b>OECD Americas</b>	<b>465.95</b>	<b>498.52</b>	<b>567.20</b>	<b>686.92</b>	<b>728.14</b>	<b>712.13</b>	<b>738.01</b>	<b>754.65</b>	..
Australia	12.93	16.82	21.11	25.66	27.14	29.99	31.75	32.52	..
Israel <sup>1</sup>	1.15	1.39	2.69	4.45	4.49	5.48	5.35	5.65	..
Japan	41.13	54.22	68.99	85.20	80.30	74.44	72.31	72.13	..
Korea	2.50	4.78	14.57	26.75	29.82	30.62	32.33	33.92	..
New Zealand	1.94	2.29	2.96	4.06	4.54	4.57	4.62	4.81	..
<b>OECD Asia Oceania</b>	<b>59.66</b>	<b>79.51</b>	<b>110.32</b>	<b>146.12</b>	<b>146.29</b>	<b>145.09</b>	<b>146.37</b>	<b>149.02</b>	..
Austria	4.13	4.28	4.90	6.51	8.48	8.19	8.21	8.44	..
Belgium	4.42	5.50	6.93	8.22	8.71	8.98	8.59	9.01	..
Czech Republic	2.40	2.48	2.79	4.43	6.04	6.03	6.03	6.31	..
Denmark	2.70	3.03	3.48	4.06	4.49	4.39	4.03	4.10	..
Estonia	..	..	0.84	0.56	0.72	0.75	0.74	0.76	..
Finland	2.41	2.80	3.95	3.95	4.26	4.32	4.14	4.15	..
France	25.15	30.72	38.92	45.23	44.72	43.86	43.57	44.02	..
Germany	36.54	44.75	54.96	59.90	55.33	53.46	55.30	56.01	..
Greece	2.07	3.19	5.16	6.44	7.38	7.51	5.66	5.77	..
Hungary	2.28	2.88	2.93	3.04	4.09	4.18	3.96	4.29	..
Iceland	0.13	0.16	0.21	0.21	0.23	0.28	0.28	0.30	..
Ireland	1.17	1.58	1.68	3.54	4.30	3.94	3.70	3.75	..
Italy	18.96	24.35	32.96	40.17	42.26	38.77	37.37	36.70	..
Latvia	..	..	1.09	0.74	1.04	1.10	1.00	1.07	..
Luxembourg	0.23	0.44	0.88	1.61	2.37	2.19	2.11	1.98	..
Netherlands	6.53	7.68	9.27	10.92	11.68	11.75	10.34	10.49	..
Norway	2.30	2.89	3.41	4.06	4.38	4.85	4.82	4.93	..
Poland	8.97	9.17	7.17	9.76	12.26	17.07	15.76	16.71	..
Portugal	1.64	2.32	3.31	5.92	6.38	6.47	5.46	5.55	..
Slovak Republic	1.68	1.50	1.45	1.43	2.35	2.59	2.20	2.18	..
Slovenia	..	..	0.90	1.21	1.45	1.78	1.80	1.77	..
Spain	10.85	15.07	21.54	30.52	36.88	34.11	28.27	29.68	..
Sweden	5.35	5.92	6.99	7.57	8.07	7.88	7.81	7.93	..
Switzerland	3.59	3.74	5.21	5.88	5.89	6.08	5.96	5.75	..
Turkey	4.38	5.49	9.35	12.04	12.84	15.33	21.20	24.72	..
United Kingdom	28.12	30.76	39.53	42.18	42.97	40.47	39.85	40.34	..
<b>OECD Europe</b>	<b>176.00</b>	<b>210.71</b>	<b>269.83</b>	<b>320.12</b>	<b>339.56</b>	<b>336.34</b>	<b>328.16</b>	<b>336.72</b>	..
International marine bunkers	121.64	110.99	115.78	155.06	177.71	205.91	195.26	204.84	..
International aviation bunkers	62.54	67.53	86.51	118.87	141.23	152.88	168.53	176.95	..
<i>IEA</i>	<i>686.08</i>	<i>762.29</i>	<i>911.10</i>	<i>1 105.03</i>	<i>1 156.38</i>	<i>1 126.69</i>	<i>1 144.95</i>	<i>1 172.06</i>	..
<i>IEA/Accession/Association</i>	<i>736.73</i>	<i>840.45</i>	<i>1 020.24</i>	<i>1 308.28</i>	<i>1 436.95</i>	<i>1 517.22</i>	<i>1 636.14</i>	<i>1 692.96</i>	..
<i>European Union - 28</i>	..	..	<i>261.75</i>	<i>306.50</i>	<i>327.10</i>	<i>321.76</i>	<i>308.52</i>	<i>314.23</i>	..
<i>G7</i>	<i>601.61</i>	<i>658.43</i>	<i>771.21</i>	<i>918.08</i>	<i>943.32</i>	<i>904.91</i>	<i>927.25</i>	<i>944.30</i>	..
<i>G8</i>	..	..	<i>887.08</i>	<i>992.55</i>	<i>1 031.89</i>	<i>1 001.40</i>	<i>1 021.99</i>	<i>1 038.17</i>	..
<i>G20</i>	..	..	<i>1 192.64</i>	<i>1 452.22</i>	<i>1 603.31</i>	<i>1 718.55</i>	<i>1 860.42</i>	<i>1 917.37</i>	..
<i>OPEC</i>	<i>16.04</i>	<i>40.53</i>	<i>66.03</i>	<i>94.37</i>	<i>122.07</i>	<i>151.43</i>	<i>175.79</i>	<i>176.89</i>	..

Includes non-energy use in transport.

World includes international marine bunkers and international aviation bunkers.

1. Please refer to section 'Geographical coverage'.

## Total transport consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>202.71</b>	<b>289.03</b>	<b>434.18</b>	<b>545.85</b>	<b>689.37</b>	<b>884.52</b>	<b>1 057.03</b>	<b>1 090.67</b>	<b>..</b>
Albania	0.26	0.49	0.23	0.48	0.78	0.73	0.84	0.82	..
Armenia	..	..	1.05	0.21	0.25	0.50	0.56	0.57	..
Azerbaijan	..	..	2.23	0.88	1.53	1.75	2.63	2.44	..
Belarus	..	..	4.15	2.34	2.81	3.84	4.11	3.67	..
Bosnia and Herzegovina	..	..	0.73	0.70	0.76	1.13	0.98	1.03	..
Bulgaria	1.59	1.51	2.28	1.91	2.65	2.71	2.95	3.23	..
Croatia	..	..	1.26	1.49	1.85	1.98	1.90	2.00	..
Cyprus <sup>1</sup>	0.25	0.21	0.38	0.58	0.67	0.76	0.60	0.62	..
FYR of Macedonia	..	..	0.26	0.34	0.35	0.46	0.54	0.62	..
Georgia	..	..	1.39	0.36	0.55	0.80	1.18	1.31	..
Gibraltar	0.01	0.01	0.03	0.08	0.10	0.11	0.13	0.14	..
Kazakhstan	..	..	5.45	3.32	3.54	4.75	4.88	5.35	..
Kosovo	..	..	..	0.19	0.27	0.32	0.34	0.37	..
Kyrgyzstan	..	..	2.02	0.30	0.37	0.67	1.09	0.93	..
Lithuania	..	..	1.87	1.05	1.41	1.50	1.66	1.76	..
Malta	0.08	0.09	0.15	0.15	0.11	0.19	0.19	0.20	..
Republic of Moldova	..	..	0.84	0.26	0.41	0.58	0.60	0.65	..
Montenegro	..	..	..	..	0.16	0.23	0.17	0.19	..
Romania	2.84	2.54	4.15	3.38	4.18	4.83	5.33	5.41	..
Russian Federation	..	..	115.87	74.48	88.56	96.49	94.75	93.87	..
Serbia	..	..	1.52	0.79	2.21	2.20	2.01	1.98	..
Tajikistan	..	..	0.27	0.02	0.05	0.10	0.84	0.82	..
Turkmenistan	..	..	3.90	2.44	3.25	2.96	4.32	4.33	..
Ukraine	..	..	19.45	10.43	11.77	12.95	10.34	8.76	..
Uzbekistan	..	..	2.08	3.90	3.35	3.06	2.63	2.53	..
Former Soviet Union	73.23	97.65	x	x	x	x	x	x	..
Former Yugoslavia	3.82	4.44	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>82.07</b>	<b>106.93</b>	<b>171.58</b>	<b>110.07</b>	<b>131.95</b>	<b>145.58</b>	<b>145.55</b>	<b>143.57</b>	<b>..</b>
Algeria	1.00	2.09	5.34	5.77	8.29	10.66	14.61	15.59	..
Angola	0.47	0.33	0.34	0.36	0.82	2.13	2.81	3.03	..
Benin	0.10	0.09	0.05	0.31	0.52	1.06	1.36	1.53	..
Botswana	..	..	0.22	0.41	0.51	0.65	0.74	0.80	..
Cameroon	0.21	0.39	0.58	0.62	0.70	0.90	1.10	1.17	..
Congo	0.12	0.17	0.17	0.14	0.24	0.49	0.66	0.68	..
Côte d'Ivoire	0.31	0.52	0.40	0.42	0.40	0.50	0.87	1.04	..
Dem. Rep. of the Congo	0.17	0.21	0.19	0.26	0.37	0.55	1.49	0.88	..
Egypt	1.49	2.73	5.36	9.57	10.19	14.89	17.85	18.34	..
Eritrea	..	..	..	0.07	0.06	0.05	0.06	0.06	..
Ethiopia	0.19	0.21	0.31	0.52	0.71	0.93	1.46	1.62	..
Gabon	0.01	0.08	0.11	0.11	0.12	0.21	0.27	0.27	..
Ghana	0.37	0.42	0.54	0.98	1.20	1.71	2.42	2.62	..
Kenya	0.53	0.64	0.90	0.89	0.94	1.65	2.17	2.69	..
Libya	0.55	1.57	2.07	3.71	4.27	6.06	6.33	6.01	..
Mauritius	0.06	0.08	0.15	0.25	0.28	0.31	0.36	0.37	..
Morocco	0.68	0.87	1.30	2.68	3.33	4.45	5.01	5.20	..
Mozambique	0.10	0.10	0.20	0.28	0.34	0.56	0.73	0.84	..
Namibia	..	..	..	0.38	0.52	0.60	0.67	0.71	..
Niger	..	..	..	0.12	0.13	0.27	0.39	0.40	..
Nigeria	1.36	4.54	3.97	7.41	9.74	9.41	7.30	8.43	..
Senegal	0.17	0.24	0.24	0.38	0.48	0.67	0.79	0.85	..
South Africa	9.53	8.55	10.30	12.32	14.97	16.40	17.88	18.17	..
South Sudan	..	..	..	..	..	..	0.32	0.22	..
Sudan	0.80	0.75	1.29	0.87	1.62	2.91	2.60	2.61	..
United Rep. of Tanzania	0.27	0.23	0.23	0.48	0.88	1.14	1.97	2.33	..
Togo	0.07	0.11	0.14	0.14	0.21	0.53	0.46	0.48	..
Tunisia	0.35	0.58	0.83	1.34	1.53	2.40	2.17	2.30	..
Zambia	0.25	0.29	0.26	0.24	0.33	0.22	0.38	0.39	..
Zimbabwe	0.68	0.57	0.65	0.64	0.44	0.40	0.88	0.86	..
Other Africa	0.46	1.12	1.65	2.44	2.95	3.79	4.53	4.62	..
<b>Africa</b>	<b>20.31</b>	<b>27.46</b>	<b>37.79</b>	<b>54.12</b>	<b>67.10</b>	<b>86.48</b>	<b>100.64</b>	<b>105.10</b>	<b>..</b>

Includes non-energy use in transport.

1. Please refer to section 'Geographical coverage'.

## Total transport consumption of energy (Mtoe)

Mtoe	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.08	0.32	0.54	1.00	1.67	2.61	3.10	3.25	..
Brunei Darussalam	0.03	0.11	0.19	0.27	0.32	0.40	0.46	0.46	..
Cambodia	..	..	..	0.44	0.50	1.03	1.28	1.43	..
DPR of Korea	0.67	1.84	1.56	0.56	0.43	0.44	0.45	0.47	..
India	12.53	16.63	20.81	31.92	38.72	64.25	78.56	86.03	..
Indonesia	3.08	5.95	10.71	20.85	23.69	34.10	44.02	44.17	..
Malaysia	1.56	2.14	4.88	10.81	13.69	14.93	22.31	21.10	..
Mongolia	..	..	0.51	0.32	0.35	0.48	0.66	0.67	..
Myanmar	0.43	0.63	0.44	1.16	1.54	0.81	2.66	3.57	..
Nepal	0.02	0.05	0.11	0.27	0.27	0.64	0.86	0.75	..
Pakistan	1.09	2.21	4.50	8.36	9.07	11.53	13.29	13.85	..
Philippines	3.28	3.46	4.52	8.10	8.30	8.04	9.16	10.59	..
Singapore	0.60	0.95	1.36	1.75	1.96	2.51	2.49	2.41	..
Sri Lanka	0.54	0.68	0.82	1.68	2.07	2.28	2.63	2.86	..
Chinese Taipei	1.21	2.85	6.60	11.50	12.76	12.14	12.18	12.46	..
Thailand	2.39	3.21	9.01	14.61	18.13	19.92	22.34	23.72	..
Viet Nam	0.97	0.65	1.38	3.50	6.37	10.14	9.79	10.67	..
Other Asia	0.71	0.93	0.95	1.18	1.42	2.87	3.59	3.40	..
<b>Non-OECD Asia excl. China</b>	<b>29.18</b>	<b>42.62</b>	<b>68.89</b>	<b>118.29</b>	<b>141.25</b>	<b>189.11</b>	<b>229.83</b>	<b>241.85</b>	..
People's Rep. of China	17.14	25.66	34.60	89.94	144.34	207.07	279.59	299.83	..
Hong Kong, China	0.50	0.82	1.50	3.76	2.04	2.19	2.21	2.44	..
<b>China</b>	<b>17.65</b>	<b>26.48</b>	<b>36.10</b>	<b>93.69</b>	<b>146.38</b>	<b>209.26</b>	<b>281.80</b>	<b>302.26</b>	..
Argentina	8.82	10.47	9.55	13.83	13.95	15.71	16.80	17.53	..
Bolivia	0.39	0.71	0.75	0.98	1.20	1.89	2.61	2.69	..
Brazil	19.09	25.71	32.96	47.37	52.55	69.99	86.44	84.10	..
Colombia	2.63	4.02	5.72	6.30	6.91	7.35	10.12	10.04	..
Costa Rica	0.28	0.44	0.53	1.00	1.25	1.52	1.66	1.77	..
Cuba	1.48	1.78	1.77	0.78	0.69	0.47	0.48	0.52	..
Curaçao	0.45	0.51	0.29	0.44	0.47	0.51	0.36	0.35	..
Dominican Republic	0.53	0.60	0.78	1.76	1.89	1.87	1.60	1.92	..
Ecuador	0.70	1.34	2.59	2.91	3.22	4.16	5.37	5.65	..
El Salvador	0.22	0.29	0.42	0.84	1.02	1.00	0.95	1.12	..
Guatemala	0.32	0.45	0.57	1.29	1.71	1.89	2.16	2.49	..
Haiti	0.06	0.10	0.14	0.24	0.39	0.36	0.39	0.47	..
Honduras	0.18	0.21	0.35	0.70	0.75	1.00	1.15	1.37	..
Jamaica	0.54	0.29	0.37	0.66	0.75	0.63	0.62	0.61	..
Nicaragua	0.28	0.29	0.25	0.48	0.48	0.53	0.63	0.74	..
Panama	0.30	0.35	0.43	0.78	0.95	1.17	1.32	1.45	..
Paraguay	0.18	0.37	0.56	0.92	1.01	1.49	1.69	1.87	..
Peru	2.10	2.04	2.38	3.20	3.31	5.85	6.83	7.38	..
Suriname	..	..	..	0.10	0.17	0.22	0.23	0.23	..
Trinidad and Tobago	0.38	0.48	0.46	0.55	0.72	1.07	1.07	1.13	..
Uruguay	0.59	0.55	0.50	0.80	0.76	1.04	1.20	1.24	..
Venezuela	4.96	9.19	9.74	11.67	14.43	16.43	17.01	15.49	..
Other Non-OECD Americas	0.15	0.35	0.64	1.37	1.48	1.75	1.92	1.95	..
<b>Non-OECD Americas</b>	<b>44.62</b>	<b>60.55</b>	<b>71.73</b>	<b>98.97</b>	<b>110.05</b>	<b>137.89</b>	<b>162.59</b>	<b>162.10</b>	..
Bahrain	0.08	0.21	0.34	0.52	0.84	1.06	1.15	1.20	..
Islamic Republic of Iran	3.44	7.12	13.03	25.49	35.25	40.05	47.38	46.79	..
Iraq	0.98	3.26	7.25	8.77	8.69	9.35	9.68	8.47	..
Jordan	0.24	0.55	0.91	1.20	1.61	1.75	2.35	2.61	..
Kuwait	0.75	1.79	0.97	2.06	2.78	4.22	4.44	4.29	..
Lebanon	0.55	0.64	0.64	1.38	1.39	1.74	1.89	1.91	..
Oman	0.04	0.22	0.58	0.90	1.24	2.76	4.20	4.44	..
Qatar	0.11	0.35	0.50	0.81	1.57	3.46	4.68	4.93	..
Saudi Arabia	1.45	6.59	16.40	20.37	25.32	35.23	43.92	47.51	..
Syrian Arab Republic	0.58	1.21	2.42	2.79	4.48	4.11	2.21	2.14	..
United Arab Emirates	0.26	2.30	3.72	4.92	7.56	10.05	11.98	10.43	..
Yemen	0.41	0.76	1.35	1.49	1.90	2.42	2.74	1.05	..
<b>Middle East</b>	<b>8.88</b>	<b>24.99</b>	<b>48.10</b>	<b>70.71</b>	<b>92.64</b>	<b>116.19</b>	<b>136.61</b>	<b>135.79</b>	..

Includes non-energy use in transport.

## GDP using exchange rates (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>22 577.0</b>	<b>28 173.6</b>	<b>37 949.0</b>	<b>49 923.6</b>	<b>58 086.8</b>	<b>66 018.1</b>	<b>73 547.2</b>	<b>75 489.0</b>	..
<b>Non-OECD Total</b>	<b>4 769.3</b>	<b>6 636.6</b>	<b>8 605.2</b>	<b>11 646.5</b>	<b>15 469.4</b>	<b>21 281.0</b>	<b>25 875.6</b>	<b>26 738.5</b>	..
<b>OECD Total</b>	<b>17 807.7</b>	<b>21 537.0</b>	<b>29 343.8</b>	<b>38 277.1</b>	<b>42 617.4</b>	<b>44 737.1</b>	<b>47 671.5</b>	<b>48 750.4</b>	<b>49 591.6</b>
Canada	616.8	781.3	1 014.1	1 342.7	1 524.5	1 613.5	1 779.6	1 796.4	1 822.7
Chile	40.8	52.7	76.2	144.8	181.0	217.5	257.2	263.1	267.3
Mexico	334.0	516.6	617.9	869.3	953.7	1 049.9	1 177.0	1 207.7	1 235.5
United States	5 490.3	6 529.2	9 064.4	12 713.1	14 408.1	14 964.4	16 177.5	16 597.4	16 865.6
<b>OECD Americas</b>	<b>6 481.9</b>	<b>7 879.7</b>	<b>10 772.6</b>	<b>15 069.9</b>	<b>17 067.4</b>	<b>17 845.3</b>	<b>19 391.3</b>	<b>19 864.7</b>	<b>20 191.2</b>
Australia	415.4	500.3	673.5	954.7	1 131.1	1 293.8	1 445.3	1 485.3	1 521.6
Israel <sup>1</sup>	51.8	65.8	95.2	170.7	188.7	233.8	270.7	277.5	287.9
Japan	2 358.9	2 976.7	4 682.8	5 348.9	5 672.3	5 700.1	5 914.0	5 986.1	6 045.9
Korea	79.5	141.1	362.9	710.0	894.7	1 094.5	1 234.3	1 266.6	1 302.4
New Zealand	66.8	70.0	82.7	111.7	135.9	146.6	162.0	167.4	174.0
<b>OECD Asia Oceania</b>	<b>2 972.4</b>	<b>3 753.9</b>	<b>5 897.2</b>	<b>7 296.1</b>	<b>8 022.7</b>	<b>8 468.7</b>	<b>9 026.5</b>	<b>9 183.0</b>	<b>9 331.9</b>
Austria	170.6	207.7	259.4	336.0	365.9	390.2	407.3	411.2	417.3
Belgium	225.4	270.9	330.5	412.5	451.3	483.5	500.7	508.1	514.2
Czech Republic	107.0	126.9	144.1	151.4	183.6	207.0	214.1	223.8	229.3
Denmark	167.7	186.4	229.1	298.2	318.6	322.0	335.6	341.0	345.4
Estonia	..	..	15.0	14.1	19.9	19.5	22.8	23.2	23.5
Finland	99.8	122.6	167.1	209.4	237.9	247.8	247.1	247.7	251.2
France	1 224.0	1 492.1	1 907.3	2 346.5	2 547.2	2 646.8	2 748.2	2 777.5	2 810.5
Germany	1 729.0	2 040.5	2 568.6	3 123.9	3 213.8	3 417.1	3 634.1	3 696.6	3 765.6
Greece	151.2	184.6	197.7	251.5	304.3	299.4	244.9	244.3	244.3
Hungary	72.3	92.7	103.8	106.6	131.6	130.3	138.5	142.9	145.7
Iceland	4.2	6.1	8.0	10.3	12.7	13.3	14.6	15.2	16.2
Ireland	42.1	57.9	82.6	165.1	216.3	221.3	239.9	303.0	318.8
Italy	1 074.6	1 379.8	1 749.2	2 060.2	2 158.7	2 125.1	2 043.5	2 059.5	2 077.6
Latvia	..	..	..	16.4	24.3	23.8	27.6	28.3	28.9
Luxembourg	13.7	14.9	24.1	40.8	47.2	53.2	59.7	62.1	64.7
Netherlands	354.1	425.6	530.5	734.7	785.1	836.4	851.6	868.3	886.9
Norway	145.5	198.4	255.7	367.1	409.3	428.5	457.6	465.0	470.0
Poland	197.2	228.2	226.7	326.2	379.8	479.3	535.6	556.2	571.1
Portugal	97.5	121.0	166.6	221.4	231.1	238.3	224.0	227.5	230.7
Slovak Republic	37.2	44.1	51.1	55.5	71.0	89.5	97.4	101.1	104.4
Slovenia	..	..	30.9	36.9	44.1	48.0	48.0	49.1	50.3
Spain	558.7	653.9	873.1	1 149.5	1 358.1	1 431.6	1 370.9	1 414.9	1 460.6
Sweden	228.5	258.4	321.1	396.5	451.4	488.4	519.3	540.6	557.7
Switzerland	336.8	344.4	429.0	483.4	520.7	581.2	620.7	625.9	634.0
Turkey	172.2	219.0	364.0	520.9	658.1	771.9	1 025.4	1 087.6	1 118.8
United Kingdom	1 144.1	1 227.4	1 638.9	2 076.0	2 385.4	2 429.7	2 624.7	2 682.3	2 730.7
<b>OECD Europe</b>	<b>8 353.4</b>	<b>9 903.4</b>	<b>12 674.0</b>	<b>15 911.1</b>	<b>17 527.3</b>	<b>18 423.0</b>	<b>19 253.8</b>	<b>19 702.8</b>	<b>20 068.5</b>
<i>IEA</i>	<i>17 376.8</i>	<i>20 895.8</i>	<i>28 515.6</i>	<i>37 028.7</i>	<i>41 212.9</i>	<i>43 150.8</i>	<i>45 876.5</i>	<i>46 909.5</i>	<i>47 705.4</i>
<i>IEA/Accession/Association</i>	<i>18 377.3</i>	<i>22 388.5</i>	<i>31 073.1</i>	<i>41 954.5</i>	<i>48 139.6</i>	<i>53 601.1</i>	<i>59 485.5</i>	<i>61 367.0</i>	..
<i>European Union - 28</i>	..	..	<i>11 879.3</i>	<i>14 769.3</i>	<i>16 239.4</i>	<i>16 977.9</i>	<i>17 504.6</i>	<i>17 889.6</i>	..
<i>G7</i>	<i>13 637.6</i>	<i>16 427.0</i>	<i>22 625.3</i>	<i>29 011.3</i>	<i>31 910.0</i>	<i>32 896.6</i>	<i>34 921.5</i>	<i>35 595.9</i>	..
<i>G8</i>	..	..	<i>24 134.7</i>	<i>30 026.3</i>	<i>33 276.8</i>	<i>34 523.2</i>	<i>36 712.1</i>	<i>37 319.7</i>	..
<i>G20</i>	..	..	<i>33 738.6</i>	<i>44 328.9</i>	<i>51 139.5</i>	<i>57 368.1</i>	<i>63 637.4</i>	<i>65 374.7</i>	..
<i>OPEC</i>	<i>970.7</i>	<i>1 231.6</i>	<i>1 290.7</i>	<i>1 707.0</i>	<i>2 206.1</i>	<i>2 823.0</i>	<i>3 238.0</i>	<i>3 282.3</i>	..

1. Please refer to section 'Geographical coverage'.



## GDP using exchange rates (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>4 769.3</b>	<b>6 636.6</b>	<b>8 605.2</b>	<b>11 646.5</b>	<b>15 469.4</b>	<b>21 281.0</b>	<b>25 875.6</b>	<b>26 738.5</b>	..
Albania	4.0	5.4	6.2	7.0	9.3	11.9	12.8	13.1	..
Armenia	..	..	6.4	4.3	7.7	9.3	11.1	11.5	..
Azerbaijan	..	..	22.3	13.1	24.8	52.9	58.4	59.0	..
Belarus	..	..	30.5	27.1	38.9	55.2	61.0	58.6	..
Bosnia and Herzegovina	..	..	3.4	11.3	14.9	17.2	17.8	18.3	..
Bulgaria	18.1	28.6	36.3	32.8	43.5	50.6	52.7	54.6	..
Croatia	..	..	58.0	46.8	58.3	59.7	57.4	58.3	..
Cyprus <sup>1</sup>	3.8	6.7	12.3	19.0	22.6	25.6	23.0	23.4	..
FYR of Macedonia	..	..	7.7	7.0	7.7	9.4	10.2	10.6	..
Georgia	..	..	16.9	6.4	9.1	11.6	14.4	14.8	..
Gibraltar	0.5	0.5	0.7	0.9	1.0	1.1	1.1	1.2	..
Kazakhstan	..	..	96.3	66.9	109.5	148.0	184.1	186.3	..
Kosovo	..	..	..	3.3	4.7	5.8	6.6	6.8	..
Kyrgyzstan	..	..	4.8	3.2	3.9	4.8	5.9	6.1	..
Lithuania	..	..	27.1	24.3	35.0	37.1	43.8	44.6	..
Malta	1.3	2.9	4.3	7.1	7.9	8.7	9.9	10.5	..
Republic of Moldova	..	..	9.9	3.5	5.0	5.8	7.1	7.0	..
Montenegro	..	..	..	..	3.3	4.1	4.4	4.5	..
Romania	65.1	116.3	124.0	110.0	145.5	168.0	182.3	189.0	..
Russian Federation	..	..	1 509.3	1 015.0	1 366.7	1 626.6	1 790.6	1 723.9	..
Serbia	..	..	24.6	25.6	34.6	39.5	39.9	40.2	..
Tajikistan	..	..	6.8	2.6	4.1	5.6	7.5	7.9	..
Turkmenistan	..	..	13.7	10.8	13.8	22.6	35.0	37.3	..
Ukraine	..	..	205.8	89.4	129.4	136.0	134.3	121.1	..
Uzbekistan	..	..	20.5	20.0	26.1	39.3	53.8	58.1	..
Former Soviet Union	1 215.3	1 628.2	x	x	x	x	x	x	x
Former Yugoslavia	89.7	139.5	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>1 397.9</b>	<b>1 928.2</b>	<b>2 247.6</b>	<b>1 557.2</b>	<b>2 127.1</b>	<b>2 556.5</b>	<b>2 824.8</b>	<b>2 766.6</b>	..
Algeria	45.9	70.0	92.0	110.4	142.3	161.2	182.9	189.8	..
Angola	26.8	25.0	32.0	34.5	46.2	82.5	100.9	103.9	..
Benin	1.8	2.2	3.0	4.8	5.8	7.0	8.6	8.8	..
Botswana	..	..	5.3	8.6	10.2	12.8	16.1	16.0	..
Cameroon	6.4	10.7	14.9	17.1	20.5	23.6	28.8	30.4	..
Congo	2.8	4.1	6.6	7.6	9.3	12.0	14.2	14.6	..
Côte d'Ivoire	12.0	16.5	17.8	22.3	22.3	24.9	31.1	34.0	..
Dem. Rep. of the Congo	23.3	21.2	23.1	13.0	15.7	20.5	27.8	29.7	..
Egypt	29.5	52.6	89.6	136.4	162.2	218.9	237.7	247.7	..
Eritrea	..	..	..	1.9	2.2	2.1	2.7	2.8	..
Ethiopia	8.1	8.2	10.0	13.1	17.9	29.9	44.1	48.3	..
Gabon	5.7	8.9	10.6	12.5	13.6	14.4	17.8	18.6	..
Ghana	9.9	9.7	12.0	18.4	23.5	32.2	44.8	46.5	..
Kenya	10.2	14.6	21.8	26.2	31.3	40.0	49.4	52.2	..
Libya	50.1	72.7	46.9	48.0	61.7	74.8	38.1	34.2	..
Mauritius	1.6	2.2	3.9	6.6	7.7	10.0	11.6	12.0	..
Morocco	18.4	27.2	43.2	57.5	73.0	93.2	108.3	113.2	..
Mozambique	2.8	2.3	2.3	4.6	7.1	10.2	13.4	14.3	..
Namibia	..	..	..	7.1	9.1	11.3	14.0	14.8	..
Niger	-	-	-	3.7	4.4	5.7	7.4	7.6	..
Nigeria	112.0	143.0	130.3	156.6	259.2	367.1	449.9	461.8	..
Senegal	4.2	4.9	6.4	8.6	10.9	12.9	14.8	15.8	..
South Africa	152.8	192.0	223.0	267.0	322.3	375.3	412.1	417.3	..
South Sudan	..	..	..	..	..	..	6.1	4.1	..
Sudan	10.7	15.5	19.8	34.1	46.4	65.6	69.3	72.7	..
United Rep. of Tanzania	6.7	8.3	12.2	16.5	23.4	31.4	40.9	43.7	..
Togo	1.4	1.9	2.1	2.6	2.7	3.2	3.8	4.0	..
Tunisia	8.2	12.9	18.3	29.1	35.3	44.1	47.6	48.1	..
Zambia	7.1	7.6	8.4	9.9	13.4	20.3	25.3	26.1	..
Zimbabwe	7.4	8.4	12.9	15.3	10.4	9.4	12.6	12.7	..
Other Africa	41.9	49.9	58.0	70.7	100.8	132.6	157.2	160.3	..
<b>Africa</b>	<b>607.8</b>	<b>792.6</b>	<b>926.4</b>	<b>1 164.8</b>	<b>1 510.5</b>	<b>1 949.0</b>	<b>2 239.3</b>	<b>2 306.1</b>	..

1. Please refer to section 'Geographical coverage'.

## GDP using exchange rates (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	22.2	28.6	42.4	67.0	85.9	115.3	147.0	156.6	..
Brunei Darussalam	6.8	11.5	9.6	12.0	13.3	13.7	13.7	13.6	..
Cambodia	..	..	..	5.2	8.1	11.2	14.9	15.9	..
DPR of Korea	10.5	22.4	42.7	29.8	28.9	26.8	26.6	26.9	..
India	213.3	274.7	471.6	811.5	1 123.4	1 656.6	2 127.8	2 296.6	..
Indonesia	109.8	181.5	309.8	453.4	571.2	755.1	942.3	987.5	..
Malaysia	27.8	45.8	81.8	162.5	204.9	255.0	314.3	330.0	..
Mongolia	..	..	3.8	3.8	5.3	7.2	11.4	11.7	..
Myanmar	6.9	10.3	11.7	23.3	42.6	61.9	82.7	88.6	..
Nepal	3.5	4.2	6.7	10.9	12.9	16.0	19.1	19.7	..
Pakistan	29.8	43.4	79.9	117.6	150.0	177.4	206.2	215.9	..
Philippines	54.5	80.0	94.5	125.3	156.9	199.6	251.0	265.8	..
Singapore	19.1	32.1	67.6	134.5	170.7	236.4	281.4	287.0	..
Sri Lanka	9.6	13.7	20.6	34.3	41.6	56.7	72.8	76.3	..
Chinese Taipei	41.4	82.5	155.1	296.7	361.6	446.1	502.0	505.8	..
Thailand	41.3	66.5	141.6	217.7	283.8	340.9	381.7	392.5	..
Viet Nam	14.5	16.9	29.5	61.1	85.4	115.9	144.8	154.5	..
Other Asia	22.9	28.6	34.3	42.8	58.5	83.5	109.1	103.5	..
<b>Non-OECD Asia excl. China</b>	<b>633.9</b>	<b>942.7</b>	<b>1 603.2</b>	<b>2 609.5</b>	<b>3 404.7</b>	<b>4 575.5</b>	<b>5 649.0</b>	<b>5 948.3</b>	..
People's Rep. of China	223.8	341.4	829.6	2 237.1	3 569.9	6 100.6	8 333.3	8 909.8	..
Hong Kong, China	30.6	54.3	104.1	153.4	188.6	228.6	258.0	264.3	..
<b>China</b>	<b>254.3</b>	<b>395.7</b>	<b>933.7</b>	<b>2 390.5</b>	<b>3 758.5</b>	<b>6 329.3</b>	<b>8 591.3</b>	<b>9 174.1</b>	..
Argentina	186.8	226.3	194.4	303.2	333.6	423.6	444.2	455.9	..
Bolivia	7.5	9.2	9.3	13.5	15.7	19.7	24.5	25.7	..
Brazil	637.7	1 010.4	1 192.7	1 538.7	1 774.8	2 208.9	2 421.6	2 330.4	..
Colombia	74.1	104.1	148.1	192.5	229.9	287.0	348.5	359.2	..
Costa Rica	8.5	11.9	15.2	24.5	29.5	37.3	42.8	44.4	..
Cuba	23.1	30.0	44.7	38.7	49.5	64.3	70.7	73.9	..
Curaçao	1.1	1.4	1.7	2.3	2.5	2.7	1.9	1.8	..
Dominican Republic	10.2	14.7	18.5	33.4	39.7	54.0	64.5	69.0	..
Ecuador	19.2	29.4	38.0	46.5	58.9	69.6	86.5	86.6	..
El Salvador	10.9	11.8	11.3	17.8	20.0	21.4	23.0	23.6	..
Guatemala	12.7	18.2	19.9	29.8	34.6	41.3	47.9	49.9	..
Haiti	4.8	6.6	6.3	6.6	6.4	6.6	7.7	7.8	..
Honduras	4.2	6.0	7.6	10.5	13.2	15.7	18.0	18.7	..
Jamaica	9.8	7.9	10.3	12.3	13.5	13.2	13.5	13.6	..
Nicaragua	5.9	5.4	4.7	6.6	7.7	8.7	10.7	11.2	..
Panama	6.2	8.7	9.9	16.5	20.4	28.9	39.9	42.2	..
Paraguay	3.9	7.5	11.3	14.3	15.7	20.0	24.7	25.4	..
Peru	51.9	64.7	58.5	85.8	105.8	147.5	180.3	186.2	..
Suriname	-	-	-	2.7	3.5	4.4	5.0	4.9	..
Trinidad and Tobago	7.4	10.2	8.0	12.4	18.3	22.2	22.8	22.7	..
Uruguay	15.7	21.4	21.4	29.9	30.2	40.3	47.4	47.8	..
Venezuela	183.1	217.0	235.3	289.4	328.3	393.8	422.0	398.0	..
Other Non-OECD Americas	17.5	22.5	29.6	34.9	39.0	40.4	42.7	43.4	..
<b>Non-OECD Americas</b>	<b>1 302.2</b>	<b>1 845.3</b>	<b>2 096.9</b>	<b>2 762.7</b>	<b>3 190.6</b>	<b>3 971.4</b>	<b>4 410.9</b>	<b>4 342.5</b>	..
Bahrain	2.5	7.6	8.9	15.3	19.6	25.7	29.9	30.8	..
Islamic Republic of Iran	226.5	165.1	205.5	281.9	368.5	467.8	463.9	464.1	..
Iraq	16.6	45.7	71.3	101.6	104.2	138.5	181.0	186.5	..
Jordan	3.5	7.1	8.7	14.3	19.5	26.4	29.5	30.2	..
Kuwait	60.5	53.3	40.7	73.4	108.9	115.4	137.1	139.7	..
Lebanon	20.3	14.4	11.4	21.8	26.3	38.0	40.7	41.2	..
Oman	6.4	11.4	27.0	42.4	44.3	58.6	67.9	71.7	..
Qatar	25.8	22.8	18.9	36.0	53.4	125.1	161.2	167.0	..
Saudi Arabia	152.5	261.9	245.1	320.5	407.0	526.8	649.6	672.2	..
Syrian Arab Republic	9.2	18.9	24.2	38.6	47.2	59.9	23.7	17.0	..
United Arab Emirates	46.1	116.9	124.1	195.6	254.0	286.0	347.0	360.0	..
Yemen	3.4	7.0	11.7	20.3	25.0	30.9	28.9	20.8	..
<b>Middle East</b>	<b>573.1</b>	<b>732.1</b>	<b>797.5</b>	<b>1 161.8</b>	<b>1 477.9</b>	<b>1 899.3</b>	<b>2 160.3</b>	<b>2 201.0</b>	..

## GDP using purchasing power parities (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>26 389.2</b>	<b>33 625.2</b>	<b>45 734.9</b>	<b>61 152.2</b>	<b>73 790.8</b>	<b>88 652.4</b>	<b>101 773.3</b>	<b>105 035.2</b>	..
<b>Non-OECD Total</b>	<b>9 383.7</b>	<b>12 969.3</b>	<b>17 646.5</b>	<b>24 278.9</b>	<b>32 533.4</b>	<b>45 049.9</b>	<b>55 133.8</b>	<b>57 304.3</b>	..
<b>OECD Total</b>	<b>17 005.5</b>	<b>20 656.0</b>	<b>28 088.4</b>	<b>36 873.3</b>	<b>41 257.4</b>	<b>43 602.5</b>	<b>46 639.6</b>	<b>47 730.9</b>	<b>48 560.5</b>
Canada	520.3	659.1	855.5	1 132.7	1 286.1	1 361.1	1 501.3	1 515.4	1 537.2
Chile	58.3	75.2	108.8	206.7	258.4	310.5	367.1	375.6	381.8
Mexico	550.4	851.3	1 018.2	1 432.5	1 571.7	1 730.2	1 939.6	1 990.2	2 033.1
United States	5 490.3	6 529.2	9 064.4	12 713.1	14 408.1	14 964.4	16 177.5	16 597.4	16 851.8
<b>OECD Americas</b>	<b>6 619.3</b>	<b>8 114.7</b>	<b>11 046.9</b>	<b>15 485.0</b>	<b>17 524.3</b>	<b>18 366.2</b>	<b>19 985.5</b>	<b>20 478.7</b>	<b>20 803.8</b>
Australia	301.3	363.0	488.6	692.6	820.6	938.6	1 048.5	1 077.5	1 106.6
Israel <sup>1</sup>	48.8	61.9	89.6	160.7	177.6	220.0	254.8	261.2	269.9
Japan	1 803.4	2 275.7	3 580.1	4 004.8	4 250.0	4 323.6	4 437.0	4 462.3	4 496.0
Korea	109.4	194.0	499.1	976.5	1 230.5	1 505.3	1 697.6	1 742.0	1 789.9
New Zealand	62.0	65.0	76.7	103.7	126.1	136.0	150.3	155.3	160.9
<b>OECD Asia Oceania</b>	<b>2 324.9</b>	<b>2 959.6</b>	<b>4 734.2</b>	<b>5 938.3</b>	<b>6 604.8</b>	<b>7 123.5</b>	<b>7 588.3</b>	<b>7 698.4</b>	<b>7 823.1</b>
Austria	153.3	186.6	233.0	301.8	328.7	350.5	365.8	369.3	374.8
Belgium	203.8	244.9	298.9	373.0	408.1	437.2	452.8	459.6	465.3
Czech Republic	149.7	177.5	201.7	211.9	256.9	289.7	299.7	313.3	320.9
Denmark	124.5	138.3	170.1	221.4	236.5	239.0	249.1	253.1	256.4
Estonia	..	..	22.1	20.9	29.4	28.8	33.7	34.2	34.7
Finland	83.9	103.0	140.4	175.9	199.9	208.2	207.6	208.1	211.0
France	1 083.4	1 320.7	1 688.2	2 076.9	2 254.5	2 342.7	2 425.0	2 455.9	2 485.0
Germany	1 624.6	1 917.4	2 413.6	2 935.3	3 019.8	3 210.8	3 414.7	3 473.5	3 538.0
Greece	158.4	193.4	207.1	263.5	318.9	313.7	256.5	256.0	256.0
Hungary	119.2	152.7	171.0	175.7	216.8	214.7	228.3	235.5	240.1
Iceland	3.9	5.6	7.3	9.5	11.7	12.2	13.4	14.0	14.6
Ireland	37.4	51.5	73.6	147.0	192.6	197.1	213.7	269.8	283.9
Italy	1 051.4	1 350.0	1 711.4	2 015.8	2 112.1	2 079.2	1 999.4	2 015.0	2 032.8
Latvia	..	..	35.1	25.5	37.8	36.9	42.8	44.0	44.8
Luxembourg	11.2	12.2	19.7	33.3	38.5	43.5	48.8	50.8	52.9
Netherlands	313.7	376.9	469.9	650.7	695.4	740.8	754.3	769.0	785.5
Norway	96.3	131.3	169.2	242.9	270.8	283.6	302.8	307.7	310.8
Poland	330.1	382.0	379.4	546.0	635.7	802.3	896.5	931.8	955.6
Portugal	118.4	146.9	202.2	268.7	280.6	289.3	271.9	276.2	280.1
Slovak Republic	56.0	66.5	77.0	83.6	106.9	134.8	146.7	152.3	157.3
Slovenia	..	..	36.6	43.8	52.3	56.9	56.9	58.2	59.6
Spain	581.4	680.4	908.6	1 196.2	1 413.2	1 489.7	1 426.6	1 472.3	1 520.0
Sweden	182.8	206.8	256.9	317.3	361.2	390.8	415.5	432.5	446.8
Switzerland	240.0	245.4	305.7	344.5	371.1	414.2	442.4	446.1	453.4
Turkey	281.7	358.3	595.4	852.2	1 076.7	1 262.8	1 677.6	1 779.2	1 831.4
United Kingdom	1 056.4	1 133.2	1 513.2	1 916.8	2 202.4	2 243.3	2 423.4	2 476.5	2 521.9
<b>OECD Europe</b>	<b>8 061.3</b>	<b>9 581.6</b>	<b>12 307.3</b>	<b>15 450.0</b>	<b>17 128.3</b>	<b>18 112.7</b>	<b>19 065.8</b>	<b>19 553.9</b>	<b>19 933.6</b>
<i>IEA</i>	<i>16 344.2</i>	<i>19 662.0</i>	<i>26 792.7</i>	<i>34 994.7</i>	<i>39 148.0</i>	<i>41 235.7</i>	<i>43 964.9</i>	<i>44 987.8</i>	<i>45 756.7</i>
<i>IEA/Accession/Association</i>	<i>18 558.9</i>	<i>22 925.0</i>	<i>32 502.3</i>	<i>45 870.3</i>	<i>54 488.5</i>	<i>64 404.9</i>	<i>74 139.1</i>	<i>77 097.8</i>	..
<i>European Union - 28</i>	..	..	<i>11 703.1</i>	<i>14 429.3</i>	<i>15 960.2</i>	<i>16 772.5</i>	<i>17 302.0</i>	<i>17 700.7</i>	..
<i>G7</i>	<i>12 629.8</i>	<i>15 185.4</i>	<i>20 826.4</i>	<i>26 795.3</i>	<i>29 533.1</i>	<i>30 525.2</i>	<i>32 378.2</i>	<i>32 996.1</i>	..
<i>G8</i>	..	..	<i>23 541.3</i>	<i>28 622.5</i>	<i>31 993.4</i>	<i>33 453.3</i>	<i>35 601.6</i>	<i>36 099.4</i>	..
<i>G20</i>	..	..	<i>37 424.4</i>	<i>50 212.2</i>	<i>59 914.3</i>	<i>71 071.8</i>	<i>81 509.9</i>	<i>84 274.8</i>	..
<i>OPEC</i>	<i>2 056.3</i>	<i>2 572.2</i>	<i>2 720.8</i>	<i>3 598.0</i>	<i>4 673.4</i>	<i>5 987.5</i>	<i>6 840.3</i>	<i>6 958.4</i>	..

1. Please refer to section 'Geographical coverage'.

## GDP using purchasing power parities (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>9 383.7</b>	<b>12 969.3</b>	<b>17 646.5</b>	<b>24 278.9</b>	<b>32 533.4</b>	<b>45 049.9</b>	<b>55 133.8</b>	<b>57 304.3</b>	..
Albania	9.0	12.4	14.0	15.8	21.1	27.1	29.0	29.8	..
Armenia	..	..	13.0	8.8	15.6	18.9	22.7	23.4	..
Azerbaijan	..	..	59.7	35.2	66.2	141.5	156.2	157.9	..
Belarus	..	..	80.7	71.6	102.7	146.0	161.2	154.9	..
Bosnia and Herzegovina	..	..	6.8	22.6	29.8	34.3	35.5	36.6	..
Bulgaria	39.9	63.0	80.0	72.2	95.9	111.6	116.2	120.4	..
Croatia	..	..	81.5	65.8	81.9	83.9	80.6	82.0	..
Cyprus <sup>1</sup>	4.2	7.4	13.5	20.9	24.9	28.2	25.3	25.8	..
FYR of Macedonia	..	..	19.7	18.0	19.8	24.1	26.1	27.1	..
Georgia	..	..	37.7	14.1	20.2	25.9	31.9	32.8	..
Gibraltar	0.4	0.4	0.6	0.8	0.9	0.9	1.0	1.0	..
Kazakhstan	..	..	217.9	151.2	247.7	334.9	416.4	421.4	..
Kosovo	..	..	..	7.7	11.2	13.8	15.5	16.1	..
Kyrgyzstan	..	..	14.9	10.0	12.0	14.9	18.2	18.8	..
Lithuania	..	..	45.3	40.7	58.7	62.2	73.4	74.7	..
Malta	1.6	3.7	5.4	9.0	10.0	11.1	12.5	13.3	..
Republic of Moldova	..	..	23.4	8.3	11.7	13.7	16.7	16.6	..
Montenegro	..	..	..	..	6.7	8.3	8.8	9.1	..
Romania	130.2	232.5	247.8	219.8	290.7	335.7	364.3	377.7	..
Russian Federation	..	..	2 714.9	1 827.2	2 460.4	2 928.1	3 223.4	3 103.3	..
Serbia	..	..	53.6	55.9	75.5	86.1	87.1	87.7	..
Tajikistan	..	..	18.9	7.2	11.5	15.8	20.9	22.1	..
Turkmenistan	..	..	30.0	23.6	30.3	49.6	76.8	81.7	..
Ukraine	..	..	533.4	231.7	335.3	352.5	348.2	313.8	..
Uzbekistan	..	..	60.9	59.7	77.7	117.1	160.2	173.0	..
Former Soviet Union	2 197.9	2 944.5	x	x	x	x	x	x	x
Former Yugoslavia	144.5	224.6	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>2 527.7</b>	<b>3 488.5</b>	<b>4 373.6</b>	<b>2 997.7</b>	<b>4 118.2</b>	<b>4 986.1</b>	<b>5 528.2</b>	<b>5 421.1</b>	..
Algeria	129.8	197.8	259.9	311.9	401.9	455.4	516.7	536.1	..
Angola	43.8	40.9	52.4	56.5	75.7	135.0	165.1	170.1	..
Benin	4.3	5.2	7.1	11.2	13.6	16.4	20.2	20.6	..
Botswana	..	..	10.9	17.6	21.1	26.3	33.1	33.0	..
Cameroon	14.1	23.6	32.7	37.5	45.0	51.9	63.3	66.9	..
Congo	5.2	7.7	12.3	14.2	17.3	22.3	26.4	27.1	..
Côte d'Ivoire	25.8	35.8	38.4	48.2	48.2	53.8	67.2	73.4	..
Dem. Rep. of the Congo	43.8	39.8	43.4	24.4	29.4	38.5	52.2	55.8	..
Egypt	109.5	195.1	332.3	505.9	601.8	812.0	881.9	919.0	..
Eritrea	..	..	..	5.6	6.3	6.1	7.7	8.0	..
Ethiopia	25.0	25.4	30.7	40.3	55.1	92.3	135.9	149.0	..
Gabon	9.9	15.2	18.2	21.5	23.4	24.7	30.7	31.9	..
Ghana	22.7	22.2	27.5	41.9	53.6	73.5	102.2	106.2	..
Kenya	25.7	36.6	54.6	65.7	78.5	100.3	123.9	130.9	..
Libya	120.0	174.1	112.4	115.0	147.8	179.1	91.3	81.9	..
Mauritius	3.0	4.2	7.5	12.6	14.7	19.1	22.1	22.8	..
Morocco	40.9	60.6	96.2	128.1	162.6	207.6	241.3	252.2	..
Mozambique	6.1	4.8	4.9	9.9	15.2	21.8	28.8	30.7	..
Namibia	..	..	..	11.4	14.5	18.0	22.4	23.6	..
Niger	..	..	..	8.4	10.2	13.1	16.9	17.5	..
Nigeria	244.1	311.7	283.9	341.4	564.8	800.2	980.6	1 006.6	..
Senegal	9.0	10.6	13.7	18.6	23.3	27.8	31.8	33.9	..
South Africa	244.8	307.7	357.4	427.9	516.5	601.5	660.4	668.7	..
South Sudan	..	..	..	..	..	..	22.5	21.1	..
Sudan	23.9	34.6	44.3	76.1	103.7	146.6	154.9	162.5	..
United Rep. of Tanzania	19.4	24.4	35.7	48.2	68.3	91.7	119.4	127.7	..
Togo	3.3	4.5	5.0	6.2	6.6	7.7	9.3	9.8	..
Tunisia	20.4	32.1	45.5	72.3	87.5	109.3	118.1	119.3	..
Zambia	15.7	16.6	18.4	21.7	29.3	44.5	55.6	57.2	..
Zimbabwe	15.0	16.9	26.0	30.9	21.0	19.0	25.5	25.7	..
Other Africa	101.0	119.3	134.9	165.7	228.9	301.2	360.3	368.8	..
<b>Africa</b>	<b>1 326.2</b>	<b>1 767.4</b>	<b>2 106.3</b>	<b>2 697.0</b>	<b>3 485.7</b>	<b>4 516.7</b>	<b>5 187.4</b>	<b>5 357.8</b>	..

1. Please refer to section 'Geographical coverage'.

## GDP using purchasing power parities (billion 2010 USD)

<i>billion 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	70.1	90.4	134.0	211.7	271.2	364.1	464.3	494.8	..
Brunei Darussalam	13.7	23.3	19.4	24.2	26.8	27.7	27.7	27.6	..
Cambodia	..	..	..	16.4	25.6	35.4	46.7	50.0	..
DPR of Korea	39.5	84.0	160.2	111.7	108.4	100.6	99.9	100.8	..
India	684.1	880.8	1 512.5	2 602.5	3 602.4	5 312.2	6 823.4	7 364.8	..
Indonesia	291.3	481.8	822.2	1 203.3	1 515.9	2 004.0	2 500.9	2 620.8	..
Malaysia	63.4	104.4	186.5	370.5	467.0	581.4	716.6	752.2	..
Mongolia	..	..	11.0	10.9	15.0	20.5	32.5	33.3	..
Myanmar	24.0	35.8	40.6	81.0	148.4	215.6	288.0	308.3	..
Nepal	11.4	13.9	22.0	35.8	42.3	52.6	62.9	64.6	..
Pakistan	120.2	175.2	322.3	474.3	605.2	715.8	831.9	871.1	..
Philippines	140.3	205.9	243.4	322.8	404.0	514.0	646.4	684.5	..
Singapore	28.9	48.7	102.4	203.8	258.7	358.2	426.3	434.9	..
Sri Lanka	28.6	40.7	61.3	102.0	123.9	168.8	216.6	226.9	..
Chinese Taipei	80.8	160.9	302.4	578.6	705.1	870.0	979.0	986.3	..
Thailand	107.6	173.2	368.7	566.8	738.8	887.6	993.7	1 021.9	..
Viet Nam	47.8	55.8	97.1	201.5	281.3	382.1	477.4	509.3	..
Other Asia	45.4	57.1	65.1	78.3	111.9	166.9	221.0	211.5	..
<b>Non-OECD Asia excl. China</b>	<b>1 797.1</b>	<b>2 631.8</b>	<b>4 471.2</b>	<b>7 196.2</b>	<b>9 452.0</b>	<b>12 777.5</b>	<b>15 855.3</b>	<b>16 763.5</b>	..
People's Rep. of China	453.3	691.5	1 680.5	4 531.9	7 231.9	12 358.7	16 881.7	18 049.6	..
Hong Kong, China	44.3	78.7	150.8	222.1	273.2	331.1	373.6	382.7	..
<b>China</b>	<b>497.6</b>	<b>770.2</b>	<b>1 831.3</b>	<b>4 754.0</b>	<b>7 505.0</b>	<b>12 689.8</b>	<b>17 255.3</b>	<b>18 432.3</b>	..
Argentina	289.4	350.7	301.3	469.9	517.0	656.5	688.4	706.6	..
Bolivia	20.1	24.6	24.9	36.1	42.0	52.5	65.5	68.6	..
Brazil	809.3	1 282.3	1 513.7	1 952.8	2 252.5	2 803.3	3 075.4	2 959.5	..
Colombia	126.7	177.9	253.0	328.9	392.9	490.4	595.4	613.7	..
Costa Rica	12.9	17.9	23.0	37.0	44.7	56.4	64.8	67.2	..
Cuba	73.3	95.2	142.0	123.0	157.1	204.2	224.6	234.5	..
Curaçao	1.0	1.2	1.5	2.1	2.2	2.4	1.7	1.7	..
Dominican Republic	20.5	29.6	37.4	67.3	80.1	108.7	129.8	139.0	..
Ecuador	37.8	57.9	74.8	91.4	115.8	136.8	170.2	170.5	..
El Salvador	22.4	24.2	23.3	36.6	41.1	44.1	47.4	48.6	..
Guatemala	29.6	42.4	46.3	69.3	80.4	96.2	111.5	116.1	..
Haiti	10.6	14.6	14.1	14.6	14.2	14.7	17.1	17.3	..
Honduras	8.5	12.1	15.4	21.3	26.7	31.9	36.5	37.9	..
Jamaica	16.4	13.3	17.3	20.6	22.6	22.1	22.6	22.8	..
Nicaragua	15.3	14.1	12.3	17.1	20.0	22.6	27.7	29.1	..
Panama	11.9	16.5	18.9	31.4	38.8	55.0	76.0	80.4	..
Paraguay	8.6	16.7	24.9	31.6	34.8	44.4	54.6	56.2	..
Peru	100.0	124.7	112.7	165.3	203.9	284.3	347.6	358.9	..
Suriname	..	..	..	4.5	6.0	7.4	8.4	8.3	..
Trinidad and Tobago	13.0	17.9	14.0	21.8	32.1	38.9	40.1	39.9	..
Uruguay	22.0	30.1	30.0	41.9	42.3	56.5	66.4	67.1	..
Venezuela	218.8	259.3	281.2	345.8	392.3	470.6	504.3	475.6	..
Other Non-OECD Americas	18.2	23.1	30.1	34.4	38.3	40.0	40.6	42.9	..
<b>Non-OECD Americas</b>	<b>1 886.4</b>	<b>2 646.3</b>	<b>3 012.1</b>	<b>3 964.7</b>	<b>4 597.6</b>	<b>5 739.9</b>	<b>6 416.6</b>	<b>6 362.4</b>	..
Bahrain	4.8	14.7	17.2	29.5	37.9	49.7	57.9	59.5	..
Islamic Republic of Iran	617.1	449.8	559.9	768.1	1 004.0	1 274.4	1 263.8	1 264.2	..
Iraq	45.9	126.4	197.2	281.1	288.3	383.3	500.9	516.0	..
Jordan	8.7	18.0	21.9	36.2	49.3	66.7	74.4	76.2	..
Kuwait	115.8	102.0	77.8	140.5	208.5	220.9	262.5	267.3	..
Lebanon	36.9	26.1	20.8	39.7	47.9	69.2	74.1	75.0	..
Oman	14.6	26.3	62.2	97.7	102.0	135.1	156.3	165.1	..
Qatar	45.5	40.2	33.4	63.6	94.2	220.8	284.6	294.7	..
Saudi Arabia	352.4	605.4	566.6	740.8	940.8	1 217.8	1 501.6	1 553.9	..
Syrian Arab Republic	20.4	41.8	53.4	85.3	104.1	132.3	52.2	37.5	..
United Arab Emirates	75.5	191.5	203.3	320.4	415.9	468.5	568.2	589.6	..
Yemen	11.0	22.8	38.4	66.6	81.8	101.1	94.6	68.0	..
<b>Middle East</b>	<b>1 348.7</b>	<b>1 665.1</b>	<b>1 852.0</b>	<b>2 669.4</b>	<b>3 374.8</b>	<b>4 339.8</b>	<b>4 891.0</b>	<b>4 967.1</b>	..

## Population (millions)

<i>millions</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>3 912.9</b>	<b>4 435.6</b>	<b>5 279.5</b>	<b>6 108.6</b>	<b>6 505.0</b>	<b>6 913.3</b>	<b>7 247.3</b>	<b>7 333.8</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>2 993.1</b>	<b>3 450.7</b>	<b>4 206.7</b>	<b>4 952.3</b>	<b>5 308.0</b>	<b>5 673.1</b>	<b>5 978.2</b>	<b>6 057.0</b>	<b>..</b>
<b>OECD Total</b>	<b>919.7</b>	<b>984.9</b>	<b>1 072.8</b>	<b>1 156.4</b>	<b>1 197.0</b>	<b>1 240.1</b>	<b>1 269.1</b>	<b>1 276.7</b>	<b>1 284.6</b>
Canada	22.5	24.5	27.7	30.7	32.2	34.0	35.5	35.9	36.2
Chile	10.1	11.2	13.2	15.4	16.3	17.1	17.8	18.0	18.2
Mexico	57.1	70.4	87.1	100.9	107.2	114.3	119.7	121.0	122.4
United States	211.9	227.7	250.2	282.4	296.0	309.8	319.2	321.7	324.2
<b>OECD Americas</b>	<b>301.6</b>	<b>333.8</b>	<b>378.1</b>	<b>429.4</b>	<b>451.7</b>	<b>475.2</b>	<b>492.3</b>	<b>496.6</b>	<b>501.0</b>
Australia	13.6	14.8	17.2	19.2	20.4	22.2	23.7	24.1	24.4
Israel <sup>1</sup>	3.3	3.9	4.7	6.3	7.0	7.6	8.2	8.4	8.5
Japan	108.9	117.1	123.6	126.8	127.8	128.0	127.1	127.0	126.8
Korea	34.1	38.1	42.9	47.0	48.1	49.4	50.4	50.6	50.8
New Zealand	3.0	3.1	3.4	3.9	4.1	4.4	4.5	4.6	4.7
<b>OECD Asia Oceania</b>	<b>162.9</b>	<b>177.0</b>	<b>191.7</b>	<b>203.2</b>	<b>207.4</b>	<b>211.7</b>	<b>214.0</b>	<b>214.7</b>	<b>215.1</b>
Austria	7.6	7.5	7.7	8.0	8.2	8.4	8.5	8.6	8.7
Belgium	9.7	9.9	10.0	10.2	10.5	10.9	11.2	11.2	11.3
Czech Republic	9.9	10.3	10.4	10.3	10.2	10.5	10.5	10.5	10.6
Denmark	5.0	5.1	5.1	5.3	5.4	5.5	5.6	5.7	5.7
Estonia	..	..	1.6	1.4	1.4	1.3	1.3	1.3	1.3
Finland	4.7	4.8	5.0	5.2	5.2	5.4	5.5	5.5	5.5
France	53.3	55.2	58.2	60.9	63.1	65.0	66.2	66.5	66.7
Germany	79.0	78.3	79.4	81.5	81.3	80.3	81.0	81.7	82.7
Greece	9.0	9.7	10.3	10.8	11.0	11.1	10.9	10.9	10.9
Hungary	10.4	10.7	10.4	10.2	10.1	10.0	9.9	9.8	9.8
Iceland	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Ireland	3.1	3.4	3.5	3.8	4.2	4.6	4.6	4.6	4.7
Italy	54.8	56.4	56.7	56.9	58.2	59.8	60.8	60.7	60.6
Latvia	..	..	2.7	2.4	2.2	2.1	2.0	2.0	2.0
Luxembourg	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6
Netherlands	13.4	14.1	14.9	15.9	16.3	16.6	16.9	16.9	17.0
Norway	4.0	4.1	4.2	4.5	4.6	4.9	5.1	5.2	5.2
Poland	33.4	35.6	38.0	38.3	38.2	38.5	38.5	38.5	38.4
Portugal	8.7	9.9	10.0	10.3	10.5	10.6	10.4	10.4	10.3
Slovak Republic	4.6	5.0	5.3	5.4	5.4	5.4	5.4	5.4	5.4
Slovenia	..	..	2.0	2.0	2.0	2.0	2.1	2.1	2.1
Spain	35.3	38.0	39.3	40.6	43.7	46.6	46.5	46.4	46.5
Sweden	8.1	8.3	8.6	8.9	9.0	9.4	9.7	9.8	9.9
Switzerland	6.4	6.4	6.8	7.2	7.5	7.9	8.2	8.3	8.4
Turkey	38.1	44.4	55.1	64.3	68.6	73.0	76.6	77.5	78.3
United Kingdom	56.2	56.3	57.2	58.9	60.4	62.8	64.6	65.1	65.6
<b>OECD Europe</b>	<b>455.3</b>	<b>474.1</b>	<b>503.0</b>	<b>523.8</b>	<b>538.0</b>	<b>553.3</b>	<b>562.8</b>	<b>565.5</b>	<b>568.5</b>
<i>IEA</i>	<i>849.1</i>	<i>899.2</i>	<i>963.0</i>	<i>1 029.1</i>	<i>1 062.1</i>	<i>1 096.7</i>	<i>1 119.0</i>	<i>1 124.9</i>	<i>1 131.2</i>
<i>IEA/Accession/Association</i>	<i>2 575.3</i>	<i>2 876.6</i>	<i>3 335.1</i>	<i>3 768.8</i>	<i>3 960.3</i>	<i>4 142.2</i>	<i>4 277.6</i>	<i>4 311.7</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>477.9</i>	<i>487.1</i>	<i>494.9</i>	<i>503.7</i>	<i>508.1</i>	<i>509.6</i>	<i>..</i>
<i>G7</i>	<i>586.6</i>	<i>615.5</i>	<i>653.0</i>	<i>698.1</i>	<i>719.1</i>	<i>739.7</i>	<i>754.5</i>	<i>758.6</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>801.3</i>	<i>844.7</i>	<i>862.6</i>	<i>882.6</i>	<i>898.3</i>	<i>902.7</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>3 659.2</i>	<i>4 118.4</i>	<i>4 319.7</i>	<i>4 513.5</i>	<i>4 659.6</i>	<i>4 696.3</i>	<i>..</i>
<i>OPEC</i>	<i>155.1</i>	<i>193.3</i>	<i>262.4</i>	<i>329.2</i>	<i>367.9</i>	<i>414.8</i>	<i>454.5</i>	<i>464.5</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Population (millions)

millions	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>2 993.1</b>	<b>3 450.7</b>	<b>4 206.7</b>	<b>4 952.3</b>	<b>5 308.0</b>	<b>5 673.1</b>	<b>5 978.2</b>	<b>6 057.0</b>	<b>..</b>
Albania	2.3	2.7	3.3	3.1	3.0	2.9	2.9	2.9	..
Armenia	..	..	3.5	3.1	3.0	3.0	3.0	3.0	..
Azerbaijan	..	..	7.2	8.0	8.4	9.1	9.5	9.6	..
Belarus	..	..	10.2	10.0	9.7	9.5	9.5	9.5	..
Bosnia and Herzegovina	..	..	4.5	3.8	3.8	3.8	3.8	3.8	..
Bulgaria	8.6	8.9	8.7	8.2	7.7	7.4	7.2	7.2	..
Croatia	..	..	4.8	4.4	4.4	4.4	4.2	4.2	..
Cyprus <sup>1</sup>	0.6	0.5	0.6	0.7	0.7	0.8	0.9	0.8	..
FYR of Macedonia	..	..	2.0	2.0	2.0	2.1	2.1	2.1	..
Georgia	..	..	4.8	4.4	4.2	3.9	3.7	3.7	..
Gibraltar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
Kazakhstan	..	..	16.3	14.9	15.1	16.3	17.3	17.5	..
Kosovo	..	..	..	1.7	1.7	1.8	1.8	1.8	..
Kyrgyzstan	..	..	4.4	4.9	5.2	5.4	5.8	6.0	..
Lithuania	..	..	3.7	3.5	3.3	3.1	2.9	2.9	..
Malta	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	..
Republic of Moldova	..	..	3.7	3.6	3.6	3.6	3.6	3.6	..
Montenegro	..	..	..	..	0.6	0.6	0.6	0.6	..
Romania	20.8	22.2	23.2	22.4	21.3	20.2	19.9	19.8	..
Russian Federation	..	..	148.3	146.6	143.5	142.8	143.8	144.1	144.9
Serbia	..	..	10.1	8.1	7.4	7.3	7.1	7.1	..
Tajikistan	..	..	5.3	6.2	6.8	7.6	8.3	8.5	..
Turkmenistan	..	..	3.7	4.5	4.7	5.0	5.3	5.4	..
Ukraine	..	..	51.9	49.2	47.1	45.9	45.3	45.2	..
Uzbekistan	..	..	20.5	24.7	26.2	28.6	30.8	31.3	..
Former Soviet Union	248.0	264.0	x	x	x	x	x	x	x
Former Yugoslavia	20.4	21.8	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>301.1</b>	<b>320.4</b>	<b>341.0</b>	<b>338.4</b>	<b>334.1</b>	<b>335.6</b>	<b>339.9</b>	<b>341.0</b>	<b>..</b>
Algeria	15.8	19.3	25.9	31.2	33.3	36.0	38.9	39.7	..
Angola	6.8	8.2	11.1	15.1	17.9	21.2	24.2	25.0	..
Benin	3.1	3.7	5.0	6.9	8.2	9.5	10.6	10.9	..
Botswana	..	..	1.4	1.7	1.9	2.0	2.2	2.3	..
Cameroon	7.3	8.9	12.1	15.9	18.1	20.6	22.8	23.3	..
Congo	1.5	1.8	2.4	3.1	3.5	4.1	4.5	4.6	..
Côte d'Ivoire	6.0	8.3	12.2	16.5	18.1	20.1	22.2	22.7	..
Dem. Rep. of the Congo	21.7	26.4	35.0	48.0	56.1	65.9	74.9	77.3	..
Egypt	37.0	43.4	56.4	68.3	74.9	82.0	89.6	91.5	..
Eritrea	..	..	..	3.5	4.2	4.7	5.1	5.3	..
Ethiopia	31.0	35.2	48.1	66.4	76.6	87.6	97.0	99.4	..
Gabon	0.6	0.7	1.0	1.2	1.4	1.5	1.7	1.7	..
Ghana	9.4	10.8	14.6	18.8	21.4	24.3	26.8	27.4	..
Kenya	12.5	16.3	23.4	31.1	35.3	40.3	44.9	46.1	..
Libya	2.4	3.2	4.4	5.3	5.8	6.3	6.3	6.3	..
Mauritius	0.9	1.0	1.1	1.2	1.2	1.3	1.3	1.3	..
Morocco	17.1	20.1	25.0	29.0	30.4	32.1	33.9	34.4	..
Mozambique	9.9	11.9	13.4	18.3	21.1	24.3	27.2	28.0	..
Namibia	..	..	..	1.9	2.0	2.2	2.4	2.5	..
Niger	..	..	..	11.2	13.5	16.3	19.1	19.9	..
Nigeria	60.3	73.7	95.6	122.9	139.6	159.4	177.5	182.2	..
Senegal	4.6	5.6	7.5	9.9	11.3	13.0	14.7	15.1	..
South Africa	24.4	29.1	36.8	44.9	47.6	51.0	54.1	55.0	..
South Sudan	..	..	..	..	..	..	11.9	12.3	..
Sudan	15.2	19.1	25.8	34.8	40.1	46.2	39.4	40.2	..
United Rep. of Tanzania	15.0	18.7	25.5	34.0	39.1	45.6	51.8	53.5	..
Togo	2.3	2.7	3.8	4.9	5.6	6.4	7.1	7.3	..
Tunisia	5.4	6.4	8.2	9.7	10.1	10.6	11.1	11.3	..
Zambia	4.6	5.9	8.1	10.6	12.0	13.9	15.7	16.2	..
Zimbabwe	5.8	7.3	10.5	12.5	13.0	14.0	15.2	15.6	..
Other Africa	72.3	87.7	114.1	134.7	155.5	180.2	202.0	208.8	..
<b>Africa</b>	<b>393.0</b>	<b>475.4</b>	<b>628.1</b>	<b>813.6</b>	<b>918.9</b>	<b>1 042.7</b>	<b>1 156.0</b>	<b>1 186.9</b>	<b>..</b>

1. Please refer to section 'Geographical coverage'.

## Population (millions)

<i>millions</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	68.7	81.4	106.0	131.3	142.9	151.6	159.1	161.0	..
Brunei Darussalam	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4	..
Cambodia	..	..	..	12.2	13.3	14.4	15.3	15.6	..
DPR of Korea	15.6	17.4	20.2	22.8	23.8	24.5	25.0	25.2	..
India	593.5	697.2	870.6	1 053.5	1 144.3	1 231.0	1 295.3	1 311.1	..
Indonesia	124.2	147.5	181.4	211.5	226.3	241.6	254.5	257.6	..
Malaysia	11.7	13.8	18.2	23.4	25.8	28.1	29.9	30.3	..
Mongolia	..	..	2.2	2.4	2.5	2.7	2.9	3.0	..
Myanmar	29.2	34.5	42.0	47.7	50.0	51.7	53.4	53.9	..
Nepal	12.8	14.9	18.7	23.7	25.5	26.9	28.2	28.5	..
Pakistan	63.1	78.1	107.6	138.3	153.4	170.0	185.0	188.9	..
Philippines	39.0	47.4	61.9	77.9	86.1	93.0	99.1	100.7	..
Singapore	2.2	2.4	3.0	4.0	4.3	5.1	5.5	5.5	..
Sri Lanka	13.1	14.7	17.1	18.7	19.4	20.1	20.8	21.0	..
Chinese Taipei	15.5	17.8	20.2	21.9	22.7	23.2	23.4	23.4	..
Thailand	40.2	47.4	56.6	62.7	65.9	66.7	67.7	68.0	..
Viet Nam	45.8	53.7	66.0	77.6	82.4	86.9	90.7	91.7	..
Other Asia	29.2	31.1	33.2	34.8	41.0	46.3	51.4	52.6	..
<b>Non-OECD Asia excl. China</b>	<b>1 103.8</b>	<b>1 299.4</b>	<b>1 625.4</b>	<b>1 964.8</b>	<b>2 130.0</b>	<b>2 284.3</b>	<b>2 407.6</b>	<b>2 438.3</b>	..
People's Rep. of China	881.9	981.2	1 135.2	1 262.6	1 303.7	1 337.7	1 364.3	1 371.2	..
Hong Kong, China	4.2	5.1	5.7	6.7	6.8	7.0	7.2	7.3	..
<b>China</b>	<b>886.2</b>	<b>986.3</b>	<b>1 140.9</b>	<b>1 269.3</b>	<b>1 310.5</b>	<b>1 344.7</b>	<b>1 371.5</b>	<b>1 378.5</b>	..
Argentina	25.2	28.1	32.7	37.1	39.1	41.2	43.0	43.4	..
Bolivia	4.8	5.6	6.9	8.3	9.1	9.9	10.6	10.7	..
Brazil	103.3	122.2	150.4	175.8	188.5	198.6	206.1	207.8	..
Colombia	23.7	27.7	34.3	40.4	43.3	45.9	47.8	48.2	..
Costa Rica	2.0	2.4	3.1	3.9	4.2	4.5	4.8	4.8	..
Cuba	9.2	9.8	10.6	11.1	11.3	11.3	11.4	11.4	..
Curaçao	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	..
Dominican Republic	4.9	5.8	7.2	8.6	9.2	9.9	10.4	10.5	..
Ecuador	6.6	8.0	10.2	12.6	13.7	14.9	15.9	16.1	..
El Salvador	4.0	4.6	5.3	5.8	5.9	6.0	6.1	6.1	..
Guatemala	5.9	7.1	9.2	11.7	13.2	14.7	16.0	16.3	..
Haiti	5.0	5.7	7.1	8.5	9.3	10.0	10.6	10.7	..
Honduras	2.9	3.6	4.9	6.2	6.9	7.5	8.0	8.1	..
Jamaica	2.0	2.1	2.4	2.6	2.7	2.7	2.8	2.8	..
Nicaragua	2.6	3.3	4.1	5.0	5.4	5.7	6.0	6.1	..
Panama	1.7	2.0	2.5	3.0	3.3	3.6	3.9	3.9	..
Paraguay	2.7	3.2	4.2	5.3	5.8	6.2	6.6	6.6	..
Peru	14.4	17.4	21.8	25.9	27.6	29.4	31.0	31.4	..
Suriname	..	..	..	0.5	0.5	0.5	0.5	0.5	..
Trinidad and Tobago	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.4	..
Uruguay	2.8	2.9	3.1	3.3	3.3	3.4	3.4	3.4	..
Venezuela	12.6	15.3	19.9	24.5	26.8	29.0	30.7	31.1	..
Other Non-OECD Americas	2.6	2.8	3.0	2.9	3.1	3.3	3.5	3.5	..
<b>Non-OECD Americas</b>	<b>240.0</b>	<b>280.9</b>	<b>344.2</b>	<b>404.7</b>	<b>433.8</b>	<b>460.0</b>	<b>480.3</b>	<b>485.2</b>	..
Bahrain	0.2	0.4	0.5	0.7	0.9	1.3	1.4	1.4	..
Islamic Republic of Iran	30.9	38.7	56.2	65.9	70.1	74.3	78.1	79.1	..
Iraq	11.0	13.7	17.5	23.6	27.0	30.9	35.3	36.4	..
Jordan	1.9	2.3	3.4	4.8	5.3	6.5	7.4	7.6	..
Kuwait	0.9	1.4	2.1	1.9	2.3	3.1	3.8	3.9	..
Lebanon	2.5	2.6	2.7	3.2	4.0	4.3	5.6	5.9	..
Oman	0.8	1.2	1.8	2.2	2.5	2.9	4.2	4.5	..
Qatar	0.1	0.2	0.5	0.6	0.8	1.8	2.2	2.2	..
Saudi Arabia	6.7	9.9	16.4	21.4	24.7	28.1	30.9	31.5	..
Syrian Arab Republic	7.1	9.0	12.5	16.4	18.1	20.7	18.8	18.5	..
United Arab Emirates	0.4	1.0	1.8	3.1	4.5	8.3	9.1	9.2	..
Yemen	6.5	8.1	12.0	17.8	20.5	23.6	26.2	26.8	..
<b>Middle East</b>	<b>69.0</b>	<b>88.3</b>	<b>127.1</b>	<b>161.4</b>	<b>180.8</b>	<b>205.7</b>	<b>222.9</b>	<b>227.0</b>	..



## Energy production/TPES (self-sufficiency)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1.018</b>	<b>1.013</b>	<b>1.004</b>	<b>1.000</b>	<b>1.005</b>	<b>0.994</b>	<b>1.008</b>	<b>1.010</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>1.726</b>	<b>1.483</b>	<b>1.329</b>	<b>1.389</b>	<b>1.364</b>	<b>1.257</b>	<b>1.200</b>	<b>1.202</b>	<b>..</b>
<b>OECD Total</b>	<b>0.657</b>	<b>0.716</b>	<b>0.760</b>	<b>0.725</b>	<b>0.696</b>	<b>0.718</b>	<b>0.787</b>	<b>0.792</b>	<b>0.769</b>
Canada	1.244	1.079	1.308	1.478	1.474	1.513	1.685	1.744	1.712
Chile	0.598	0.612	0.566	0.341	0.329	0.299	0.382	0.357	0.347
Mexico	0.899	1.546	1.581	1.520	1.459	1.246	1.107	1.024	0.982
United States	0.842	0.861	0.863	0.733	0.703	0.778	0.908	0.922	0.883
<b>OECD Americas</b>	<b>0.875</b>	<b>0.911</b>	<b>0.942</b>	<b>0.844</b>	<b>0.823</b>	<b>0.876</b>	<b>0.995</b>	<b>1.005</b>	<b>0.969</b>
Australia	1.192	1.227	1.824	2.265	2.337	2.536	2.920	3.043	2.978
Israel <sup>1</sup>	0.792	0.020	0.037	0.035	0.113	0.166	0.315	0.320	0.368
Japan	0.092	0.126	0.170	0.202	0.191	0.199	0.060	0.070	0.070
Korea	0.314	0.225	0.243	0.183	0.204	0.180	0.183	0.189	0.181
New Zealand	0.496	0.609	0.898	0.836	0.760	0.919	0.829	0.802	0.782
<b>OECD Asia Oceania</b>	<b>0.276</b>	<b>0.304</b>	<b>0.415</b>	<b>0.459</b>	<b>0.481</b>	<b>0.532</b>	<b>0.531</b>	<b>0.559</b>	<b>0.566</b>
Austria	0.369	0.330	0.327	0.342	0.292	0.350	0.375	0.365	0.372
Belgium	0.142	0.173	0.273	0.236	0.239	0.259	0.239	0.201	0.269
Czech Republic	0.853	0.878	0.827	0.749	0.734	0.711	0.711	0.689	0.661
Denmark	0.022	0.050	0.581	1.488	1.657	1.199	0.993	0.991	0.903
Estonia	..	..	0.554	0.675	0.742	0.877	0.966	1.024	0.915
Finland	0.232	0.281	0.426	0.461	0.486	0.478	0.537	0.547	0.524
France	0.245	0.274	0.499	0.519	0.506	0.518	0.565	0.559	0.538
Germany	0.513	0.520	0.530	0.402	0.405	0.394	0.392	0.388	0.371
Greece	0.198	0.247	0.429	0.369	0.341	0.342	0.380	0.365	0.298
Hungary	0.597	0.511	0.510	0.465	0.376	0.448	0.465	0.448	0.445
Iceland	0.484	0.604	0.714	0.774	0.763	0.885	0.890	0.881	0.893
Ireland	0.162	0.230	0.350	0.156	0.113	0.128	0.158	0.144	0.301
Italy	0.171	0.152	0.173	0.164	0.162	0.190	0.250	0.237	0.225
Latvia	..	..	0.147	0.368	0.411	0.439	0.548	0.548	0.588
Luxembourg	0.001	0.008	0.008	0.019	0.024	0.028	0.040	0.039	0.039
Netherlands	0.916	1.116	0.901	0.768	0.768	0.837	0.802	0.645	0.589
Norway	0.564	3.002	5.671	8.715	8.364	6.122	7.052	7.027	7.427
Poland	1.156	1.000	1.007	0.893	0.850	0.668	0.716	0.713	0.665
Portugal	0.203	0.148	0.202	0.156	0.137	0.247	0.283	0.242	0.258
Slovak Republic	0.166	0.175	0.248	0.357	0.351	0.348	0.412	0.402	0.391
Slovenia	..	..	0.537	0.483	0.481	0.518	0.554	0.518	0.526
Spain	0.220	0.233	0.384	0.259	0.212	0.270	0.306	0.283	0.285
Sweden	0.238	0.398	0.629	0.642	0.672	0.650	0.717	0.748	0.707
Switzerland	0.226	0.351	0.423	0.481	0.424	0.482	0.529	0.498	0.485
Turkey	0.637	0.545	0.490	0.341	0.284	0.304	0.258	0.246	0.250
United Kingdom	0.498	0.997	1.010	1.222	0.921	0.737	0.605	0.658	0.669
<b>OECD Europe</b>	<b>0.463</b>	<b>0.573</b>	<b>0.643</b>	<b>0.669</b>	<b>0.606</b>	<b>0.578</b>	<b>0.583</b>	<b>0.576</b>	<b>0.566</b>
<i>IEA</i>	<i>0.653</i>	<i>0.698</i>	<i>0.741</i>	<i>0.706</i>	<i>0.675</i>	<i>0.705</i>	<i>0.780</i>	<i>0.789</i>	<i>0.767</i>
<i>IEA/Accession/Association</i>	<i>0.715</i>	<i>0.778</i>	<i>0.821</i>	<i>0.788</i>	<i>0.771</i>	<i>0.786</i>	<i>0.817</i>	<i>0.815</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.578</i>	<i>0.561</i>	<i>0.507</i>	<i>0.488</i>	<i>0.496</i>	<i>0.486</i>	<i>..</i>
<i>G7</i>	<i>0.663</i>	<i>0.702</i>	<i>0.726</i>	<i>0.674</i>	<i>0.640</i>	<i>0.677</i>	<i>0.764</i>	<i>0.777</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>0.876</i>	<i>0.794</i>	<i>0.804</i>	<i>0.853</i>	<i>0.933</i>	<i>0.951</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>0.936</i>	<i>0.887</i>	<i>0.895</i>	<i>0.894</i>	<i>0.923</i>	<i>0.927</i>	<i>..</i>
<i>OPEC</i>	<i>14.253</i>	<i>6.825</i>	<i>4.101</i>	<i>3.767</i>	<i>3.469</i>	<i>2.808</i>	<i>2.579</i>	<i>2.625</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Energy production/TPES (self-sufficiency)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>1.726</b>	<b>1.483</b>	<b>1.329</b>	<b>1.389</b>	<b>1.364</b>	<b>1.257</b>	<b>1.200</b>	<b>1.202</b>	..
Albania	1.725	1.123	0.920	0.550	0.522	0.763	0.862	0.947	..
Armenia	..	..	0.019	0.319	0.346	0.353	0.287	0.361	..
Azerbaijan	..	..	0.917	1.665	2.030	5.655	4.104	4.062	..
Belarus	..	..	0.073	0.138	0.138	0.144	0.132	0.141	..
Bosnia and Herzegovina	..	..	0.656	0.708	0.723	0.674	0.773	0.769	..
Bulgaria	0.267	0.273	0.341	0.532	0.535	0.593	0.635	0.649	..
Croatia	..	..	0.604	0.508	0.488	0.549	0.541	0.524	..
Cyprus <sup>1</sup>	0.012	0.007	0.004	0.021	0.023	0.036	0.060	0.060	..
FYR of Macedonia	..	..	0.507	0.575	0.551	0.560	0.494	0.476	..
Georgia	..	..	0.162	0.462	0.345	0.420	0.312	0.285	..
Gibraltar	-	-	-	-	-	-	-	-	..
Kazakhstan	..	..	1.239	2.202	2.332	2.270	2.169	2.101	..
Kosovo	..	..	..	0.710	0.718	0.746	0.726	0.717	..
Kyrgyzstan	..	..	0.334	0.591	0.514	0.461	0.469	0.452	..
Lithuania	..	..	0.307	0.475	0.457	0.216	0.250	0.251	..
Malta	-	-	-	-	0.001	0.006	0.016	0.023	..
Republic of Moldova	..	..	0.009	0.032	0.031	0.062	0.100	0.103	..
Montenegro	..	..	..	..	0.580	0.732	0.723	0.709	..
Romania	0.967	0.806	0.656	0.782	0.723	0.784	0.835	0.832	..
Russian Federation	..	..	1.471	1.579	1.846	1.858	1.821	1.880	..
Serbia	..	..	0.698	0.865	0.640	0.676	0.712	0.729	..
Tajikistan	..	..	0.382	0.588	0.661	0.709	0.705	0.718	..
Turkmenistan	..	..	4.168	3.089	3.213	2.083	2.915	2.940	..
Ukraine	..	..	0.539	0.571	0.567	0.596	0.732	0.684	..
Uzbekistan	..	..	0.833	1.083	1.201	1.276	1.279	1.314	..
Former Soviet Union	1.168	1.225	x	x	x	x	x	x	..
Former Yugoslavia	0.632	0.558	x	x	x	x	x	x	..
<b>Non-OECD Europe and Eurasia</b>	<b>1.125</b>	<b>1.161</b>	<b>1.141</b>	<b>1.325</b>	<b>1.509</b>	<b>1.580</b>	<b>1.615</b>	<b>1.658</b>	..
Algeria	11.714	5.867	4.512	5.268	5.140	3.755	2.771	2.643	..
Angola	2.828	2.477	4.870	6.042	8.359	8.038	6.408	6.668	..
Benin	0.882	0.896	1.068	0.729	0.669	0.567	0.609	0.596	..
Botswana	..	..	0.713	0.600	0.542	0.491	0.555	0.636	..
Cameroon	0.906	1.835	2.204	1.766	1.483	1.206	1.255	1.369	..
Congo	4.580	6.161	11.109	20.387	12.546	10.449	5.966	5.677	..
Côte d'Ivoire	0.653	0.677	0.778	0.885	1.105	1.099	0.929	0.969	..
Dem. Rep. of the Congo	0.886	1.014	1.019	1.072	1.060	1.029	0.980	1.006	..
Egypt	1.228	2.218	1.701	1.308	1.265	1.154	0.919	0.875	..
Eritrea	..	..	..	0.717	0.656	0.784	0.771	0.769	..
Ethiopia	0.968	0.970	0.964	0.966	0.959	0.955	0.936	0.934	..
Gabon	5.984	6.939	12.209	9.951	5.343	3.353	3.050	3.135	..
Ghana	0.780	0.821	0.830	0.710	0.624	0.529	1.102	1.057	..
Kenya	0.786	0.793	0.820	0.816	0.846	0.806	0.826	0.812	..
Libya	43.324	13.697	6.552	4.797	5.501	4.991	2.030	1.835	..
Mauritius	0.719	0.571	0.445	0.261	0.226	0.183	0.155	0.176	..
Morocco	0.350	0.262	0.190	0.123	0.159	0.116	0.096	0.094	..
Mozambique	0.902	0.906	0.947	1.012	1.187	1.226	1.546	1.477	..
Namibia	..	..	..	0.370	0.315	0.264	0.256	0.254	..
Niger	..	..	..	0.875	0.873	0.803	1.049	1.020	..
Nigeria	3.814	2.965	2.202	2.301	2.219	2.118	1.887	1.824	..
Senegal	0.636	0.567	0.571	0.497	0.453	0.545	0.480	0.472	..
South Africa	0.821	1.119	1.259	1.335	1.231	1.159	1.156	1.179	..
South Sudan	..	..	..	..	..	..	11.399	13.856	..
Sudan	0.803	0.847	0.826	1.502	1.803	2.097	1.090	1.005	..
United Rep. of Tanzania	0.898	0.910	0.931	0.943	0.920	0.925	0.893	0.881	..
Togo	0.861	0.846	0.835	0.836	0.843	0.760	0.796	0.789	..
Tunisia	2.408	2.042	1.158	0.908	0.804	0.810	0.636	0.585	..
Zambia	0.788	0.896	0.911	0.949	0.915	0.930	0.907	0.899	..
Zimbabwe	0.900	0.892	0.920	0.875	0.913	0.940	1.041	0.952	..
Other Africa	0.886	0.875	0.898	1.011	1.383	1.274	1.222	1.216	..
<b>Africa</b>	<b>2.259</b>	<b>2.006</b>	<b>1.754</b>	<b>1.785</b>	<b>1.812</b>	<b>1.688</b>	<b>1.438</b>	<b>1.419</b>	..

1. Please refer to section 'Geographical coverage'.

## Energy production/TPES (self-sufficiency)

	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.841	0.803	0.845	0.830	0.850	0.855	0.832	0.823	..
Brunei Darussalam	38.198	15.660	9.058	8.255	9.496	5.732	4.574	5.927	..
Cambodia	..	..	..	0.797	0.727	0.679	0.669	0.624	..
DPR of Korea	0.925	0.896	0.870	0.953	1.033	1.131	1.927	2.403	..
India	0.902	0.905	0.917	0.796	0.779	0.717	0.657	0.651	..
Indonesia	2.487	2.245	1.709	1.526	1.561	1.796	1.994	1.890	..
Malaysia	1.004	1.485	2.215	1.586	1.454	1.217	1.055	1.124	..
Mongolia	..	..	0.804	0.813	1.285	3.976	3.232	3.010	..
Myanmar	0.987	1.010	0.998	1.201	1.500	1.632	1.341	1.347	..
Nepal	0.970	0.965	0.950	0.880	0.893	0.869	0.836	0.842	..
Pakistan	0.849	0.845	0.797	0.738	0.804	0.770	0.752	0.755	..
Philippines	0.468	0.543	0.600	0.489	0.551	0.583	0.540	0.505	..
Singapore	-	-	0.006	0.011	0.018	0.023	0.025	0.024	..
Sri Lanka	0.689	0.708	0.760	0.570	0.547	0.569	0.496	0.470	..
Chinese Taipei	0.286	0.208	0.223	0.139	0.122	0.116	0.124	0.113	..
Thailand	0.523	0.508	0.634	0.608	0.557	0.599	0.584	0.556	..
Viet Nam	0.743	0.916	1.023	1.389	1.473	1.127	1.028	0.953	..
Other Asia	0.935	0.884	1.237	1.037	1.191	1.294	1.196	1.389	..
<b>Non-OECD Asia excl. China</b>	<b>1.040</b>	<b>1.034</b>	<b>0.992</b>	<b>0.889</b>	<b>0.894</b>	<b>0.880</b>	<b>0.856</b>	<b>0.836</b>	..
People's Rep. of China	1.011	1.029	1.012	0.994	0.938	0.881	0.844	0.839	..
Hong Kong, China	0.010	0.008	0.005	0.004	0.004	0.007	0.007	0.008	..
<b>China</b>	<b>1.004</b>	<b>1.021</b>	<b>1.002</b>	<b>0.983</b>	<b>0.932</b>	<b>0.877</b>	<b>0.840</b>	<b>0.835</b>	..
Argentina	0.858	0.928	1.051	1.347	1.265	1.011	0.870	0.858	..
Bolivia	3.827	1.786	1.886	1.368	2.684	2.500	2.799	2.541	..
Brazil	0.625	0.565	0.743	0.788	0.904	0.928	0.881	0.938	..
Colombia	1.232	1.000	1.989	2.802	2.902	3.395	3.742	3.693	..
Costa Rica	0.390	0.395	0.407	0.424	0.531	0.524	0.500	0.527	..
Cuba	0.357	0.330	0.434	0.551	0.532	0.425	0.503	0.479	..
Curaçao	-	-	-	0.000	0.001	0.001	0.001	0.001	..
Dominican Republic	0.421	0.386	0.235	0.131	0.147	0.133	0.137	0.120	..
Ecuador	5.040	2.344	2.591	2.543	2.949	2.231	2.147	2.011	..
El Salvador	0.673	0.759	0.686	0.534	0.552	0.545	0.508	0.480	..
Guatemala	0.693	0.681	0.767	0.749	0.692	0.736	0.672	0.674	..
Haiti	0.923	0.901	0.803	0.767	0.805	0.822	0.780	0.775	..
Honduras	0.718	0.703	0.712	0.509	0.450	0.488	0.470	0.473	..
Jamaica	0.086	0.098	0.174	0.154	0.111	0.173	0.180	0.175	..
Nicaragua	0.565	0.592	0.704	0.536	0.521	0.532	0.601	0.563	..
Panama	0.168	0.373	0.411	0.294	0.265	0.186	0.191	0.211	..
Paraguay	0.838	0.770	1.490	1.776	1.662	1.481	1.369	1.313	..
Peru	0.828	1.285	1.089	0.766	0.800	1.090	1.149	1.036	..
Suriname	..	..	..	1.172	1.104	1.298	1.438	1.508	..
Trinidad and Tobago	3.782	3.437	2.109	1.935	2.167	2.120	2.027	1.938	..
Uruguay	0.225	0.290	0.510	0.332	0.345	0.508	0.559	0.585	..
Venezuela	10.549	4.207	3.658	4.211	3.963	2.734	2.751	3.077	..
Other Non-OECD Americas	0.092	0.105	0.187	0.111	0.131	0.130	0.093	0.093	..
<b>Non-OECD Americas</b>	<b>1.658</b>	<b>1.155</b>	<b>1.274</b>	<b>1.432</b>	<b>1.475</b>	<b>1.333</b>	<b>1.282</b>	<b>1.300</b>	..
Bahrain	5.324	4.274	2.739	2.099	1.748	1.589	1.626	1.597	..
Islamic Republic of Iran	15.006	2.122	2.709	2.062	1.799	1.675	1.334	1.371	..
Iraq	22.108	13.935	5.505	5.196	3.702	3.322	3.306	3.820	..
Jordan	0.002	0.000	0.049	0.059	0.038	0.038	0.032	0.033	..
Kuwait	22.477	8.954	5.530	6.103	5.584	4.194	5.235	4.844	..
Lebanon	0.060	0.072	0.073	0.035	0.051	0.032	0.021	0.024	..
Oman	157.394	13.109	9.079	7.970	6.015	3.584	3.065	3.055	..
Qatar	20.616	7.995	4.243	5.446	5.360	6.452	4.955	4.870	..
Saudi Arabia	53.719	17.159	6.352	4.862	4.659	2.865	2.917	2.926	..
Syrian Arab Republic	2.706	2.128	2.133	2.117	1.270	1.277	0.518	0.469	..
United Arab Emirates	58.346	12.474	5.396	4.882	3.942	2.829	2.933	3.133	..
Yemen	0.052	0.047	3.734	4.641	3.104	2.457	2.147	1.187	..
<b>Middle East</b>	<b>21.740</b>	<b>8.779</b>	<b>4.451</b>	<b>3.746</b>	<b>3.236</b>	<b>2.601</b>	<b>2.526</b>	<b>2.585</b>	..

## TPES/GDP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.270</b>	<b>0.256</b>	<b>0.231</b>	<b>0.201</b>	<b>0.198</b>	<b>0.195</b>	<b>0.185</b>	<b>0.181</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>0.456</b>	<b>0.446</b>	<b>0.469</b>	<b>0.382</b>	<b>0.365</b>	<b>0.333</b>	<b>0.308</b>	<b>0.299</b>	<b>..</b>
<b>OECD Total</b>	<b>0.210</b>	<b>0.189</b>	<b>0.155</b>	<b>0.138</b>	<b>0.130</b>	<b>0.121</b>	<b>0.111</b>	<b>0.108</b>	<b>0.106</b>
Canada	0.258	0.246	0.208	0.189	0.179	0.164	0.157	0.150	0.153
Chile	0.208	0.180	0.184	0.174	0.157	0.142	0.137	0.137	0.140
Mexico	0.157	0.184	0.200	0.173	0.189	0.170	0.160	0.155	0.148
United States	0.315	0.276	0.211	0.179	0.161	0.148	0.137	0.132	0.128
<b>OECD Americas</b>	<b>0.301</b>	<b>0.267</b>	<b>0.210</b>	<b>0.179</b>	<b>0.164</b>	<b>0.151</b>	<b>0.140</b>	<b>0.135</b>	<b>0.132</b>
Australia	0.137	0.139	0.128	0.108	0.100	0.099	0.087	0.084	0.087
Israel <sup>1</sup>	0.150	0.119	0.120	0.107	0.098	0.099	0.079	0.083	0.078
Japan	0.136	0.116	0.094	0.097	0.092	0.087	0.074	0.072	0.070
Korea	0.271	0.292	0.256	0.265	0.235	0.228	0.217	0.215	0.218
New Zealand	0.118	0.128	0.155	0.153	0.125	0.125	0.126	0.123	0.118
<b>OECD Asia Oceania</b>	<b>0.139</b>	<b>0.126</b>	<b>0.109</b>	<b>0.116</b>	<b>0.109</b>	<b>0.108</b>	<b>0.097</b>	<b>0.095</b>	<b>0.095</b>
Austria	0.126	0.111	0.096	0.085	0.092	0.087	0.079	0.080	0.080
Belgium	0.204	0.173	0.145	0.141	0.129	0.124	0.106	0.105	0.110
Czech Republic	0.422	0.370	0.345	0.272	0.246	0.218	0.196	0.188	0.180
Denmark	0.113	0.103	0.076	0.062	0.059	0.060	0.048	0.047	0.048
Estonia	..	..	0.654	0.334	0.262	0.288	0.262	0.234	0.254
Finland	0.211	0.201	0.170	0.155	0.145	0.148	0.138	0.131	0.135
France	0.147	0.129	0.117	0.107	0.106	0.099	0.088	0.089	0.086
Germany	0.194	0.175	0.137	0.108	0.105	0.095	0.084	0.083	0.083
Greece	0.078	0.081	0.108	0.108	0.099	0.092	0.094	0.095	0.094
Hungary	0.294	0.306	0.277	0.234	0.209	0.204	0.172	0.176	0.176
Iceland	0.265	0.246	0.285	0.303	0.246	0.408	0.403	0.368	0.392
Ireland	0.164	0.142	0.120	0.084	0.067	0.065	0.053	0.044	0.043
Italy	0.111	0.095	0.084	0.083	0.086	0.082	0.072	0.074	0.072
Latvia	..	..	..	0.234	0.186	0.190	0.157	0.151	0.144
Luxembourg	0.325	0.239	0.140	0.082	0.093	0.079	0.064	0.060	0.057
Netherlands	0.175	0.151	0.127	0.103	0.104	0.100	0.086	0.085	0.085
Norway	0.098	0.093	0.082	0.071	0.066	0.079	0.061	0.064	0.060
Poland	0.471	0.555	0.455	0.272	0.243	0.210	0.176	0.171	0.174
Portugal	0.071	0.083	0.101	0.111	0.114	0.099	0.095	0.097	0.093
Slovak Republic	0.417	0.450	0.417	0.320	0.265	0.199	0.164	0.162	0.158
Slovenia	..	..	0.185	0.174	0.165	0.153	0.139	0.134	0.135
Spain	0.092	0.104	0.103	0.106	0.105	0.089	0.084	0.084	0.081
Sweden	0.170	0.157	0.147	0.120	0.114	0.104	0.093	0.084	0.086
Switzerland	0.056	0.058	0.057	0.052	0.050	0.045	0.040	0.039	0.038
Turkey	0.141	0.144	0.145	0.146	0.128	0.138	0.118	0.118	0.120
United Kingdom	0.191	0.162	0.126	0.107	0.093	0.084	0.069	0.067	0.065
<b>OECD Europe</b>	<b>0.165</b>	<b>0.151</b>	<b>0.129</b>	<b>0.110</b>	<b>0.106</b>	<b>0.099</b>	<b>0.087</b>	<b>0.087</b>	<b>0.086</b>
<i>IEA</i>	<i>0.211</i>	<i>0.189</i>	<i>0.153</i>	<i>0.138</i>	<i>0.128</i>	<i>0.120</i>	<i>0.109</i>	<i>0.107</i>	<i>0.105</i>
<i>IEA/Accession/Association</i>	<i>0.238</i>	<i>0.221</i>	<i>0.188</i>	<i>0.169</i>	<i>0.168</i>	<i>0.168</i>	<i>0.158</i>	<i>0.154</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.139</i>	<i>0.115</i>	<i>0.110</i>	<i>0.102</i>	<i>0.090</i>	<i>0.089</i>	<i>..</i>
<i>G7</i>	<i>0.225</i>	<i>0.196</i>	<i>0.154</i>	<i>0.139</i>	<i>0.129</i>	<i>0.120</i>	<i>0.109</i>	<i>0.106</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>0.181</i>	<i>0.155</i>	<i>0.144</i>	<i>0.134</i>	<i>0.124</i>	<i>0.120</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>0.209</i>	<i>0.182</i>	<i>0.179</i>	<i>0.177</i>	<i>0.168</i>	<i>0.164</i>	<i>..</i>
<i>OPEC</i>	<i>0.116</i>	<i>0.171</i>	<i>0.260</i>	<i>0.296</i>	<i>0.291</i>	<i>0.295</i>	<i>0.295</i>	<i>0.294</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## TPES/GDP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>0.456</b>	<b>0.446</b>	<b>0.469</b>	<b>0.382</b>	<b>0.365</b>	<b>0.333</b>	<b>0.308</b>	<b>0.299</b>	..
Albania	0.440	0.564	0.433	0.257	0.234	0.178	0.183	0.167	..
Armenia	..	..	1.212	0.467	0.328	0.268	0.266	0.268	..
Azerbaijan	..	..	1.015	0.859	0.542	0.219	0.245	0.243	..
Belarus	..	..	1.491	0.908	0.689	0.498	0.455	0.431	..
Bosnia and Herzegovina	..	..	2.066	0.384	0.338	0.378	0.441	0.439	..
Bulgaria	1.132	0.994	0.778	0.568	0.458	0.353	0.339	0.341	..
Croatia	..	..	0.163	0.179	0.167	0.157	0.140	0.144	..
Cyprus <sup>1</sup>	0.204	0.129	0.111	0.113	0.098	0.096	0.086	0.086	..
FYR of Macedonia	..	..	0.322	0.380	0.369	0.305	0.263	0.253	..
Georgia	..	..	0.733	0.451	0.314	0.268	0.306	0.314	..
Gibraltar	0.056	0.060	0.081	0.140	0.146	0.165	0.172	0.179	..
Kazakhstan	..	..	0.763	0.534	0.465	0.467	0.417	0.419	..
Kosovo	..	..	..	0.473	0.410	0.428	0.337	0.369	..
Kyrgyzstan	..	..	1.556	0.723	0.667	0.574	0.698	0.657	..
Lithuania	..	..	0.594	0.294	0.253	0.190	0.160	0.162	..
Malta	0.200	0.110	0.163	0.095	0.111	0.096	0.078	0.061	..
Republic of Moldova	..	..	1.000	0.818	0.705	0.603	0.467	0.481	..
Montenegro	..	..	..	..	0.306	0.272	0.218	0.224	..
Romania	0.734	0.561	0.502	0.329	0.265	0.209	0.173	0.169	..
Russian Federation	..	..	0.582	0.610	0.477	0.423	0.405	0.412	..
Serbia	..	..	0.803	0.536	0.464	0.396	0.332	0.367	..
Tajikistan	..	..	0.786	0.836	0.571	0.386	0.345	0.341	..
Turkmenistan	..	..	1.281	1.384	1.391	1.005	0.765	0.742	..
Ukraine	..	..	1.225	1.497	1.105	0.974	0.787	0.744	..
Uzbekistan	..	..	2.267	2.538	1.805	1.099	0.812	0.733	..
Former Soviet Union	0.698	0.681	x	x	x	x	x	x	x
Former Yugoslavia	0.259	0.242	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>0.675</b>	<b>0.644</b>	<b>0.681</b>	<b>0.642</b>	<b>0.505</b>	<b>0.435</b>	<b>0.401</b>	<b>0.400</b>	..
Algeria	0.105	0.160	0.241	0.244	0.228	0.249	0.283	0.285	..
Angola	0.154	0.183	0.184	0.208	0.182	0.148	0.145	0.144	..
Benin	0.643	0.613	0.548	0.416	0.433	0.531	0.494	0.520	..
Botswana	..	..	0.229	0.210	0.182	0.168	0.169	0.170	..
Cameroon	0.441	0.341	0.335	0.370	0.355	0.295	0.261	0.256	..
Congo	0.189	0.150	0.119	0.093	0.117	0.140	0.185	0.182	..
Côte d'Ivoire	0.225	0.216	0.245	0.304	0.431	0.408	0.446	0.382	..
Dem. Rep. of the Congo	0.304	0.400	0.510	1.070	1.063	0.967	1.034	0.972	..
Egypt	0.271	0.287	0.360	0.298	0.380	0.335	0.338	0.321	..
Eritrea	..	..	..	0.365	0.346	0.350	0.308	0.305	..
Ethiopia	1.815	2.029	2.302	2.424	2.064	1.424	1.102	1.034	..
Gabon	0.252	0.155	0.112	0.118	0.221	0.354	0.281	0.274	..
Ghana	0.339	0.413	0.439	0.342	0.251	0.235	0.199	0.208	..
Kenya	0.555	0.505	0.492	0.534	0.512	0.489	0.479	0.481	..
Libya	0.052	0.097	0.238	0.330	0.288	0.278	0.469	0.504	..
Mauritius	0.243	0.197	0.170	0.153	0.151	0.132	0.121	0.121	..
Morocco	0.192	0.199	0.176	0.192	0.204	0.184	0.176	0.171	..
Mozambique	2.387	2.977	2.585	1.548	1.196	0.981	0.867	0.905	..
Namibia	..	..	..	0.143	0.146	0.136	0.129	0.127	..
Niger	..	..	..	0.402	0.390	0.390	0.395	0.388	..
Nigeria	0.320	0.342	0.510	0.549	0.406	0.327	0.299	0.302	..
Senegal	0.315	0.316	0.264	0.277	0.257	0.297	0.263	0.259	..
South Africa	0.322	0.341	0.408	0.408	0.398	0.377	0.353	0.340	..
South Sudan	..	..	..	..	..	..	0.117	0.136	..
Sudan	0.689	0.540	0.536	0.391	0.323	0.255	0.216	0.215	..
United Rep. of Tanzania	1.155	0.960	0.796	0.815	0.737	0.658	0.607	0.594	..
Togo	0.545	0.478	0.612	0.824	0.876	0.982	0.865	0.848	..
Tunisia	0.230	0.253	0.270	0.251	0.236	0.233	0.222	0.227	..
Zambia	0.555	0.599	0.646	0.641	0.555	0.415	0.396	0.393	..
Zimbabwe	0.790	0.777	0.723	0.654	0.923	1.019	0.875	0.886	..
Other Africa	0.554	0.562	0.724	0.674	0.539	0.468	0.430	0.434	..
<b>Africa</b>	<b>0.340</b>	<b>0.344</b>	<b>0.424</b>	<b>0.425</b>	<b>0.397</b>	<b>0.356</b>	<b>0.346</b>	<b>0.342</b>	..

1. Please refer to section 'Geographical coverage'.

## TPES/GDP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.286	0.294	0.300	0.273	0.265	0.265	0.241	0.242	..
Brunei Darussalam	0.051	0.117	0.180	0.199	0.167	0.236	0.259	0.199	..
Cambodia	..	..	..	0.655	0.422	0.474	0.428	0.442	..
DPR of Korea	1.957	1.356	0.778	0.663	0.739	0.552	0.361	0.292	..
India	0.749	0.728	0.648	0.543	0.459	0.418	0.388	0.371	..
Indonesia	0.348	0.307	0.318	0.343	0.314	0.279	0.238	0.228	..
Malaysia	0.218	0.260	0.267	0.301	0.321	0.288	0.285	0.260	..
Mongolia	..	..	0.886	0.625	0.570	0.548	0.463	0.423	..
Myanmar	1.149	0.917	0.915	0.552	0.346	0.218	0.224	0.224	..
Nepal	1.112	1.081	0.864	0.744	0.709	0.638	0.609	0.595	..
Pakistan	0.616	0.570	0.537	0.540	0.506	0.476	0.446	0.435	..
Philippines	0.315	0.280	0.304	0.319	0.248	0.202	0.190	0.196	..
Singapore	0.197	0.160	0.171	0.139	0.126	0.108	0.093	0.089	..
Sri Lanka	0.431	0.332	0.268	0.243	0.216	0.172	0.148	0.150	..
Chinese Taipei	0.316	0.338	0.308	0.286	0.283	0.250	0.220	0.215	..
Thailand	0.378	0.331	0.296	0.332	0.349	0.346	0.353	0.345	..
Viet Nam	0.963	0.851	0.606	0.470	0.483	0.508	0.462	0.478	..
Other Asia	0.265	0.271	0.201	0.193	0.163	0.147	0.131	0.135	..
<b>Non-OECD Asia excl. China</b>	<b>0.529</b>	<b>0.478</b>	<b>0.435</b>	<b>0.397</b>	<b>0.363</b>	<b>0.332</b>	<b>0.307</b>	<b>0.297</b>	..
People's Rep. of China	1.907	1.752	1.050	0.505	0.499	0.416	0.354	0.334	..
Hong Kong, China	0.104	0.085	0.083	0.089	0.067	0.060	0.055	0.053	..
<b>China</b>	<b>1.690</b>	<b>1.523</b>	<b>0.942</b>	<b>0.478</b>	<b>0.477</b>	<b>0.403</b>	<b>0.345</b>	<b>0.326</b>	..
Argentina	0.191	0.185	0.237	0.203	0.201	0.186	0.189	0.189	..
Bolivia	0.159	0.266	0.280	0.364	0.331	0.321	0.337	0.323	..
Brazil	0.129	0.113	0.118	0.122	0.121	0.120	0.125	0.128	..
Colombia	0.188	0.170	0.164	0.134	0.118	0.109	0.098	0.094	..
Costa Rica	0.110	0.106	0.110	0.117	0.131	0.125	0.115	0.111	..
Cuba	0.467	0.488	0.389	0.329	0.216	0.192	0.165	0.163	..
Curaçao	5.223	2.855	0.850	0.899	0.835	0.762	1.050	1.112	..
Dominican Republic	0.281	0.234	0.216	0.217	0.177	0.137	0.118	0.120	..
Ecuador	0.122	0.170	0.166	0.190	0.159	0.169	0.164	0.174	..
El Salvador	0.182	0.214	0.218	0.223	0.226	0.203	0.176	0.183	..
Guatemala	0.231	0.208	0.222	0.237	0.226	0.247	0.276	0.254	..
Haiti	0.332	0.317	0.246	0.307	0.534	0.573	0.539	0.548	..
Honduras	0.352	0.313	0.313	0.285	0.312	0.290	0.297	0.304	..
Jamaica	0.297	0.287	0.269	0.309	0.275	0.203	0.208	0.212	..
Nicaragua	0.229	0.283	0.426	0.381	0.370	0.338	0.336	0.348	..
Panama	0.326	0.163	0.150	0.156	0.143	0.125	0.105	0.101	..
Paraguay	0.392	0.277	0.273	0.270	0.252	0.240	0.210	0.213	..
Peru	0.183	0.174	0.166	0.142	0.129	0.132	0.132	0.132	..
Suriname	..	..	..	0.235	0.178	0.164	0.139	0.134	..
Trinidad and Tobago	0.356	0.375	0.749	0.793	0.881	0.906	0.857	0.854	..
Uruguay	0.152	0.123	0.105	0.103	0.098	0.101	0.099	0.105	..
Venezuela	0.104	0.151	0.168	0.177	0.172	0.184	0.160	0.149	..
Other Non-OECD Americas	0.329	0.257	0.172	0.143	0.131	0.151	0.157	0.157	..
<b>Non-OECD Americas</b>	<b>0.162</b>	<b>0.151</b>	<b>0.156</b>	<b>0.154</b>	<b>0.149</b>	<b>0.146</b>	<b>0.144</b>	<b>0.145</b>	..
Bahrain	0.816	0.368	0.588	0.523	0.532	0.494	0.470	0.464	..
Islamic Republic of Iran	0.091	0.230	0.337	0.436	0.469	0.437	0.511	0.510	..
Iraq	0.280	0.213	0.281	0.256	0.254	0.271	0.273	0.257	..
Jordan	0.178	0.213	0.377	0.339	0.342	0.269	0.277	0.286	..
Kuwait	0.118	0.196	0.224	0.255	0.241	0.278	0.232	0.248	..
Lebanon	0.117	0.172	0.171	0.225	0.191	0.168	0.184	0.185	..
Oman	0.015	0.101	0.156	0.178	0.224	0.319	0.358	0.354	..
Qatar	0.056	0.145	0.345	0.303	0.312	0.221	0.275	0.272	..
Saudi Arabia	0.047	0.119	0.237	0.305	0.301	0.352	0.328	0.330	..
Syrian Arab Republic	0.223	0.236	0.433	0.400	0.441	0.361	0.455	0.587	..
United Arab Emirates	0.028	0.062	0.165	0.161	0.175	0.220	0.211	0.204	..
Yemen	0.288	0.183	0.214	0.233	0.263	0.252	0.262	0.168	..
<b>Middle East</b>	<b>0.088</b>	<b>0.155</b>	<b>0.265</b>	<b>0.304</b>	<b>0.317</b>	<b>0.329</b>	<b>0.334</b>	<b>0.331</b>	..

## TPES/GDP PPP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.231</b>	<b>0.214</b>	<b>0.192</b>	<b>0.164</b>	<b>0.156</b>	<b>0.145</b>	<b>0.134</b>	<b>0.130</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>0.232</b>	<b>0.228</b>	<b>0.229</b>	<b>0.183</b>	<b>0.174</b>	<b>0.157</b>	<b>0.145</b>	<b>0.140</b>	<b>..</b>
<b>OECD Total</b>	<b>0.220</b>	<b>0.197</b>	<b>0.161</b>	<b>0.144</b>	<b>0.134</b>	<b>0.125</b>	<b>0.113</b>	<b>0.110</b>	<b>0.108</b>
Canada	0.306	0.291	0.247	0.224	0.212	0.195	0.186	0.178	0.181
Chile	0.146	0.126	0.129	0.122	0.110	0.099	0.096	0.096	0.098
Mexico	0.095	0.112	0.121	0.105	0.115	0.103	0.097	0.094	0.090
United States	0.315	0.276	0.211	0.179	0.161	0.148	0.137	0.132	0.128
<b>OECD Americas</b>	<b>0.295</b>	<b>0.259</b>	<b>0.205</b>	<b>0.175</b>	<b>0.160</b>	<b>0.146</b>	<b>0.136</b>	<b>0.131</b>	<b>0.128</b>
Australia	0.189	0.192	0.177	0.149	0.138	0.136	0.119	0.116	0.120
Israel <sup>1</sup>	0.159	0.126	0.128	0.113	0.104	0.105	0.084	0.088	0.083
Japan	0.178	0.151	0.123	0.129	0.122	0.115	0.099	0.096	0.094
Korea	0.197	0.213	0.186	0.193	0.171	0.166	0.158	0.157	0.159
New Zealand	0.127	0.138	0.167	0.165	0.134	0.135	0.136	0.133	0.128
<b>OECD Asia Oceania</b>	<b>0.178</b>	<b>0.160</b>	<b>0.136</b>	<b>0.142</b>	<b>0.133</b>	<b>0.129</b>	<b>0.115</b>	<b>0.113</b>	<b>0.113</b>
Austria	0.140	0.124	0.107	0.095	0.102	0.097	0.087	0.089	0.089
Belgium	0.226	0.191	0.160	0.156	0.143	0.137	0.117	0.116	0.121
Czech Republic	0.302	0.265	0.247	0.194	0.176	0.156	0.140	0.135	0.129
Denmark	0.153	0.138	0.102	0.084	0.080	0.081	0.065	0.064	0.065
Estonia	..	..	0.443	0.226	0.177	0.195	0.178	0.159	0.172
Finland	0.251	0.239	0.202	0.184	0.172	0.176	0.164	0.156	0.160
France	0.166	0.145	0.133	0.121	0.120	0.111	0.100	0.100	0.097
Germany	0.206	0.186	0.146	0.115	0.112	0.102	0.090	0.089	0.088
Greece	0.075	0.077	0.104	0.103	0.095	0.088	0.090	0.091	0.089
Hungary	0.178	0.186	0.168	0.142	0.127	0.124	0.104	0.107	0.107
Iceland	0.288	0.267	0.309	0.329	0.267	0.443	0.437	0.399	0.435
Ireland	0.184	0.160	0.135	0.094	0.076	0.073	0.060	0.049	0.048
Italy	0.113	0.097	0.086	0.085	0.088	0.084	0.073	0.076	0.073
Latvia	..	..	0.225	0.150	0.120	0.122	0.101	0.097	0.093
Luxembourg	0.397	0.293	0.172	0.101	0.114	0.097	0.078	0.073	0.070
Netherlands	0.198	0.171	0.143	0.116	0.117	0.113	0.097	0.096	0.096
Norway	0.148	0.140	0.125	0.108	0.099	0.120	0.092	0.096	0.091
Poland	0.281	0.331	0.272	0.163	0.145	0.125	0.105	0.102	0.104
Portugal	0.058	0.068	0.083	0.092	0.094	0.081	0.078	0.080	0.077
Slovak Republic	0.277	0.298	0.277	0.212	0.176	0.132	0.109	0.108	0.105
Slovenia	..	..	0.156	0.146	0.140	0.129	0.117	0.113	0.114
Spain	0.089	0.099	0.099	0.102	0.100	0.086	0.080	0.081	0.078
Sweden	0.212	0.196	0.184	0.150	0.143	0.130	0.116	0.105	0.108
Switzerland	0.079	0.082	0.080	0.073	0.070	0.063	0.057	0.055	0.053
Turkey	0.086	0.088	0.089	0.089	0.078	0.084	0.072	0.072	0.073
United Kingdom	0.206	0.175	0.136	0.116	0.101	0.091	0.074	0.073	0.070
<b>OECD Europe</b>	<b>0.171</b>	<b>0.156</b>	<b>0.132</b>	<b>0.113</b>	<b>0.108</b>	<b>0.101</b>	<b>0.088</b>	<b>0.087</b>	<b>0.086</b>
<i>IEA</i>	<i>0.225</i>	<i>0.201</i>	<i>0.163</i>	<i>0.146</i>	<i>0.135</i>	<i>0.126</i>	<i>0.114</i>	<i>0.111</i>	<i>0.109</i>
<i>IEA/Accession/Association</i>	<i>0.236</i>	<i>0.216</i>	<i>0.180</i>	<i>0.155</i>	<i>0.149</i>	<i>0.140</i>	<i>0.127</i>	<i>0.123</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.141</i>	<i>0.117</i>	<i>0.112</i>	<i>0.103</i>	<i>0.091</i>	<i>0.090</i>	<i>..</i>
<i>G7</i>	<i>0.242</i>	<i>0.212</i>	<i>0.168</i>	<i>0.150</i>	<i>0.140</i>	<i>0.129</i>	<i>0.118</i>	<i>0.114</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>0.186</i>	<i>0.162</i>	<i>0.149</i>	<i>0.138</i>	<i>0.127</i>	<i>0.124</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>0.189</i>	<i>0.161</i>	<i>0.153</i>	<i>0.143</i>	<i>0.131</i>	<i>0.127</i>	<i>..</i>
<i>OPEC</i>	<i>0.055</i>	<i>0.082</i>	<i>0.124</i>	<i>0.141</i>	<i>0.137</i>	<i>0.139</i>	<i>0.140</i>	<i>0.139</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## TPES/GDP PPP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>0.232</b>	<b>0.228</b>	<b>0.229</b>	<b>0.183</b>	<b>0.174</b>	<b>0.157</b>	<b>0.145</b>	<b>0.140</b>	..
Albania	0.194	0.248	0.190	0.113	0.103	0.078	0.081	0.073	..
Armenia	..	..	0.594	0.229	0.161	0.131	0.130	0.131	..
Azerbaijan	..	..	0.380	0.321	0.203	0.082	0.092	0.091	..
Belarus	..	..	0.564	0.343	0.260	0.189	0.172	0.163	..
Bosnia and Herzegovina	..	..	1.034	0.192	0.169	0.189	0.221	0.220	..
Bulgaria	0.514	0.451	0.353	0.258	0.208	0.160	0.154	0.154	..
Croatia	..	..	0.116	0.128	0.119	0.112	0.100	0.102	..
Cyprus <sup>1</sup>	0.185	0.117	0.101	0.102	0.089	0.087	0.078	0.078	..
FYR of Macedonia	..	..	0.126	0.148	0.144	0.119	0.103	0.099	..
Georgia	..	..	0.329	0.203	0.141	0.121	0.137	0.141	..
Gibraltar	0.069	0.073	0.099	0.165	0.169	0.189	0.199	0.207	..
Kazakhstan	..	..	0.337	0.236	0.205	0.206	0.184	0.185	..
Kosovo	..	..	..	0.200	0.173	0.181	0.142	0.156	..
Kyrgyzstan	..	..	0.501	0.233	0.215	0.185	0.225	0.212	..
Lithuania	..	..	0.354	0.175	0.151	0.113	0.095	0.097	..
Malta	0.158	0.087	0.129	0.075	0.088	0.076	0.062	0.048	..
Republic of Moldova	..	..	0.423	0.347	0.299	0.256	0.198	0.204	..
Montenegro	..	..	..	..	0.152	0.135	0.109	0.111	..
Romania	0.367	0.281	0.251	0.165	0.133	0.104	0.087	0.084	..
Russian Federation	..	..	0.324	0.339	0.265	0.235	0.225	0.229	..
Serbia	..	..	0.368	0.246	0.213	0.181	0.152	0.168	..
Tajikistan	..	..	0.281	0.299	0.204	0.138	0.123	0.122	..
Turkmenistan	..	..	0.584	0.631	0.634	0.458	0.348	0.338	..
Ukraine	..	..	0.473	0.577	0.426	0.376	0.304	0.287	..
Uzbekistan	..	..	0.761	0.852	0.606	0.369	0.273	0.246	..
Former Soviet Union	0.386	0.377	x	x	x	x	x	x	x
Former Yugoslavia	0.161	0.150	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>0.373</b>	<b>0.356</b>	<b>0.350</b>	<b>0.334</b>	<b>0.261</b>	<b>0.223</b>	<b>0.205</b>	<b>0.204</b>	..
Algeria	0.037	0.057	0.085	0.087	0.081	0.088	0.100	0.101	..
Angola	0.094	0.112	0.112	0.127	0.111	0.090	0.089	0.088	..
Benin	0.273	0.261	0.233	0.177	0.184	0.226	0.210	0.221	..
Botswana	..	..	0.111	0.102	0.089	0.082	0.082	0.082	..
Cameroon	0.200	0.155	0.152	0.168	0.162	0.134	0.118	0.116	..
Congo	0.102	0.081	0.064	0.050	0.063	0.075	0.099	0.098	..
Côte d'Ivoire	0.104	0.100	0.113	0.141	0.200	0.189	0.206	0.177	..
Dem. Rep. of the Congo	0.162	0.213	0.272	0.570	0.566	0.515	0.551	0.518	..
Egypt	0.073	0.077	0.097	0.080	0.102	0.090	0.091	0.086	..
Eritrea	..	..	..	0.127	0.120	0.122	0.107	0.106	..
Ethiopia	0.589	0.658	0.747	0.786	0.670	0.462	0.358	0.336	..
Gabon	0.146	0.090	0.065	0.069	0.128	0.206	0.163	0.159	..
Ghana	0.148	0.181	0.192	0.150	0.110	0.103	0.087	0.091	..
Kenya	0.221	0.201	0.196	0.213	0.204	0.195	0.191	0.192	..
Libya	0.022	0.040	0.099	0.138	0.120	0.116	0.196	0.210	..
Mauritius	0.127	0.103	0.089	0.080	0.079	0.069	0.063	0.064	..
Morocco	0.086	0.089	0.079	0.086	0.092	0.083	0.079	0.077	..
Mozambique	1.113	1.388	1.205	0.721	0.558	0.457	0.404	0.422	..
Namibia	..	..	..	0.090	0.092	0.085	0.081	0.079	..
Niger	..	..	..	0.175	0.170	0.170	0.172	0.169	..
Nigeria	0.147	0.157	0.234	0.252	0.186	0.150	0.137	0.138	..
Senegal	0.146	0.147	0.123	0.129	0.120	0.138	0.123	0.121	..
South Africa	0.201	0.213	0.254	0.255	0.248	0.235	0.220	0.212	..
South Sudan	..	..	..	..	..	..	0.032	0.026	..
Sudan	0.308	0.242	0.240	0.175	0.144	0.114	0.097	0.096	..
United Rep. of Tanzania	0.396	0.329	0.273	0.279	0.253	0.225	0.208	0.203	..
Togo	0.225	0.197	0.252	0.339	0.361	0.405	0.356	0.350	..
Tunisia	0.093	0.102	0.109	0.101	0.095	0.094	0.090	0.092	..
Zambia	0.253	0.273	0.294	0.292	0.253	0.189	0.180	0.179	..
Zimbabwe	0.391	0.385	0.358	0.324	0.457	0.505	0.433	0.439	..
Other Africa	0.230	0.235	0.311	0.288	0.237	0.206	0.188	0.189	..
<b>Africa</b>	<b>0.156</b>	<b>0.154</b>	<b>0.187</b>	<b>0.184</b>	<b>0.172</b>	<b>0.154</b>	<b>0.149</b>	<b>0.147</b>	..

1. Please refer to section 'Geographical coverage'.



## TPES/GDP PPP (toe per thousand 2010 USD)

<i>toe per thousand 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.091	0.093	0.095	0.086	0.084	0.084	0.076	0.077	..
Brunei Darussalam	0.025	0.058	0.089	0.098	0.083	0.117	0.128	0.099	..
Cambodia	..	..	..	0.208	0.134	0.151	0.136	0.141	..
DPR of Korea	0.521	0.361	0.207	0.177	0.197	0.147	0.096	0.078	..
India	0.234	0.227	0.202	0.169	0.143	0.130	0.121	0.116	..
Indonesia	0.131	0.116	0.120	0.129	0.118	0.105	0.090	0.086	..
Malaysia	0.096	0.114	0.117	0.132	0.141	0.126	0.125	0.114	..
Mongolia	..	..	0.311	0.219	0.200	0.192	0.162	0.149	..
Myanmar	0.330	0.263	0.263	0.158	0.099	0.063	0.064	0.064	..
Nepal	0.338	0.329	0.263	0.226	0.216	0.194	0.185	0.181	..
Pakistan	0.153	0.141	0.133	0.134	0.125	0.118	0.111	0.108	..
Philippines	0.122	0.109	0.118	0.124	0.096	0.079	0.074	0.076	..
Singapore	0.130	0.105	0.113	0.092	0.083	0.071	0.061	0.059	..
Sri Lanka	0.145	0.111	0.090	0.082	0.073	0.058	0.050	0.050	..
Chinese Taipei	0.162	0.173	0.158	0.147	0.145	0.128	0.113	0.110	..
Thailand	0.145	0.127	0.114	0.128	0.134	0.133	0.136	0.132	..
Viet Nam	0.292	0.258	0.184	0.143	0.147	0.154	0.140	0.145	..
Other Asia	0.134	0.136	0.106	0.105	0.085	0.074	0.065	0.066	..
<b>Non-OECD Asia excl. China</b>	<b>0.187</b>	<b>0.171</b>	<b>0.156</b>	<b>0.144</b>	<b>0.131</b>	<b>0.119</b>	<b>0.109</b>	<b>0.106</b>	..
People's Rep. of China	0.941	0.865	0.518	0.249	0.246	0.205	0.175	0.165	..
Hong Kong, China	0.072	0.059	0.057	0.061	0.046	0.041	0.038	0.036	..
<b>China</b>	<b>0.864</b>	<b>0.782</b>	<b>0.480</b>	<b>0.241</b>	<b>0.239</b>	<b>0.201</b>	<b>0.172</b>	<b>0.162</b>	..
Argentina	0.123	0.119	0.153	0.131	0.129	0.120	0.122	0.122	..
Bolivia	0.059	0.099	0.105	0.136	0.124	0.120	0.126	0.121	..
Brazil	0.101	0.089	0.093	0.096	0.096	0.095	0.099	0.101	..
Colombia	0.110	0.100	0.096	0.078	0.069	0.064	0.057	0.055	..
Costa Rica	0.073	0.070	0.073	0.078	0.087	0.082	0.076	0.073	..
Cuba	0.147	0.154	0.123	0.104	0.068	0.060	0.052	0.051	..
Curaçao	5.824	3.181	0.948	1.002	0.931	0.849	1.171	1.239	..
Dominican Republic	0.140	0.116	0.107	0.108	0.088	0.068	0.059	0.059	..
Ecuador	0.062	0.086	0.085	0.096	0.081	0.086	0.083	0.088	..
El Salvador	0.088	0.104	0.106	0.108	0.110	0.099	0.086	0.089	..
Guatemala	0.099	0.089	0.095	0.102	0.097	0.106	0.119	0.109	..
Haiti	0.149	0.143	0.111	0.138	0.240	0.258	0.243	0.247	..
Honduras	0.174	0.154	0.155	0.141	0.154	0.143	0.147	0.150	..
Jamaica	0.178	0.172	0.161	0.185	0.164	0.121	0.124	0.127	..
Nicaragua	0.088	0.109	0.165	0.147	0.143	0.131	0.130	0.134	..
Panama	0.171	0.085	0.079	0.082	0.075	0.066	0.055	0.053	..
Paraguay	0.177	0.125	0.123	0.122	0.114	0.108	0.095	0.096	..
Peru	0.095	0.090	0.086	0.074	0.067	0.069	0.068	0.069	..
Suriname	..	..	..	0.139	0.106	0.097	0.082	0.079	..
Trinidad and Tobago	0.203	0.213	0.426	0.452	0.502	0.516	0.488	0.486	..
Uruguay	0.108	0.088	0.075	0.074	0.070	0.072	0.071	0.075	..
Venezuela	0.087	0.126	0.141	0.148	0.144	0.154	0.134	0.125	..
Other Non-OECD Americas	0.315	0.250	0.169	0.146	0.133	0.152	0.165	0.159	..
<b>Non-OECD Americas</b>	<b>0.112</b>	<b>0.105</b>	<b>0.109</b>	<b>0.107</b>	<b>0.103</b>	<b>0.101</b>	<b>0.099</b>	<b>0.099</b>	..
Bahrain	0.422	0.190	0.304	0.270	0.275	0.256	0.243	0.240	..
Islamic Republic of Iran	0.033	0.085	0.124	0.160	0.172	0.160	0.188	0.187	..
Iraq	0.101	0.077	0.102	0.092	0.092	0.098	0.099	0.093	..
Jordan	0.070	0.085	0.149	0.135	0.136	0.107	0.110	0.113	..
Kuwait	0.062	0.103	0.117	0.133	0.126	0.145	0.121	0.130	..
Lebanon	0.065	0.095	0.094	0.124	0.105	0.092	0.101	0.102	..
Oman	0.007	0.044	0.068	0.077	0.097	0.139	0.156	0.154	..
Qatar	0.032	0.082	0.196	0.172	0.177	0.125	0.156	0.154	..
Saudi Arabia	0.021	0.051	0.102	0.132	0.130	0.152	0.142	0.143	..
Syrian Arab Republic	0.101	0.107	0.196	0.181	0.200	0.164	0.206	0.266	..
United Arab Emirates	0.017	0.038	0.100	0.098	0.107	0.134	0.129	0.124	..
Yemen	0.088	0.056	0.066	0.071	0.081	0.077	0.080	0.051	..
<b>Middle East</b>	<b>0.037</b>	<b>0.068</b>	<b>0.114</b>	<b>0.132</b>	<b>0.139</b>	<b>0.144</b>	<b>0.148</b>	<b>0.147</b>	..

## TPES/population (toe per capita)

<i>toe per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1.559</b>	<b>1.624</b>	<b>1.662</b>	<b>1.642</b>	<b>1.768</b>	<b>1.862</b>	<b>1.877</b>	<b>1.861</b>	..
<b>Non-OECD Total</b>	<b>0.727</b>	<b>0.857</b>	<b>0.960</b>	<b>0.899</b>	<b>1.064</b>	<b>1.248</b>	<b>1.333</b>	<b>1.322</b>	..
<b>OECD Total</b>	<b>4.067</b>	<b>4.130</b>	<b>4.227</b>	<b>4.583</b>	<b>4.621</b>	<b>4.381</b>	<b>4.155</b>	<b>4.119</b>	<b>4.093</b>
Canada	7.085	7.829	7.630	8.265	8.449	7.800	7.844	7.536	7.686
Chile	0.844	0.848	1.063	1.634	1.742	1.805	1.976	2.001	2.062
Mexico	0.921	1.351	1.421	1.495	1.685	1.562	1.572	1.548	1.496
United States	8.162	7.925	7.655	8.050	7.834	7.150	6.944	6.802	6.659
<b>OECD Americas</b>	<b>6.467</b>	<b>6.295</b>	<b>5.988</b>	<b>6.295</b>	<b>6.199</b>	<b>5.661</b>	<b>5.523</b>	<b>5.401</b>	<b>5.305</b>
Australia	4.191	4.701	5.031	5.375	5.576	5.744	5.293	5.207	5.430
Israel <sup>1</sup>	2.368	2.017	2.460	2.893	2.650	3.043	2.613	2.743	2.629
Japan	2.942	2.943	3.548	4.083	4.063	3.893	3.455	3.385	3.343
Korea	0.632	1.082	2.167	4.003	4.368	5.060	5.323	5.387	5.592
New Zealand	2.653	2.858	3.805	4.425	4.085	4.214	4.520	4.462	4.396
<b>OECD Asia Oceania</b>	<b>2.546</b>	<b>2.668</b>	<b>3.350</b>	<b>4.156</b>	<b>4.235</b>	<b>4.336</b>	<b>4.089</b>	<b>4.059</b>	<b>4.106</b>
Austria	2.831	3.067	3.240	3.570	4.078	4.046	3.746	3.800	3.811
Belgium	4.729	4.744	4.810	5.669	5.556	5.524	4.746	4.751	5.010
Czech Republic	4.551	4.547	4.805	4.008	4.421	4.291	3.988	3.998	3.917
Denmark	3.782	3.734	3.377	3.491	3.488	3.511	2.855	2.833	2.887
Estonia	..	..	6.163	3.365	3.834	4.218	4.549	4.131	4.537
Finland	4.508	5.146	5.692	6.257	6.556	6.824	6.243	5.927	6.161
France	3.378	3.477	3.847	4.138	4.290	4.020	3.665	3.707	3.618
Germany	4.239	4.561	4.425	4.132	4.144	4.060	3.775	3.768	3.766
Greece	1.309	1.538	2.089	2.507	2.753	2.482	2.124	2.135	2.105
Hungary	2.041	2.647	2.777	2.448	2.731	2.651	2.415	2.562	2.608
Iceland	5.277	6.565	8.902	11.100	10.551	17.025	17.935	16.867	19.019
Ireland	2.248	2.422	2.827	3.628	3.504	3.152	2.763	2.857	2.937
Italy	2.176	2.318	2.584	3.012	3.202	2.904	2.414	2.513	2.459
Latvia	..	..	2.961	1.618	2.022	2.149	2.177	2.156	2.121
Luxembourg	12.629	9.779	8.871	7.665	9.412	8.312	6.852	6.547	6.302
Netherlands	4.614	4.549	4.496	4.738	4.988	5.025	4.325	4.360	4.416
Norway	3.609	4.491	4.967	5.826	5.803	6.935	5.412	5.705	5.420
Poland	2.783	3.559	2.711	2.321	2.414	2.607	2.444	2.469	2.582
Portugal	0.791	1.013	1.679	2.390	2.519	2.223	2.035	2.121	2.075
Slovak Republic	3.344	3.984	4.026	3.285	3.495	3.283	2.943	3.023	3.039
Slovenia	..	..	2.858	3.224	3.645	3.575	3.225	3.185	3.278
Spain	1.463	1.782	2.290	3.005	3.251	2.744	2.466	2.563	2.562
Sweden	4.773	4.872	5.514	5.360	5.711	5.428	4.973	4.638	4.857
Switzerland	2.936	3.138	3.585	3.450	3.467	3.335	3.060	2.962	2.861
Turkey	0.640	0.708	0.956	1.182	1.228	1.461	1.586	1.663	1.720
United Kingdom	3.879	3.523	3.598	3.786	3.689	3.247	2.785	2.776	2.710
<b>OECD Europe</b>	<b>3.021</b>	<b>3.152</b>	<b>3.238</b>	<b>3.345</b>	<b>3.445</b>	<b>3.300</b>	<b>2.985</b>	<b>3.017</b>	<b>3.020</b>
<i>IEA</i>	4.323	4.397	4.538	4.948	4.980	4.727	4.479	4.442	4.418
<i>IEA/Accession/Association</i>	1.700	1.719	1.752	1.883	2.048	2.171	2.202	2.192	..
<i>European Union - 28</i>	..	..	3.445	3.480	3.624	3.428	3.084	3.113	..
<i>G7</i>	5.219	5.230	5.348	5.770	5.740	5.331	5.050	4.978	..
<i>G8</i>	..	..	5.456	5.502	5.540	5.249	5.048	4.969	..
<i>G20</i>	..	..	1.931	1.960	2.122	2.256	2.295	2.280	..
<i>OPEC</i>	0.727	1.089	1.281	1.536	1.744	2.006	2.101	2.077	..

1. Please refer to section 'Geographical coverage'.

## TPES/population (toe per capita)

<i>toe per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>0.727</b>	<b>0.857</b>	<b>0.960</b>	<b>0.899</b>	<b>1.064</b>	<b>1.248</b>	<b>1.333</b>	<b>1.322</b>	..
Albania	0.763	1.150	0.813	0.580	0.720	0.729	0.807	0.758	..
Armenia	..	..	2.174	0.655	0.833	0.838	0.984	1.016	..
Azerbaijan	..	..	3.165	1.403	1.600	1.280	1.502	1.488	..
Belarus	..	..	4.465	2.462	2.769	2.900	2.928	2.662	..
Bosnia and Herzegovina	..	..	1.550	1.146	1.315	1.690	2.049	2.108	..
Bulgaria	2.378	3.203	3.237	2.277	2.598	2.417	2.475	2.592	..
Croatia	..	..	1.980	1.895	2.194	2.125	1.898	1.997	..
Cyprus <sup>1</sup>	1.237	1.709	2.382	3.097	3.028	2.982	2.299	2.378	..
FYR of Macedonia	..	..	1.241	1.326	1.396	1.393	1.296	1.289	..
Georgia	..	..	2.585	0.649	0.678	0.795	1.178	1.246	..
Gibraltar	1.092	1.160	2.055	4.409	4.870	5.580	5.911	6.278	..
Kazakhstan	..	..	4.493	2.397	3.359	4.235	4.434	4.451	..
Kosovo	..	..	..	0.909	1.141	1.405	1.213	1.396	..
Kyrgyzstan	..	..	1.705	0.473	0.499	0.505	0.700	0.668	..
Lithuania	..	..	4.344	2.037	2.662	2.276	2.388	2.486	..
Malta	0.845	1.004	1.963	1.732	2.180	2.017	1.813	1.485	..
Republic of Moldova	..	..	2.677	0.792	0.973	0.985	0.928	0.952	..
Montenegro	..	..	..	..	1.664	1.822	1.538	1.624	..
Romania	2.296	2.932	2.683	1.614	1.810	1.730	1.586	1.610	..
Russian Federation	..	..	5.929	4.224	4.541	4.819	5.038	4.925	..
Serbia	..	..	1.961	1.690	2.160	2.141	1.859	2.080	..
Tajikistan	..	..	1.002	0.347	0.344	0.287	0.311	0.318	..
Turkmenistan	..	..	4.776	3.306	4.039	4.499	5.040	5.141	..
Ukraine	..	..	4.857	2.721	3.033	2.887	2.335	1.995	..
Uzbekistan	..	..	2.261	2.064	1.799	1.513	1.420	1.361	..
Former Soviet Union	3.421	4.202	x	x	x	x	x	x	x
Former Yugoslavia	1.139	1.550	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>3.131</b>	<b>3.874</b>	<b>4.485</b>	<b>2.955</b>	<b>3.218</b>	<b>3.315</b>	<b>3.335</b>	<b>3.242</b>	..
Algeria	0.305	0.579	0.856	0.866	0.974	1.112	1.327	1.362	..
Angola	0.612	0.556	0.529	0.477	0.470	0.573	0.606	0.598	..
Benin	0.380	0.364	0.332	0.285	0.305	0.389	0.400	0.419	..
Botswana	..	..	0.883	1.034	1.001	1.052	1.224	1.200	..
Cameroon	0.384	0.409	0.413	0.396	0.401	0.338	0.329	0.334	..
Congo	0.364	0.344	0.330	0.228	0.310	0.412	0.583	0.575	..
Côte d'Ivoire	0.447	0.432	0.357	0.411	0.530	0.505	0.626	0.572	..
Dem. Rep. of the Congo	0.327	0.321	0.337	0.289	0.297	0.301	0.384	0.374	..
Egypt	0.216	0.348	0.572	0.594	0.823	0.893	0.898	0.868	..
Eritrea	..	..	..	0.200	0.182	0.158	0.161	0.161	..
Ethiopia	0.474	0.474	0.477	0.477	0.481	0.487	0.501	0.503	..
Gabon	2.311	1.885	1.241	1.194	2.180	3.293	2.964	2.941	..
Ghana	0.360	0.372	0.362	0.333	0.275	0.312	0.332	0.354	..
Kenya	0.453	0.453	0.457	0.451	0.454	0.485	0.528	0.545	..
Libya	1.079	2.209	2.539	2.966	3.063	3.317	2.855	2.747	..
Mauritius	0.439	0.446	0.629	0.851	0.946	1.054	1.111	1.149	..
Morocco	0.206	0.269	0.305	0.381	0.490	0.534	0.562	0.564	..
Mozambique	0.687	0.563	0.443	0.393	0.402	0.410	0.428	0.463	..
Namibia	..	..	..	0.537	0.654	0.701	0.751	0.761	..
Niger	..	..	..	0.131	0.129	0.137	0.152	0.149	..
Nigeria	0.595	0.663	0.695	0.700	0.754	0.752	0.758	0.765	..
Senegal	0.285	0.280	0.224	0.243	0.248	0.296	0.266	0.270	..
South Africa	2.017	2.249	2.472	2.429	2.693	2.776	2.689	2.582	..
South Sudan	..	..	..	..	..	..	0.060	0.045	..
Sudan	0.485	0.438	0.412	0.383	0.374	0.362	0.381	0.389	..
United Rep. of Tanzania	0.513	0.429	0.382	0.396	0.441	0.453	0.479	0.486	..
Togo	0.324	0.326	0.334	0.433	0.425	0.487	0.467	0.470	..
Tunisia	0.349	0.513	0.601	0.753	0.823	0.966	0.952	0.971	..
Zambia	0.853	0.764	0.666	0.598	0.615	0.605	0.638	0.632	..
Zimbabwe	1.017	0.891	0.887	0.801	0.741	0.687	0.726	0.722	..
Other Africa	0.321	0.319	0.368	0.354	0.349	0.344	0.335	0.333	..
<b>Africa</b>	<b>0.527</b>	<b>0.574</b>	<b>0.626</b>	<b>0.609</b>	<b>0.653</b>	<b>0.666</b>	<b>0.671</b>	<b>0.664</b>	..

1. Please refer to section 'Geographical coverage'.

## TPES/population (toe per capita)

<i>toe per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.093	0.103	0.120	0.139	0.159	0.201	0.223	0.235	..
Brunei Darussalam	2.327	6.993	6.719	7.204	6.127	8.245	8.523	6.424	..
Cambodia	..	..	..	0.280	0.258	0.371	0.415	0.452	..
DPR of Korea	1.320	1.748	1.645	0.863	0.896	0.604	0.384	0.312	..
India	0.269	0.287	0.351	0.419	0.451	0.563	0.638	0.649	..
Indonesia	0.307	0.378	0.544	0.736	0.791	0.872	0.882	0.875	..
Malaysia	0.517	0.860	1.199	2.087	2.548	2.610	3.000	2.831	..
Mongolia	..	..	1.561	1.000	1.186	1.453	1.815	1.671	..
Myanmar	0.271	0.273	0.254	0.269	0.295	0.261	0.346	0.368	..
Nepal	0.304	0.306	0.309	0.342	0.358	0.380	0.414	0.410	..
Pakistan	0.291	0.317	0.399	0.459	0.495	0.496	0.497	0.497	..
Philippines	0.440	0.473	0.463	0.513	0.451	0.434	0.482	0.518	..
Singapore	1.712	2.126	3.783	4.635	5.056	5.006	4.766	4.627	..
Sri Lanka	0.316	0.307	0.323	0.446	0.465	0.484	0.517	0.545	..
Chinese Taipei	0.847	1.567	2.360	3.868	4.509	4.804	4.718	4.646	..
Thailand	0.389	0.464	0.741	1.153	1.503	1.767	1.991	1.990	..
Viet Nam	0.305	0.268	0.271	0.370	0.501	0.678	0.737	0.805	..
Other Asia	0.208	0.249	0.208	0.237	0.232	0.265	0.279	0.265	..
<b>Non-OECD Asia excl. China</b>	<b>0.304</b>	<b>0.347</b>	<b>0.429</b>	<b>0.528</b>	<b>0.580</b>	<b>0.665</b>	<b>0.720</b>	<b>0.726</b>	..
People's Rep. of China	0.484	0.609	0.767	0.895	1.366	1.896	2.165	2.168	..
Hong Kong, China	0.748	0.914	1.511	2.039	1.845	1.947	1.956	1.901	..
<b>China</b>	<b>0.485</b>	<b>0.611</b>	<b>0.771</b>	<b>0.901</b>	<b>1.369</b>	<b>1.896</b>	<b>2.164</b>	<b>2.167</b>	..
Argentina	1.412	1.488	1.407	1.661	1.710	1.908	1.950	1.980	..
Bolivia	0.249	0.437	0.381	0.588	0.569	0.635	0.781	0.772	..
Brazil	0.793	0.932	0.932	1.066	1.142	1.339	1.471	1.434	..
Colombia	0.589	0.638	0.707	0.639	0.626	0.680	0.711	0.700	..
Costa Rica	0.470	0.526	0.542	0.732	0.910	1.022	1.035	1.026	..
Cuba	1.175	1.489	1.645	1.146	0.947	1.092	1.026	1.058	..
Curaçao	36.247	22.692	7.716	10.020	9.498	8.903	12.643	12.985	..
Dominican Republic	0.586	0.591	0.559	0.846	0.763	0.749	0.730	0.783	..
Ecuador	0.356	0.626	0.619	0.698	0.680	0.788	0.892	0.933	..
El Salvador	0.500	0.550	0.470	0.683	0.758	0.722	0.666	0.704	..
Guatemala	0.499	0.533	0.482	0.602	0.592	0.692	0.825	0.777	..
Haiti	0.320	0.366	0.220	0.235	0.368	0.380	0.393	0.399	..
Honduras	0.504	0.514	0.485	0.479	0.597	0.608	0.673	0.703	..
Jamaica	1.488	1.064	1.167	1.467	1.387	0.976	1.009	1.037	..
Nicaragua	0.513	0.472	0.487	0.501	0.532	0.515	0.600	0.643	..
Panama	1.231	0.714	0.603	0.848	0.878	0.997	1.089	1.084	..
Paraguay	0.571	0.655	0.729	0.726	0.683	0.774	0.789	0.816	..
Peru	0.658	0.649	0.446	0.472	0.494	0.665	0.767	0.784	..
Suriname	..	..	..	1.311	1.285	1.385	1.283	1.220	..
Trinidad and Tobago	2.684	3.528	4.900	7.760	12.426	15.110	14.450	14.264	..
Uruguay	0.846	0.906	0.724	0.931	0.889	1.211	1.370	1.465	..
Venezuela	1.510	2.129	1.993	2.094	2.103	2.496	2.199	1.909	..
Other Non-OECD Americas	2.174	2.057	1.690	1.706	1.645	1.869	1.946	1.963	..
<b>Non-OECD Americas</b>	<b>0.878</b>	<b>0.989</b>	<b>0.950</b>	<b>1.049</b>	<b>1.096</b>	<b>1.261</b>	<b>1.322</b>	<b>1.294</b>	..
Bahrain	8.479	7.792	10.535	11.954	12.035	10.082	10.329	10.363	..
Islamic Republic of Iran	0.668	0.984	1.234	1.868	2.462	2.751	3.035	2.990	..
Iraq	0.425	0.712	1.147	1.101	0.978	1.215	1.403	1.314	..
Jordan	0.328	0.667	0.975	1.021	1.252	1.090	1.103	1.135	..
Kuwait	7.690	7.553	4.424	9.703	11.609	10.489	8.469	8.903	..
Lebanon	0.959	0.950	0.723	1.517	1.265	1.471	1.336	1.306	..
Oman	0.120	0.997	2.329	3.380	3.951	6.358	5.743	5.651	..
Qatar	10.089	14.785	13.711	18.415	19.910	15.652	20.436	20.334	..
Saudi Arabia	1.080	3.137	3.545	4.574	4.952	6.603	6.908	7.029	..
Syrian Arab Republic	0.291	0.499	0.840	0.944	1.147	1.045	0.573	0.539	..
United Arab Emirates	3.407	7.111	11.278	10.335	9.928	7.543	8.056	8.003	..
Yemen	0.150	0.158	0.210	0.267	0.321	0.331	0.290	0.130	..
<b>Middle East</b>	<b>0.733</b>	<b>1.287</b>	<b>1.660</b>	<b>2.190</b>	<b>2.591</b>	<b>3.034</b>	<b>3.238</b>	<b>3.211</b>	..

## Electricity consumption/GDP (kWh per 2010 USD)

<i>kWh per 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>0.250</b>	<b>0.271</b>	<b>0.288</b>	<b>0.284</b>	<b>0.289</b>	<b>0.300</b>	<b>0.299</b>	<b>0.297</b>	<b>..</b>
<b>Non-OECD Total</b>	<b>0.316</b>	<b>0.356</b>	<b>0.437</b>	<b>0.427</b>	<b>0.441</b>	<b>0.447</b>	<b>0.456</b>	<b>0.454</b>	<b>..</b>
<b>OECD Total</b>	<b>0.233</b>	<b>0.244</b>	<b>0.244</b>	<b>0.241</b>	<b>0.234</b>	<b>0.230</b>	<b>0.214</b>	<b>0.210</b>	<b>0.221</b>
Canada	0.374	0.402	0.441	0.389	0.358	0.329	0.318	0.303	0.323
Chile	0.191	0.196	0.216	0.265	0.277	0.259	0.261	0.272	0.293
Mexico	0.098	0.116	0.161	0.205	0.222	0.219	0.221	0.223	0.257
United States	0.331	0.343	0.323	0.303	0.281	0.277	0.256	0.249	0.260
<b>OECD Americas</b>	<b>0.322</b>	<b>0.333</b>	<b>0.324</b>	<b>0.305</b>	<b>0.285</b>	<b>0.278</b>	<b>0.259</b>	<b>0.252</b>	<b>0.266</b>
Australia	0.136	0.174	0.216	0.205	0.189	0.183	0.164	0.160	0.169
Israel <sup>1</sup>	0.158	0.178	0.204	0.233	0.241	0.227	0.200	0.204	0.212
Japan	0.187	0.185	0.180	0.197	0.192	0.193	0.171	0.167	0.170
Korea	0.170	0.247	0.280	0.391	0.420	0.440	0.432	0.422	0.453
New Zealand	0.245	0.282	0.361	0.324	0.294	0.285	0.251	0.247	0.252
<b>OECD Asia Oceania</b>	<b>0.181</b>	<b>0.188</b>	<b>0.193</b>	<b>0.220</b>	<b>0.220</b>	<b>0.226</b>	<b>0.208</b>	<b>0.204</b>	<b>0.212</b>
Austria	0.161	0.170	0.181	0.169	0.181	0.180	0.175	0.175	0.181
Belgium	0.170	0.178	0.192	0.205	0.198	0.189	0.173	0.173	0.174
Czech Republic	0.346	0.372	0.402	0.386	0.354	0.321	0.308	0.301	0.315
Denmark	0.103	0.126	0.133	0.116	0.113	0.109	0.099	0.097	0.102
Estonia	..	..	0.604	0.449	0.377	0.444	0.388	0.380	0.426
Finland	0.283	0.323	0.373	0.378	0.355	0.357	0.337	0.333	0.349
France	0.137	0.163	0.182	0.188	0.190	0.190	0.168	0.169	0.183
Germany	0.213	0.222	0.205	0.175	0.183	0.174	0.157	0.155	0.159
Greece	0.091	0.117	0.166	0.197	0.191	0.198	0.225	0.232	0.236
Hungary	0.282	0.312	0.343	0.317	0.289	0.298	0.283	0.282	0.306
Iceland	0.498	0.476	0.517	0.716	0.655	1.234	1.210	1.202	1.141
Ireland	0.157	0.169	0.160	0.134	0.120	0.121	0.109	0.089	0.093
Italy	0.125	0.127	0.134	0.146	0.154	0.153	0.149	0.150	0.155
Latvia	..	..	..	0.301	0.256	0.285	0.254	0.244	0.258
Luxembourg	0.303	0.264	0.216	0.168	0.154	0.160	0.129	0.132	0.131
Netherlands	0.137	0.145	0.146	0.141	0.144	0.139	0.133	0.131	0.135
Norway	0.423	0.386	0.387	0.306	0.283	0.284	0.259	0.261	0.283
Poland	0.383	0.480	0.550	0.382	0.345	0.301	0.282	0.277	0.295
Portugal	0.088	0.126	0.151	0.185	0.213	0.220	0.217	0.219	0.238
Slovak Republic	0.378	0.492	0.575	0.481	0.373	0.313	0.286	0.276	0.275
Slovenia	..	..	0.345	0.311	0.314	0.278	0.289	0.289	0.304
Spain	0.117	0.152	0.157	0.182	0.196	0.186	0.182	0.180	0.193
Sweden	0.311	0.344	0.422	0.351	0.309	0.287	0.252	0.246	0.257
Switzerland	0.094	0.110	0.117	0.117	0.119	0.110	0.099	0.099	0.106
Turkey	0.065	0.099	0.138	0.201	0.208	0.233	0.214	0.211	0.249
United Kingdom	0.229	0.215	0.187	0.173	0.159	0.147	0.126	0.123	0.130
<b>OECD Europe</b>	<b>0.181</b>	<b>0.195</b>	<b>0.199</b>	<b>0.190</b>	<b>0.190</b>	<b>0.186</b>	<b>0.172</b>	<b>0.170</b>	<b>0.180</b>
<i>IEA</i>	<i>0.235</i>	<i>0.248</i>	<i>0.245</i>	<i>0.241</i>	<i>0.233</i>	<i>0.230</i>	<i>0.213</i>	<i>0.209</i>	<i>0.220</i>
<i>IEA/Accession/Association</i>	<i>0.237</i>	<i>0.252</i>	<i>0.258</i>	<i>0.263</i>	<i>0.271</i>	<i>0.286</i>	<i>0.286</i>	<i>0.282</i>	<i>..</i>
<i>European Union - 28</i>	<i>..</i>	<i>..</i>	<i>0.207</i>	<i>0.192</i>	<i>0.192</i>	<i>0.186</i>	<i>0.172</i>	<i>0.170</i>	<i>..</i>
<i>G7</i>	<i>0.251</i>	<i>0.258</i>	<i>0.249</i>	<i>0.244</i>	<i>0.234</i>	<i>0.230</i>	<i>0.211</i>	<i>0.207</i>	<i>..</i>
<i>G8</i>	<i>..</i>	<i>..</i>	<i>0.274</i>	<i>0.261</i>	<i>0.249</i>	<i>0.245</i>	<i>0.227</i>	<i>0.222</i>	<i>..</i>
<i>G20</i>	<i>..</i>	<i>..</i>	<i>0.279</i>	<i>0.278</i>	<i>0.282</i>	<i>0.295</i>	<i>0.295</i>	<i>0.292</i>	<i>..</i>
<i>OPEC</i>	<i>0.046</i>	<i>0.095</i>	<i>0.203</i>	<i>0.258</i>	<i>0.268</i>	<i>0.288</i>	<i>0.302</i>	<i>0.309</i>	<i>..</i>

1. Please refer to section 'Geographical coverage'.

## Electricity consumption/GDP (kWh per 2010 USD)

<i>kWh per 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>0.316</b>	<b>0.356</b>	<b>0.437</b>	<b>0.427</b>	<b>0.441</b>	<b>0.447</b>	<b>0.456</b>	<b>0.454</b>	..
Albania	0.343	0.561	0.294	0.643	0.560	0.475	0.523	0.460	..
Armenia	..	..	1.515	0.924	0.592	0.536	0.514	0.501	..
Azerbaijan	..	..	0.826	1.249	0.810	0.274	0.360	0.367	..
Belarus	..	..	1.463	1.105	0.807	0.612	0.572	0.577	..
Bosnia and Herzegovina	..	..	3.861	0.673	0.603	0.681	0.676	0.661	..
Bulgaria	1.277	1.233	1.143	0.916	0.734	0.666	0.645	0.638	..
Croatia	..	..	0.244	0.270	0.265	0.282	0.274	0.281	..
Cyprus <sup>1</sup>	0.202	0.145	0.152	0.168	0.187	0.200	0.182	0.185	..
FYR of Macedonia	..	..	0.692	0.840	0.898	0.787	0.711	0.673	..
Georgia	..	..	0.861	1.010	0.826	0.667	0.698	0.689	..
Gibraltar	0.093	0.096	0.104	0.132	0.136	0.164	0.169	0.173	..
Kazakhstan	..	..	1.003	0.706	0.555	0.521	0.526	0.544	..
Kosovo	..	..	..	0.811	0.780	0.807	0.778	0.770	..
Kyrgyzstan	..	..	2.127	2.592	1.839	1.559	1.934	1.800	..
Lithuania	..	..	0.550	0.363	0.302	0.289	0.256	0.255	..
Malta	0.285	0.181	0.235	0.236	0.251	0.223	0.214	0.207	..
Republic of Moldova	..	..	1.209	1.692	1.484	1.056	0.698	0.706	..
Montenegro	..	..	..	..	1.164	0.811	0.627	0.651	..
Romania	0.610	0.549	0.547	0.406	0.347	0.307	0.282	0.277	..
Russian Federation	..	..	0.656	0.751	0.606	0.563	0.530	0.551	..
Serbia	..	..	1.430	1.233	0.844	0.805	0.764	0.802	..
Tajikistan	..	..	2.629	5.226	3.559	2.526	1.650	1.659	..
Turkmenistan	..	..	0.615	0.711	0.707	0.537	0.419	0.441	..
Ukraine	..	..	1.207	1.528	1.182	1.199	1.152	1.197	..
Uzbekistan	..	..	2.389	2.189	1.723	1.201	0.941	0.882	..
Former Soviet Union	0.685	0.717	x	x	x	x	x	x	x
Former Yugoslavia	0.348	0.384	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>0.665</b>	<b>0.687</b>	<b>0.763</b>	<b>0.793</b>	<b>0.640</b>	<b>0.582</b>	<b>0.549</b>	<b>0.561</b>	..
Algeria	0.054	0.091	0.149	0.192	0.208	0.227	0.290	0.303	..
Angola	0.028	0.020	0.020	0.036	0.046	0.058	0.083	0.083	..
Benin	0.032	0.047	0.057	0.084	0.102	0.131	0.114	0.131	..
Botswana	..	..	0.186	0.222	0.258	0.249	0.233	0.243	..
Cameroon	0.169	0.125	0.158	0.159	0.162	0.225	0.193	0.192	..
Congo	0.032	0.036	0.062	0.039	0.046	0.050	0.067	0.066	..
Côte d'Ivoire	0.056	0.089	0.108	0.128	0.141	0.177	0.200	0.180	..
Dem. Rep. of the Congo	0.156	0.188	0.196	0.350	0.313	0.329	0.288	0.245	..
Egypt	0.247	0.315	0.425	0.493	0.588	0.596	0.646	0.648	..
Eritrea	..	..	..	0.089	0.110	0.128	0.125	0.126	..
Ethiopia	0.068	0.077	0.109	0.115	0.143	0.133	0.158	0.176	..
Gabon	0.028	0.059	0.082	0.087	0.094	0.108	0.108	0.107	..
Ghana	0.370	0.473	0.397	0.343	0.226	0.214	0.214	0.189	..
Kenya	0.104	0.117	0.135	0.127	0.150	0.155	0.155	0.149	..
Libya	0.018	0.050	0.149	0.248	0.322	0.279	0.302	0.304	..
Mauritius	0.100	0.132	0.181	0.245	0.270	0.249	0.238	0.236	..
Morocco	0.141	0.174	0.206	0.245	0.265	0.269	0.285	0.271	..
Mozambique	0.196	0.191	0.239	0.480	1.303	1.051	0.938	0.992	..
Namibia	..	..	..	0.265	0.326	0.298	0.268	0.257	..
Niger	..	..	..	0.101	0.113	0.127	0.134	0.145	..
Nigeria	0.019	0.035	0.064	0.058	0.069	0.059	0.057	0.057	..
Senegal	0.089	0.116	0.122	0.116	0.164	0.199	0.209	0.209	..
South Africa	0.392	0.523	0.699	0.771	0.689	0.620	0.556	0.547	..
South Sudan	..	..	..	..	..	..	0.076	0.076	..
Sudan	0.046	0.045	0.065	0.064	0.066	0.092	0.141	0.146	..
United Rep. of Tanzania	0.076	0.082	0.107	0.120	0.131	0.136	0.126	0.120	..
Togo	0.093	0.092	0.166	0.183	0.227	0.251	0.286	0.300	..
Tunisia	0.126	0.199	0.284	0.325	0.310	0.330	0.342	0.341	..
Zambia	0.725	0.803	0.730	0.630	0.615	0.396	0.436	0.452	..
Zimbabwe	0.668	0.837	0.702	0.697	1.033	0.818	0.654	0.626	..
Other Africa	0.086	0.097	0.112	0.137	0.119	0.113	0.110	0.111	..
<b>Africa</b>	<b>0.171</b>	<b>0.221</b>	<b>0.307</b>	<b>0.347</b>	<b>0.331</b>	<b>0.302</b>	<b>0.293</b>	<b>0.291</b>	..

1. Please refer to section 'Geographical coverage'.

## Electricity consumption/GDP (kWh per 2010 USD)

<i>kWh per 2010 USD</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	0.047	0.053	0.121	0.199	0.285	0.316	0.336	0.335	..
Brunei Darussalam	0.035	0.028	0.117	0.210	0.233	0.250	0.307	0.288	..
Cambodia	..	..	..	0.076	0.109	0.184	0.279	0.321	..
DPR of Korea	1.428	0.858	0.588	0.549	0.668	0.681	0.567	0.430	..
India	0.281	0.361	0.504	0.512	0.478	0.477	0.495	0.491	..
Indonesia	0.018	0.038	0.095	0.182	0.198	0.204	0.219	0.215	..
Malaysia	0.156	0.199	0.255	0.392	0.360	0.459	0.442	0.428	..
Mongolia	..	..	0.846	0.658	0.602	0.563	0.517	0.523	..
Myanmar	0.097	0.113	0.156	0.151	0.086	0.102	0.136	0.151	..
Nepal	0.021	0.044	0.099	0.129	0.154	0.173	0.206	0.201	..
Pakistan	0.214	0.245	0.374	0.439	0.475	0.447	0.436	0.427	..
Philippines	0.231	0.221	0.236	0.311	0.317	0.300	0.279	0.282	..
Singapore	0.184	0.204	0.225	0.227	0.217	0.186	0.172	0.173	..
Sri Lanka	0.092	0.104	0.127	0.162	0.188	0.164	0.152	0.161	..
Chinese Taipei	0.456	0.483	0.547	0.594	0.604	0.532	0.500	0.494	..
Thailand	0.157	0.207	0.283	0.419	0.441	0.455	0.452	0.454	..
Viet Nam	0.126	0.173	0.220	0.375	0.560	0.776	0.885	0.911	..
Other Asia	0.193	0.223	0.181	0.213	0.205	0.215	0.228	0.228	..
<b>Non-OECD Asia excl. China</b>	<b>0.218</b>	<b>0.251</b>	<b>0.332</b>	<b>0.394</b>	<b>0.397</b>	<b>0.399</b>	<b>0.405</b>	<b>0.403</b>	..
People's Rep. of China	0.693	0.810	0.699	0.560	0.651	0.645	0.643	0.623	..
Hong Kong, China	0.196	0.201	0.229	0.237	0.212	0.184	0.170	0.167	..
<b>China</b>	<b>0.634</b>	<b>0.726</b>	<b>0.646</b>	<b>0.540</b>	<b>0.629</b>	<b>0.629</b>	<b>0.629</b>	<b>0.610</b>	..
Argentina	0.129	0.153	0.219	0.254	0.281	0.277	0.294	0.294	..
Bolivia	0.111	0.154	0.196	0.260	0.280	0.305	0.325	0.301	..
Brazil	0.089	0.121	0.182	0.216	0.211	0.210	0.219	0.224	..
Colombia	0.134	0.165	0.195	0.174	0.169	0.172	0.177	0.165	..
Costa Rica	0.158	0.188	0.220	0.244	0.250	0.232	0.218	0.215	..
Cuba	0.218	0.276	0.287	0.327	0.263	0.227	0.232	0.232	..
Curaçao	0.575	0.525	0.395	0.417	0.419	0.415	0.398	0.392	..
Dominican Republic	0.192	0.175	0.151	0.344	0.300	0.244	0.241	0.235	..
Ecuador	0.056	0.098	0.129	0.173	0.187	0.246	0.254	0.266	..
El Salvador	0.074	0.107	0.164	0.204	0.229	0.247	0.256	0.263	..
Guatemala	0.070	0.101	0.093	0.129	0.182	0.192	0.192	0.197	..
Haiti	0.021	0.036	0.065	0.046	0.054	0.037	0.053	0.055	..
Honduras	0.102	0.130	0.240	0.306	0.325	0.327	0.308	0.418	..
Jamaica	0.201	0.180	0.203	0.490	0.486	0.259	0.224	0.219	..
Nicaragua	0.099	0.155	0.270	0.264	0.290	0.337	0.326	0.334	..
Panama	0.167	0.176	0.207	0.233	0.238	0.220	0.202	0.208	..
Paraguay	0.072	0.102	0.189	0.330	0.319	0.365	0.416	0.434	..
Peru	0.116	0.135	0.204	0.205	0.219	0.218	0.226	0.230	..
Suriname	..	..	..	0.397	0.389	0.361	0.401	0.407	..
Trinidad and Tobago	0.149	0.199	0.410	0.408	0.365	0.371	0.423	0.444	..
Uruguay	0.127	0.137	0.181	0.226	0.221	0.235	0.221	0.228	..
Venezuela	0.079	0.141	0.207	0.223	0.232	0.231	0.194	0.192	..
Other Non-OECD Americas	0.870	0.783	0.740	0.842	0.883	0.826	0.821	0.821	..
<b>Non-OECD Americas</b>	<b>0.113</b>	<b>0.143</b>	<b>0.200</b>	<b>0.230</b>	<b>0.232</b>	<b>0.228</b>	<b>0.231</b>	<b>0.235</b>	..
Bahrain	0.200	0.218	0.871	0.872	0.966	0.870	0.875	0.903	..
Islamic Republic of Iran	0.052	0.126	0.258	0.360	0.394	0.419	0.505	0.509	..
Iraq	0.201	0.237	0.320	0.287	0.216	0.266	0.253	0.238	..
Jordan	0.098	0.122	0.383	0.461	0.466	0.507	0.564	0.576	..
Kuwait	0.056	0.156	0.424	0.392	0.356	0.434	0.420	0.417	..
Lebanon	0.080	0.177	0.122	0.444	0.426	0.397	0.398	0.406	..
Oman	0.006	0.063	0.147	0.171	0.223	0.286	0.383	0.413	..
Qatar	0.016	0.095	0.242	0.236	0.251	0.211	0.225	0.234	..
Saudi Arabia	0.018	0.073	0.266	0.365	0.387	0.415	0.447	0.466	..
Syrian Arab Republic	0.139	0.168	0.354	0.453	0.583	0.650	0.748	0.883	..
United Arab Emirates	0.015	0.050	0.125	0.197	0.222	0.317	0.312	0.329	..
Yemen	0.061	0.072	0.125	0.122	0.148	0.191	0.196	0.190	..
<b>Middle East</b>	<b>0.046</b>	<b>0.105</b>	<b>0.257</b>	<b>0.327</b>	<b>0.348</b>	<b>0.385</b>	<b>0.408</b>	<b>0.418</b>	..

## Electricity consumption/population (kWh per capita)

<i>kWh per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>World</b>	<b>1 443</b>	<b>1 719</b>	<b>2 067</b>	<b>2 324</b>	<b>2 580</b>	<b>2 867</b>	<b>3 037</b>	<b>3 052</b>	..
<b>Non-OECD Total</b>	<b>503</b>	<b>685</b>	<b>894</b>	<b>1 004</b>	<b>1 286</b>	<b>1 678</b>	<b>1 974</b>	<b>2 006</b>	..
<b>OECD Total</b>	<b>4 502</b>	<b>5 341</b>	<b>6 666</b>	<b>7 973</b>	<b>8 314</b>	<b>8 304</b>	<b>8 046</b>	<b>8 016</b>	<b>8 542</b>
Canada	10 242	12 804	16 167	17 037	16 916	15 594	15 911	15 188	16 263
Chile	772	923	1 247	2 490	3 077	3 301	3 768	3 972	4 304
Mexico	575	854	1 143	1 765	1 976	2 016	2 169	2 230	2 598
United States	8 572	9 841	11 687	13 660	13 683	13 374	12 960	12 833	13 542
<b>OECD Americas</b>	<b>6 922</b>	<b>7 865</b>	<b>9 223</b>	<b>10 705</b>	<b>10 754</b>	<b>10 440</b>	<b>10 216</b>	<b>10 098</b>	<b>10 730</b>
Australia	4 158	5 869	8 475	10 179	10 481	10 636	9 992	9 892	10 577
Israel <sup>1</sup>	2 498	3 022	4 175	6 308	6 543	6 956	6 604	6 751	7 180
Japan	4 060	4 706	6 801	8 300	8 540	8 602	7 976	7 865	8 089
Korea	397	914	2 373	5 907	7 804	9 744	10 564	10 558	11 615
New Zealand	5 508	6 281	8 857	9 367	9 641	9 581	8 966	8 947	9 385
<b>OECD Asia Oceania</b>	<b>3 296</b>	<b>3 978</b>	<b>5 933</b>	<b>7 882</b>	<b>8 515</b>	<b>9 043</b>	<b>8 777</b>	<b>8 707</b>	<b>9 196</b>
Austria	3 621	4 685	6 111	7 076	8 032	8 385	8 361	8 346	8 649
Belgium	3 948	4 894	6 380	8 252	8 514	8 404	7 752	7 834	7 924
Czech Republic	3 730	4 575	5 584	5 694	6 343	6 322	6 271	6 384	6 847
Denmark	3 428	4 598	5 946	6 484	6 660	6 328	5 860	5 812	6 134
Estonia	..	..	5 691	4 527	5 514	6 499	6 725	6 698	7 606
Finland	6 047	8 295	12 487	15 306	16 118	16 485	15 246	15 050	15 932
France	3 156	4 423	5 970	7 229	7 658	7 741	6 975	7 043	7 711
Germany	4 654	5 796	6 646	6 697	7 238	7 399	7 035	7 015	7 227
Greece	1 532	2 224	3 200	4 586	5 297	5 334	5 063	5 212	5 297
Hungary	1 957	2 699	3 430	3 309	3 771	3 877	3 968	4 099	4 540
Iceland	9 910	12 689	16 137	26 221	28 057	51 447	53 899	55 054	55 364
Ireland	2 152	2 878	3 776	5 798	6 242	5 861	5 679	5 811	6 346
Italy	2 458	3 105	4 145	5 300	5 709	5 443	5 002	5 099	5 327
Latvia	..	..	3 396	2 082	2 777	3 231	3 507	3 492	3 803
Luxembourg	11 778	10 788	13 662	15 643	15 616	16 795	13 812	14 418	14 536
Netherlands	3 613	4 365	5 185	6 509	6 914	7 008	6 714	6 706	7 036
Norway	15 544	18 724	23 357	24 994	25 085	24 892	23 114	23 403	25 424
Poland	2 264	3 076	3 279	3 256	3 438	3 750	3 923	4 007	4 389
Portugal	985	1 543	2 522	3 989	4 683	4 959	4 663	4 807	5 321
Slovak Republic	3 027	4 359	5 543	4 945	4 920	5 164	5 137	5 151	5 289
Slovenia	..	..	5 335	5 778	6 916	6 510	6 728	6 877	7 414
Spain	1 860	2 610	3 494	5 170	6 110	5 708	5 359	5 481	6 075
Sweden	8 745	10 704	15 836	15 682	15 430	14 935	13 480	13 594	14 421
Switzerland	4 906	5 931	7 357	7 776	8 256	8 142	7 520	7 499	8 020
Turkey	293	490	909	1 627	1 994	2 469	2 870	2 959	3 557
United Kingdom	4 669	4 683	5 357	6 115	6 270	5 699	5 128	5 082	5 431
<b>OECD Europe</b>	<b>3 330</b>	<b>4 072</b>	<b>5 023</b>	<b>5 768</b>	<b>6 189</b>	<b>6 187</b>	<b>5 869</b>	<b>5 925</b>	<b>6 366</b>
<i>IEA</i>	<i>4 816</i>	<i>5 755</i>	<i>7 261</i>	<i>8 687</i>	<i>9 054</i>	<i>9 047</i>	<i>8 750</i>	<i>8 709</i>	<i>9 259</i>
<i>IEA/Accession/Association</i>	<i>1 693</i>	<i>1 965</i>	<i>2 405</i>	<i>2 930</i>	<i>3 291</i>	<i>3 697</i>	<i>3 971</i>	<i>4 009</i>	..
<i>European Union - 28</i>	..	..	<i>5 157</i>	<i>5 834</i>	<i>6 307</i>	<i>6 277</i>	<i>5 912</i>	<i>5 968</i>	..
<i>G7</i>	<i>5 834</i>	<i>6 893</i>	<i>8 620</i>	<i>10 143</i>	<i>10 388</i>	<i>10 214</i>	<i>9 786</i>	<i>9 694</i>	..
<i>G8</i>	..	..	<i>8 260</i>	<i>9 285</i>	<i>9 620</i>	<i>9 598</i>	<i>9 277</i>	<i>9 198</i>	..
<i>G20</i>	..	..	<i>2 573</i>	<i>2 990</i>	<i>3 342</i>	<i>3 753</i>	<i>4 027</i>	<i>4 059</i>	..
<i>OPEC</i>	<i>286</i>	<i>603</i>	<i>1 000</i>	<i>1 339</i>	<i>1 608</i>	<i>1 958</i>	<i>2 149</i>	<i>2 182</i>	..

1. Please refer to section 'Geographical coverage'.



## Electricity consumption/population (kWh per capita)

<i>kWh per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
<b>Non-OECD Total</b>	<b>503</b>	<b>685</b>	<b>894</b>	<b>1 004</b>	<b>1 286</b>	<b>1 678</b>	<b>1 974</b>	<b>2 006</b>	..
Albania	593	1 143	552	1 450	1 722	1 943	2 305	2 092	..
Armenia	..	..	2 717	1 295	1 504	1 676	1 901	1 901	..
Azerbaijan	..	..	2 576	2 040	2 388	1 603	2 202	2 245	..
Belarus	..	..	4 381	2 996	3 245	3 563	3 680	3 560	..
Bosnia and Herzegovina	..	..	2 896	2 008	2 348	3 049	3 144	3 176	..
Bulgaria	2 683	3 973	4 759	3 674	4 165	4 560	4 709	4 858	..
Croatia	..	..	2 965	2 856	3 476	3 813	3 715	3 899	..
Cyprus <sup>1</sup>	1 225	1 917	3 251	4 612	5 748	6 230	4 868	5 098	..
FYR of Macedonia	..	..	2 668	2 928	3 401	3 589	3 500	3 428	..
Georgia	..	..	3 039	1 453	1 785	1 977	2 688	2 734	..
Gibraltar	1 808	1 857	2 643	4 172	4 548	5 548	5 818	6 091	..
Kazakhstan	..	..	5 905	3 169	4 012	4 728	5 600	5 774	..
Kosovo	..	..	..	1 557	2 169	2 649	2 804	2 914	..
Kyrgyzstan	..	..	2 331	1 696	1 374	1 372	1 941	1 831	..
Lithuania	..	..	4 023	2 517	3 187	3 471	3 822	3 906	..
Malta	1 209	1 662	2 825	4 313	4 911	4 687	4 948	5 042	..
Republic of Moldova	..	..	3 235	1 638	2 048	1 723	1 386	1 396	..
Montenegro	..	..	..	..	6 318	5 423	4 413	4 727	..
Romania	1 907	2 872	2 925	1 988	2 365	2 551	2 584	2 645	..
Russian Federation	..	..	6 673	5 198	5 770	6 410	6 603	6 588	7 405
Serbia	..	..	3 492	3 886	3 922	4 359	4 271	4 540	..
Tajikistan	..	..	3 350	2 172	2 144	1 880	1 484	1 547	..
Turkmenistan	..	..	2 293	1 698	2 055	2 403	2 759	3 059	..
Ukraine	..	..	4 787	2 778	3 246	3 555	3 419	3 209	..
Uzbekistan	..	..	2 383	1 780	1 717	1 653	1 645	1 638	..
Former Soviet Union	3 355	4 424	x	x	x	x	x	x	x
Former Yugoslavia	1 533	2 464	x	x	x	x	x	x	x
<b>Non-OECD Europe and Eurasia</b>	<b>3 085</b>	<b>4 136</b>	<b>5 032</b>	<b>3 650</b>	<b>4 076</b>	<b>4 437</b>	<b>4 560</b>	<b>4 548</b>	..
Algeria	158	328	528	680	887	1 015	1 363	1 451	..
Angola	109	62	57	82	119	227	347	346	..
Benin	19	28	35	57	72	96	92	106	..
Botswana	..	..	717	1 093	1 414	1 555	1 686	1 724	..
Cameroon	147	151	194	171	182	258	243	251	..
Congo	62	82	172	96	121	147	213	207	..
Côte d'Ivoire	111	178	157	173	174	219	281	269	..
Dem. Rep. of the Congo	167	151	130	95	87	102	107	94	..
Egypt	197	381	675	984	1 272	1 590	1 713	1 754	..
Eritrea	..	..	..	49	58	58	65	67	..
Ethiopia	18	18	23	23	33	46	72	86	..
Gabon	259	722	917	877	925	1 009	1 146	1 152	..
Ghana	392	426	327	334	248	283	357	320	..
Kenya	85	105	125	107	133	154	171	169	..
Libya	374	1 130	1 591	2 230	3 426	3 325	1 841	1 656	..
Mauritius	180	299	670	1 363	1 684	1 996	2 185	2 233	..
Morocco	152	236	357	487	636	782	912	892	..
Mozambique	56	36	41	122	437	439	463	507	..
Namibia	..	..	..	995	1 455	1 532	1 563	1 540	..
Niger	..	..	..	33	37	45	52	55	..
Nigeria	35	68	87	74	129	136	144	144	..
Senegal	81	103	104	102	158	199	211	218	..
South Africa	2 455	3 456	4 240	4 587	4 664	4 564	4 229	4 148	..
South Sudan	..	..	..	..	..	..	39	25	..
Sudan	32	37	50	62	76	131	248	264	..
United Rep. of Tanzania	34	37	51	58	78	94	99	98	..
Togo	56	63	91	96	110	125	154	166	..
Tunisia	192	403	632	977	1 084	1 365	1 462	1 458	..
Zambia	1 114	1 024	752	588	682	577	703	726	..
Zimbabwe	860	960	861	853	830	551	543	510	..
Other Africa	50	55	57	72	77	83	85	85	..
<b>Africa</b>	<b>265</b>	<b>368</b>	<b>453</b>	<b>496</b>	<b>545</b>	<b>564</b>	<b>568</b>	<b>566</b>	..

1. Please refer to section 'Geographical coverage'.

## Electricity consumption/population (kWh per capita)

<i>kWh per capita</i>	1973	1980	1990	2000	2005	2010	2014	2015	2016p
Bangladesh	15	19	48	102	171	241	311	326	..
Brunei Darussalam	1 588	1 699	4 354	7 595	8 536	8 712	10 113	9 293	..
Cambodia	..	..	..	33	67	144	271	328	..
DPR of Korea	963	1 105	1 243	715	810	744	602	460	..
India	101	142	273	395	469	642	814	859	..
Indonesia	16	46	163	390	501	637	811	823	..
Malaysia	370	657	1 146	2 720	2 862	4 158	4 646	4 656	..
Mongolia	..	..	1 489	1 054	1 252	1 492	2 027	2 064	..
Myanmar	23	34	43	74	73	122	211	249	..
Nepal	6	12	35	59	78	103	140	138	..
Pakistan	101	136	278	373	465	467	485	488	..
Philippines	322	374	361	500	578	644	706	744	..
Singapore	1 599	2 718	4 983	7 575	8 678	8 680	8 844	8 949	..
Sri Lanka	67	97	154	297	404	463	531	585	..
Chinese Taipei	1 221	2 236	4 194	8 031	9 616	10 230	10 747	10 669	..
Thailand	161	291	709	1 454	1 902	2 325	2 550	2 621	..
Viet Nam	40	55	98	295	580	1 035	1 412	1 534	..
Other Asia	151	205	187	262	292	387	484	448	..
<b>Non-OECD Asia excl. China</b>	<b>125</b>	<b>182</b>	<b>328</b>	<b>523</b>	<b>634</b>	<b>800</b>	<b>951</b>	<b>983</b>	..
People's Rep. of China	176	282	511	993	1 782	2 944	3 927	4 047	..
Hong Kong, China	1 416	2 157	4 178	5 447	5 879	5 974	6 074	6 025	..
<b>China</b>	<b>182</b>	<b>291</b>	<b>529</b>	<b>1 016</b>	<b>1 804</b>	<b>2 959</b>	<b>3 938</b>	<b>4 057</b>	..
Argentina	956	1 234	1 300	2 078	2 393	2 847	3 039	3 088	..
Bolivia	173	253	266	420	482	604	753	719	..
Brazil	549	1 004	1 447	1 887	1 991	2 339	2 578	2 516	..
Colombia	421	618	842	829	896	1 078	1 294	1 231	..
Costa Rica	675	932	1 080	1 521	1 736	1 901	1 958	1 985	..
Cuba	547	841	1 214	1 139	1 155	1 294	1 442	1 506	..
Curaçao	3 988	4 173	3 587	4 648	4 764	4 852	4 795	4 582	..
Dominican Republic	400	441	389	1 343	1 292	1 328	1 490	1 537	..
Ecuador	163	360	481	638	800	1 144	1 381	1 426	..
El Salvador	204	274	354	623	769	878	966	1 014	..
Guatemala	150	258	203	329	477	538	575	602	..
Haiti	20	41	58	35	37	24	39	40	..
Honduras	145	213	372	514	622	685	697	968	..
Jamaica	1 005	668	880	2 324	2 453	1 247	1 086	1 069	..
Nicaragua	222	260	308	348	417	514	581	617	..
Panama	630	773	833	1 267	1 460	1 756	2 082	2 233	..
Paraguay	105	242	505	887	864	1 179	1 563	1 661	..
Peru	417	503	546	680	837	1 094	1 314	1 366	..
Suriname	..	..	..	2 218	2 807	3 044	3 699	3 713	..
Trinidad and Tobago	1 124	1 876	2 682	3 991	5 142	6 190	7 140	7 411	..
Uruguay	705	1 004	1 244	2 030	1 999	2 803	3 069	3 185	..
Venezuela	1 145	1 998	2 449	2 636	2 850	3 134	2 661	2 451	..
Other Non-OECD Americas	5 745	6 265	7 270	10 025	11 129	10 242	10 167	10 243	..
<b>Non-OECD Americas</b>	<b>611</b>	<b>937</b>	<b>1 216</b>	<b>1 573</b>	<b>1 704</b>	<b>1 970</b>	<b>2 126</b>	<b>2 101</b>	..
Bahrain	2 083	4 611	15 619	19 943	21 871	17 750	19 224	20 190	..
Islamic Republic of Iran	384	538	944	1 541	2 069	2 642	2 996	2 988	..
Iraq	305	792	1 304	1 237	834	1 192	1 296	1 218	..
Jordan	180	381	992	1 386	1 706	2 056	2 243	2 288	..
Kuwait	3 624	5 998	8 368	14 913	17 123	16 390	15 333	14 951	..
Lebanon	650	974	518	2 994	2 811	3 479	2 888	2 861	..
Oman	51	624	2 187	3 243	3 931	5 704	6 128	6 588	..
Qatar	2 958	9 701	9 597	14 336	15 982	14 936	16 736	17 460	..
Saudi Arabia	416	1 927	3 986	5 472	6 367	7 785	9 410	9 926	..
Syrian Arab Republic	182	356	688	1 069	1 517	1 880	942	811	..
United Arab Emirates	1 752	5 767	8 583	12 653	12 571	10 891	11 914	12 915	..
Yemen	32	62	123	140	180	250	217	147	..
<b>Middle East</b>	<b>383</b>	<b>867</b>	<b>1 612</b>	<b>2 356</b>	<b>2 843</b>	<b>3 555</b>	<b>3 952</b>	<b>4 052</b>	..



# ANNEX



## ADDITIONAL BALANCES

For this 2017 edition, the IEA Secretariat received data for the first time from two additional countries: Greenland and Mali. For this 2017 edition, their data are published as an annex, but will be included in the full book in future years.

The IEA Secretariat is very grateful to statisticians in both countries for their support to broaden the scope of country coverage.

Note that Mali energy data are included in the Africa region, as well as in “Other Africa”. Greenland energy data are not included in any regional aggregate after 1990. Prior to 1990, Greenland data are included in Denmark data.

### Greenland

#### Sources

##### *Sources 2004 to 2015:*

- Direct communication with Statistics Greenland, Nuuk.
- Statbank Greenland, accessed December 2016, <http://bank.stat.gl>
- IEA Secretariat estimates.

#### *Sources for biofuels and waste:*

- Statbank Greenland, accessed December 2016, <http://bank.stat.gl>
- IEA Secretariat estimates.

### Mali

#### Sources

##### *Sources 2000 to 2015:*

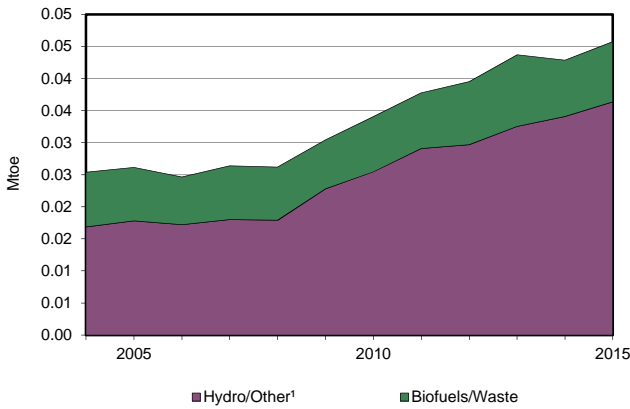
- Direct communication with the Ministère de l’Énergie et de l’Eau, Bamako.
- *Système d’Information Énergétique du Mali 2014 and 2015*, Ministère de l’Énergie et de l’Eau, Bamako, 2015 and 2017.
- *Rapport Annuel 2011 to 2015*, Énergie du Mali, Bamako, 2012 to 2016.
- AFREC Energy questionnaire, African Energy Commission, 2000 to 2015.

#### *Sources for biofuels and waste:*

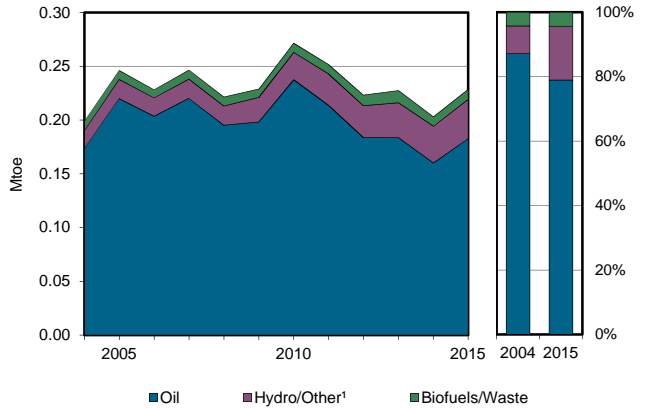
- AFREC Energy questionnaire, African Energy Commission, 2000 to 2015.
- IEA Secretariat estimates.

## Greenland

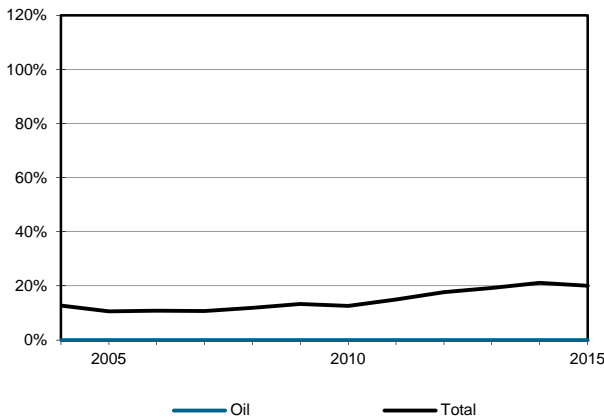
**Figure 1. Energy production**



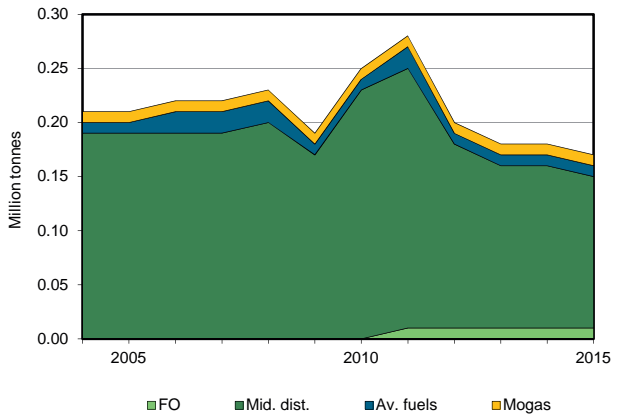
**Figure 2. Total primary energy supply²**



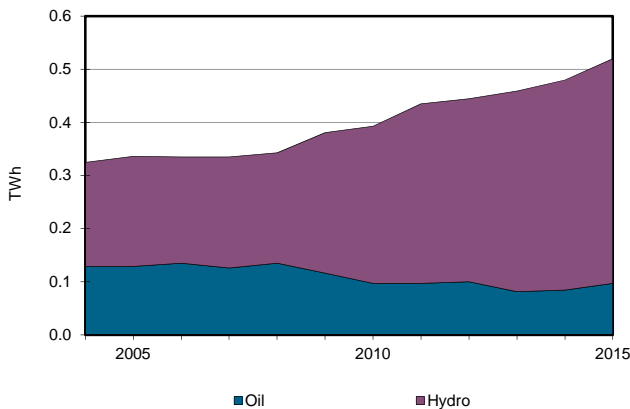
**Figure 3. Energy self-sufficiency³**



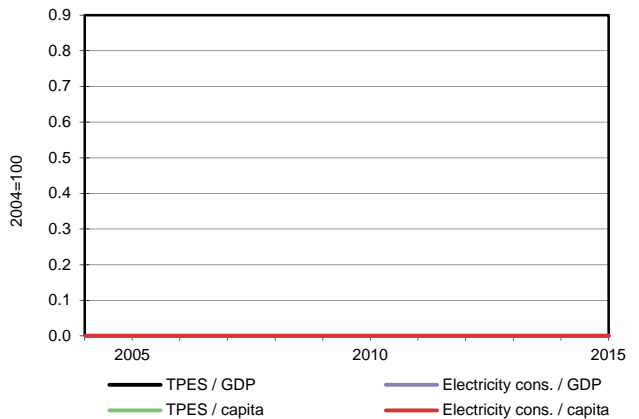
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁵**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. GDP in 2010 USD.

## Greenland

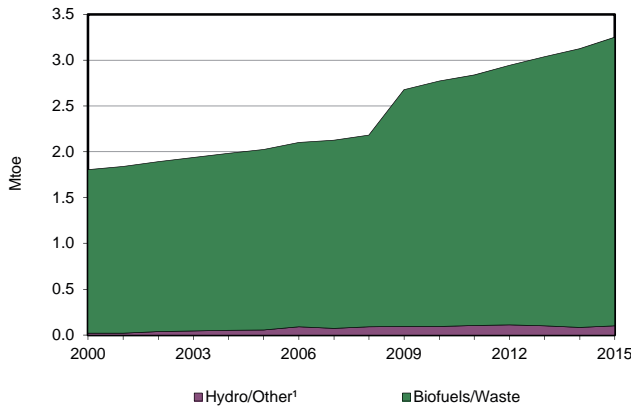
2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	36	-	9	-	-	46
Imports	-	-	196	-	-	-	-	-	-	-	196
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-7	-	-	-	-	-	-	-	-7
Intl. aviation bunkers	-	-	-6	-	-	-	-	-	-	-	-6
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>183</b>	-	-	<b>36</b>	-	<b>9</b>	-	-	<b>229</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-16	-	-	-	-	-	-1	-	-18
Electricity plants	-	-	-32	-	-	-36	-	-	45	-	-24
CHP plants	-	-	-1	-	-	-	-	-9	-	19	9
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-9	-	-9
Losses	-	-	-	-	-	-	-	-	-6	-	-6
<b>TFC</b>	-	-	<b>133</b>	-	-	-	-	-	<b>28</b>	<b>19</b>	<b>180</b>
<b>INDUSTRY</b>	-	-	<b>8</b>	-	-	-	-	-	<b>4</b>	<b>0</b>	<b>12</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	1	-	-	-	-	-	-	-	1
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	2	-	-	-	-	-	1	0	3
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	5	-	-	-	-	-	3	0	9
<b>TRANSPORT</b>	-	-	<b>28</b>	-	-	-	-	-	-	-	<b>28</b>
Domestic aviation	-	-	6	-	-	-	-	-	-	-	6
Road	-	-	10	-	-	-	-	-	-	-	10
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	11	-	-	-	-	-	-	-	11
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>97</b>	-	-	-	-	-	<b>24</b>	<b>19</b>	<b>140</b>
Residential	-	-	34	-	-	-	-	-	9	11	54
Comm. and public services	-	-	17	-	-	-	-	-	15	8	39
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	-	-	41	-	-	-	-	-	0	-	41
Non-specified	-	-	5	-	-	-	-	-	-	-	5
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>97</b>	-	-	<b>423</b>	-	-	-	-	<b>520</b>
Electricity plants	-	-	97	-	-	423	-	-	-	-	520
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	<b>697</b>	-	-	-	-	<b>98</b>	-	-	<b>795</b>
CHP plants	-	-	697	-	-	-	-	98	-	-	795
Heat plants	-	-	-	-	-	-	-	-	-	-	-

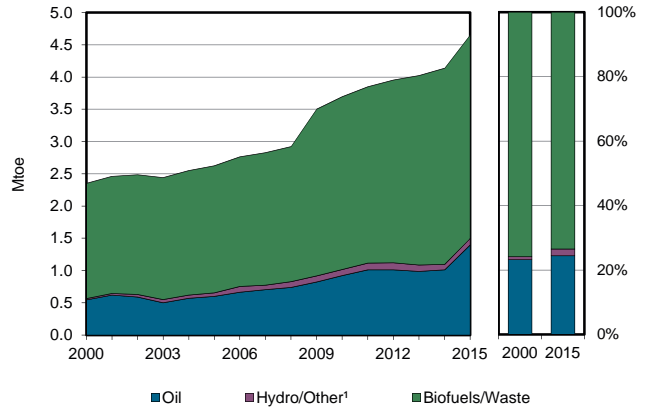


## Mali

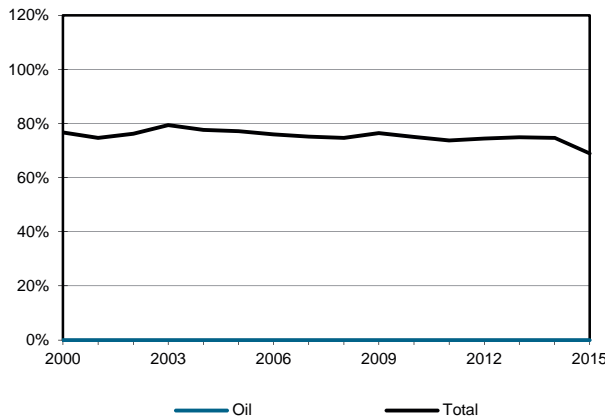
**Figure 1. Energy production**



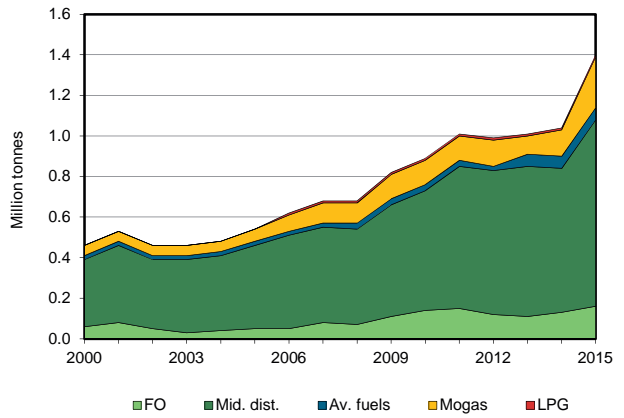
**Figure 2. Total primary energy supply²**



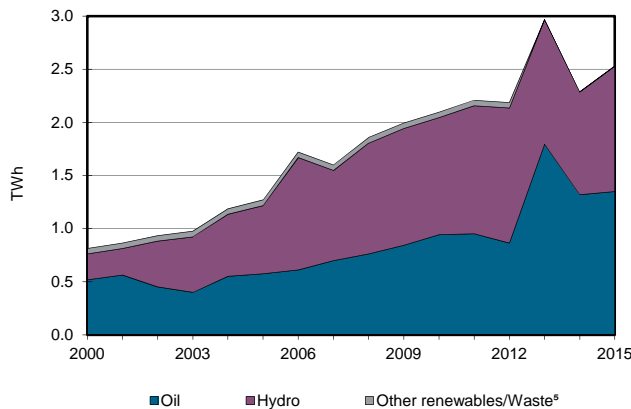
**Figure 3. Energy self-sufficiency³**



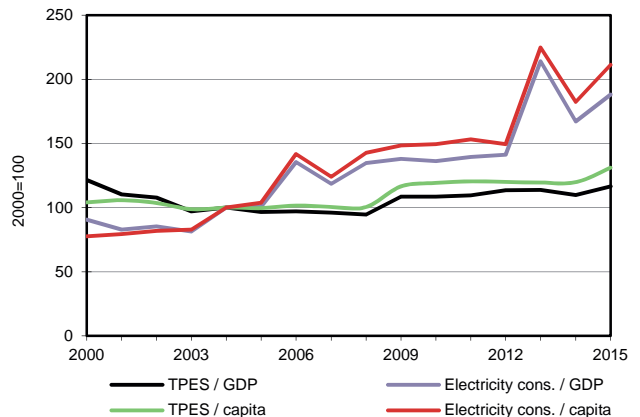
**Figure 4. Oil products demand⁴**



**Figure 5. Electricity generation by source**



**Figure 6. Selected indicators⁶**



In these graphs, peat and oil shale are aggregated with coal, where applicable.

1. Includes geothermal, solar, wind, tide/wave/ocean, heat and other.
2. Excluding electricity trade.
3. Production divided by TPES. 100% represents full self-sufficiency.
4. Includes international bunkers. LPG: LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.
5. Includes geothermal, solar, wind, tide/wave/ocean, biofuels, waste, heat and other.
6. GDP in 2010 USD.

## Mali

2015

Thousand tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Geotherm./Solar/etc.	Biofuels/Waste	Electricity	Heat	Total
Production	-	-	-	-	-	102	0	3150	-	-	3251
Imports	-	-	1466	-	-	-	-	-	65	-	1531
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-67	-	-	-	-	-	-	-	-67
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	-	-	<b>1398</b>	-	-	<b>102</b>	<b>0</b>	<b>3150</b>	<b>65</b>	-	<b>4715</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-1	-	-	-	-	-	-	-	-1
Electricity plants	-	-	-622	-	-	-102	-0	-67	218	-	-572
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat.fuel/BKB/PB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	11617	-	-	11617
Energy industry own use	-	-	-	-	-	-	-	-1200	-1	-	-1201
Losses	-	-	-	-	-	-	-	-	-25	-	-25
<b>TFC</b>	-	-	<b>775</b>	-	-	-	-	<b>13501</b>	<b>257</b>	-	<b>14533</b>
<b>INDUSTRY</b>	-	-	<b>37</b>	-	-	-	-	-	<b>95</b>	-	<b>132</b>
Iron and steel	-	-	-	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper pulp and printing	-	-	-	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	37	-	-	-	-	-	95	-	132
<b>TRANSPORT</b>	-	-	<b>646</b>	-	-	-	-	-	-	-	<b>646</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	-	-	-	-	-	-	-	-	-
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	646	-	-	-	-	-	-	-	646
<b>OTHER</b>	-	-	<b>93</b>	-	-	-	-	<b>13501</b>	<b>162</b>	-	<b>13756</b>
Residential	-	-	51	-	-	-	-	11814	75	-	11940
Comm. and public services	-	-	-	-	-	-	-	1687	38	-	1725
Agriculture/forestry	-	-	41	-	-	-	-	-	-	-	41
Fishing	-	-	-	-	-	-	-	-	0	-	0
Non-specified	-	-	-	-	-	-	-	-	49	-	49
<b>NON-ENERGY USE</b>	-	-	-	-	-	-	-	-	-	-	-
in industry/transf./energy	-	-	-	-	-	-	-	-	-	-	-
of which: chem./petrochem.	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Electr. generated - GWh</b>	-	-	<b>1350</b>	-	-	<b>1181</b>	<b>1</b>	-	-	-	<b>2532</b>
Electricity plants	-	-	1350	-	-	1181	1	-	-	-	2532
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - TJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

# Energy Data Officer/Statistician

## Possible Staff Vacancies

International Energy Agency, Paris, France

### The IEA

The International Energy Agency, based in Paris, acts as energy policy advisor to 29 member countries in their effort to ensure reliable, affordable and clean energy for their citizens. Founded during the oil crisis of 1973-74, the initial role of the IEA was to co-ordinate measures in times of oil supply emergencies. As energy markets have changed, so has the IEA. Its mandate has broadened to incorporate the “Three E’s” of balanced energy policy making: energy security, economic development and environmental protection. Current work focuses on climate change policies, market reform, energy technology collaboration and outreach to the rest of the world, especially major consumers and producers of energy like China, India, Russia and the OPEC countries.

The Energy Data Centre, with a staff of around 30 people, provides a dynamic environment for young people just finishing their studies or with one to two years of work experience.

### Job description

The data officers/statisticians compile, verify and disseminate information on all aspects of energy including production, transformation and consumption of all fuels, energy efficiency indicators, CO<sub>2</sub> emissions, and energy prices and taxes. The data officers are responsible for the production of data sets through receiving, reviewing and inputting data submissions from member countries and other sources. They check for completeness, correct calculations, internal consistency, accuracy and consistency with definitions. Often this entails proactively investigating and helping to resolve anomalies in collaboration with national administrations. The data officers/statisticians also design and implement computer macros used in the preparation of their energy statistics publication(s) alongside analysis of the data.

### Principal qualifications

- University degree in a topic relevant to energy, or statistics. We currently have staff with degrees in mathematics, statistics, information technology, economics, engineering, physics, environmental studies, etc.
- Experience in the basic use of databases and computer software. Experience in Visual Basic is an advantage.
- Ability to work accurately, pay attention to detail and work to deadlines; ability to deal simultaneously with a wide variety of tasks and to organise work efficiently.
- Good communication skills; ability to work well in a team and in a multicultural environment, particularly in liaising with contacts in national administrations and industry; ability to understand, and communicate data.
- An excellent written and oral command of English; knowledge of other languages would be an asset.
- Some knowledge of energy industry operations and terminology would also be an advantage, but is not required.

Nationals of any IEA member country are eligible for appointment. Basic salaries start at 3 300 euros per month. The possibilities for advancement are good for candidates with appropriate qualifications and experience. Tentative enquiries about future vacancies are welcomed from men and women with relevant qualifications and experience. Applications in English, accompanied by a curriculum vitae, should be sent to:

Office of Management and Administration  
International Energy Agency  
31-35 rue de la Fédération  
75739 Paris Cedex 15, France

## Online Data Services

Users can instantly access not only all the data published in this book, but also all the time series used for preparing this publication and all the other statistics publications of the IEA. The data are available online, either through annual subscription or pay-per-view access. More information on this service can be found on our website: <http://data.iea.org>

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## Nine Annual Publications

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### ■ World Energy Statistics 2017

*World Energy Statistics* presents comprehensive world energy statistics on all energy sources – coal, gas, oil, electricity, renewables and waste. It covers energy supply and consumption for 150 countries and regions, including all OECD countries, over 100 other key energy producing and consuming countries, as well as world totals. The book includes detailed tables by country in original units for the year 2015, and summary time series on production, trade, and final consumption by sector. It also presents provisional 2016 supply data for OECD countries, and initial 2016 estimates for non-OECD countries' production and trade of natural gas, primary coal and oil.

*Published August 2017 - Price: Print €120; PDF €96*

### ■ World Energy Balances 2017

*World Energy Balances* presents comprehensive energy balances for all the world's largest energy producing and consuming countries. It contains detailed data on the supply and consumption of energy for 150 countries and regions, including all OECD countries, over 100 other key energy producing and consuming countries, as well as world totals. The book includes graphs and detailed data by country for all energy sources – coal, gas, oil, electricity, renewables and waste - expressed in balance format, for the year 2015. Alongside this, there are summary time series on production, trade, final consumption by sector, as well as key energy and economic indicators. The volume also presents provisional 2016 supply data for OECD countries, and initial 2016 estimates for non-OECD countries' production and trade of natural gas, primary coal and oil.

*Published August 2017 - Price: Print €120; PDF €96*

### ■ Coal Information 2017

*Coal Information* provides a comprehensive review of historical and current market trends in the world coal sector, including 2016 provisional data. It provides a review of the world coal market in 2015, alongside a statistical overview of developments, which covers world coal production and coal reserves, coal demand by type, coal trade and coal prices. A detailed and comprehensive statistical picture of historical and current coal developments in the 35 OECD member countries, by region and individually is presented in tables and charts. Complete coal balances and coal trade data for selected years are presented on 22 major non-OECD coal-producing and -consuming countries, with summary statistics on coal supply and end-use statistics for about 40 countries and regions worldwide.

*Published August 2017 - Price: Print €165; PDF €132*

## ■ Electricity Information 2017

*Electricity Information* provides a comprehensive review of historical and current market trends in the OECD electricity sector, including 2016 provisional data. It provides an overview of the world electricity developments in 2015 covering world electricity and heat production, input fuel mix, supply and consumption, and electricity imports and exports. More detail is provided for the 35 OECD countries with information covering production, installed capacity, input energy mix to electricity and heat production, consumption, electricity trades, input fuel prices and end-user electricity prices. It provides comprehensive statistical details on overall energy consumption, economic indicators, electricity and heat production by energy form and plant type, electricity imports and exports, sectoral energy and electricity consumption, as well as prices for electricity and electricity input fuels for each country and regional aggregate.

*Published August 2017 - Price: Print €150; PDF €120*

## ■ Natural Gas Information 2017

*Natural Gas Information* is a detailed reference work on gas supply and demand covering not only the OECD countries but also the rest of the world; this publication contains essential information on LNG and pipeline trade, gas reserves, storage capacity and prices. The main part of the book concentrates on OECD countries, showing a detailed supply and demand balance for each country and for the three OECD regions: Americas, Asia-Oceania and Europe, as well as a breakdown of gas consumption by end user. Import and export data are reported by source and destination.

*Published August 2017 - Price: Print €165; PDF €132*

## ■ Oil Information 2017

*Oil Information* is a comprehensive reference book on current developments in oil supply and demand. This publication contains key data on world production, trade, prices and consumption of major oil product groups, with time series back to the early 1970s. Its core consists of a detailed and comprehensive picture of oil supply, demand, trade, production and consumption by end-user for each OECD country individually and for the OECD regions. Trade data are reported extensively by origin and destination.

*Published August 2017 - Price: Print €165; PDF €132*

## ■ Renewables Information 2017

*Renewables Information* provides a comprehensive review of historical and current market trends in OECD countries, including 2015 provisional data. It provides an overview of the development of renewables and waste in the world over the 1990 to 2015 period. A greater focus is given to the OECD countries with a review of electricity generation and capacity from renewable and waste energy sources, including detailed tables. However, an overview of developments in the world and OECD renewable and waste market is also presented. The publication encompasses energy indicators, generating capacity, electricity and heat production from renewable and waste sources, as well as production and consumption of renewables and waste.

*Published August 2017 - Price: Print €110; PDF €88*

## ■ CO<sub>2</sub> Emissions from Fuel Combustion 2017

In recognition of the fundamental importance of understanding energy related environmental issues, the IEA's *CO<sub>2</sub> Emissions from Fuel Combustion* provides a full analysis of emissions stemming from energy use. This annual publication has become an essential tool for analysts and policy makers in many international fora such as the Conference of the Parties, which will be meeting in Bonn, Germany, from 7 to 16 November 2017. The data in this book are designed to assist in understanding the evolution of the emissions of CO<sub>2</sub> from 1971 to 2015 for 150 countries and regions by sector and by fuel. Emissions were calculated using IEA energy databases and the default methods and emission factors from the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*.

*Published November 2017 - Price: Print €165; PDF €132*

## ■ Energy Efficiency Indicators Highlights 2017

*Energy Efficiency Indicators Highlights* is designed to help understand what drives final energy use in IEA member countries in order to improve and track national energy efficiency policies. It provides the first comprehensive selection of data that the IEA has been collecting each year after its member states recognised in 2009 the need to better monitor energy efficiency policies. The report includes country-specific analysis of end uses across the largest sectors – residential, services, industry and transport. It answers questions such as:

- What are the largest drivers for energy use trends in each country?
- Was energy saved because of efficiency progress over time?
- How much energy is used for space heating, appliances or cooking?
- What are the most energy-intensive industries?

Improving energy efficiency is a critical step for governments to take to move towards a sustainable energy system. This report highlights the key role of end-use energy data and indicators in monitoring progress in energy efficiency around the world.

*Published December 2017 - Free pdf*

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# Two Quarterlies

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## ■ Oil, Gas, Coal and Electricity

*Oil, Gas, Coal and Electricity* provides detailed and up-to-date quarterly statistics on oil, natural gas, coal and electricity for the OECD countries. Oil statistics cover production, trade, refinery intake and output, stock changes and consumption for crude oil, NGL and nine selected product groups. Statistics for electricity, natural gas and coal show supply and trade. Oil and coal import and export data are reported by origin and destination. Gas imports and exports data are reported by entries and exits of physical flows. Moreover, oil and coal production are reported on a worldwide basis.

*Published Quarterly - Price €120, annual subscription: Print €380; PDF €304*

## ■ Energy Prices and Taxes

*Energy Prices and Taxes* responds to the needs of the energy industry and OECD governments for up-to-date information on prices and taxes in national and international energy markets. It contains crude oil import prices by crude stream, industry prices and consumer prices. The end-user prices for OECD member countries cover main oil products, gas, coal and electricity. Every issue includes full notes on sources and methods and a description of price components in each country. Time series availability varies with each data series.

*Published Quarterly - Price €120, annual subscription: Print €380; PDF €304*

## Electronic Editions

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### ■ CD-ROMs and Online Data Services

To complement its publications, the Energy Data Centre produces CD-ROMs containing the complete databases which are used for preparing the statistics publications. Built-in software allows you to access and manipulate all these data in a very user-friendly manner and includes graphic facilities. These databases are also available on the internet from our online data service.

#### Annual CD-ROMS / Online Databases

- |  |                             |
|--|-----------------------------|
| ■ World Energy Statistics 2017   | Price: €800 (single user)   |
| ■ World Energy Balances 2017   | Price: €800 (single user)   |
| ■ <b>World Energy Statistics and Balances 2017</b><br><i>(Combined subscription of the above two series)</i> | Price: €1 400 (single user) |
| ■ Coal Information 2017  | Price: €550 (single user)   |
| ■ Electricity Information 2017   | Price: €550 (single user)   |
| ■ Natural Gas Information 2017   | Price: €550 (single user)   |
| ■ Oil Information 2017   | Price: €550 (single user)   |
| ■ Renewables Information 2017  | Price: €400 (single user)   |
| ■ CO <sub>2</sub> Emissions from Fuel Combustion 2017  | Price: €550 (single user)   |

#### Quarterly CD-ROMs / Online Databases

- |                           |   |
|---------------------------|---|
| ■ Energy Prices and Taxes | Price: (four quarters) €900 (single user) |
|---------------------------|---|

A description of these services is available on our website: <http://data.iea.org>

## Other Online Services

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### ■ The Monthly Oil Data Service

The IEA *Monthly Oil Data Service* provides the detailed databases of historical and projected information which is used in preparing the IEA's monthly *Oil Market Report* (OMR). The IEA Monthly Oil Data Service comprises three packages available separately or combined as a subscriber service on the Internet. The data are available at the same time as the official release of the Oil Market Report.

The packages include:

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| ■ Supply, Demand, Balances and Stocks | Price: €6 150 (single user)        |
| ■ Trade                               | Price: €2 050 (single user)        |
| ■ Field-by-Field Supply               | Price: €3 080 (single user)        |
| ■ <b>Complete Service</b>             | <b>Price: €9 200 (single user)</b> |

A description of this service is available on our website: [www.iea.org/statistics/mods](http://www.iea.org/statistics/mods)



## ■ The Monthly Gas Data Service

The service provides monthly natural gas data for OECD countries:

- Supply balances in terajoules and cubic metres;
- Production, trade, stock changes and levels where available, gross inland deliveries, own use and losses;
- Highly detailed trade data with about 50 import origins and export destinations;
- LNG trade detail available from January 2002,
- From 2011 onwards, transit volumes are included and trade data corresponds to entries/exits.

The databases cover the time period January 1984 to current month with a time lag of two months for the most recent data.

- Monthly Gas Data Service: Natural Gas Balances & Trade  
Historical plus 12 monthly updates Price: €800 (single user)

For more information consult: [www.iea.org/statistics/mgds](http://www.iea.org/statistics/mgds)

**Moreover, the IEA statistics website contains a wealth of free statistics covering oil, natural gas, coal, electricity, renewables, energy-related CO<sub>2</sub> emissions and more for 150 countries and regions and historic data for the last 20 years. It also contains Sankey flows to enable users to explore visually how a country's energy balance shifts over up to 40 years, starting with production and continuing through transformation to see important changes in supply mix or share of consumption. The IEA Energy Atlas offers panoramas on every aspect of energy on a global basis and for 150 individual countries, with interactive maps and customisable charts that detail and compare a host of data based on the Agency's authoritative statistics. The website also includes free headline energy data in excel format for all OECD countries and global regions from 1971 onwards as well as for Association countries from 1990 onwards.**

**The IEA statistics website can be accessed at [www.iea.org/statistics/](http://www.iea.org/statistics/)**



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Photo credit: © GraphicObsession

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More detailed data in original units are published in the 2017 edition of *World Energy Statistics*.

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