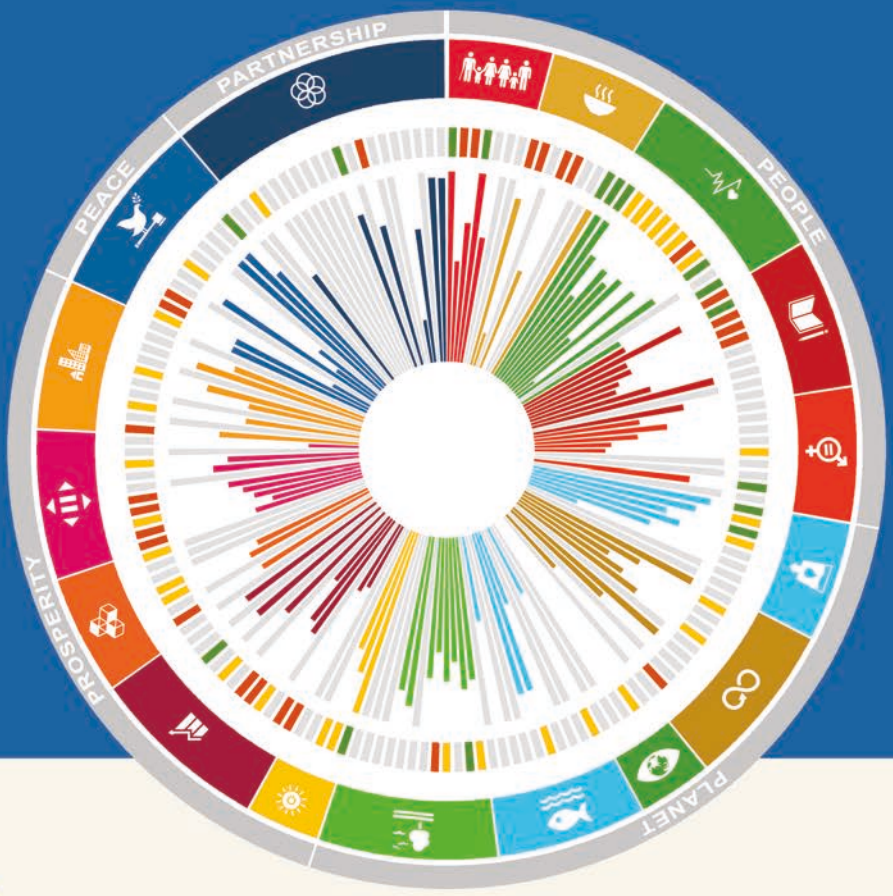
The Short and Winding Road to 2030

MEASURING DISTANCE TO THE SDG TARGETS



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Foreword

The 2030 Agenda for Sustainable Development, adopted by world leaders at the United Nations on 25 September 2015, is a broad and ambitious plan of action for people, planet and prosperity, with the overarching objective of leaving no one behind. At its core are 17 Sustainable Development Goals (SDGs) and 169 targets.

The OECD is fully committed to supporting the achievement of the SDGs. This commitment is underscored by the OECD Action Plan on the SDGs, endorsed by the OECD Council in December 2016. The Action Plan describes how the OECD will support the 2030 Agenda through its legal instruments, its expertise in policy analysis and its know-how on statistics, indicators and systems for monitoring performance. As part of this extensive plan, the OECD Centre on Well-being, Inclusion, Sustainability and Equal Opportunity developed a unique methodology for measuring the distance that OECD countries would need to travel in order to meet the SDG targets.

This report, *The Short and Winding Road to the 2030 Agenda: Measuring Distance to the SDG Targets* leverages UN and OECD data to provide a high-level assessment of OECD Member countries' performance across the goals and targets of the 2030 Agenda at national level. Now in its fourth edition, the *Measuring Distance to the SDG Targets* report was first released as a pilot study in 2016.

This edition of the *Measuring Distance to the SDG Targets* builds on previous work. It deepens the analysis by looking at both current achievements and recent trends – i.e. whether countries have been moving towards or away from the targets, and how likely they are to meet their commitments by 2030 based on recent trends – as well as considering how these trends may be affected by the COVID-19 pandemic. To this end, the report is closely aligned with the global indicator framework curated by the Inter-agency and Expert Group on SDG Indicators.

The SDGs are our promise and our responsibility to future generations. They present a unique opportunity for countries to work together to achieve a more inclusive and sustainable future for all. In this respect, the OECD, through its expertise on policy and data, is assisting several countries in their efforts to implement the SDGs. This report aims to further support Member countries in their priority setting, assessment and monitoring towards the achievement of the 2030 Agenda.

Acknowledgements

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Martine Zaïda is the communications coordinator and has provided essential support throughout. Julia Carro assisted communications and publishing and Anne-Lise Faron prepared and formatted the manuscript for publication. Patrick Hamm copy edited the work. Sonia Primot designed the front cover.

This report is also the outcome of a collective effort with contributions from policy analysts and statisticians from around the OECD. The report draws on analysis carried out by a range of OECD Directorates. We are thus grateful to many colleagues for their help, comments and insights, either on draft text, or on specific queries. These colleagues include: Nadim Ahmad, Marcos Díaz Ramírez, Lorenz Gross and Stefano Marta from the Centre for Entrepreneurship, SMEs, Regions and Cities. David Bradbury and Joseph Stead from the Centre for Tax Policy and Administration. Yasmin Ahmad, Marylin Bachmann, Eric Bensel, John Egan, Paul Horrocks, Valentina Orru, Esme Sout and Chantal Verger from the Development Co-operation Directorate. Alejandra María Meneses, Pierre de Boisséson and Hyeshin Park from the Development Centre. Filippo Maria D'Arcangelo, Orsetta Causa, Tobias Kruse, Ilai Levin, Alessia Pagani, Mauro Pisu, and Zuzana Smidova from the Economics Department. Manon Costinot, Marie-Helene Doumet, Corinne Heckmann, Marta Encinas-Martin and Michael Ward from the Education Directorate. Marion Devaux, Rodrigo Fernandez, Emily Hewlett, Chris James, Sebastian Königs, Maxime Ladaique, Gaëtan Lafortune, Jongmi Lee and David Morgan from the Employment, Labour and Social Affairs Directorate. Jane Ellis, Chiara Falduto, Guy Halpern, Myriam Linster, Alexander Mackie, Sara Miet, Katia Karousakis, Sara Ramos Magaña and Dimitra Xynou from the Environment Directorate. Pinar Guven, Ernesto Soria Morales and Laura Völker from the Public Governance Directorate. Jesús Antón, Fabiana Cerasa, Claire Delpeuch, Koen Deconinck and Guillaume Gruère from the Trade and Agriculture Directorate. Benoit Arnaud, Esther Bolton, David Brackfield, Daniel Clarke, Anne-Sophie Fraisse, Annabelle Mourougane, Sonia Primot, Belen Zinni and Jorrit Zwijnenburg from the Statistics and Data Directorate. Mario Cervantes, Fernando Galindo-Rueda, Guy Lalanne, Audrey Plonk and Verena Weber from the Directorate for Science, Technology and Innovation. Carlotta Balestra, Grainne Dirwan, Carrie Exton, Lara Fleischer, Michal Shinwell and Liva Stokenberga from the Centre on Well-being, Inclusion, Sustainability and Equal Opportunity.

The report has benefited from helpful comments on early drafts provided by national delegates to the OECD Committee on Statistics and Statistical Policy (CSSP). Their contributions and advice are kindly acknowledged and we hope the resulting product can be useful for their work.

Editorial

As this editorial is written, war has broken out in Europe. The current terrible crisis caused by the large scale aggression by Russia against Ukraine constitutes a clear violation of international law and a serious threat to the rules-based international order. It constitutes a direct threat to peace and stability on the continent and puts the most elementary human rights at risk. It also casts a dark cloud on the possibility of achieving the Sustainable Development Goals (SDGs). The dangers are real and reach far beyond the European continent. Global peace and security may be disrupted and many countries across the world are likely to be affected by the economic and social consequences of this act of aggression.

Russia's aggression against Ukraine comes at a time when most countries, including low-income and emerging economies, are still struggling to exit the pandemic or deal with its impacts. As this report shows, the pandemic has exacerbated a number of economic and social imbalances, and has made many goals and targets harder to achieve. Across the globe, the pandemic is causing long-term damage to job prospects and living standards, while putting pressure on the sources of public financing. Vulnerable populations have felt its impact the hardest. Young people, for instance, have been (and without appropriate action will continue to be) hit particularly hard by the crisis, meaning that the future is also at stake.

Governments' efforts to advance on the SDGs have not been in vain, however. Since the adoption of the 2030 Agenda in 2015, a majority of OECD countries have undertaken important steps to implement SDGs, as visible for instance in the progress made on promoting gender equality, curbing greenhouse gas emissions or reducing death from assault and homicides. Interestingly, almost all OECD countries adopted national strategies, policies and regulatory frameworks to increase their environmentally protected areas or to promote youth employment. Significant progress has also been made when it comes to measurement. Since the adoption of the SDGs, statistical gaps have been significantly reduced and we are now able to track almost 80% of targets, as opposed to less than half in 2016.

At this critical time, and despite the severe geopolitical, economic and social challenges that the world is facing, there are at least three reasons to be optimistic.

First, the violation of international law and possible violations of human rights in Ukraine have been met with a united response from democracies and countries across the world that share the same values as OECD countries. Manifestations of solidarity with Ukraine have come from all parts of the world and from all walks of life. Governments, citizens, civil society and corporates have all stood in support of the people of Ukraine and their democratically-elected government. This highlights a shared commitment to peace, the rule of law and strong and cohesive institutions, which are core to the SDGs.

Second, while COVID-19 found many governments and populations unprepared for a global crisis of this scale, the world as a whole has learnt from this ordeal. These lessons have been used to combat the pandemic more effectively and prevent even worse consequences from materialising. In the OECD area this can be seen, for instance, in the deployment of mass scale vaccination campaigns and in unprecedented fiscal responses. While the pandemic is not over, OECD countries' sanitary responses have continued to improve throughout the pandemic.

Third, in a long-term perspective looking beyond 2030, countries are taking active steps to handle the crucial common challenge that humanity faces: climate change. While this report shows that some of the SDGs are far from being achieved, such as on ocean acidification, marine debris and eutrophication or the loss of biodiversity, the momentum for international action is strong, as shown by the COP 26 outcomes as well as the recent developments of a global biodiversity framework at the Convention on Biological Diversity.

Opportunities to advance on SDGs are therefore many and shouldn't be wasted, given the short time left. To seize these opportunities, we need a rigorous understanding of where countries stand on the 2030 Agenda, how quickly they are advancing towards their goals and what should be the priorities for action. This is the purpose of the OECD report *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets*, first published in 2016, and now in its fourth edition. The report is one of the main pillars of the OECD Council Action Plan on the SDGs and helps OECD countries to identify where they currently stand in relation to the SDG targets and where they need to be. It proposes sustainable pathways based on evidence. It reaffirms the OECD role as a leading source of expertise, data, good practices and standards in the economic, social and environmental areas of public policy that are relevant to SDGs. And it encourages a "race to the top" for better and more coherent policies that can help deliver on the SDGs through the use of hallmark OECD approaches. The OECD *Measuring Distance to the SDG Targets* report leverages high-quality statistics from the UN and OECD sources to provide a high-level assessment of OECD Member countries' performance across the Goals and Targets of the 2030 Agenda based on the indicators agreed internationally for global monitoring.

A sustainable future for all will not be possible without accurate information and data. This report is a testament to that.

Mathias Cormann

Secretary-General, OECD

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Executive summary

The 2030 Agenda sets out ambitious goals for people, the planet and prosperity. How far have OECD countries travelled to reach the SDGs? How has the COVID-19 pandemic impacted countries' progress? And how much is the assessment of where OECD countries stand being affected by what we currently do not know? The OECD report *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets* aims to help Member countries evaluate where they currently stand with regard to the SDGs, to assess the direction and pace of their recent trajectory, and to identify areas where additional effort is needed. It also sets out the statistical agenda ahead – showing how much we do not yet know and how this might affect both the achievement of the SDGs and decisions about what to prioritise across this vast agenda.

Where do OECD countries stand with respect to their 2030 commitments?

With less than 10 years left, stronger policy actions are needed to fulfil the 2030 Agenda. So far, the OECD area as a whole has met 10 of the 112 targets for which performance can be gauged and it is considered to be close to 18 more (mainly those related to securing basic needs and implementing policy tools and frameworks), but much remains to be done. Twenty-one targets appear to be far from being met, and none of these can be considered as on track. In particular, there is considerable scope to strengthen countries' efforts in several key areas: to ensure that no one is left behind, to restore trust in institutions and to limit pressures on the natural environment. Yet the 2030 Agenda is global by essence, and OECD countries should sustain efforts even beyond their borders.

OECD countries should foster inclusion. One in eight OECD residents is income poor, and over the past decades most OECD countries have not made progress towards poverty reduction. Many groups, including women, young adults and migrants, face greater challenges than the rest of the population. For instance, despite progress, women's rights and opportunities are still limited in both private and public spheres. In addition, unhealthy behaviours such as malnutrition and tobacco consumption, which appear to be more common among low socio-economic groups, and disparities in education tend to exacerbate further inequalities.

While the pandemic has underscored the importance of trust for democracies, OECD countries remain far from achieving related targets. Trust and transparency are critical for a society's capacity to absorb and bounce back from shocks. Yet available data show a long-term decrease in people's trust in institutions in developed countries. Trust in government reflects a mix of economic, social and political interactions between citizens and government. OECD countries have not yet made enough progress towards targets related to areas that are critical for trust, including accessibility, accountability, transparency and diversity in public institutions.

Environmental pressures are rising. The displacement abroad of resource- or pollution-intensive production has allowed some progress in a few areas in OECD countries. Yet the use of material resources to support economic growth remains high, and many valuable materials continue to be disposed of as waste. On the climate front, despite some progress in the decoupling of greenhouse gas emissions from

population and GDP growth, emissions are still rising in some countries, and despite a pledge by G20 countries to phase out inefficient fossil fuel subsidies, major economies still support their production and consumption. As for biodiversity, despite some encouraging developments in the protection of ecosystems, threats to terrestrial and marine biodiversity have continued to rise, and none of the 21 Aichi Biodiversity Targets that should have been fulfilled by 2020 have been met by all OECD countries.

How has the COVID-19 pandemic affected progress towards the SDGs?

OECD countries' progress towards the targets of the 2030 Agenda has been significantly affected by the unfolding of the COVID-19 pandemic since late 2019. By November 2021, OECD countries reported over 2.3 million deaths due to COVID-19. Beyond the large number of deaths, the crisis induced by the pandemic is unprecedented in many ways.

The recession triggered by the COVID-19 pandemic has been the most severe – as well as the shortest – since World War II. While OECD countries did their best to respond to the crisis at the necessary scale and speed, most governments were unprepared to confront the crisis. The pandemic has also exacerbated some long-standing structural weaknesses of OECD countries, challenged institutions and put sources of public financing under pressure.

The pandemic has also brought about some positive developments. The reduction in economic activity due to the COVID-19 crisis led to a temporary improvement of environmental conditions. The COVID-19 crisis has also prompted OECD governments to revisit long-held assumptions about the role of macro-economic policies, leading to fiscal responses on a scale not observed over the past 50 years. The recovery packages deployed by most OECD governments provide an opportunity to "build back better" and strengthen systemic resilience to cope with future shocks.

How is this snapshot affected by missing data?

Ensuring that all countries have the capacity to track progress towards the SDGs is critical for the overall success of the 2030 Agenda, as well as to ensure that COVID-19 recovery measures are broadly consistent with the SDGs. One challenge still facing OECD governments is addressing the many blind spots in our understanding of how far they have progressed with respect to the SDGs and what the road to 2030 will look like going forward. Data gaps influence how we assess progress towards the 2030 Agenda – if not carefully understood, they may lead to biased conclusions. For instance, if the SDG reporting framework is incomplete or not up to date, or fails to represent all segments of the population, any inference about the efficiency of policies risks being flawed. The same is true if diagnostic tools cannot provide a comprehensive assessment of the most recent trends, especially in times of uncertainty. While available data make it possible to cover 136 of the 169 targets, some of the data do not properly gauge current outcomes nor performance over time. Beyond availability, many other gaps – such as timeliness or granularity – influence our understanding of progress towards the 2030 Agenda.

1 Overview

The 2030 Agenda for Sustainable Development, adopted in 2015 by all the members of the United Nations, has an unprecedented ambition, but also confronts countries with complex challenges. This report aims to help OECD Member countries meet their obligations to monitor and report on the SDGs by looking at how far OECD countries have come in achieving each of the SDG targets for which data exist. The chapter finds that while a few targets have already been met (mainly those relating to securing decent living standards and to the implementation of policy tools and frameworks), in many areas OECD countries still have a long road to travel. In particular, OECD countries have scope to strengthen their efforts to ensure that no one is left behind, to restore trust in institutions and to limit pressures on the natural environment.

The 2030 Agenda for Sustainable Development, adopted by all the UN Member States at the UN General Assembly in September 2015, includes an ambitious set of 17 goals and 169 targets that all the countries committed to achieve by 2030. It is a call to action for a better and more sustainable future for all. While the UN prepares annual reports on progress towards the SDGs at global and regional levels (UN, 2021[1]), national governments are responsible for monitoring and reporting achievements at the national and sub-national levels.

To support the international community and OECD member and partner countries in the implementation of the 2030 Agenda, the OECD Council adopted an Action Plan on the Sustainable Development Goals in December 2016 (OECD, 2016[2]). The present report is a major element of this Plan. While a central part of the OECD's data effort is to contribute to the global indicator framework put in place to monitor the 2030 Agenda, *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets* report offers a high-level picture of Member countries' performance across the goals and targets of the 2030 Agenda.

The global framework for SDG follow-up and review

The 2030 Agenda includes a set of 17 Sustainable Development Goals (Figure 1.1). For communication purposes, these goals are sometimes grouped under five broad themes (the "5Ps"): People (broadly corresponding to Goals 1 to 5), Planet (Goals 6, 12, 13, 14 and 15), Prosperity (Goals 7 to 11), Peace (Goal 16) and Partnerships (Goal 17).[1] Most of these goals and their underlying targets build on previous international agreements, especially those concerning development, the environment and human rights.

Figure 1.1. The Sustainable Development Goals

Source: Sustainable Development Goals Communications Materials, accessed on 3 December 2022. More details available at: https://www.un.org/sustainabledevelopment/news/communications-material/.

The 17 SDGs are underpinned by 169 targets, which in several cases specify the achievements to be accomplished or the policies to be deployed by 2030. To monitor progress towards these targets, in 2015 the United Nations Statistical Commission (StatCom) created the Inter-Agency Expert Group on SDG indicators (IAEG-SDGs), composed of experts from National Statistical Offices (NSOs) and observers from international organisations (including the OECD), to develop and implement a global indicator framework

for the goals and targets of the 2030 Agenda. These indicators are at different stages of development, with some already well developed, with established methodologies and regularly collected data, while others are still in the early stages of conceptual development and data collection. These global indicators are classified by the IAEG-SDGs into three tiers based on their methodological development and data availability, as follows:

- Tier I indicators are conceptually clear, based on established methodology and standards, and regularly produced by at least 50% of countries accounting for at least 50% of the population of each world region;
- Tier II indicators are conceptually clear, based on established methodology and standards, but not regularly produced by countries; and
- Tier III indicators are those that still lack an established methodology or standards.

The IAEG-SDGs is regularly revising the tier classifications of the indicators included in the global indicator framework, as their methodology and data availability evolve continuously over time. At the time of drafting this report, 130 indicators were classified as Tier I, 97 as Tier II and none as Tier III out of the 231 unique indicators[2] included in the global indicator framework, while the remaining four indicators had multiple tiers (i.e. different components of the indicator are classified into different tiers).[3] The tier level of indicators varies across the goals. For instance, more than 80 per cent of the indicators for goals relating to Good Health and Well Being (Goal 3), Affordable and Clean Energy (Goal 7) and Industry, Innovation and Infrastructure (Goal 9) are classified as tier I, while less than one-third of the indicators on Gender Equality (Goal 5), Climate Action (Goal 13), Sustainable Cities and Communities (Goal 11) and Peace, Justice and strong Institutions (Goal 16) are tier I.

Each year, the UN Secretary General prepares a global overview of progress towards the SDGs at the regional and global levels, which starts from the global indicator framework (UN, 2021[1]), while national governments are responsible for monitoring and reporting achievements in each country. While the SDGs are to be achieved globally, the 2030 Agenda states that implementation at the national level will be in accordance with national circumstances:

> "The Sustainable Development Goals and targets are integrated and indivisible, global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities." *(UN, 2015[3])*

The OECD contribution to monitoring the SDGs

To support the international community and OECD member and partner countries in the implementation of the 2030 Agenda, the OECD Council adopted the Action Plan on the SDGs in December 2016 (OECD, 2016[2]). The Action Plan aims to: i) support countries to identify where they currently stand in relation to the SDGs and where they need to be, and to propose sustainable pathways based on evidence; ii) reaffirms the OECD role as a leading source of expertise, data, good practices and standards in the economic, social and environmental areas of public policy that are relevant to SDGs; and iii) encourages a "race to the top" for better and more coherent policies that can help deliver the SDGs through the use of hallmark OECD approaches (e.g. peer reviews and learning; monitoring and statistical reporting; policy dialogue; soft laws). With these objectives in mind, the OECD has identified four key areas of action:

- Apply an "SDG lens" to the OECD's strategies and policy tools.
- Leverage OECD data to help analyse progress in the implementation of the SDGs.
- Upgrade the OECD's support for integrated planning and policy making at the country level and provide a space for governments to share experiences on governing for the SDGs.
- Reflect on the implications of the SDGs for the OECD's external relations.

The OECD reports to its members on the implementation of the OECD Action Plan on an annual basis, supporting their implementation efforts with OECD analysis and recommendations. Much of the OECD's work is relevant to the SDGs. This includes the importance of international co-operation and global governance as well as the Universal Values of the 2030 Agenda, such as the overarching principle of "leaving no one behind" (LNOB) and policy work on the "5Ps" (i.e. People, Planet, Prosperity, Peace and Partnership) that are embedded in the OECD's programme of work. Since 2015, the OECD has taken steps to integrate an SDG lens into a number of OECD review processes (including Environmental Performance Reviews, Investment Policy Reviews, Public Governance Reviews, Digital Government Studies Review, and Development Assistance Committee Peer Reviews) as well as analytical working papers and other publications.

Concerning SDG monitoring, the OECD contributed to the development of the global indicator framework for the SDGs as an observer to the UN Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs). The OECD is also the custodian or partner agency on a number of indicators featuring in the global indicator framework. It directly supplies data to the *SDG Global Database* on official development assistance (ODA) and other international flows, on gender-based legal discrimination (leveraging the OECD Development Centre's work on the Social Institutions and Gender Index (OECD, 2019[4])), as well as on access to civil justice (OECD, 2021[5]) and on policy instruments for biodiversity (Karousakis, 2018[6]).

The purpose and nature of this report

The OECD *Measuring Distance to the SDG Targets* report, first released in 2016 and now in its fourth edition, leverages UN and OECD data to provide a high-level assessment of OECD Member countries' performance across the goals and targets of the 2030 Agenda at national level.[4] These reports contribute to the OECD Action Plan on SDGs, and in particular to Action Area 2 ("*Leverage OECD data to help analyse progress in the implementation of the SDGs*"). They are not meant to replace thematic reviews conducted by different OECD Directorates but rather to help Member countries with meeting the policy commitments they undertook when signing the 2030 Agenda by:

- Identifying available comparative indicators that countries could use to set their strategic priorities within the SDG agenda and to track progress towards them.
- Assessing OECD Member countries' most recent position on each of the targets and putting this into context through a comparison with the OECD average.
- Highlighting key data gaps where statistical development will be particularly important, either to track progress or to advance understanding of the policy drivers of SDG targets.[5]

This edition of the *Measuring Distance to the SDG Targets* builds on previous work. It deepens the analysis by looking at both current achievements and recent trends – i.e. whether countries have been moving towards or away from the targets, and how likely they are to meet their commitments by 2030 based on recent trends – as well as considering how these trends may be affected by the COVID-19 pandemic. To this end, the report draws on data from UN and OECD databases aligned with the global indicator framework, while complementing *SDG Global Database* with OECD sources to deepen the analysis of specific issues.

Member countries have used previous *Measuring Distance to the SDG Targets* reports to guide their monitoring processes, test the robustness of national indicators and develop national baselines.[6] As part of their national SDGs implementation processes, several OECD countries have used evidence from these reports to:

- Communicate on SDGs or add a comparative lens to national monitoring exercises (Statistics Denmark, 2017[7]; Government of the Republic of Slovenia, 2018[8]; Statistics Netherlands, 2018[9]).

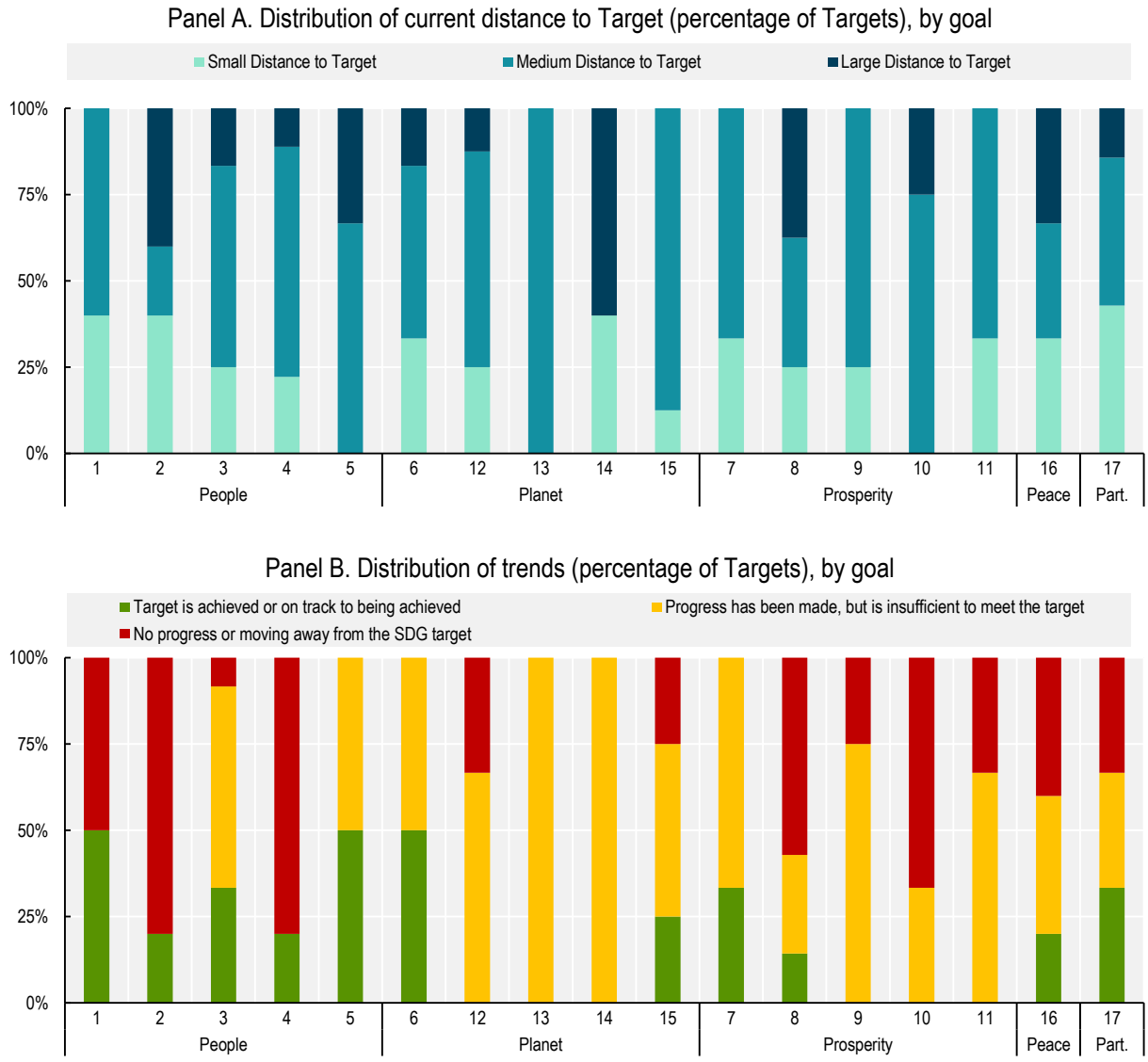
- Develop national monitoring and reporting systems (Office of the Government of the Czech Republic, 2017[10]; Bureau fédéral du Plan, 2019[11]).
- Discuss policy-relevant areas of action (Slovak Academy of Sciences, 2017[12]).

Where do OECD countries stand with respect to the SDGs?

While some SDG targets are, on average, close to being met, performance is very uneven across the 17 goals of the 2030 Agenda for Sustainable Development. Figure 1.2 presents a snapshot of OECD progress towards targets based on available data for each of the 17 goals, showing that distances to targets and trends over time differ significantly even when considering a specific goal:

- On average, OECD countries have already achieved, or are close to achieving, at least 25% of the targets for 12 of the 17 goals (in lighter blue in Panel A, Figure 1.2). Conversely, no target can be classified as close to being reached for the goals relating to Gender Equality (5), Climate actions (Goal 13) and Reduced inequalities (Goal 10) – in medium or darker blue in Panel A, Figure 1.2.
- OECD countries are, on average, making progress towards the goals pertaining to Gender Equality (5), three of the Planet goals (Goal 6 on clean water and sanitation; Goal 13 on climate action; and Goal 14 on life below water) as well as on affordable and clean energy (Goal 7) – shown in green and yellow (Panel B of Figure 1.2).
- In most cases, the progress made is insufficient to reach targets by 2030 (in yellow). Conversely, while some targets are on track to be met by 2030 for all the People-related goals, progress has been slow or even reversed in most cases (in red).

Figure 1.2. Distribution of distance to targets and trends over time, OECD average, by goal



Note: Numbers from 1 to 17 stand for the goals: 1 for No poverty, 2 for Zero hunger, 3 for Good health and well-being, 4 for Quality education, 5 for Gender equality, 6 for Clean water and sanitation, 7 for Affordable and clean energy, 8 for Decent work and economic growth, 9 for Industry, innovation and infrastructure, 10 for Reduced inequality, 11 for Sustainable cities and communities, 12 for Responsible consumption and production, 13 for Climate action, 14 for Life below water, 15 for Life on land, 16 for Peace, justice and strong institutions and 17 for partnerships for the goals. These goals are grouped under five broad themes (the "5Ps"): People, Planet, Prosperity, Peace and Partnership. Panel A shows how OECD countries perform, on average, at a given point in time, in terms of their distance from the target level they are supposed to meet by 2030. Panel B shows how OECD countries perform, on average, based on recent developments for the different indicators; it shows the likelihood of meeting the different targets by 2030 based on recent trends. The OECD average is measured as the simple average across OECD countries with available data. Averages for each goal are based on the simple average of the distances across each of the targets pertaining to a given goal. Percentages are computed for the targets with available data – see Future statistical and research agenda on SDGs.
Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/lrv5nq

These results suggest that the **"Decade of Action for the Sustainable Development Goals"** (UN, 2020[15]) is mired in uncertainty. With less than 10 years left to achieve the SDGs, much stronger policy actions will be needed to make the 2030 Agenda a success. In addition, there is significant heterogeneity

in the performances of OECD countries across goals and targets. The four thematic chapters included in this report provide a more exhaustive picture of where OECD countries stand in meeting the different targets, while country profiles dive into the details of countries' performances and data availability. The present chapter provides an overview of the main strengths and weaknesses of OECD countries.

Box 1.1. Key challenges in SDG measurement

This report is closely aligned with the global indicator framework as curated by the IAEG-SDGs;[1] as such, it reflects the level of ambition agreed by UN Member States when setting the 2030 Agenda. Doing so allows to provide a picture of countries' achievement vis à vis the SDG targets. Yet, these estimates should be interpreted with the following considerations in mind:

- First, when seeking to identify strategic priorities for implementing the SDGs, countries should look at their performance against targets rather than focusing on average results by goal or even broader categories (the 5Ps). Achievements at target level differ significantly even when considering a specific goal; the average distance at goal level may mask those differences and prevent identifying the specific targets for which stronger policy action is needed.
- Second, when evaluating countries' performances at the goal level, attention should be paid to the many blind spots arising from missing data. For instance, although data are currently available for almost 70% of the targets pertaining to the Planet category, only one in three of these targets can be monitored over time due to limited availability of robust time-series data.
- Third, while the target levels have been set with reference to the wording of the 2030 Agenda wherever possible, these targets reflect large disparities in their level of ambition. For instance, for climate-related targets (mainly in Goal 13), the level of ambition appears to be particularly low as the Paris Agreement on climate change entered into force over one year after the SDGs were agreed; the 2030 Agenda, therefore, falls short of the ambition of the Paris Agreement. Also, the wording of SDG targets varies between targets. For instance, while some targets are expressed using strong prescriptive verbs such as "eradicating" (e.g. Target 1.1. aims at "eradicating extreme poverty") or "ending" (e.g. Target 5.1 aims at "ending all forms of discrimination against all women and girls"), others are more loosely defined (e.g. Target 12.5 aims at "substantially reducing waste generation").

In addition, the projections included in this report only illustrate the potential scale of progress; they should be interpreted as indicating where OECD countries could end up in 2030 if they were to keep travelling at the same pace they achieved over the past decade(s). As a result, given the lags in available data, the pace of progress displayed will not reflect measures already announced or enacted but which have not yet manifested their full effect. Also, the pace of progress does not reflect the effects of the pandemic on countries' trajectories (see the Methodological Annex for more details).

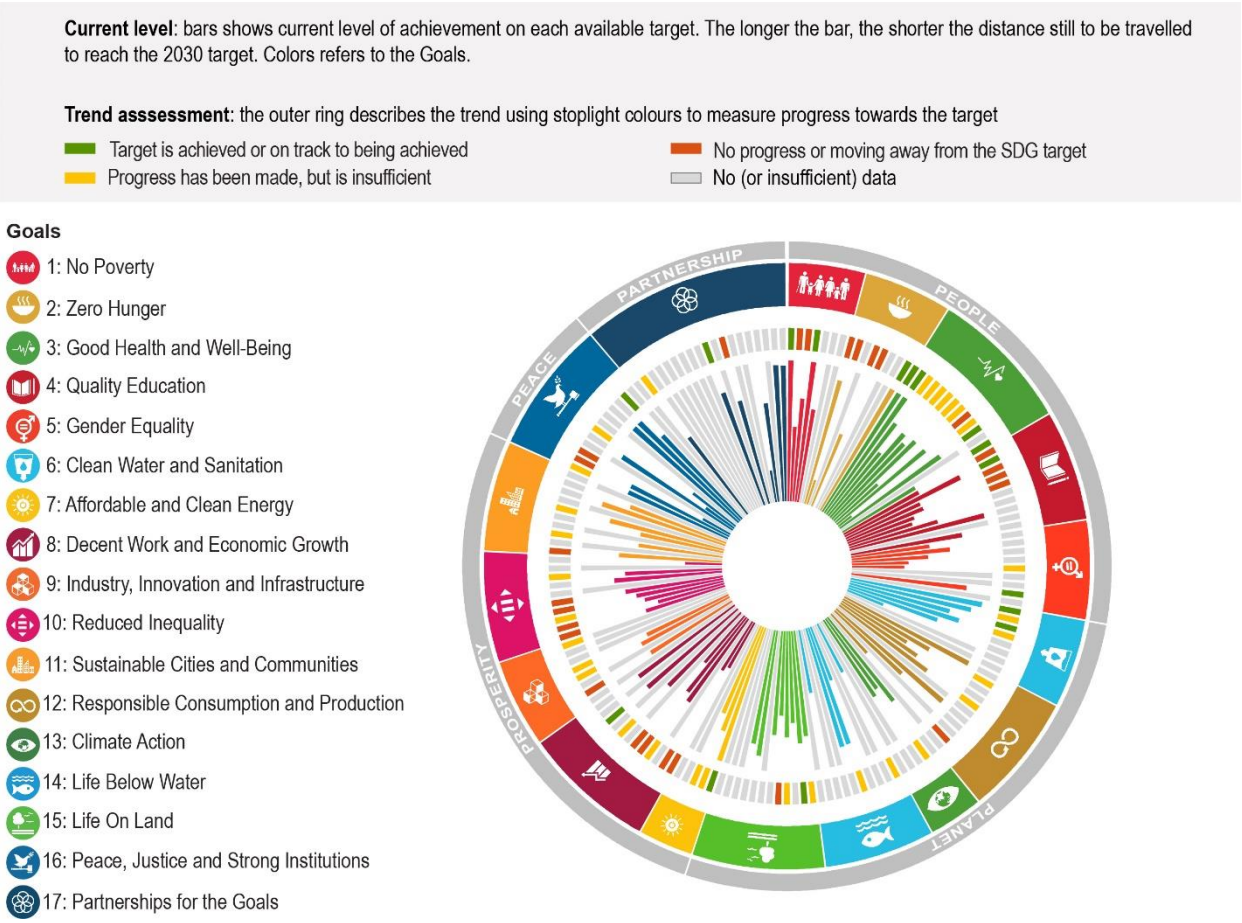
Note:
1. While all indicators and time series used in the report are closely aligned with the global indicator framework, in some cases, and while recognising the need for comparability among OECD Member countries, the present report goes beyond the global indicator framework, in particular, for monitoring indicators and targets for which no comparable data are currently available or tailoring the analysis to the policy challenges confronting OECD countries (more details in Methodological Annex). Such indicators that are not included in the global indicator framework are highlighted in the thematic chapters.

Progress on targets: Main results

Progress on SDGs requires a granular understanding of countries' strengths and weaknesses based on the consideration of the 169 targets (Figure 1.3). The assessment shows both **current achievements** (in the inner circle; the longer the bar, the smaller the distance remaining to be travelled) **as well as whether OECD countries are on track** (or at least making progress) to meet their commitments by 2030 (in the outer circle).

Overall, while a few targets have already been met (mainly those relating to securing basic needs and to the implementation of policy tools and frameworks – see Table 1.1), in many areas OECD countries still have a long road to travel (Figure 1.3). In particular, OECD countries have scope to strengthen their efforts to ensure that no one is left behind, to restore trust in institutions and to limit pressures on the natural environment (see Table 1.2).

Figure 1.3. OECD average distance from achieving SDG targets



Note: The OECD average is measured as the simple average across OECD countries with available data.
Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

The OECD area as a whole has secured decent living standards for its population. Table 1.1 lists the targets for which OECD distances (on average) are smallest. It shows that the OECD average already exceeds target levels (i.e. the average distance is nil) for 10 targets, while 18 additional targets are considered to be close to be met (the average distance is below 0.5 standardised measurement units, see

Annex 1.A). For instance, the OECD average distance is nil or very small (and likely to be nil by 2030) when it comes to eradicating extreme poverty (Target 1.1) and hunger (Target 2.1), as well as providing access to some basic amenities including sanitation (Targets 1.4 and 6.2), freshwater (Target 6.1) and energy (Target 7.1). OECD countries have also been able to reduce maternal and infant mortality (Targets 3.1 and 3.2), to afford access to early childhood education (Target 4.2), to provide modern education facilities (Target 4.a) and a legal identity to all citizens (Target 16.9), and to develop key statistical capacities (Targets 17.18 and 17.19).

Most OECD countries have already adopted or implemented a handful of policy instruments mentioned in the 2030 Agenda. Some of the data series included in this report are so-called "binary measures" (i.e. "yes" or "no" indicators) that aim at tracking the adoption and/or implementation of various policy instruments and frameworks. For most of these, most OECD countries have already met the relevant targets (i.e. they have already adopted or implemented the various measures). As a result, the average distance to target is very small (or nil) for the targets that rely on such binary measures. For example, all OECD countries with available data have already met Target 12.7 (on promoting public procurement practices) and Target 16.10 (on guarantying public access to information). Most of them have also met Target 11.a (on having national urban policies or regional development plans to support urban planning) and Target 15.8 (on implementing measures to prevent the introduction of Invasive Alien Species).

In a few cases, however, a small distance to targets may also reflect the lack of good quality data. Some SDG targets are multifaceted, phrased in general terms or open to different interpretations, implying that more than one indicator is needed to monitor progress. In these cases, relying on a single indicator can lead to wrong conclusions. For instance, while Target 4.2 refers to the quality of childhood education, available data only capture the quantity of education (i.e. participation rate in organised learning). In a few other cases, while data in the global indicator framework are available, they may not be fully appropriate in the OECD context. For instance, the global indicator framework proposed monitoring Target 14.6 on harmful fisheries subsidies through a policy indicator capturing the *"degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing"*. While this measure may provide an overview of the situation, an extensive assessment would require considering aspects that are not covered by such an indicator (see Planet chapter). Similarly, the global indicator framework proposes that the monitoring of Target 9.c on access to ICT should be done using data on the number of connections to the mobile network. But, as detailed in the Prosperity chapter, relying on this measure may mask significant connectivity gaps. In such cases (and wherever possible), the present report includes additional data series sourced from the OECD database to reflect the specific conditions prevailing in OECD countries (details are available in thematic chapters).

Table 1.1. Lowest OECD average distances to targets and recent trends

Targets where OECD countries, on average, already meet or are close to meeting SDG targets

	Target		Average distance	Trend assessment
	1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than USD 1.25 a day	0.00	Target is achieved or on track to being achieved
	1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	0.00	Target is achieved or on track to being achieved
	2.1	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	0.28	No progress or moving away from the SDG target
	2.c	Adopt measures to ensure the proper functioning of food commodity markets and	0.00	Target is achieved or

		Target	Average distance	Trend assessment
		their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility		on track to being achieved
	3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	0.00	Target is achieved or on track to being achieved
	3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1 000 live births and under-5 mortality to at least as low as 25 per 1 000 live births	0.00	Target is achieved or on track to being achieved
	3.b	Support the research and development of vaccines and medicines for the communicable and noncommunicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all	0.37	Target is achieved or on track to being achieved
	4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	0.24	Target is achieved or on track to being achieved
	4.a	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all	0.05	Available data do not allow assessing trends
	6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	0.15	Target is achieved or on track to being achieved
	6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	0.35	Progress has been made, but is insufficient to meet the target
	7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	0.00	Target is achieved or on track to being achieved
	8.10	Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	0.45	Target is achieved or on track to being achieved
	8.b	By 2020, develop and operationalise a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization	0.45	Available data do not allow assessing trends
	9.c	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	0.36	Progress has been made, but is insufficient to meet the target
	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	0.49	Progress has been made, but is insufficient to meet the target
	11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	0.23	Available data do not allow assessing trends
	12.1	Implement the 10-year framework of programmes on sustainable consumption and production, with all countries taking action, and with developed countries taking the lead, taking into account the development and capabilities of developing countries	0.00	Available data do not allow assessing trends
	12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities	0.00	Available data do not allow assessing trends
	14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	0.38	Progress has been made, but is insufficient to meet the target
	14.6	By 2020, prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognising that appropriate and effective special and differential treatment of developing and least developed countries should be an integral part of the World Trade Organisation negotiations on fisheries subsidies	0.36	Available data do not allow assessing trends
	15.8	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or	0.30	Available data do not allow assessing trends

		Target	Average distance	Trend assessment
		eradicate the priority species		
	16.5	Substantially reduce corruption and bribery in all their forms	0.00	Available data do not allow assessing trends
	16.9	By 2030, provide legal identity for all, including birth registration	0.17	Available data do not allow assessing trends
	16.10	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	0.00	Available data do not allow assessing trends
	17.10	Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda	0.45	Target is achieved or on track to being achieved
	17.18	By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	0.09	Available data do not allow assessing trends
	17.19	By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product and support statistical capacity-building in developing countries	0.11	Available data do not allow assessing trends

Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

OECD countries still have a long road to travel to meet 21 targets by 2030 (Table 1.2), and none of the targets due by 2020 are likely to be met by all Member countries (see Box 1.2). Lack of progress is visible in the area of inequalities and exclusion, showing no change with respect to previous evidence (OECD, 2019[16]). On average, around one in eight OECD residents are considered as income poor, based on a relative threshold set at half of the median income of each country (Targets 1.2 and 10.2); over the past decades, most OECD countries did not make any progress toward poverty reduction based on this measure (see details on Goal 1 in the People chapter and on Goal 10 in the Prosperity chapter).

In addition, many population groups including women and young adults are facing additional challenges, implying large distances for the targets focusing on them. Despite progress, women's rights and opportunities are still limited in both the private and public spheres. For example, no OECD country reached equal representation of men and women at higher levels of decision-making in political, economic and public life or has been able to close the gender gap in wages, nor the gap in time spent on paid and unpaid work (Targets 5.4 and 5.5) – see details on Goal 5 in the People chapter.

Inequities in education start early in life and tend to get worse over time, owing to a number of different factors, including socio-economic background, gender and place of residence (Target 4.5).[7] All in all, too many children, youth and adults lack the basic skills needed to become active, responsible and engaged citizens (Target 4.6) – see details on Goal 4 in the People chapter.

Unhealthy behaviours (including malnutrition and tobacco consumption) may further exacerbate inequalities. Smoking (Target 3.a), harmful alcohol use (Target 3.4) and obesity (Target 2.2) are the root cause of many chronic health conditions and increase the risk of people dying from COVID-19 (OECD, 2021[17]). Such unhealthy behaviours tend to be more common among low socio-economic groups (Murtin et al., 2017[18]; Placzek, 2021[19]). Although smoking has been declining in many OECD countries, 17% of adults still smoke daily in the average OECD country. Unhealthy diets and sedentary lifestyles have led to rising obesity rates in all OECD countries, with an average of 60% of adults being overweight or obese. Yet, spending on disease prevention remains relatively low, accounting for only 2.7% of total health spending on average across OECD countries (OECD, 2021[17]). Also, despite universal health coverage in most OECD countries, barriers to access persist, with many households not having enough money to pay for health care (Target 3.8) – see details on Goals 2 and 3 in the People chapter.

Table 1.2. Largest OECD average distances from targets and recent trends

Targets where OECD countries are, on average, furthest from meeting SDG targets

	Target		Average distance	Trend assessment
	2.2	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	2.46	No progress or moving away from the SDG target
	2.5	By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilisation of genetic resources and associated traditional knowledge, as internationally agreed	3.59	No progress or moving away from the SDG target
	3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	1.79	Progress has been made, but is insufficient to meet the target
	3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	2.65	Progress has been made, but is insufficient to meet the target
	4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	1.57	Available data do not allow assessing trends
	5.4	Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	1.79	Available data do not allow assessing trends
	5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	1.89	Progress has been made, but is insufficient to meet the target
	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	2.12	Available data do not allow assessing trends
	8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	1.89	No progress or moving away from the SDG target
	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors	1.77	No progress or moving away from the SDG target
	8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training	1.69	No progress or moving away from the SDG target
	10.2	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	1.54	Available data do not allow assessing trends
	10.c	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent	2.21	Available data do not allow assessing trends
	12.b	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	1.87	No progress or moving away from the SDG target
	14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	1.83	Progress has been made, but is insufficient to meet the target
	14.4	By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	1.78	Available data do not allow assessing trends
	14.b	Provide access for small-scale artisanal fishers to marine resources and markets	1.64	Available data do not allow assessing trends
	16.3	Promote the rule of law at the national and international levels and ensure equal access to justice for all	2.33	No progress or moving away from the SDG

	Target		Average distance	Trend assessment
				target
	16.6	Develop effective, accountable and transparent institutions at all levels	2.26	Progress has been made, but is insufficient to meet the target
	16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels	1.85	Available data do not allow assessing trends
	17.15	Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	2.32	Available data do not allow assessing trends

Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

The macro-economic situation that prevailed in the years immediately prior to the pandemic was already challenging. As detailed in the section below (Impact of the COVID-19 pandemic on OECD countries' progress in meeting the targets of the 2030 Agenda), the economy, along with trade, employment and incomes, is recovering from the shock caused by the pandemic, but the revival is unbalanced. As macro-economic indicators are among the timeliest, some of the distances to targets reported in Table 1.2 are already capturing the effect of the pandemic. Yet, even before the pandemic hit, many OECD economies were struggling with slow GDP growth (Target 8.1) and sluggish productivity (8.2) as well as intensifying trade frictions and low investment (OECD, 2021[20]). Structural problems in many labour markets include stubbornly high long-term unemployment, informality, poor job quality and security and worsening labour market outcomes for young people (Target 8.6) – see details on Goal 8 in the Prosperity chapter.

While the pandemic has underscored how critical trust and transparency are for democracies, OECD countries remain far from the related targets. Trust and transparency are critical to a society's capacity to absorb and bounce back from shocks (OECD, 2021[21]). Yet, available data show a marked decrease in people's trust in institutions in developed countries since the 1970s (UNDESA, 2021[22]). Trust in government is multifaceted and reflects a mix of economic, social and political interactions between citizens and government. Still, available data pertaining to Goal 16 in Table 1.2 show that OECD countries still have a long distance to travel to reach the targets relating to areas that are critical for trust, including accessibility, accountability, transparency and diversity in public institutions (Targets 16.3, 16.6 and 16.7) – see details on Goal 16 in the Peace and Partnership chapter.

The 2030 Agenda calls upon governments, international and non-governmental organisations, the private sector and civil society to join efforts to support the implementation of the SDGs beyond national borders. Yet, available data show that the total official development assistance (ODA) provided by members of the Development Assistance Committee (DAC) is less than half the target (0.7% of GNI) agreed by the donor community (Target 17.2), and that very few OECD countries are using results frameworks and planning tools owned by recipient countries when deciding how to allocate ODA (Target 17.15). In addition, while remittances to developing countries are one of the largest development finance flows and have the potential to contribute towards the achievement of Agenda 2030, the high cost of sending remittances from destination to origin countries limits their full potential (Target 10.c) – see details on Goal 17 in the Peace and Partnership chapter.

At the same time, environmental pressures are rising. With few exceptions (mainly relating to Goal 14 on oceans and maritime biodiversity), current distances to the targets underpinning the Planet goals appear to be smaller, on average, than in other areas (Figure 1.3). However, this mainly reflects the fact that the social and economic damages from environmental emergencies are now only starting to materialise. In some cases, this also reflects the lower level of ambition of these targets[8] (see Box 1.1) and the higher uncertainty relating to missing data (see Figure 1.5). Looking at changes over time (rather than current performance) provides a more sober assessment of OECD countries' performance on these goals

and targets. Although available data do not allow such a dynamic assessment for the vast majority of indicators, for those that can be assessed analysis shows that none of the Planet-related targets are on track to be achieved by 2030, with the only exceptions being those related to access to drinking water (Target 6.1), water quality (Target 6.3) and the use of forest resources (Target 15.2).

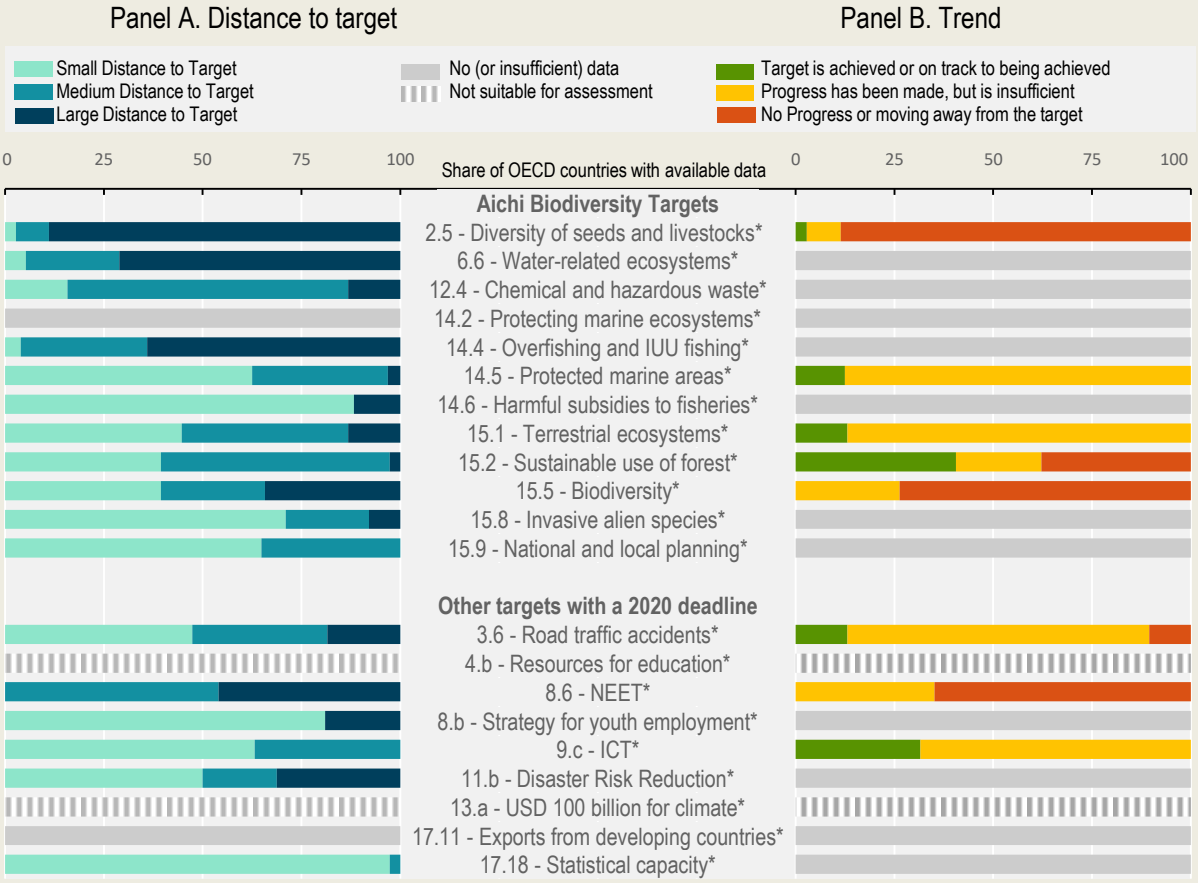
Overall, as further detailed by thematic OECD work, "the picture that emerges from OECD environmental indicators is mixed at best" (OECD, 2020[23]). The displacement abroad of production that is resource- or pollution-intensive (and, to a lower extent, technological progress and policy action) has allowed some progress in a few areas, such as energy intensity, water use and municipal waste management. Yet, the use of material resources to support economic growth remains high, and many valuable materials continue to be disposed of as waste (see details on Goals 6 and 12 in the Planet chapter and on Goal 7 in the Prosperity chapter). On the climate front, despite some progress achieved in decoupling greenhouse gas emissions from population and GDP growth, emissions are hardly decreasing, and all OECD countries are continuing to support the production and consumption of fossil fuels (see details on Goal 13 in the Planet chapter). As for biodiversity, despite some encouraging developments in protecting ecosystems, threats to terrestrial and marine biodiversity have been rising; as a result, in the absence of more determined action OECD countries are set to miss their targets in this field (see details on Goals 14 and 15 in the Planet chapter).

Box 1.2. SDG targets with a 2020 deadline

While urgent action is required to make progress on all the SDGs, the 2030 Agenda set an earlier deadline, in 2020, for a group of 21 targets (see Figure 1.4 for a full list of targets). Overall, available data reveal a lack of progress on many of these targets. Yet, given the lag in available data, "current" distances to the target may not reflect actual achievements by 2020; because of this, even when available data allows assessing 2020 outcomes, Panel B complements the measurement by describing past trajectories.

Of these 21 targets, 12 are linked to the *United Nations Convention on Biological Diversity (*Aichi biodiversity targets, ABT), covering the period 2011-2020. The ABT encompass a set of five strategic goals and 20 targets that Parties to the UN Convention on Biological Diversity (CBD) agreed to use as a framework for their national commitments on biodiversity conservation, sustainable use and equitable sharing of the benefits arising from the use of genetic resources. **According to available data, none of the ABT are likely to be met by OECD countries, on average, by the end of 2020,** although this varies significantly among countries and targets (Figure 1.4 – Annex 1.A provide methodological insights on the figure).

Figure 1.4. Distance to targets and trends over time across OECD countries, targets with a 2020 deadline



Note: Given the lag in available data, "current" distances to target may not reflect actual achievements by 2020. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.), i.e. reflecting the dispersion in countries' achievements in the most recent available year. Countries' distances are grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light green; medium distances (from 0.5 s.u. to 1.5 s.u.), shown in medium green; and large distances (i.e. more than 1.5 s.u.), shown in dark green. Panel B shows the distribution of OECD countries in terms of their recent changes in the indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2020, shown in yellow; those whose recent progress would be insufficient to meet the target by 2020, shown in orange; and countries whose recent performance has been stagnating or moving further away from the 2020 target, shown in brown. The figure also shows countries with no data to assess either their current distance or their pace of progress (shown in white). Time series are considered as missing where there are only two data points (or less) for each country; indicators are considered as missing when they are available for less than 20 OECD countries. For further details see the Methodological Annex.
Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/m4t83n

As the indicators underpinning these targets are of different natures, a "policy results chain" provides a useful lens on their assessment as it allows distinguishing between inputs, processes, outputs and outcomes (Cohen and Shinwell, 2020[24]).[1] As noted above, **OECD countries show positive results on many "process indicators" tracking the implementation of frameworks and policies**. In the field of biodiversity, data from the *SDG Global Database* show that virtually all OECD countries have already implemented international instruments aiming to combat illegal, unreported and unregulated fishing (Target 14.6) and adopted national legislation to prevent and control invasive alien species (Target 15.8).

On the measurement side, all OECD countries have taken steps to integrate biodiversity values into national accounting and reporting systems, following the System of Environmental-Economic Accounting (SEEA). Yet, the uptake of such policy tools and frameworks is not comprehensive. For instance, large disparities between OECD countries remain in the implementation of international agreements on the management of hazardous waste and other chemicals (Target 12.4). In addition, while the policy measures underpinning Target 14.6 suggest that OECD countries have made significant progress over the past 15 years in adopting and implementing policies against illegal, under-reported and unregulated (IUU) fishing, regulatory loopholes and policy gaps remain in all OECD countries, and IUU fishing continues to hamper the development of a sustainable ocean economy (OECD, 2020[25]).

Targets relating to the protection of ecosystems (supported by output measures) show good results. Figure 1.4 shows that all OECD countries expanded their protected areas over the past two decades. By 2020, 27 of them met Target 15.1 (and ABT 11) to protect at least 17% of their land area by 2020, while 20 met SDG Target 14.5 (and ABT 11) to protect at least 10% of coastal and marine areas (see Box 1.1 for insights into the summary figures included in this report). Still, as detailed in the Planet chapter, results are mixed when it comes to the protection of so-called "key biodiversity areas".[2] In addition, while worldwide forests are threatened by overexploitation, fragmentation, degradation and conversion to other types of land use (Target 15.2), the area of forests and wooded land has been stable or increasing in most OECD countries (OECD, 2020[23]), with most of them having achieved a sustainable use of their forest resources.[3]

Yet, outcome measure confirms that trends in biodiversity continue to decline. Since 1970, one tenth of the world's terrestrial biodiversity and one third of freshwater biodiversity have been lost and, according to (OECD, 2018[26]), we are on course to lose another 10% of terrestrial species by 2050. Data underpinning Target 15.5 show that biodiversity is losing ground in more than 2 in 3 OECD countries. On Target 2.5, focusing on local breeds and livestock, available data suggests that a very high share of local livestock breeds is at risk of extinction, with very few OECD countries making progress.

Beyond ABT, a broad range of targets ranging from road traffic accident (Target 3.6) to youth employment (Targets 8.6 and 8.b), access to ICT (Target 9.c) and north-south cooperation (Targets 4.b, 13.a, 17.11 and 17.18) had their target date in 2020. Figure 1.4 shows that, for those targets whose performance can be monitored over time, progress has been achieved. In particular, virtually all OECD countries have reduced deaths from road traffic accidents and expanded access to ICT. In addition, in around 40% of them, the share of youth not in employment, education or training (NEET) has been declining over the past 2 decades. Yet, OECD countries are, on average, far from having achieved their 2020 commitments. Most notably, the proportion of NEET (Target 8.6) is among the furthest away from its target level (see Table 1.2). As detailed in the Prosperity chapter, in a majority of OECD countries, more than one in ten young adult is not in employment, education or training, a share that exceeds one in five in Mexico, Italy, Turkey and Colombia.

Notes:
1. While none of the indicators underpinning ATB can be classified as an input indicator, the broader 2030 Agenda includes several relevant indicators, such as forest area as a proportion of total land area (Target 15.1) or revenue generated and finance mobilized from biodiversity-relevant economic instruments (Target 15.a) – see Box 1.1 for details.
2. Key Biodiversity Areas encompass: i) sites contributing significantly to the global persistence of biodiversity; ii) sites holding effectively the entire population of at least one species assessed as Critically Endangered or Endangered on the IUCN Red List of Threatened Species; and iii) Key Biodiversity Areas identified under an earlier version of the Key Biodiversity Area criteria. These three subsets are reassessed using the Global Standard, which unifies these approaches along with other mechanisms for identifying important sites for other species and ecosystems. See the SDG indicators metadata repository for further details at: https://unstats.un.org/sdgs/metadata/.
3. Despite the 2020 deadline for Target 14.2 on the management and protection of marine and coastal ecosystems, the indicator attached to this target (proportion of national exclusive economic zones managed using ecosystem-based approaches) is still missing from the *SDG Global database* (UNDESA, 2021[13]).

Impact of the COVID-19 pandemic on OECD countries' progress in meeting the targets of the 2030 Agenda

OECD countries' progress towards achieving the targets of the 2030 Agenda has been significantly affected by the unfolding of the COVID-19 pandemic since late 2019. By November 2021, over 2.3 million deaths due to COVID-19 were reported in OECD countries (OECD, 2021[27])**. But even beyond the large number of deaths, the crisis induced by the pandemic is unprecedented,** differing from both previous economic crises and previous pandemics (Cohen, 2021[28]). It has affected all countries and world regions, touched upon all aspects of people's lives and tested the ability of governments to respond at the required speed and scale.

The recession induced by the COVID-19 pandemic was the most severe as well as the shortest since World War II (Cohen, 2021[28]). Most OECD countries implemented measures that deliberately restricted economic and social activities in order to limit contacts between people and the spread of the contagion. The impact on output growth has been substantial in all countries, resulting in a reduction of OECD GDP by almost 5% in 2020 (OECD, 2021[29]). The initial impact on OECD labour markets was ten times greater than that observed in the first months of the 2008 global financial crisis (OECD, 2020[30]). However, the rebound has also been steeper, supported by unprecedented support by governments and central banks as well as by progress in vaccination (see Prosperity chapter). In parallel, social safety nets, job retention schemes and food assistance programmes have buffered the short-term effects of the crisis on poverty and hunger (see People chapter).

Still, the pandemic has exacerbated some long-standing structural weaknesses of OECD countries and risks causing long-term damage to job prospects and living standards. In addition, the highly sectoral nature of the impacts of the crisis has meant that some workers have shouldered the bulk of the burden, while others not only suffered less, but also benefited more quickly from the recovery (OECD, 2021[31]). Young people have been hit particularly hard by the crisis, as they generally hold less secure jobs and are over-represented among workers in hard-hit industries, such as accommodation and food services (OECD, 2020[30]). Young people have also experienced some of the largest declines in mental health, social connectedness and subjective well-being (OECD, 2021[32]).

The crisis has severely challenged institutions. In many countries, attempts to prevent the circulation of the virus have limited people's ability to go to health-care facilities or to attend school. The pandemic has revealed and amplified existing vulnerabilities of preventive and curative health-care systems, pandemic preparedness and the distribution of medical equipment. School closures have harmed the education of young people and made their integration into the labour market more difficult (OECD, 2021[20]). Such disruptions may challenge OECD countries for a long time to come (see People chapter). Beyond the impact on education and health systems, the COVID-19 crisis has also exposed governments to severe stress tests, with many governments experiencing gaps and/or overlaps between the roles of different institutions (OECD, 2020[33]).

The pandemic has also put sources of public financing under pressure. The large stimulus packages implemented by OECD countries were both essential and successful in supporting households and firms. Yet, these programs significantly increased public debt. The "scissors effect" on SDG financing (i.e. increasing needs and declining resources) has been magnified by the need to respond to the pandemic. Moreover, the internal processes of government have often been subject to lower standards of consultation, transparency, oversight or control (see Peace and Partnerships chapter).

The reduction in economic activity associated with the COVID-19 crisis led to a temporary improvement of environmental conditions, with a short-term reduction in global emissions of greenhouse gases, temporary improvements in water quality in waterways and coastal zones, and less pressure on biodiversity. While this highlighted even further the significance of human interference with

the climate, ecosystems and biodiversity, these benefits are not lasting. The recovery is already being associated with poorer environmental conditions (see Planet chapter).

While countries have generally responded to the crisis at the scale and speed required by the exceptional situation, most governments were unprepared to confront the crisis (OECD, 2021[21]). As most OECD countries have now given two vaccinations to most of the eligible population, the threat of major new waves of hospitalisations and deaths is waning, but many uncertainties remain.

Contagion rates remain elevated, and countries with lower vaccination rates are exposed to risks of further outbreaks. In addition, in many low- and middle-income countries vaccination rates are still low, providing fertile ground for more dangerous variants of the virus to emerge. Delivery of vaccines to emerging and developing economies is expected to improve in 2022 and 2023 but is still falling short of needs. Unless vaccines win the race against variants, the pandemic will remain a factor in global economic outcomes over the coming years (OECD, 2021[20]).

The COVID-19 pandemic has not been the only disruption affecting our lives and jobs in recent times. Huge wildfires (notably in Siberia and Australia – possibly the largest in recorded history – and California and Turkey), unprecedented heatwaves and droughts (e.g. in western North America), extreme cold weather events and destructive floods (e.g. in Germany, Belgium and western Canada) have caused thousands of fatalities and major destruction of property and disruption of economic activity. Hurricane Ida in late August and early September 2021 was one the costliest storms in US history. In December 2021, Storm Barra caused the worst floods in decades in Spain and France. Such storms, along with other weather-related disasters, have become more frequent and severe due to rising sea and air temperatures (OECD, 2021[20]; IPCC, 2021[34]; World Meteorological Organisation, 2021[35]).

The COVID-19 crisis has prompted OECD governments to revisit long-held assumptions about the role of macro-economic policies, leading to fiscal responses on a scale not seen since World War II. The recovery packages deployed by most OECD governments provide an opportunity to "build back better" and strengthen systemic resilience to cope with future shock. Unchecked, major future challenges, such as climate change and biodiversity loss but also population ageing, the digital transformation and challenges to the social contract, could have social and economic impacts far greater than those caused by COVID-19. The massive public investment plans that have been rolled out since the onset of the crisis are therefore key to upgrade critical infrastructure, make progress towards the green transition, bridge the digital divides and avoid and mitigate future shocks. The challenge ahead will be to tailor short-term objectives on the strength of the recovery to the medium- and long-term objectives of the SDGs, so as to make the recovery green, inclusive and resilient.

Future statistical and research agenda on SDGs

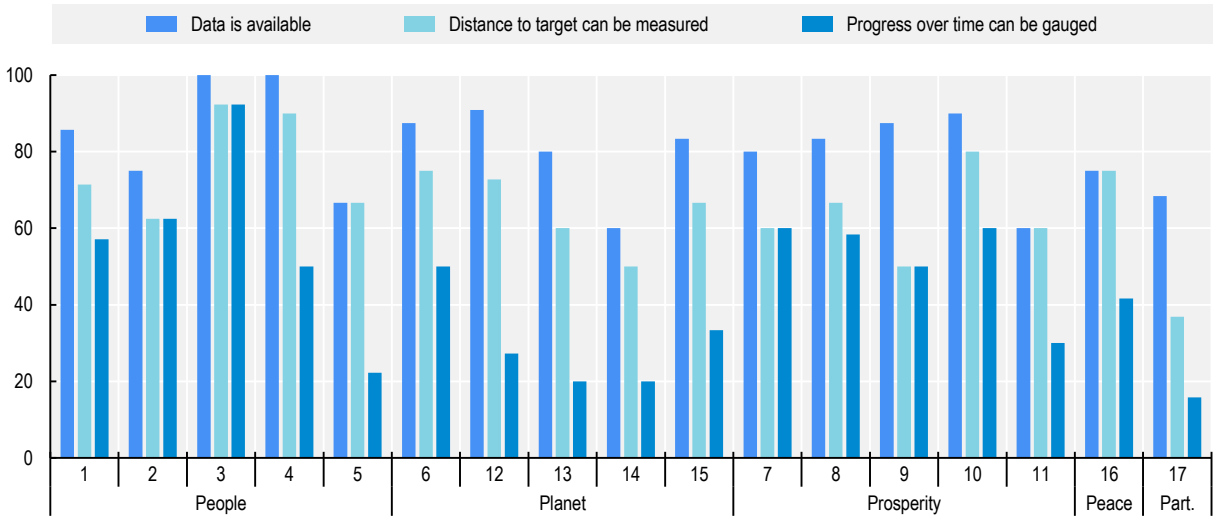
While the findings of this report point to the need for stronger action in the eight years that separate us from 2030, blind spots remain in our understanding of where countries stand on SDGs. Data gaps remains significant. Overall, available data on the levels of the various indicators make it possible to cover 136 of the 169 global targets underpinning the 17 SDGs. As shown in Figure 1.5, indicator coverage is uneven across the 17 goals. For instance, data for OECD countries allow covering more than 80% of the targets for 11 of the 17 goals, while coverage is below this threshold for the goals relating to Food and hunger (Goal 2), Gender equality (Goal 5), Life below water (Goal 14), Sustainable cities (Goal 11), Peace, justice and institutions (Goal 16) and Partnerships for the goals (Goal 17).

Data gaps become starker when looking at indicators that allow measuring distances to the goals. While available data make it possible to cover 136 of the 169 targets, some of those do not allow to properly gauge current performance (see the Methodological Annex for details). Therefore, coverage actually

exceeds 80% for Good health and well-being and Quality education only (i.e. Goals 3 and 4) while it is less than half this level for Goal 17 on Partnerships for the goals.

A dynamic assessment of countries' performance on SDGs raises additional data challenges, related to the availability of robust time-series information.[9] Figure 1.5 shows that for seven goals, mostly those related to the Planet category – on Responsible consumption and production (Goal 12), Climate action (Goal 13), Life below water (Goal 14) and Life on land (Goal 15) – but also to Gender Inequality (Goal 5), Sustainable cities (Goal 11) and Partnerships for the goals (Goal 17) data are lacking to gauge progress over time for more than 60% of targets.

Figure 1.5. Share of the 2030 Agenda's targets covered by at least one indicator, by goal



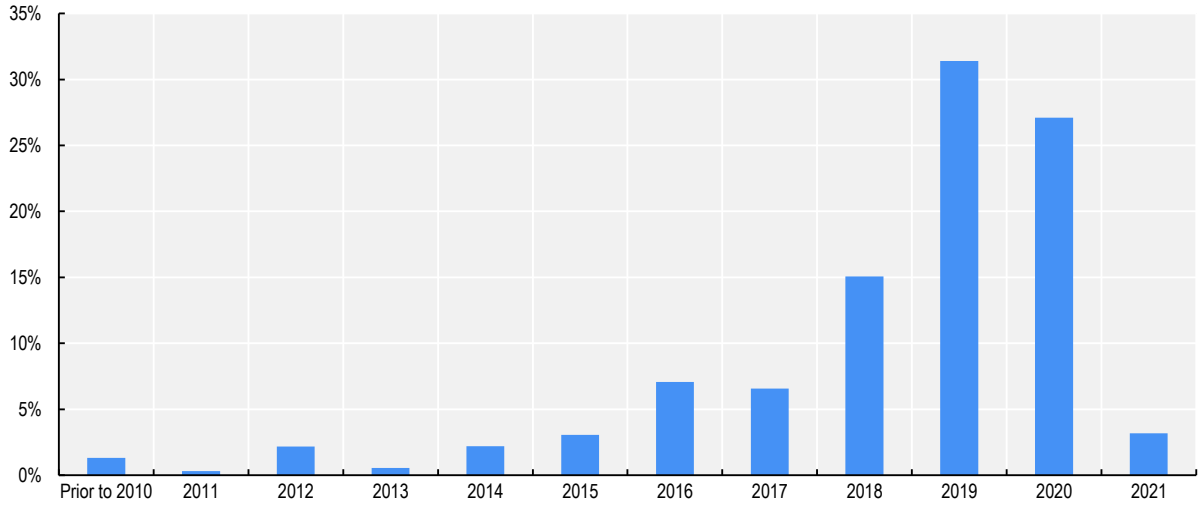
Note: Numbers from 1 to 17 stand for the goals: 1 No poverty, 2 Zero hunger, 3 Good health and well-being, 4 Quality education, 5 Gender equality, 6 Clean water and sanitation, 7 Affordable and clean energy, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, 10 Reduced inequality, 11 Sustainable cities and communities, 12 Responsible consumption and production, 13 Climate action, 14 Life below water, 15 Life on land, 16 Peace, justice and strong institutions and 17 Partnerships for the goals. These goals are grouped under five broad themes (the "5Ps"): People, Planet, Prosperity, Peace and Partnership.
Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/b1eiox

Beyond data availability, many other gaps influence the understanding of progress toward the 2030 Agenda – not carefully recognised, they may lead to biased conclusions. Data availability is one of the most salient challenges standing in the way of a more robust assessment of the progress made by countries in meeting their commitments under the 2030 Agenda. Yet, other statistical gaps such as timeliness or granularity also weigh heavily on our assessment. For instance, given the lag in available data, the effects of the pandemic on current distances and trajectories are hardly reflected in our estimates (Figure 1.6). More generally, if the SDG reporting framework is incomplete, not up to date, or misses important segments of the population, it becomes risky to make inferences about what the good policies are.

Figure 1.6. Timeliness of available data

Distribution of latest available data, by year



Source: All data is taken and adapted from (UNDESA, 2021[13]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[14]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/qn7r6w

Conclusion: Start learning lessons for the post-2030 Agenda

As the 2030 deadline for the SDGs approaches, the United Nations and the international community at large will need to start working on a new framework for global policy action. With eight years to go to meet the SDGs, and despite progress in some areas, improvements are uneven across goals, countries and regions. In order to sustain the momentum generated by the SDGs, it will be key to develop a successor framework after 2030, one that will build on the strength of the 2030 Agenda while also addressing the shortcomings of the existing SDGs.

Beyond the measurement and monitoring challenges raised so far, a deeper reflection will be needed on how to capture the interlinkages between different goals, targets and indicators and their overall coherence. Most of the goals have economic, social and environmental aspects, yet the targets and indicators often offer a partial perspective on them. An example is the lack of a gender focus under the Planet SDGs and their related targets and indicators. Only 5% of the Planet indicators are identified in the framework as gender relevant (OECD, 2021[36]). While data availability is clearly a major limitation to broadening the scope of some indicators, the framework itself should capture the possible interlinkages between the many goals.

The 2030 Agenda is global in essence. In many cases, the focus on countries' performances may come with shortcomings. While action on adaptation and mitigation in response to climate change will necessarily have a national component, its monitoring and assessment is global in nature and goes well beyond the sole remit of any one country. Global measurement instruments and accounting systems such as the System of Environmental Economic Accounting (SEEA) are crucial in developing common indicators. They are indeed the classic public good, like measuring and monitoring global poverty or global inequality (Kanbur, Patel and Stiglitz, 2018[37]).

Another methodological aspect that will require further consideration is how to better distinguish between measures of policy instruments and measures of ultimate outcomes. Separate reporting of

the two types of measures will be essential to assess the extent to which the short-term recovery plans deployed by countries in the aftermath of the COVID crisis are coherent with the long-term goals of the 2030 Agenda. The SDG framework recognises that progress should be considered in a holistic manner to take account of the inevitable trade-offs, spill overs and unintended consequences of policy and investment decisions. Yet, the 17 SDGs (both in their general formulation and in their specification into detailed targets) cover a mixture of aspects along the causal chain from inputs to processes, outputs and outcomes. The large number of goals and targets, spread out along the input-output-outcome chain, raises obvious challenges for evaluation and assessment.

Finally, the SDGs highlight the inevitable tension between the pull to broaden the set of measures used for monitoring progress and the imperative to focus on a small number of top-level indicators – a tension that can only be resolved through prioritisation of the UN goals and targets at the national level. The process leading to the SDGs reveals the tension between the desire for completeness and thoroughness, on one side, and the need for clarity on the other side. Obviously, the more detailed the information collected and the more that data are disaggregated, the more complete the picture one will have of what is going on. The 169 SDG targets and the 247 indicators provide a useful platform and have the virtue of being agreed internationally. But their implementation needs to be sensitive to national needs and priorities, as well as limited resources. Accountability and sovereignty imply that this streamlining and selection of targets and indicators should take place in the context of a national dialogue informed by international frameworks (Stiglitz, Fitoussi and Durand, 2018[38]).

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Annex 1.A. How to read the figures summarising current performances and trends over time included in this report

This edition of *Measuring Distance to the SDG Targets* builds on earlier versions of the same report to assess OECD countries' current distances to the SDG targets of the 2030 Agenda. It also deepens the existing analysis by looking at whether countries have been moving towards or away from the targets and how likely they are to meet their commitments by 2030.

To support this assessment, each section of the five thematic chapters in this report focuses on a single Sustainable Development Goal and includes a figure summarising how OECD countries are distributed in terms of their current performance and of changes over time (see description below) for each target.

For the sake of clarity, all figures have the same structure:

Panel A of each figure shows how OECD countries perform, at a given point in time, in terms of their distance from the target level they are supposed to meet by 2030. As detailed in the Methodological Annex, countries' distance to target is measured as the "standardised difference" between a country's current position and the target end-value. For each indicator, the standardised measurement unit (or s.u.) is the standard deviation observed among OECD countries in the reference year (i.e. the year closest to 2015):

- lighter blue is used to indicate those countries that (based on the most recent available information) are very close to the final target (i.e. less than 0.5 OECD standard deviation away from the target, or standardised units, s.u.);
- medium blue for those that are at an intermediate position (i.e. from 0.5 to 1.5 s.u.); and
- darker blue for those that are still far away from the targets (i.e. more than 1.5 s.u.).

Panel B shows how OECD countries are performing, based on developments in the different indicators in the most recent period, in terms of the likelihood of meeting the different targets by 2030:

- green is used to indicate those countries that (based on the change in the different indicators over a recent period) should meet the target in 2030 just by maintaining their current pace of progress (i.e. more than 75% of (randomised) projections meet the target);
- yellow for those countries whose current pace of progress is insufficient to meet the target by 2030 (i.e. less than 75% of randomised projections meet the target, while the correlation coefficient between the indicator and the year is high and statistically significant, implying that a significant trend could be detected); and
- red for those countries whose recent changes have been stagnating or moving them further away from the target (i.e. less than 75% of randomised projections meet the target and the correlation coefficient between the indicator and the year is low or not statistically significant, implying that no statistical trend could be identified).

The methods and concepts are further detailed in the Methodological Annex.

Notes

[1] The 5Ps were first mentioned in the preamble of the resolution adopted by the UN General Assembly in 2015 (UN, 2015[3]). This report relies on the 5Ps to describe member countries' performance, even if the 5Ps are not, at the time of writing, an official UN classification of the 17 goals.

[2] The global indicator framework includes 231 unique indicators. However, twelve indicators repeat under two or three different targets. The total number of indicators listed in the global indicator framework of SDG indicators is therefore 247.

[3] While the Tier classification is relevant for global monitoring, it may not be used when restricting the analysis to a specific set of countries. For instance, this report covers Targets supported by indicators classified as Tier III while data for OECD countries may lack for indicators classified as Tier I.

[4] As complements to the main reports, the OECD has also developed, based on the same methodology, tailored assessments for specific countries, and it has also released a series of working papers on specific topics. For instance, the methodology in this report had been adapted to assess the distance that OECD countries need to travel in order to reach the SDG targets pertaining to children and young people (Marguerit, Cohen and Exton, 2018[48]) and to women and girls (Cohen and Shinwell, 2020[47]). Other studies have focused on the analysis of transboundary aspects within the 2030 Agenda – so as to better understand how countries' policies or development patterns will affect other countries as well as shared global resources (Ino, Murtin and Shinwell, 2021[49]).

[5] The 2019 edition of the *Measuring Distance* report (2019[16]) showed OECD average and country-level distances from achieving the SDG targets for 105 of the 169 targets, based on 132 indicators from UN and OECD databases. It also presented a data gap analysis, identifying areas where available data do not allow exhaustive country-level assessments of distances from targets.

[6] In addition, evidence from previous editions of this report was quoted in Voluntary National Reviews (VNRs) submitted to the UN-HLPF by eight OECD countries (Kingdom of Belgium, 2017[39]; Office of the Government of the Czech Republic, 2017[45]; The Danish Government, 2017[40]; Government of Israel, 2019[41]; Government of Poland, 2018[42]; Government of the Republic of Slovenia, 2017[43]; Deputy Prime Minister's Office for Investments and Informatization of the Slovak Republic, 2018[46]; Government of Sweden, 2017[44]). The *Measuring Distance to the SDG Targets* methodology has also been used to inform OECD support for national strategies in line with the 2030 Agenda (e.g. Slovenia, Slovak Republic and Poland). More recently, work underpinning this report has informed bilateral co-operation projects related to the implementation of SDGs (e.g. in Korea, Poland and Italy).

[7] Target 4.5 on disparities in education is not included in Table 1.2 as it is the only target for which the OECD average distance is greater than 1.5 standardised units. Yet, this target is included in the discussion as, on average, OECD countries are 1.49 standard units away from the target.

[8] As already noted, for the climate-related targets (mainly among Goal 13), the level of ambition is particularly low. Indeed, the Paris Agreement on climate change entered into force over one year after the SDGs were agreed. The 2030 Agenda therefore did not reflect the ambition of the Paris Agreement.

[9] Wherever possible, data series are tracked in this report over the last two decades. In practice, to accommodate the fact that some of the available time series are much shorter, the minimum requirement for inclusion in the dynamic analysis performed in this report is that at least three observations are available over a five-year period.

2 People

The “People” theme of the 2030 Agenda aims at eradicating poverty and hunger, in all their forms and dimensions, to ensure that all human beings can fulfil their potential, in particular in terms of health and education, and including without being penalised because of their gender. Relying on the global indicator framework, this chapter assesses whether by 2030 the OECD countries are likely to achieve the SDG targets that focus on People. It shows where OECD countries are standing both in terms of their current performance and in terms of changes over time, and what part of the People theme of the 2030 Agenda currently remains unmeasurable. It also discusses some of the main impacts of the COVID-19 pandemic on the People targets.

Introduction

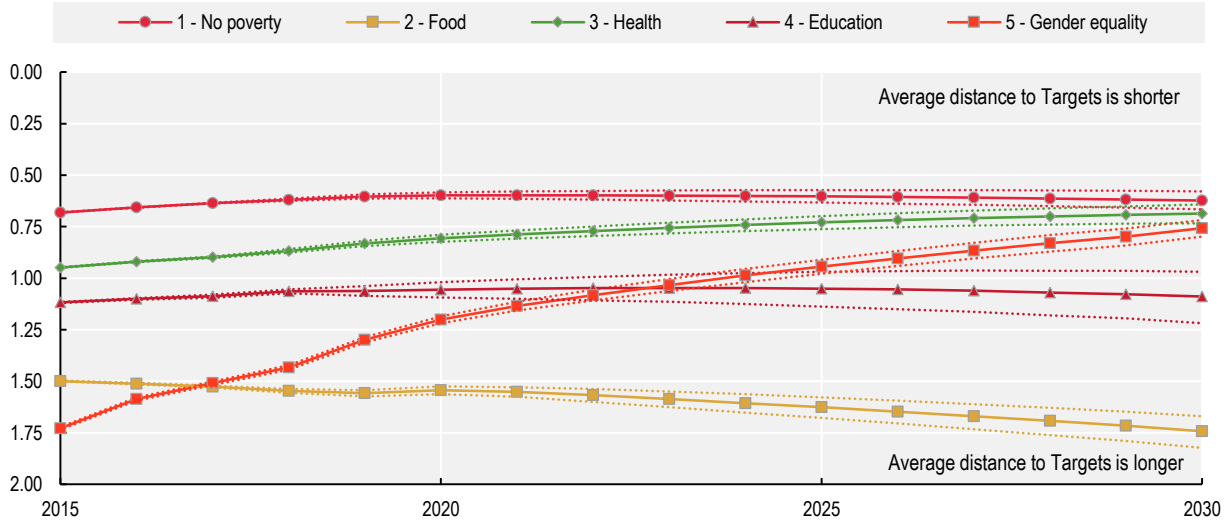
The 2030 Agenda is a call to action for all countries to act for a better and more sustainable future for all. At its core is a set of 17 Sustainable Development Goals balancing the three dimensions of sustainable development: the economic, social and environmental. Since the adoption of the sustainable development agenda in 2015, its broad scope has often been characterised by five broad themes, i.e. the "5Ps" (UN, 2015[1]): People, Planet, Prosperity, Peace and Partnerships.[1] The People theme aims at eradicating poverty (Goal 1) and hunger (Goal 2), in all their forms and dimensions, to ensure that all human beings can fulfil their potential, in particular in terms of health (Goal 3) and education (Goal 4), and without being penalised because of their gender (Goal 5).

Making progress towards the People SDGs also provides an opportunity to empower people and ensure inclusiveness and equality in ways that are mutually reinforcing. For example, the provision of access to quality education (Goal 4) helps improve skill acquisition and promotes economic empowerment. It also enhances people's ability to find employment (Goal 8) whilst increasing their incomes (Goals 1 and 10) (OECD, 2019[2]).

Even before the pandemic hit, OECD countries were not on track to achieve the People goals. In 2015, OECD countries were on average[2] closest to reaching targets for the goals on Poverty eradication (Goal 1), followed by Health (Goal 3) and Education (Goal 4), and they were furthest from achieving the targets for Food (Goal 2) and Gender equality (Goal 5) – see Figure 2.1.

However, OECD countries have been progressing towards the SDG targets for all goals, with the exception of Food (Goal 2). The rate of progress varies among goals, with Poverty eradication (Goal 1) and Education (Goal 4) showing little improvement, while Health and most notably Gender equality (Goals 3 and 5) are showing stronger progress. Projecting trends up to 2030 suggests that all the People goals with the exception of Food (Goal 2) are likely to be closer to reaching their targets, but none of them is likely to actually reach the targets *in the absence of additional measures*. To overcome some of the challenges relating to composite measures, this chapter dives into the details of the underlying targets and provides an exhaustive picture of where OECD countries stand in terms of meeting the targets.

Figure 2.1. OECD countries' average distance to SDG targets over time by goal, People



Note: Based on available data series. This figure shows the average distance that OECD countries are projected to travel towards the SDGs based on recent trends; hence these distances are based on existing policies and do not account for the additional measures that OECD countries may have introduced since the latest observation available. Distances are measured in standardised units (see the methodological annex for details), with 0 indicating that the 2030 level has already been attained. Full lines show OECD countries' average performance against all targets under the relevant goal. Dashed lines show the confidence interval (10th and 90th percentiles of estimated trends). When data are not available for specific years, these are imputed using linear interpolation between the two closest available observations. Past (i.e. before the first available year) and future (i.e. after the latest available year) trajectories are imputed using Monte Carlo simulations (see the methodological annex for details).

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/mfz87k

Many goals lack good quality data,[3] which hampers countries' ability to evaluate policy outcomes and determine priorities for future action. Although there is current data available on almost three-quarters of the targets pertaining to the People category, only 60% of People SDG targets can be monitored over time due to the limited availability of robust time-series data. In addition, this rate is uneven among the different goals. For instance, it is possible to track over time only two of the nine targets for Goal 5 on Gender equality.

Overall, in OECD countries, while governments have been able to buffer some of the effects induced by containment measures, the pandemic and its aftermath may have long-term consequences. Social safety nets and food assistance programmes have been able to cushion some of the short-term impacts of the crisis on poverty (see Impact of the COVID-19 pandemic on Goal 1 for references and details) and on hunger (Impact of the COVID-19 pandemic on Goal 2), but the pandemic may nevertheless have a great impact on malnutrition. In addition, given countries' heavy reliance on support measures,[4] it is much more challenging to assess the longer-term consequences of the pandemic. The tremendous disruptions faced by the systems of Health (Impact of the COVID-19 pandemic on Goal 3) and Education (Impact of the COVID-19 pandemic on Goal 4) will challenge OECD outcomes in these areas for a long time. In many countries, attempts to prevent the circulation of the virus have affected people's ability to access health-care facilities or to attend school. As for the dimension of Gender equality, covered by Goal 5, the effects of the pandemic are more ambiguous and call for careful monitoring (Impact of the COVID-19 pandemic on Goal 5).

Goal 1 – No poverty

Goal 1 aims at "ending poverty in all its forms everywhere". Overall, basic living conditions for all are (or are about to be) met in all OECD countries. However, beyond extreme poverty, Member countries show much more diverse outcomes. Relative income poverty in most OECD countries had been stagnating, while there has been limited progress on (absolute) measures of multidimensional poverty. The aggregated performance of OECD countries in terms of social protection coverage is rather anemic and may hide significant disparities – the coverage rates of cash and in-kind programmes to prevent poverty differ across countries and programme types. These overall patterns should, however, be interpreted carefully and in light of what can actually be measured.

The COVID-19 pandemic has had a dramatic impact on poverty at global level. In OECD countries, however, government support measures for households seem to have buffered most of the economic impacts of COVID-19, with micro-simulation models pointing to relative stability of relative poverty rates (and even a decrease in some countries). Social protection has been key to prevent the impact of the crisis from disproportionately affecting vulnerable populations. However, heavy reliance on support measures raises the possibility that progress may be reversed, should the support measures be withdrawn.

Assessing OECD countries' performance on Goal 1

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 2.1 shows that data allow the monitoring of five of the seven targets underpinning Goal 1, and four of them can be assessed over time. For this Goal, two data series are sourced from the OECD and do not follow the global indicator framework. Global indicator supporting Target 1.2 is the proportion of the population living below the *national* poverty line. To preserve cross-country comparability, this report relies on a *relative* income poverty rate source from the *OECD Income Distribution Database*. In the case of Target 1.3.1, data series from OECD databases complement the *SDG Global Database*. Drawing from OECD databases for this indicator allows offering longer time series and hence meeting higher statistical standards. On top of the indicators listed in Table 2.1, the database includes three additional data series under Target 1.a. Yet, those are considered to be mainly informative in the context of Goal 1 and are not assessed in this report (details and data for all indicators are available at http://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-2-people.xlsx).

Table 2.1. Available data series supporting the monitoring of Goal 1

Indicator code	Indicator Label	Available over time	Primary source
1.1.1	Proportion of population below international poverty line	Yes	*SDG Global Database*
1.2.1	*Relative income poverty rate*	Yes	OECD
1.2.2	Proportion of population living in multidimensional poverty	Yes	*SDG Global Database*
1.3.1	Proportions of the population covered by social protection floors/systems (9 data series covering different population groups – see note below for details)	Partially	*SDG Global Database*
1.3.1	*Recipients of secondary out-of-work benefits (safety nets) as a percentage of poor working-age population (proxy)*	Yes	OECD
1.4.1	Proportion of population using basic sanitation services, by location	Yes	*SDG Global Database*
1.4.1	Proportion of population using basic drinking water services, by location	Yes	*SDG Global Database*
1.5.1	Number of deaths and missing persons attributed to disasters per 100 000 population	No	*SDG Global Database*
1.5.1	Number of directly affected persons attributed to disasters per 100 000 population	No	*SDG Global Database*
1.5.2	Direct economic loss attributed to disasters relative to GDP	No	*SDG Global Database*
1.5.3	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework	No	*SDG Global Database*
1.5.4	Proportion of local governments that adopt and implement local disaster risk reduction (DRR) strategies in line with national disaster risk reduction strategies	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries. Indicator 1.3.1 is supported by nine data series from the *SDG Global Database*: proportion of population with severe disabilities receiving disability cash benefit, proportion of poor population receiving social assistance cash benefit, proportion of employed population covered in the event of work injury, proportion of population above statutory pensionable age receiving a pension, proportion of children/households receiving child/family cash benefit, proportion of mothers with newborns receiving maternity cash benefit, proportion of population covered by at least one social protection benefit, proportion of unemployed persons receiving unemployment cash benefit and proportion of vulnerable population receiving social assistance cash benefit. For Indicator 1.3.1, an adequate number of observations are available only for three of nine data series over time: proportion of population with severe disabilities receiving disability cash benefit, proportion of population above statutory pensionable age receiving a pension and proportion of unemployed persons receiving unemployment cash benefit.

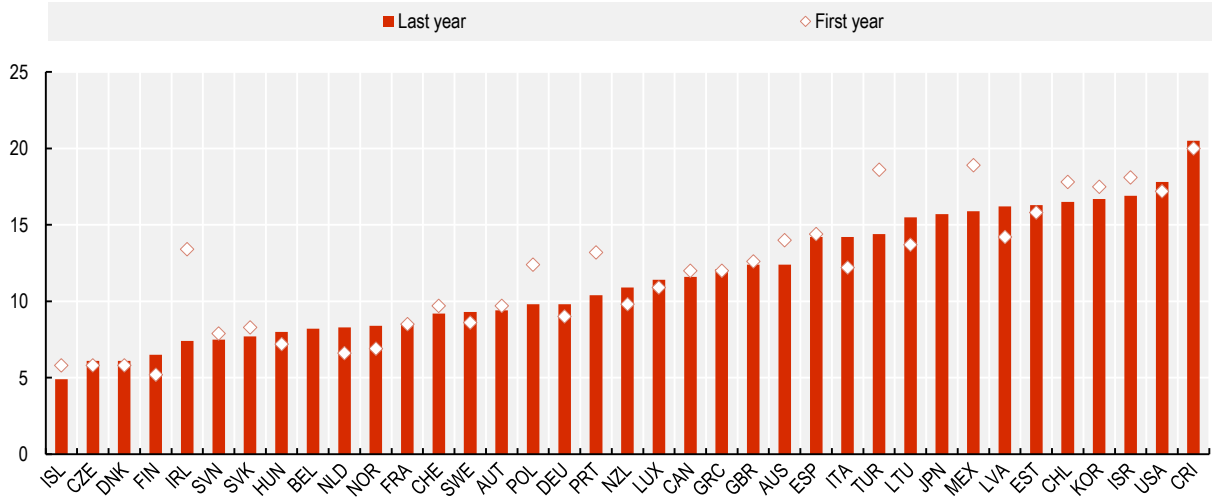
Virtually all OECD countries have already eradicated extreme poverty (Figure 2.3, panel A**).** Target 1.1 calls on countries to "eradicate extreme poverty" by 2030 – i.e. the extreme poverty rate (measured as the share of people living on less than USD 1.90 a day) is below 3%.[5] In 2018, only one OECD country (Colombia) has not met this target yet, but given recent trends, all member states are expected to attain the target by 2030. This conclusion might, however, be at odds with what people with direct experience of poverty report about their lives, even in richer economies (Bray et al., 2019[5]). It might also reflect the statistical and conceptual inadequacy of this metric when applied to high-income countries.

Beyond extreme poverty, OECD countries' performance is mixed. To overcome some of the methodological issues associated with measures of extreme poverty, Goal 1 also aims at halving *"*the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions*"*. In the global indicator framework, Target 1.2 is to be monitored with two measures: national measures of income poverty (operationalised through measures of relative income poverty in the OECD context)[6] and a measure of multidimensional poverty. In 2018 (or most recent year available). Only six OECD countries are considered to be at a short distance (i.e. less than 7.5% of the population live below the relative poverty rate), while 16 of them have a relative poverty rate exceeding 12% and are thus considered to be far from the target (Figure 2.2). In particular, the United States and Costa Rica are farthest from achieving the target, with 17.8% and 20.5% respectively. On average, one in ten OECD residents is considered as relatively poor, while one in five is at the crossroads of the different dimensions of poverty.[7] This means that, on average, OECD countries still have a large distance to travel to meet the target. Over time, changes in the two indicators do not show consistent trends, but no OECD country is expected to make enough progress to reach the target levels by 2030 on both indicators.[8] As already underlined in the literature (Morelli, Smeeding and Thompson, 2015[6]), most OECD countries are not showing any specific

improvement on relative income poverty. Data included in this report suggest that only five of them achieved some reductions over the past 15 years (Ireland, Mexico, Poland, Turkey and the United Kingdom). On the multidimensional poverty front, only a small majority of OECD countries are making some progress, but only two of them (Colombia and Iceland) at a sufficient rate to halve the level by 2030.

Figure 2.2. Relative income poverty rate (Target 1.2)

Percentage of persons living with less than 50% of median equivalised disposable income



Note: First year refers to 1999 for Finland; 2000 for Canada; 2002 for the United Kingdom; 2005 for Poland; 2006 for Hungary and Switzerland; 2007 for Austria and Spain; 2008 for Germany; 2009 for Chile; 2010 for Costa Rica; 2011 for Denmark, the Netherlands, New Zealand, Turkey and Israel; 2012 for France, Australia and Mexico; 2013 for Sweden and Estonia, 2015 for Luxembourg and Korea; and 2004 otherwise. Last year refers to 2014 for New Zealand, 2016 for the Netherlands, 2017 for Iceland, Denmark, Hungary, Switzerland, Chile and the United States; 2019 for Sweden, Canada, the United Kingdom and Latvia; 2020 for Costa Rica; and 2018 otherwise.
Source: OECD (2021[7]), "Poverty rate" (indicator), https://doi.org/10.1787/0fe1315d-en (accessed on 29 October 2021).

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Even in countries with the most advanced systems of social protection, some workers and their families may not be properly covered (OECD, 2019[8]). Target 1.3 aims at "implementing nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable". For global measurement, the IAEG-SDGs proposes to measure this through the "proportion of population covered by social protection floors/systems". The target has been operationalised in the *SDG Global Database* by a series of 12 different indicators covering different aspects of social protection and for different population groups (elderly, unemployed, pregnant women, etc.); however, data are available only for nine of them. In line with previous OECD analysis of this issue, this report also includes a proxy measure of recipients of secondary out-of-work benefits (safety nets) as a percentage of the poor working-age population, sourced from the OECD. On average, over the different dimensions of social protection, around three-quarters of OECD countries can be classified as currently having a "medium" or "large" distance to the 2030 target levels for comprehensive coverage (operationalised at 97% of the respective reference population[9]), and more than half of them are not making any progress towards universal coverage (Figure 2.3, panel B).This implies that most OECD countries do not currently provide social protection to all vulnerable populations and that these coverage rates have been stagnating or even falling through time. However, when assessing social protection programmes that address different risks separately,[10] the picture is more nuanced. While the coverage rates for family, disability and old-age benefits are, on average, quite high (relative to their population of interest), the rates are much lower when it comes to the proportion of unemployed receiving unemployment

cash benefits, the proportion of the poor working-age population receiving secondary out-of-work benefits, and the proportion of the employed population covered in the event of work injury. Not all data series allow to assess changes over time; for instance, the evolution of family benefits cannot be assessed with the available data. Coverage rates for disability and old-age benefits are likely to remain above the target level,[11] while the proportion of unemployed receiving unemployment cash benefits as well as the proportion of the poor working-age population receiving secondary out-of-work benefits are stagnating or even declining in most OECD countries.[12] These patterns are in line with previous OECD analysis of social protection systems (OECD, 2019[9]), which have pointed to long-term declines in benefit coverage (OECD, 2018[10]).

Most OECD countries secure decent living standards for all (Figure 2.3, panel A). Target 1.4 aims at ensuring that all "have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance". First, Target 1.4 is monitored through the proportion of population living in households with access to basic services (understood as the proportion of population with access to basic sanitation and the proportion of population with access to drinking water services). While the language of the target suggests that 100% of the population should have access to both basic sanitation and drinking water services, the threshold to consider the target as achieved were set at 97% to allow for measurement errors. On average, in 2020, almost all OECD residents already had access to basic services such as drinking water (99.6%) or sanitation (98.3%). However, as shown by Figure 2.3, panel B, projecting past trends does not suggest that a comprehensive coverage will be reached in all countries by 2030.[13] In addition, as highlighted by the OECD (2017[11]), most countries already reached their economic and technical limits in terms of connection to basic services and may need to find other ways of serving small and isolated areas in order to reach complete coverage. Beyond access to basic services, the global indicator framework also includes a measure focusing on secure tenure rights to land. This is not included in this report, however, as available data do not cover enough OECD countries.

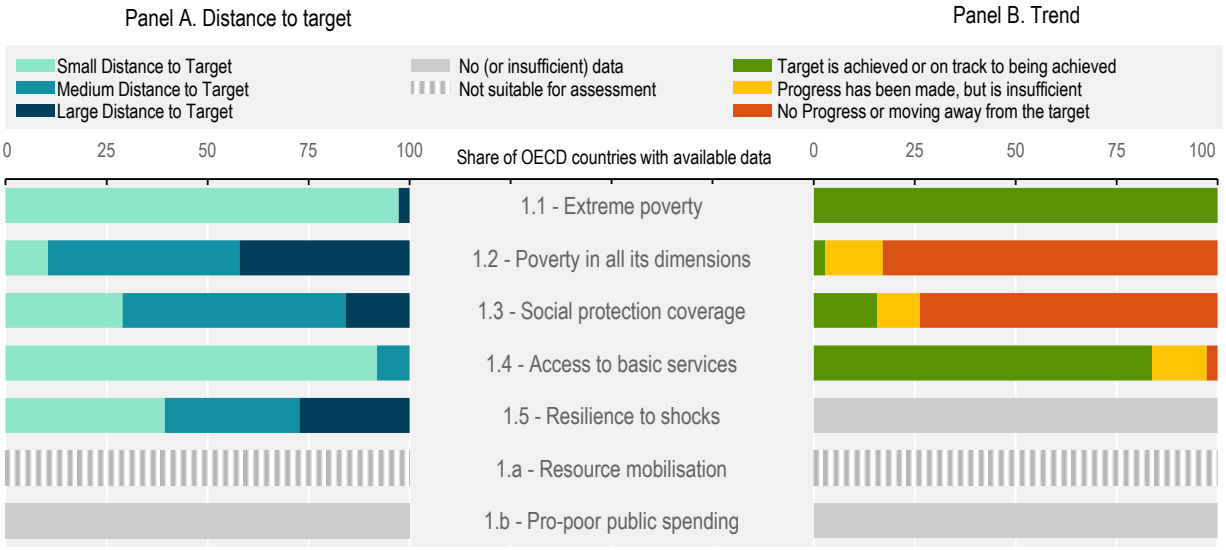
When it comes to the resilience of the vulnerable population towards shocks and disasters, the distance to target varies greatly among OECD countries (and indicators). Target 1.5 commits countries to "build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters". Five indicators are available to assess OECD countries' current performance on Target 1.5 on prevention and resilience towards shocks: i) the adoption and implementation of DRR strategies in line with the Sendai Framework at national and ii) at local levels; iii) the number of deaths and missing persons attributed to natural disasters as well as iv) directly affected persons and v) the direct economic loss attributed to disasters relative to GDP. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, these indicators are repeated under Targets 11.5, 11.b and 13.1. Overall, most OECD countries are considered to be at a rather short distance to the target, but available data do not allow gauging progress over time.[14] On policy indicators, most OECD countries already had DRR strategies at both national and local levels in 2019. However, data from the *SDG Global Database* suggest that 11 OECD countries (Canada, Denmark, Iceland, Ireland, Israel, Italy, the Netherlands, the Slovak Republic, Sweden, Turkey and Portugal) stand far from the target, with a score on the adoption and implementation of DRR strategies below 43% (100% being full adoption and implementation).[15] Disasters cost lives and disrupt socio-economic activities and livelihoods, causing important economic costs each time they occur. Yet, given the large disparities existing among OECD countries, on average across three indicators on the impacts of disasters, most OECD countries (14 of 23) were at a rather short distance to the target in 2019 (or latest year); however, available data do not allow gauging progress over time. In terms of loss of life due to disasters, the OECD average is around 1 death per 100 000 inhabitants. So far, with 0.20% of total economic loss attributed to disasters in 2018, available data show a limited impact of natural disasters in most OECD countries.[16]

Data are not adequate to assess countries' efforts to end poverty. Goal 1 includes two "means of implementation" targets (1.a and 1.b). Target 1.a focuses on mobilising resources to implement programmes and policies to end poverty (it is monitored through data on the share of government spending on essential services, education, health and social protection, and ODA that focuses on poverty reduction), and Target 1.b, refers to the existence of policy frameworks aiming to support investment in poverty eradication actions (it is to be monitored through a measure of pro-poor public social spending). Rather than indicators of "performance", these indicators are useful to contextualise Goal 1 (and no data are available to monitor performance on the latter indicator). Concretely, OECD work on social data and indicators and specific publications such as (OECD, 2020[12]) provide some insights into those areas. In particular, these show that after decades of rapid growth in the 1960s and 1970s, fiscal consolidation efforts implied a lower growth of social spending after 1990 and a decline over the past decade.

Summing up

Overall, OECD countries show a mixed performance on the different targets of Goal 1 (on poverty) (Figure 2.3). Basic needs, such as eradicating extreme poverty (Target 1.1) and access to basic services (Target 1.4), are met in most OECD countries. Figure 2.3, panel A, shows that virtually all OECD countries are extremely close to eradicating extreme poverty. Similarly, on access to basic services, nine in ten OECD countries are within a short distance of meeting the target. However, more comprehensive measures, such as the relative poverty rate or multidimensional measures (Target 1.2), show more unbalanced outcomes. Nine in ten OECD countries are currently considered to be at a medium or even large distance from hitting the target on multidimensional poverty and more than three-quarters show no progress towards the target. Although social protection is an effective way to tackle poverty (OECD, 2019[13]), it is not universal even in countries with the most advanced systems. Progress towards full coverage is also insufficient, as more than half of OECD countries are expected to show no progress or move away from Target 1.3 (Figure 2.3, panel B). In addition, many OECD countries still lack the means to mitigate vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters (Target 1.5). While progress is not assessed for building resilience of the vulnerable to shocks, current distances to targets show that only two in five OECD countries can be considered close to the corresponding target.

Figure 2.3. Distance to target and trends over time in OECD countries, by SDG target, Goal 1



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those countries whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance to target or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 1

At global level, the pandemic had a dramatic impact on extreme poverty, but the evidence for its impact in the OECD area is scant (Target 1.1) – see Table 2.2. Global extreme poverty is expected to have risen in 2020 for the first time in over 20 years due to COVID-19 (World Bank, 2020[14]). However, assessing the impact of the crisis on extreme poverty across OECD countries is more challenging, because of a much smaller number of studies.

In most OECD countries, government support measures to households have helped offset some impacts of the COVID-19 crisis on relative poverty (Target 1.2). While most macro-economic measures of economic performance such as GDP or employment dramatically declined during the crisis, average household disposable income (as measured by national accounts) rose by 5.3% in the second quarter of 2020, thanks to government cash transfers (OECD, 2020[15]), though it then gradually fell until the fourth quarter of 2020 (OECD, 2021[16]). While data on average household income do not allow meaningful inferences on the impact of the crisis on income poverty, recent research using micro-simulation models tends to confirm the effectiveness of social protection systems in cushioning shocks on household incomes[17] (Figari and Fiorio, 2020[17]; Brewer and Tasseva, 2020[18]; Almeida et al., 2020[19]; Lustig et al., 2020[20]; Li et al., 2020[21]; Han, Meyer and Sullivan, 2020[22]).[18] Provisional estimates prepared by the OECD[19] show that earning losses were heavier for the most vulnerable. Those losses were alleviated to a

large extent by taxes and social transfers, and in particular by the extraordinary measures put in place by national governments. Despite that, some working-age people, particularly young workers, have experienced increases in poverty rates in some countries (Eurostat, 2021[23]).

As noted above, social protection (Target 1.3) has been key to limiting the economic impact of a crisis on vulnerable populations, as it plays a critical role in softening the drop in income as a result of the crisis. However, there is a risk that many vulnerable households will nevertheless experience a drop in disposable income, and a greater risk of poverty, as the crisis lasts longer. Entitlements to job retention schemes and unemployment benefits are often time-limited, and governments will eventually have to phase out some of the temporary emergency income support provided outside of standard social protection systems. As shown by OECD (2021[16]), the decline in real household disposable income per capita between the second and fourth quarters of 2020 reflects the decrease in government transfers to households. As stressed in OECD (2021[24]), while support remains key for sectors still heavily affected by social distancing restrictions, for others where economic activities have resumed the design of these schemes is to be progressively adjusted. In addition, supporting all vulnerable households and closing social protection gaps will remain key priorities beyond the crisis (OECD, 2020[25]), in particular for the large number of workers in non-standard jobs who are being left behind even in countries with the most advanced social protection. Overall, though, as the COVID-19 crisis and government responses affected both the number of vulnerable households as well as the number of people entitled to social protection, the actual impact on the coverage rate (Target 1.3) is still unknown (Table 2.2).

Target 1.5 on population's resilience to economic, social and environmental shocks includes measures of both policy stance and the impact of these disasters. The excess mortality induced by the COVID-19 pandemic will dramatically impact the second part of the target. In particular, this target includes an indicator on risk reduction (a score of adoption and implementation of *"*national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030*"*), which covers risks of epidemics and pandemics.[20]

As underlined by the OECD (2020[26]), **the COVID-19 pandemic is expected to lead to a marked increase in social spending** (Targets 1.a and 1.b). Demands on health-care systems have increased, and a wide array of social support measures were put in place or expanded to help people cope with the economic effects of the pandemic (OECD, 2021[27]). Yet, given the difficulty to gauge just how informative this indicator actually is (an increase in public spending cannot be classified as progress), Table 2.2 has summarised the impact as mixed.

Table 2.2. Summary impact of the COVID-19 pandemic on Goal 1 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
1.1 – Extreme poverty		
1.2 – Poverty in all its dimensions	mixed	
1.3 – Social protection coverage		
1.4 – Access to basic services	none	none
1.5 – Resilience to shocks	negative	
1.a – Resource mobilisation	mixed	
1.b – Pro-poor public spending	mixed	

Note: The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 2 – Zero hunger

Goal 2 aims at achieving food security for all and ending malnutrition, but also at promoting agricultural practices that are sustainable for the environment and that preserve the living conditions of food producers. On the consumption side, severe hunger has been eradicated in the vast majority of OECD countries. Nonetheless, in many countries malnutrition and food insecurity remain an issue, and the situation is unlikely to improve by 2030. On the production side, despite progress in some dimensions, the environmental sustainability performance of agriculture is still insufficient. Making better policies for food systems will, however, require overcoming large evidence gaps on the extent, characteristics and drivers of policy issues, but also on the effectiveness of policy instruments and on some of the policy implications (OECD, 2021[28]).[21]

On the consumption side, the fall in household income induced by the COVID-19 crisis may have led to a dramatic rise in food insecurity, especially in poorer countries. In OECD countries, however, safety nets and food assistance programmes should have softened the main effects of the crisis on hunger. Nonetheless, income losses, unemployment, stress and more sedentary behaviours induced by the pandemic raise concerns about an increase of malnutrition. On the production side, even though food supply chains have proved remarkably resilient in the face of the pandemic, the crisis is likely to have a long-term impact on the agricultural sector, most notably on farmers' livelihoods and greenhouse gas emissions (OECD, 2020[29]).

Assessing OECD countries' performance on Goal 2

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 2.3 shows that data allow the monitoring of five out of the eight targets underpinning Goal 2. For this goal, two indicators sourced from the OECD complement the *SDG Global Database*. Relying on OECD data sources allows monitoring Indicator 2.4.1 (which is to be measured by the proportion of agricultural area under productive and sustainable agriculture), for which no data series are available in the *SDG Global Database*. In addition, using OECD data sources on Target 2.2 on malnutrition provides wider country coverage and allows coverage of an area that is critical for OECD countries, beyond those covered by the global indicator framework. On top of the indicators listed in Table 2.3, the database includes six extra data series to monitor Targets 2.5 and 2.a, but those are considered to be mainly informative in the context of Goal 2 (details and data for all indicators are available at http://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-2-people.xlsx).

Table 2.3. Available data series supporting the monitoring of Goal 2

Indicator code	Indicator Label	Available over time	Primary source
2.1.1	Prevalence of undernourishment	Yes	*SDG Global Database*
2.1.2	Prevalence of moderate or severe food insecurity in the adult population	Yes	*SDG Global Database*
2.1.2	Prevalence of severe food insecurity in the adult population	Yes	*SDG Global Database*
2.2.2	*Obesity rate*	Yes	OECD
2.2.3	Proportion of women aged 15-49 years with anaemia	Yes	*SDG Global Database*
2.4.1	*Nutrient balance (nitrogen, absolute value)*	Yes	OECD
2.5.2	Proportion of local breeds classified as being at risk as a share of local breeds with known level of extinction risk	Yes	*SDG Global Database*
2.c.1	Consumer Food Price Index	Yes	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Severe hunger has been eradicated in the vast majority of OECD countries, but food insecurity remains an issue for many of them. Target 2.1 commits countries to *"*end hunger and ensure access …to safe, nutritious and sufficient food*"*. For global measurement, the IAEG-SDGs proposes to measure this through the prevalence of undernourishment (2.1.1) and the prevalence of moderate or severe food insecurity (2.1.2). Overall, around three in four OECD country are close to having eradicated Hunger (Figure 2.6, panel A). In 2019, the levels of undernourishment (i.e. the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life) and severe food insecurity (i.e. the proportion of individuals who have experienced food insecurity, as measured through the "Food Insecurity Experience Scale") are below 3% in almost all OECD countries, and below this level measures are likely to reflect measurement errors. The only notable exceptions are the Slovak Republic and Colombia, where 4% to 9% of the population still miss the dietary energy levels required to maintain a normal active and healthy life. In addition, in Mexico, the distance to target is large for both the prevalence of undernourishment (7%) and the prevalence of severe food insecurity (6%). Beyond extreme hunger though, moderate food insecurity remains an issue for a significant share of OECD countries. Only 12 OECD countries are at a short distance from eradicating food insecurity (i.e. less than 5.2% of the population is food insecure); with more than 10% of their population suffering from severe to moderate food insecurity, nine Member countries are considered to remain far from the target. When looking at recent developments in the prevalence of undernourishment over time, the picture is positive for all countries but four (Mexico, the Slovak Republic, Chile and Colombia) (Figure 2.6, panel B). However, considering the lack of progress on moderate food security, more than three in four OECD countries may not achieve the overall target by 2030.

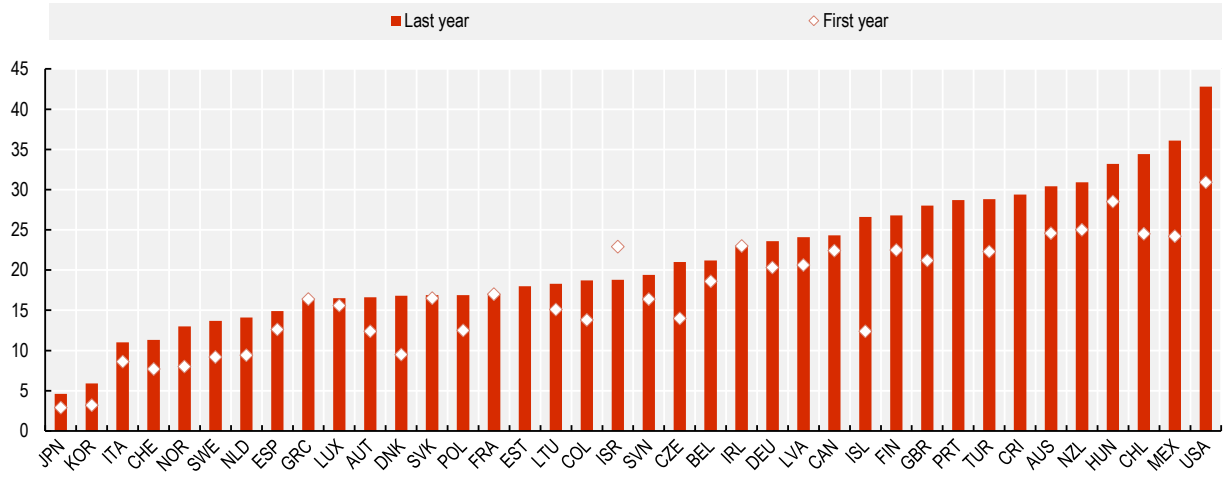
No OECD country is considered as being close to ending malnutrition. While Target 2.2 refers to *"*ending all forms of malnutrition*"* and *"*addressing the nutritional needs of adolescent girls, pregnant and lactating women and older persons*"*, global indicators focus only on children under the age of 5 and women of reproductive age. Available data do not cover enough OECD countries to measure the prevalence of stunting among children under age 5 (Indicator 2.2.1), and relying on the *SDG Global Database* would restrict the assessment to the prevalence of anaemia among women of reproductive age (2.2.3). Anaemia is highly prevalent globally, disproportionately affecting children and women of reproductive age. It negatively affects cognitive and motor development and work capacity, and among pregnant women iron deficiency anaemia is associated with adverse reproductive outcomes, including preterm delivery, low-birth-weight infants and decreased iron stores for the baby, which may lead to impaired development. In OECD countries, on average 14% of women of reproductive age suffered from anaemia in 2019. While the target had been set at 3% (below this level measures are likely to reflect measurement errors), no OECD country is considered to be at a short distance to the target, and only two (Australia and Chile) are deemed to be at a medium distance. With more than one in five women suffering from anaemia, distances are particularly large in the Czech Republic, Colombia, Latvia, Estonia, Slovenia and the Slovak Republic. While blood haemoglobin concentrations can be affected by many exogenous factors, including altitude, pregnancy, age and sex, unhealthy behaviour (such as smoking or a diet lacking in certain vitamins and minerals) also plays a significant role. Over the last two decades, the prevalence of anaemia has been increasing in all but seven OECD countries (mostly from Latin America and Eastern Asia), but even in these the pace would not be sufficient to lead to significant reductions.

In addition, other types of malnutrition, beyond those covered by the global indicator framework, prevail in OECD countries. In particular, **obesity, which was already high in the vast majority of OECD countries, had been increasing in virtually all of them over the past two decades** (Figure 2.4) **not expected to be eliminated in any of them**. With less than 6% of the population classified as obese, Japan and Korea are the only OECD countries that can be considered as close to the aspirational target of eliminating obesity, which is operationalised at 3% of the resident population. With more than 15% of their resident population being obese, distances to target are considered to be large for 31 OECD countries. For six of them, including Australia, Chile, Hungary, Mexico, New Zealand and the United States, the prevalence of obesity even exceeds 30% of adults. Being overweight, including obese, is a major risk

factor for various non-communicable diseases (NCD) such as diabetes, cardiovascular diseases and certain cancers (see Target 3.4 for further details).

Figure 2.4. Obesity rate (Target 2.2)

Measured / self-reported, % of population aged 15+



Note: For Austria, Denmark, Greece, Iceland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Poland, Slovenia, Spain, Sweden and Switzerland obesity rates are based on self-reported measures. First year refers to 1999 for Germany; 1999 for Israel; 2000 for Japan, Italy, Sweden, the Netherlands, Denmark, the Czech Republic, Finland, the United Kingdom, Mexico, the United States; 2001 for Spain and Korea; 2002 for Switzerland, Iceland and Norway; 2003 for Chile and New Zealand; 2004 for Canada, Poland and the Slovak Republic; 2005 for Colombia and Lithuania; 2006 for Austria, France and Greece; 2007 for Australia, Ireland and Slovenia; 2009 for Hungary; 2011 for Turkey, 2015 for Portugal; 2014 for otherwise. Last year refers to 2008 for the Slovak Republic; 2010 for the Czech Republic; 2012 for Germany; 2014 for Costa Rica and Estonia; 2015 for Israel, Colombia, France and Portugal; 2016 for Chile; 2017 for Denmark, Finland, Switzerland, Iceland, Poland, Australia and Turkey; 2018 for Mexico, Belgium and Latvia; 2020 for Spain and New Zealand; 2019 for otherwise.
Source: OECD (2021[30]), "Overweight or obese population" (indicator), https://doi.org/10.1787/86583552-en (accessed on 29 October 2021).

StatLink https://stat.link/43l17q

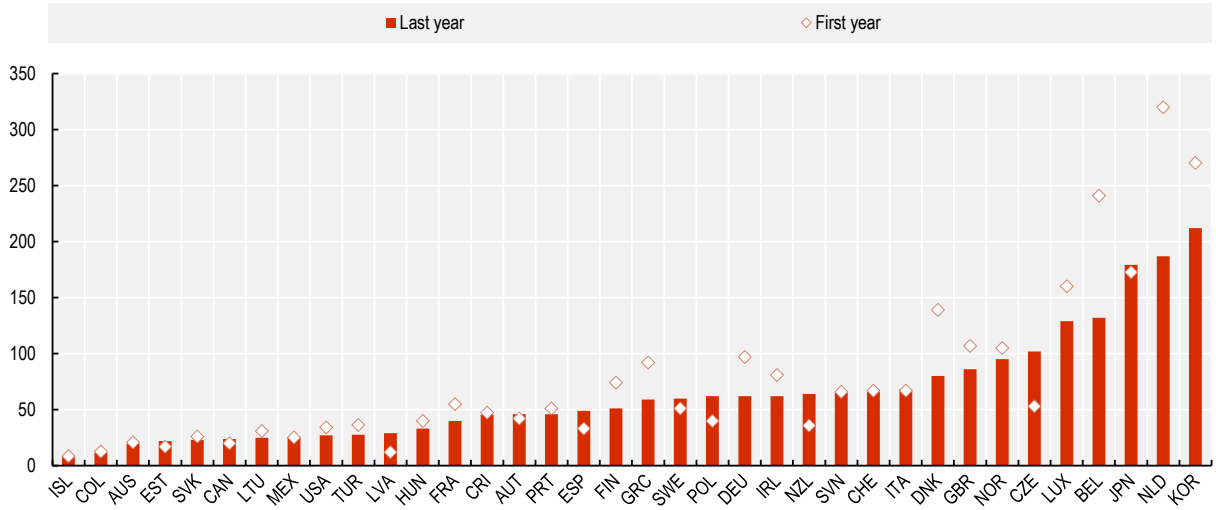
Beyond food consumption, hunger and malnutrition, Goal 2 also includes targets pertaining to the inclusiveness and the environmental impacts of the food production sector. Target 2.3 for instance, aims at fostering agricultural productivity and incomes of small-scale food producers. While data exist for some OECD countries, thus far, they cover only European countries and Canada and are thus not available for enough OECD countries to be included in this report.

The agricultural sector's pressure on the environment is high in several OECD countries, and, despite some progress, concerns remain. Target 2.4 aims at "ensuring sustainable food production systems and implementing resilient agricultural practices". At global level, Target 2.4 is measured by the share of agricultural area under productive and sustainable use, but there is no agreement as to how to measure it among OECD countries (OECD, 2019[31]). To overcome this problem, and in line with previous OECD analysis on this issue, this report measures the environmental pressure of the agricultural sector through data on the nitrogen surplus associated to agricultural production.[22] Nitrogen surpluses contribute to water and air pollution, while, conversely, agricultural areas with sustained nutrient deficits may suffer reductions in soil fertility (zero surplus can thus be considered as an aspirational target for 2030). Based on data for the latest year available (around 2018), only six OECD countries (Iceland, Colombia, Australia, Estonia, the Slovak Republic and Canada) can be considered as being "close to the 2030 target" (i.e. less than 25 kg of nitrogen per hectare of agricultural land), while nine OECD countries (Denmark, the United Kingdom, Norway, the Czech Republic, Luxembourg, Belgium, Japan, the Netherlands and Korea) report more than 70kg/ha and are thus considered as having a large distance to the target (Figure 2.5). Beyond

the static snapshot, progress towards reduced nitrogen balances is mixed. While declining on average across OECD countries, balances have been stagnating or even increasing in more than half of them, including in some countries with already high levels of nitrogen surplus. Figure 2.6, panel B, shows that despite some progress in a few countries, none of them is expected to achieve a nitrogen balance by 2030. In addition, recent analysis has shown that the decline in nitrogen surpluses has slowed almost everywhere, raising concerns about the ability of OECD countries to attain their target by 2030 (OECD, 2019[32]).

Figure 2.5. Nitrogen balance (Target 2.4)

Kilograms of nitrogen per hectare of agricultural land, absolute value



Note: First year refers to 1996 for Lithuania, Greece, Denmark, Luxembourg and Belgium; 1997 for Norway; 2017 for Australia, Mexico, the United States, Austria, Portugal, Spain, Finland, Germany, Ireland, Slovenia, Switzerland, Italy, the Czech Republic, Japan, the Netherlands and Korea; 2000 for Estonia, Hungary and the United Kingdom; and 1999 for otherwise. Last year refers to 2015 for Lithuania Greece, Denmark, Luxembourg, Belgium and Estonia; 2016 for Norway; 2018 for Iceland, Colombia, the Slovak Republic, Canada, Turkey, Latvia, France, Costa Rica, Sweden, Poland and New Zealand; and 2017 for otherwise.
Source: (OECD, 2021[33]), "Nutrient balance" (indicator), https://doi.org/10.1787/82add6a9-en (accessed on 29 October 2021).

StatLink https://stat.link/nd4qsg

Despite the fact that Target 2.5 is one of the very few with an earlier (i.e. 2020) deadline, **a very high share of local livestock breeds are at risk of extinction, with very few countries making progress**. Target 2.5 commits countries to "maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species" and "promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge". One of the measures to monitor Target 2.5 is the proportion of local breeds classified as being at risk of extinction (Indicator 2.5.2). While the natural target is zero, the target level had been set at 3% to allow for measurement errors. Even though the deadline to meet the target has passed, no OECD country had been able to make enough progress. On average, across OECD countries, in 2021, 80% of local breeds are still classified by the FAO as being "at risk" (as a share of local breeds with known level of extinction risk), and only one country (Mexico) can be considered as being close to the target (i.e. less than 15% of local breeds at risk of extinction). Yet, caution should be taken when interpreting the results, as for the majority of local breeds around the world, the risk status remains unknown due to a lack of data. For instance, even though Mexico is considered to be the only country to achieve the target level based on available data (Figure 2.6, panel B), the actual status of only 6% of local breeds was known in Mexico in 2021. While the deadline has already passed, overall trends are not encouraging, and, with the exception of three countries (Austria,

Colombia and Germany), no OECD country is expected to make any further progress towards the target in the absence of specific policies (Figure 2.6, panel B). Beyond reducing the risk of extinction, this target also aims at developing facilities for the conservation of plant and animal genetic resources for food and agriculture. Available data are, however, expressed as the total number of secured resources and do not allow any comparative assessment.

The distance to target is not assessed for two of the three "means of implementation" targets under this goal (2.a and 2.b). Target 2.a focuses on investment in rural infrastructure and agricultural research and is monitored through data on government spending and ODA going to the agriculture sector. While the type and impact of government spending in agriculture and food may be gauged, the amount of spending is a contextual indicator, rather than an indicator of performance. Therefore, it is not used to measure distance to target. In addition, as most recent agricultural policy developments have been dominated by responses to the impact of the COVID pandemic, the trend of this indicator is further discussed in the section below (Impact of the COVID-19 pandemic on Goal 2). Similarly, ODA flows are not used to monitor progress. ODA flows are conditioned by both the donor's and recipient's context and cannot be benchmarked properly. Yet, OECD data show that, driven by a shift away from bilateral aid that finances infrastructure and production, with aid focusing more on social sectors, aid to agriculture in developing countries has fallen from nearly 25% of total ODA in the mid-1980s to only 5% in 2019 (OECD, 2021[34]). Whilst the share of aid to agriculture has hovered around 5%, in volume terms it more than doubled since 2002. Part of this trend is due to the increase in total ODA since 2002, as well as to increased food security concerns and to a renewed interest in agricultural technology for the poor.

The indicator supporting the assessment of Target 2.b on trade restrictions and distortions in agricultural markets (monitored through agricultural export subsidies) is also considered as providing contextual information. Agricultural export subsidies are reported in millions of USD and do not take into account the different sizes of agricultural economies. Using a wide range of measures of support to agriculture, OECD work on agricultural policies shows that about two-thirds of support to farmers is provided through measures that strongly distort farm business decisions – thereby distorting global agricultural production and trade (OECD, 2020[35]; OECD, 2021[36]).

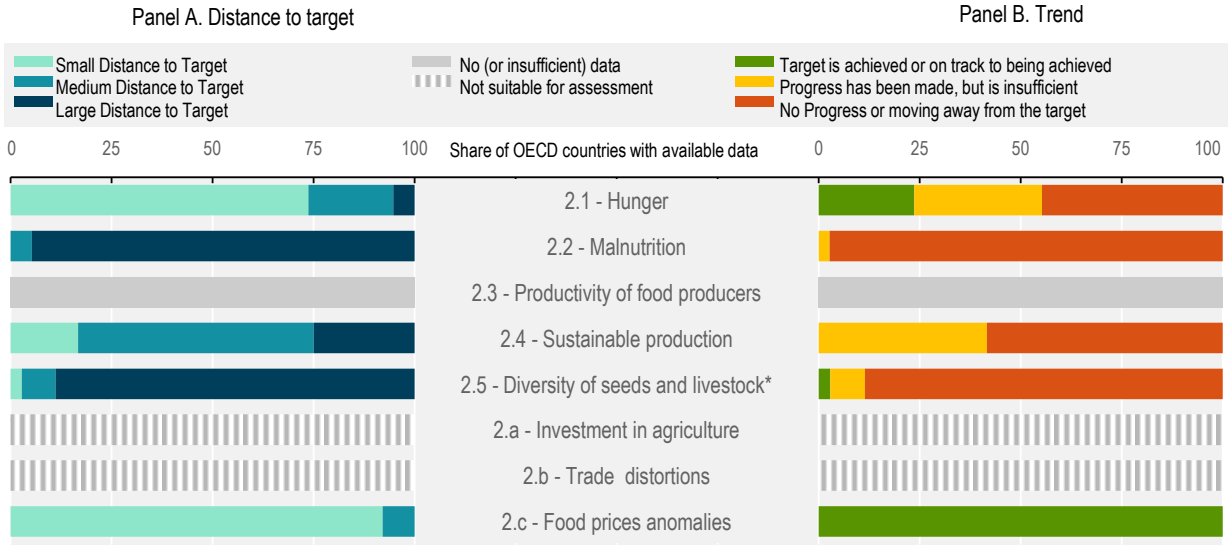
Virtually all OECD countries are (or will be) able to limit food price anomalies. Target 2.c focuses on ensuring the functioning of food commodity markets and facilitating timely access to market information. It is monitored through an indicator of food price anomalies (IFPA)[23] that aims at identifying market prices that are abnormally high.[24] In 2019, as shown in Figure 2.6, panel A, no OECD country reported a large distance on this indicator (with scores ranging between 0.90 and 1.20, only three OECD countries including Australia, the Netherlands and Poland are considered to be at a medium distance). Past trends suggest all countries are likely to remain in a "normal range" by 2030 (Figure 2.6, panel B). This suggests that in OECD countries, existing institutions and mechanisms allowed preventing high volatility in food prices in the long-run.

Summing up

Overall, while most OECD countries have alleviated severe hunger and limited extreme food price volatility, few of them will be able to meet most Goal 2 targets on eradicating hunger and malnutrition. As stressed by the OECD, food systems need to meet the triple challenge of ensuring food security and nutrition, providing livelihoods for farmers and others in the food chain, and improving the environmental sustainability of the sector (OECD, 2021[28]). Food security remains an issue, particularly for the most vulnerable (Placzek, 2021[37]), but a vast majority of OECD residents have access to sufficient, safe and nutritious food (Target 2.1). Yet, beyond hunger, more and more people are experiencing malnutrition and obesity (Target 2.2). On the environmental sustainability front, despite progress in some dimensions, the performance of agriculture is still unsatisfactory. Most OECD countries lack the mechanisms to maintain diversity of seeds and livestock (Target 2.5), and despite nearly half of OECD

countries showing some progress, none is expected to relieve the environmental pressure of the agricultural sector by 2030 (Target 2.4). While the impact of climate change and the rise in extreme weather conditions may impact food security and price stability, for now no OECD country is experiencing high food price volatility. Target 2.c on the functioning of food commodity markets is actually the only target that virtually all OECD countries are likely to reach by 2030 (if previous trends materialise).

Figure 2.6. Distance to target and trends over time in OECD countries, by SDG target, Goal 2



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of their recent changes in the indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those countries whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 2

The biggest risk for food security in OECD countries (Target 2.1) is not limited food availability but rather consumers' lack of access to food due to income limitations. Despite many factors adversely affecting agricultural and food markets during the pandemic, including a lack of seasonal labour and disruption of air freight, shortfalls in the availability of food have so far been limited. Food supply chains have demonstrated resilience in the face of the stress induced by the pandemic, and a food-price crisis similar to the one experienced in 2007-08 has been avoided (OECD, 2020[38]). However, a persistent gulf between supply and demand for some goods, together with rising food costs, has led to higher and more enduring price increases than expected (OECD, 2021[39]). In addition, the rise in unemployment triggered by containment measures has resulted in unprecedented numbers of people relying on social protection programmes or food handouts delivered by charities and anti-poverty associations. As noted in the

previous section, social safety nets and food assistance programmes have helped to mitigate the main effects of the crisis on food insecurity in most OECD countries. Yet, even in countries with the most advanced social protection, some, such as workers with non-standard jobs and their families, young people not in education, employment or training, students, etc., may have missed out. In addition, while food assistance usually provides staple food, low-income people may lack proteins and vitamins and suffer from malnutrition (Placzek, 2021[37]). As food insecurity is associated with increased risk for chronic diseases, changes in the depth and breadth of food insecurity during the COVID-19 pandemic could have serious and long-lasting health consequence (Leddy et al., 2020[40]).

In addition, the pandemic may have increased the risk of obesity (Target 2.2) – see Table 2.4. The COVID-19 crisis and lockdowns have led to dramatic changes in people's behaviours, prompting people to cut back on physical activity and to increase sedentary behaviours (Stockwell et al., 2021[41]). In parallel, as research (Torres and Nowson, 2007[42]; Adam and Epel, 2007[43]) shows that higher stress and anxiety are likely to influence eating behaviour (leading to greater consumption of foods that are energy and nutrient dense, i.e. high in sugar and fat). While no definitive evidence exists on the impact on the risk of obesity, the risk is expected to have significantly increased following the pandemic (Mattioli et al., 2020[44]).

The COVID-19 pandemic is expected to significantly affect the agricultural sector over the next decade. Beyond food consumption, Goal 2 also aims at ensuring the livelihoods of people working in food production (Target 2.3) and preserving the sustainability of agriculture. In particular, recent OECD analysis (OECD, 2020[29]) highlights how falling incomes at global level would have had a cascade effect on many different aspects of the food sector in the absence of government intervention. Yet, most recent analysis suggests that average farm incomes rose in 2020 for a majority of OECD countries (OECD, 2021[45]).

Support to agriculture (Target 2.a) may be distortive (Target 2.b), inefficient, inequitable and harmful (Target 2.4). Substantial resources – USD 75 billion – were earmarked for COVID-19 sectoral support in OECD countries – but actual disbursements have so far been much lower, partly reflecting the overall resilience of agriculture to the COVID-19 shock. Yet, most of this support was provided through potentially distorting instruments (market price support and payments linked to output or the unconstrained use of inputs) that are inefficient at transferring income to farmers (a large share of the benefits is capitalised into land values or leak in the form of higher prices for inputs). They also tend to be inequitable, to the extent that support is linked directly to production, and not targeted to producers with low incomes. Finally, through direct incentives to increase production, these instruments contribute to increasing resource pressures, including through impacts on water quality, and can raise GHG emissions. Given also a lack of complementary environmental policies, fewer countries have managed to combine productivity growth with lower resource pressures and reduced emissions (OECD, 2021[45]).

While the consequences of the COVID-19 pandemic are strongly visible in international trade, food prices remained robust (Target 2.c). Many governments moved swiftly to keep agricultural supply chains functioning, including by designating agriculture and food as an essential sector. As a result, policies were generally successful in maintaining the overall functioning of food supply chains. After dropping by 7% in the second quarter of 2020, average international food prices increased towards the end of the year, and annual averages ended 3% higher than in 2019, with contrasting movements between crop and livestock markets (OECD, 2021[45]). Yet, more recently, global food prices have risen to their highest level in a decade, amidst strong demand and weather-related disruptions to production in key food-exporting economies (OECD, 2021[46]). In October 2021, annual food price inflation rose to 4.5%, from 1.5% in May 2021. While inflation is expected to fade through 2022-23, it could continue to surprise on the upside (OECD, 2021[39]).

Table 2.4. Summary impact of the COVID-19 pandemic on Goal 2 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
2.1 – Hunger	mixed	
2.2 – Malnutrition	negative	
2.3 – Small-scale food producers	mixed	mixed
2.4 – Sustainable production	negative	negative
2.5 – Diversity of seeds and livestock*	none	none
2.a – Investment in agriculture	negative	negative
2.b – Trade distortions	negative	negative
2.c – Food prices anomalies	mixed	none

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 3 – Good health and well-being

Since the onset of the pandemic, more than 2 million people have died from COVID-19 in OECD countries. This has had a dramatic impact on Goal 3, which aims at ensuring "healthy lives and well-being for all and at all ages". While combatting non-communicable disease had been the most salient health-care challenge for OECD countries for long, the pandemic is bringing back the combat against infectious diseases as a major challenge for OECD countries. In this context, more than ever, Goal 3 is a central piece in reaching the targets of the 2030 Agenda.

Before the pandemic hit, OECD countries were progressing on the vast majority of targets relating to Goal 3. However, the pace of progress would not have allowed achieving the targets underpinning Goal 3 by 2030. While nearly all OECD countries greatly reduced maternal and infant mortality, significant challenges remain in other fields. Among those, combatting non-communicable diseases was probably the major challenge for OECD countries before the pandemic hit. Fuelled by unhealthy lifestyles, including smoking, drinking and obesity, but also by environmental factors, like air pollution, and demographic changes, non-communicable diseases were the leading cause of death in OECD countries. While the toll imposed by communicable diseases had significantly declined, a range of factors – lower confidence in the safety and efficacy of vaccines, the diffusion of antibiotic-resistant infections and new viral outbreaks such as COVID-19 – are about to undo part of the progress achieved. To overcome those persistent changes, strong and inclusive health-care systems are essential. While most OECD countries have achieved universal coverage for a core set of health services, the range of services covered and the degree of coverage vary substantially across countries. Effective access to different types of care can also be limited because of shortages of health workers, long waiting times or long travel distances to the closest health-care facility.

COVID-19 is directly affecting the health of millions of people, but the pandemic also has an indirect effect on many other dimensions of health. The pandemic revealed and amplified vulnerabilities in health-care systems. In many countries, attempts to prevent the circulation of the virus largely disrupted normal health-care services. By limiting people's ability to go to health-care facilities to seek services such as check-ups, vaccinations and even urgent medical care, the pandemic is affecting the prevention, early diagnosis and treatment of many diseases. Conversely, in the very short term, some of the protective measures put in place to limit the pandemic have had a positive impact. For instance, the substantial drops in mobility resulted in a large decrease in road accidents and in temporary reductions of air pollution.

Assessing OECD countries' performance on Goal 3

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 2.5 shows that data allows the monitoring of 12 of the 13 targets underpinning Goal 3 (all of which can be monitored over time). For this goal, 12 indicators sourced from the OECD complement the *SDG Global Database*. In most cases, they align with the global indicator framework. In some cases, drawing from OECD databases also allows for a longer time span (3.3.4 and 3.7.2), being timelier (3.a.1), or mirroring specific conditions in OECD countries. For instance, using OECD data to assess mortality indicators (3.1.1, 3.2.1, 3.2.2, 3.4.2, 3.6.1 and 3.9.3) allows greater accuracy, as mortality rates are age-standardised based on the structure of the OECD population. Therefore, drawing from OECD databases prevents country comparisons from being disproportionately influenced by country differences in the population's age structure. Finally, while the *SDG Global Database* has available data series on new HIV infections (3.3.1), since it does not cover enough OECD countries, an indicator of new incidences of AIDS is included from OECD sources. On top of the indicators listed in the table, the database includes eight extra data series (under Targets 3.b and 3.c), but these are considered to be contextual indicators rather than measures of performance and cannot be included in the assessment of Goal 3 (details and data for all indicators are available at http://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-2-people.xlsx).

Table 2.5. Available data series supporting the monitoring of Goal 3

Indicator code	Indicator Label	Available over time	Primary source
3.1.1	Maternal mortality ratio	Yes	*SDG Global Database*
3.1.1	Maternal mortality ratio	Yes	OECD
3.1.2	Proportion of births attended by skilled health personnel	Yes	*SDG Global Database*
3.2.1	Infant mortality rate	Yes	OECD
3.2.1	Infant mortality rate (deaths per 1 000 live births)	Yes	*SDG Global Database*
3.2.1	Under-five mortality rate (deaths per 1 000 live births)	Yes	*SDG Global Database*
3.2.2	Neonatal mortality rate (deaths per 1 000 live births)	Yes	*SDG Global Database*
3.2.2	Neonatal mortality rate	Yes	OECD
3.3.1	*Incidence of AIDS*	Yes	OECD
3.3.2	Tuberculosis incidence (per 100 000 population)	Yes	*SDG Global Database*
3.3.2	*Death rate due to Tuberculosis*	Yes	OECD
3.3.4	Prevalence of hepatitis B surface antigen (HBsAg)	No	*SDG Global Database*
3.3.4	Hepatitis B incidence	Yes	OECD
3.3.5	Number of people requiring interventions against neglected tropical diseases	Yes	*SDG Global Database*
3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Yes	*SDG Global Database*
3.4.2	Suicide mortality rate (deaths per 100 000 population)	Yes	*SDG Global Database*
3.4.2	Death from intentional self-harm	Yes	OECD
3.5.1	Alcohol use disorders, 12-month prevalence	No	*SDG Global Database*
3.5.2	Alcohol consumption per capita (aged 15 years or older) within a calendar year (litres of pure alcohol)	Yes	*SDG Global Database*
3.5.2	Alcohol consumption per capita	Yes	OECD
3.6.1	Death rate due to road traffic injuries (per 100 000 population)	Yes	SDG Global Database
3.6.1	Death rate due to road traffic injuries	Yes	OECD
3.7.2	Adolescent fertility rate	Yes	OECD
3.7.2	Adolescent birth rate (per 1 000 women aged 15-19 years)	Yes	*SDG Global Database*
3.8.1	Universal health coverage (UHC) service coverage index	Yes	*SDG Global Database*
3.8.2	Proportion of population with large household expenditures on health (greater than 10%) as a share of total household expenditure or income	No	*SDG Global Database*
3.8.2	Proportion of population with large household expenditures on health (greater than 25%) as a share of total household expenditure or income	No	*SDG Global Database*
3.9.1	Crude death rate attributed to household and ambient air pollution (deaths per 100 000 population)	No	*SDG Global Database*
3.9.1	Age-standardised mortality rate attributed to household and ambient air pollution (deaths per 100 000 population)	No	*SDG Global Database*
3.9.1	Age-standardised mortality rate attributed to ambient air pollution (deaths per 100 000 population)	No	*SDG Global Database*
3.9.1	Crude death rate attributed to ambient air pollution (deaths per 100 000 population)	No	*SDG Global Database*
3.9.2	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (deaths per 100 000 population)	No	*SDG Global Database*
3.9.3	Mortality rate attributed to unintentional poisonings (deaths per 100 000 population)	Yes	*SDG Global Database*
3.9.3	Mortality from accidental poisoning	Yes	OECD
3.a.1	Age-standardised prevalence of current tobacco use among persons aged 15 years or older	Yes	*SDG Global Database*
3.a.1	Tobacco consumption	Yes	OECD

Indicator code	Indicator Label	Available over time	Primary source
3.b.1	Proportion of the target population with access to pneumococcal conjugate 3rd dose (PCV3)	Yes	*SDG Global Database*
3.b.1	Proportion of the target population with access to 3 doses of diphtheria-tetanus-pertussis (DTP3)	Yes	*SDG Global Database*
3.b.1	Proportion of the target population with access to measles-containing-vaccine second dose (MCV2)	Yes	*SDG Global Database*
3.b.1	Proportion of the target population with access to affordable medicines and vaccines on a sustainable basis, human papillomavirus (HPV)	Yes	*SDG Global Database*
3.d.1	Average of 13 International Health Regulations (IHR) core capacity scores (WHO questionnaire)	Yes	*SDG Global Database*
3.d.1	Average of 13 International Health Regulations core capacity scores (SPAR new questionnaire)	No	*SDG Global Database*
3.d.2	Percentage of bloodstream infections due to methicillin-resistant Staphylococcus aureus (MRSA) among patients seeking care and whose blood sample is taken and tested	No	*SDG Global Database*
3.d.2	Percentage of bloodstream infections due to Escherichia coli resistant to 3rd-generation cephalosporin (e.g., ESBL- E. coli) among patients seeking care and whose blood sample is taken and tested	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Figure 2.9, panel A, shows that **all OECD countries already have greatly reduced both maternal mortality** (Target 3.1) and **deaths of newborns and children** (Target 3.2). Target 3.1 calls on countries to *"*reduce the global maternal mortality ratio to less than 70 per 100 000 live births*"*, which is supported by two distinct indicators: the maternal mortality ratio and the proportion of births attended by skilled heath personnel. In 2018 (or latest year available), all OECD countries already exceeded the target level for both indicators.[25] However, Figure 2.9, panel B, also shows that, in the absence of additional measures, around 15% of OECD countries may fail to reach the target for maternal mortality (Target 3.1). While no OECD country is expected to fail in achieving the target on maternal mortality, past trends suggest that a few may not be able to reach the target on the proportion of births attended by skilled health personnel (including France, Denmark, Iceland, the Slovak Republic and New Zealand).

Through Target 3.2, the 2030 Agenda aims at *"*ending preventable deaths of newborns and children under 5 years of age neonatal*"*. It even proposes numerical targets to be reached by 2030 for both mortality rates: below 12 per 1 000 live births for neonatal mortality and below 25 per 1 000 live births for under-five mortality. All OECD countries were already well below those rates in 2019, and none of them is expected to exceed those rates in 2030. This report also includes measures of infant mortality (i.e. below one year of age) for which the target had been set at 15 per 1 000 live births to be consistent with the targets for neonatal and under-five mortality. Similarly, all OECD countries are already below target level for the infant mortality rate (or will be by 2030).

Before the COVID-19 pandemic hit, most OECD countries had achieved strong progress in reducing the incidence of communicable diseases, yet these diseases remain a threat to the health of OECD citizens. Target 3.3. refers to "ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases*"* and *"*combatting hepatitis, water-borne diseases and other communicable diseases*"*, which is to be monitored by six measures, each corresponding to a different disease (target levels are set at 3 per 1 000 000 population).

- On HIV/AIDS, relative to the OECD average in 2018, distance to the target on the number of new AIDS[26] cases are short in a vast majority of countries. Distances are longer in Colombia, Costa Rica and Mexico and to a lesser extent in Chile, the United States, Latvia and Estonia. As progress in HIV/AIDS therapy has allowed decoupling HIV infection from its progression to AIDS (Gaind, 2016[47]), a majority of OECD countries (20 of 38) show declining rates of new AIDS infections. However, this should not hide the lack of progress on the rates of new HIV infections in many

OECD countries. In addition, only 11 OECD countries are expected to reach the target level for AIDS incidences by 2030.

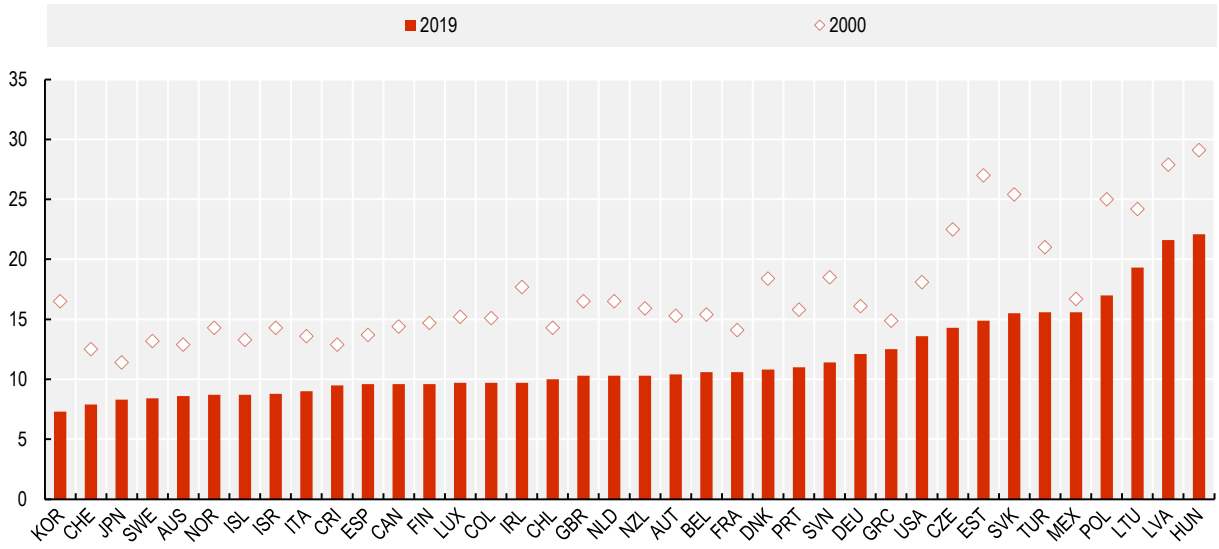
- On tuberculosis, in 2018, distances to target are short for both new reported cases and deaths for more than half of OECD countries, but they are long in Colombia, Korea, Lithuania and Latvia. Death rates are stable or declining in all OECD countries, and available data does not suggest any progress on the front of new cases in seven OECD countries. While some countries already have rather low rates (Australia, Iceland, Norway and Sweden), other countries show high rates and no progress (Colombia, Korea and Mexico).
- On hepatitis B, in 2019, distances are short in all OECD countries besides Chile, Belgium and Canada (and to a lesser extent in Costa Rica and Colombia) when the assessment is based on incidence. However, using surface antigen (HBsAg) prevalence among children under age five suggests that in 2015 fewer than half of OECD countries can be considered to be at a short distance to the target (14 of 38). While trends cannot be assessed for HBsAg prevalence, hepatitis B incidence is likely to remain at a low rate or even be decreasing in most OECD countries. Yet, for eight countries, incidences had been on an upward trend over the past few years (Canada, Belgium, Chile, Costa Rica and Colombia but also Portugal, Korea and Japan, where incidences are rather low).
- Target 3.3 also refers to tropical diseases and malaria. Yet, tropical diseases are negligible in all OECD countries other than Colombia and Mexico, and no data are available on malaria for any OECD country.

Overall, while seven in ten OECD countries are considered to be at a short distance from Target 3.3, in the absence of further measures, only four in ten countries will be able to reach the target by 2030 (Figure 2.9, panel B).

Despite current downward trends in mortality rates attributed to non-communicable diseases (NCDs) and suicide rates in most OECD countries, countries are not on track to meet target levels by 2030. Target 3.4 calls countries to "reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being". Accordingly, the global indicator framework encompasses both deaths from non-communicable diseases as well as deaths from suicide. Regarding the former, as a result of both unhealthy living conditions (see Targets 2.2, 3.5 and 3.a) and population ageing, non-communicable diseases, such as cardiovascular disease, cancer, diabetes and chronic respiratory disease, had been by far the leading cause of death in most OECD countries (OECD, 2019[48]). Figure 2.7 shows that, in 2019, most OECD countries are considered to be at a medium or long distance from the 2030 target (i.e. the probability of dying between the ages of 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease is higher than 10%).[27] At the same time, over the last two decades, all OECD countries have experienced declines in the probability of dying from such diseases. However, in the absence of further measures, the current pace of progress would be insufficient to reach the 2030 target for 28 of the 38 OECD countries.

Figure 2.7. Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease (Target 3.4)

Probability of dying between the ages of 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease



Source: (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg (accessed on 29 October 2021).

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The second segment of Target 3.4 covers quite a different aspect of premature mortality: death from suicide.[28] On average across OECD countries in 2018, 11 people per 100 000 die each year from suicide, but large cross-country disparities exist. Overall, despite minor differences between data from the OECD and from the *SDG Global Database*, Turkey, Greece and Mexico and to a lesser extent Israel and Italy can be considered to be close to target (i.e. suicide rate is below 6 in 100 000 people).[29] Conversely, death rates from suicide are twice as high in the vast majority of OECD countries. This conclusion is further strengthened when considering that death registries are likely to under-represent the phenomena due to different reporting practices and stigma (OECD, 2020[49]).

Alcohol consumption has been declining in a (small) majority of OECD countries, but consumption patterns remain high in many of them. Target 3.5 is about substance abuse, a leading driver of higher mortality. For global measurement, the IAEG-SDGs proposes monitoring the coverage of treatment interventions for substance abuse and alcohol per capita consumption (aged 15 years or older). When measured through sales data, alcohol consumption in individuals aged 15 or over was estimated at around 10 litres of pure alcohol per person in 2019 – this is equivalent to two bottles of wine, or nearly 4 litres of beer, per week per inhabitant in OECD countries. Yet, this average masks significant variations both across countries and, within the same country, across different population groups (OECD, 2021[50]).

Alcohol intake is a major risk factor for many non-communicable diseases (Target 3.4) and significantly contributes to road traffic accidents (Target 3.6), violence and homicide (Target 16.1), suicide and mental health disorders (Target 3.4) – see (OECD, 2021[50]). While there is no international benchmark to gauge alcohol consumption, in 2013, countries worldwide have agreed nine voluntary global NCD targets, among which one aims to achieve at least a 10% reduction in the harmful use of alcohol by 2025 against a baseline in 2010. **Applying this 10% reduction to alcohol consumption set the target for 2030 at 8.5 litres of pure alcohol per person and per year. Using this benchmark, 23 OECD countries are considered close to target (i.e. consumption is lower than 10 L per capita), while Latvia is the only country considered to be far from the target, with an average annual alcohol consumption of 12.9 litres of**

pure alcohol per person in 2019. Over the past two decades, average alcohol consumption has been declining in 23 OECD countries, but only 10 of them are progressing fast enough to reach the target by 2030.

Note that data on alcohol consumption per capita help to assess long-term trends but do not identify the risk from harmful drinking patterns, which account for an important share of the burden of disease (OECD, 2019[48]). Alcohol use disorders are of particular concern: more than one in ten adults suffer from disorders attributable to the consumption of alcohol in 12 OECD countries, particularly in Latvia (16%) and Hungary (21%). While substance abuse goes beyond alcohol (for instance, the global indicator framework aims at including coverage of treatment interventions for substance abuse), available data prevent a comprehensive assessment.

All OECD countries (except Colombia) experienced fewer deaths from road traffic accidents over the past two decades, but very few would have managed to halve the 2015 ensuing death rate by the end of 2020, as per Target 3.6 (Figure 2.9, panel B).[30] While the available data on death rates due to road traffic injuries do not cover 2020 yet, 2019 data suggest that the United Kingdom, Switzerland, Norway, Iceland and Sweden are the only countries that may reach that target.

Target 3.7 focuses on access to sexual and reproductive health care, but available data only allow tracking the adolescent fertility rate. **Adolescent fertility rates have been declining in almost all OECD countries.** While the 2030 Agenda does not set any numerical target, this rate is benchmarked against the distribution of OECD outcomes in 2015.[31] This implies that the target is set at 3 per 1 000, and the distance to target is considered to be long when this rate exceeds 27 per 1 000. In 2018, very few OECD countries (Mexico, Chile, Costa Rica and Colombia) showed high adolescent fertility rates relative to those standards. Figure 2.9, panel B, shows that over the past two decades, adolescent fertility rates declined in all countries (i.e. progressing towards the target) with the exception of only four countries (the Slovak Republic, Mexico, Hungary and Czech Republic).

Despite high coverage rates for core services in all OECD countries, barriers to access to health care persist (Target 3.8). In the global indicator framework, the coverage of essential health services is the first measure proposed to monitor access to universal health care. Most OECD countries have universal (or near-universal) coverage for a core set of health services, but while the share of a population covered offers an initial assessment of access to care, it is only a partial measure of accessibility and coverage. The notion of universal health coverage also depends on the range of services covered and the actual provision of such services (OECD, 2019[48]). Yet, these additional factors are not covered by the measure included in the global indicator framework. For global monitoring, the IAEG-SDGs proposed to use the Universal Health Service Coverage Index. This measure of service coverage (defined as people receiving the service they need) [32] shows that, despite constant progress in all OECD countries, none have yet been able to reach top scores, nor are they expected to meet them by 2030 (operationalised at 97%). In addition, barriers to access persist, particularly amongst the less well-off (OECD, 2019[48]). The second measure proposed in the global indicator framework is the proportion of population with large shares of household expenditures on health. On average, health expenditures exceed 10% of total household expenditures for around 8% of OECD residents. For the latest year available,[33] this share exceeds 10% of the population in Belgium, Estonia, Poland and Chile and is above 15% in Latvia, Greece, Portugal, Switzerland and Korea.

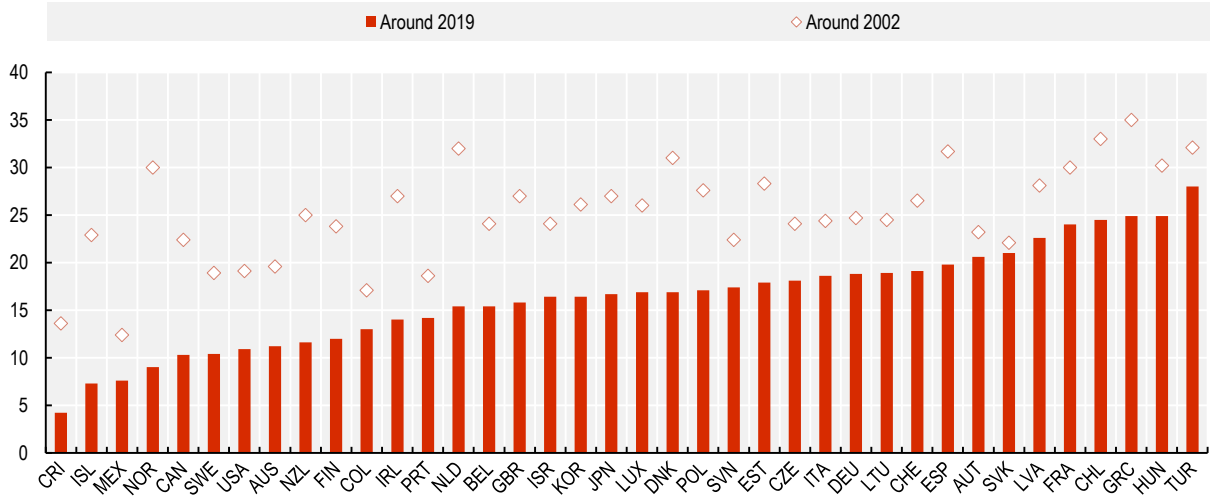
Overall, while mortality attributed to unsafe water is not an issue for OECD countries, air pollution is a major cause of death, and its impact is likely to be even greater in the future. Target 3.9 aims at reducing the number of deaths due to pollution and contamination. For global monitoring of Target 3.9, the IAEG-SDGs proposes three measures: mortality rate attributed to household and ambient air pollution; mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene; and mortality rate attributed to unintentional poisoning.[34] In 2016, among OECD countries, mortality rates from unsafe water were on average close to 0, but ambient (outdoor) and household (indoor) air pollution caused about 40 deaths per

100 000 people (crude death rate). On the latter, distances are short (i.e. less than 9 deaths per 100 000) in Sweden, Canada, Finland, New Zealand, Australia and Iceland, but longer (above 20 deaths) in 15 OECD countries and above 30 deaths in Lithuania, the Slovak Republic, Mexico, Colombia, Poland, Hungary, Latvia and Turkey. While the data included in this report do not allow to track progress for premature deaths from exposure to ambient air pollution over time, projections suggest that by 2060 outdoor air pollution may cause 6 to 9 million premature deaths a year worldwide and cost 1% of global GDP as a result of sick days, medical bills and reduced agricultural output (OECD, 2015[51]). Target 3.9 also includes deaths from accidental poisoning. In this area, results are mixed. Deaths from accidental poisoning are on average rather low (at 4 per 100 000 in 2018), and more than half of OECD countries are likely to maintain low death rates or even reduce them. Yet, four OECD members report more than 9 deaths per 100 000 population (Canada, the United States, Estonia and Finland), and 19 of them did not achieve any progress towards the eradication of deaths from poisoning in the recent past. In many of these countries, deaths from accidental poisoning have been driven by overdoses from opioids (OECD, 2019[52]).

Whilst smoking rates are declining in most countries, too many OECD adults still smoke every day. Target 3.a, which refers to "strengthening the implementation of the World Health Organization Framework Convention on Tobacco Control", is to be monitored by the prevalence of current tobacco use. With more than one in ten adults smoking daily, most recent data (2018 or latest) suggest that distances to target are long in all OECD countries except Costa Rica, Mexico, Iceland and Norway. Smoking rates even exceed twice this rate in Latvia, France, Switzerland, Hungary, Greece and Turkey (Figure 2.8). Daily smoking rates have decreased in most OECD countries over the last two decades, but the current pace of progress will not allow eradicating tobacco use by 2030. Using OECD data, the only country that is expected to meet the target is Costa Rica, where only 4% of the adult population were smoking every day in 2018.[35] Overall, smoking rates have not declined significantly in five OECD countries (including France, Portugal, Austria, Turkey and the Slovak Republic) in at least one of the data sources.

Figure 2.8. Tobacco consumption (Target 3.a)

Percentage of population aged 15 years or over who are reporting to smoke every day



Note: Around 2002 refers to 1998 for Denmark; 1999 for Costa Rica and Germany; 2000 for Mexico, Sweden, the United States, the Netherlands, the United Kingdom, Israel, Japan, Italy, France, Greece and Hungary; 2002 for Ireland, Estonia, the Czech Republic and Switzerland; 2003 for the Slovak Republic, Chile and Turkey; 2005 for Lithuania; 2006 for Portugal and Australia; 2008 for Colombia and Latvia; and 2001 for otherwise. Around 2019 refers to 2013 for Colombia; 2016 for Chile; 2017 for Denmark, Germany, Mexico and Switzerland; 2018 for Costa Rica and Belgium; 2020 for Iceland, Norway, New Zealand, Finland, Luxembourg, Spain and Estonia; and 2019 for otherwise.
Source: OECD (2021[53]), "Daily smokers" (indicator), https://doi.org/10.1787/1ff488c2-en (accessed on 29 October 2021).

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Vaccination levels are high in all OECD countries, but some have experienced significant reductions over the last decade. Target 3.b aims at supporting research and development of vaccines and medicines and providing access to them. As such, this target includes three types of indicators: the proportion of the target population covered by vaccines, ODA to medical research and basic health sectors, and proportion of health facilities that have a core set of essential medicines available. Based on 2019 data, most OECD countries comply with the WHO recommendation of vaccinating more than 90% of the target population against DTP (36 OECD countries), measles (36) or pneumococcus (33). Immunisation rates are, however, much lower for human papillomavirus, and distances are considered to be short in only eleven OECD members (i.e. more than 78% of the population is vaccinated). However, over the last decade, vaccination rates did not progress or have fallen in around one-third of OECD countries. As discussed in OECD (2019[48]), eroding public confidence in the safety and efficacy of vaccination, despite the lack of scientific evidence to support this loss of confidence, may have played a role in declining coverage in some countries.

Beyond vaccination, Target 3.b also aims at boosting development assistance to poorer countries for medical research, but, as detailed in previous sections, while there is a clear international benchmark for total ODA provided by donor countries, the ideal sectoral breakdown of this aid depends on the needs of each recipient and the priorities of each donor. OECD data nonetheless show that ODA for basic health has increased significantly over the past decade (with more than half of the total coming from the Global Fund, the Bill and Melinda Gates Foundation and the United States government). Finally, Target 3.b aims at fostering the creation of health facilities that offer a core set of essential medicines at affordable prices, but the lack of data prevents assessing this dimension of the target.

Target 3.c focuses on increasing the health workforce and is monitored through indicators on the number of health workers per 10 000 population (including dentists, nurses, midwives, pharmacists and physicians). These indicators are considered as contextual and therefore are not included in the measure of performance. Some OECD reports (e.g. (OECD, 2019[48]) provide background information on current levels and trends in the health and social care sector. They show that, in OECD countries, health and social systems employ more workers now than at any other time in history (about one in every ten jobs is found in health or social care).

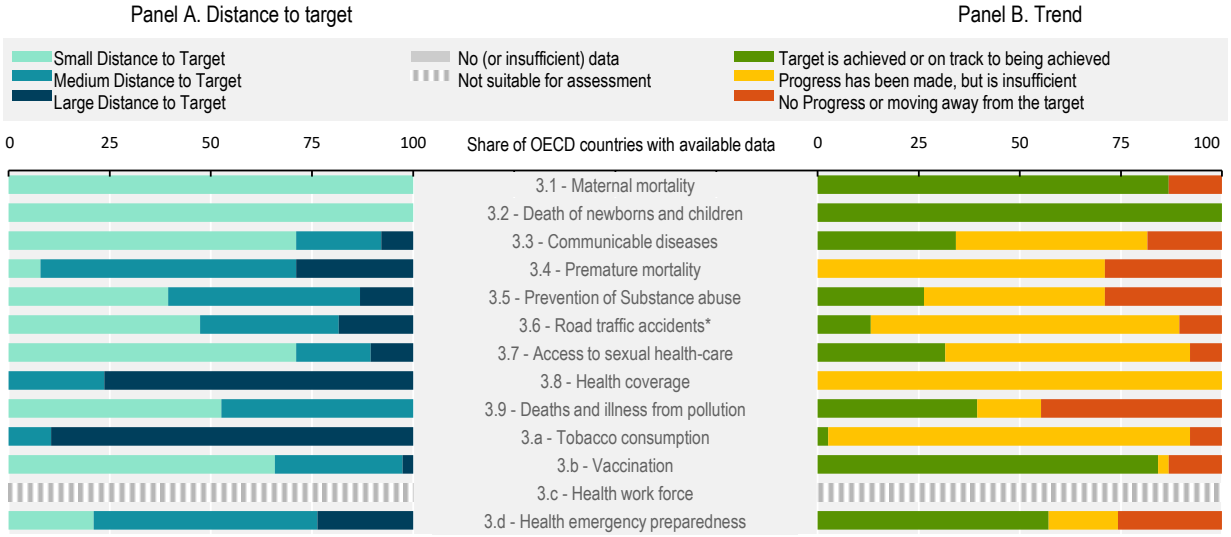
Overall, performance under the International Health Regulations (IHR) is very unequal among OECD countries. Target 3.d aims at strengthening the capacity for "early warning, risk reduction and management of national and global health risks". A country's progress in this area is measured through two sets of indicators: International Health Regulations capacity and health emergency preparedness, and measures of antimicrobial-resistant organisms. Yet, available data only allows assessing the first segment of the target. While disease outbreaks and other acute public health risks are often unpredictable and require a range of responses, IHR provide a legal framework defining people's rights and governments' obligations when handling public health events and emergencies. This legally binding instrument is used to monitor progress towards Target 3.d on preparedness for health emergencies. The indicator is defined as the percentage of attributes of core capacities,[36] with 100% as the implicit target (operationalised at 97%). Based on 2020 observations, performance on this indicator is diverse among OECD countries, with three groups of similar sizes: 11 countries are at a short distance from the target (i.e. more than 91% of the core capacities has been attained), 15 countries are at a medium distance, and 12 are considered to be at a long distance (i.e. attainment of less than 78%). Current trends show that while most OECD countries have been making progress at a pace that would allow them to reach 97% coverage by 2030, six are progressing at an insufficient pace, and nine do not show any progress towards the target level.[37]

Summing up

Prior to the COVID-19 pandemic, while most OECD countries made significant progress in many areas of health, the pace of progress has been insufficient to meet all Goal 3 targets (Figure 2.9).

Before the pandemic hit, countries were closest to meeting the targets relating to reproductive, maternal and child health, with virtually all OECD countries achieving very low maternal and infant mortality rates and most on a decreasing trend for adolescent fertility (Targets 3.1, 3.2 and 3.7). However, most OECD countries also experienced difficulties in the other areas covered by Goal 3. For instance, despite significant progress over the last two decades, unhealthy behaviours (Targets 3.5 and 3.a) and poor environmental conditions (Target 3.9) have been fuelling premature mortality (Target 3.4). While most OECD countries made significant progress towards Target 3.3 on ending the epidemics of AIDS and tuberculosis and reducing hepatitis B, the COVID-19 pandemic has been a painful reminder that communicable diseases may pose unpredictable challenges. As OECD countries confront lower public confidence in the safety and efficacy of vaccines and the spread of antibiotic-resistant infections, it remains more important than ever to build inclusive and effective health-care systems. While the majority of OECD countries have universal or near-universal coverage for a core set of essential health services, providing universal health coverage also depends on the range of services covered and the degree of cost-sharing for these. Some issues persist on these fronts, and no OECD country is expected to achieve true universal coverage by 2030 (Target 3.8).

Figure 2.9. Distance to target and trends over time in OECD countries, by SDG target, Goal 3



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of the recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 3

While no reductions of child mortality (Target 3.2) **have been reported so far, several studies reported significant declines of preterm births** (the leading cause of child mortality) occurring during

lockdowns. These declines were observed in many different countries, including Israel, Italy, Denmark, Ireland, the United States and Japan (Philip et al., 2020[54]; Been et al., 2020[55]; Meyer et al., 2021[56]; De Curtis, Villani and Polo, 2020[57]; Maeda et al., 2020[58]; Hedermann et al., 2020[59]). Some of these studies also reported significant reductions in the numbers of admissions to neonatal intensive care units. The reasons for these declines are unclear. However, the COVID-19 lockdown has drastically changed our lives by changing our working environment (including commuting), reducing physical interactions and increasing our focus on hygiene. This unusual situation is likely to have influenced several risk factors for premature birth.

COVID-19 is a communicable disease and, as such, it has a direct impact on the achievement of Target 3.3. More broadly, **by disrupting the continuity of care, the COVID-19 pandemic also had a knock-on effect on the diagnosis, treatment and prevention of both communicable** (Target 3.3) **and non-communicable** (Target 3.4) **diseases** (Table 2.6). First, to absorb the pressure put on health systems and to handle the influx of patients during the pandemic, routine and non-emergency medical care was temporarily interrupted in many countries (OECD, 2021[60]). In addition, early surveys suggested that patients had been delaying or even avoiding essential care out of fear of contracting the virus or concern about overstressing the health-care systems (American College of Emergency Physicians, 2020[61]; Lazzerini et al., 2020[62]; Van Mol et al., 2020[63]). These two factors led to significant delays in or even avoidance of medical treatments, which might have increased the morbidity and mortality risk associated with treatable and preventable health conditions, thereby contributing to excess deaths in the short, medium and long-term. In addition, some evidence suggests that unhealthy lifestyles and increased anxiety associated with the lockdowns may have long-term effects on cardiovascular disease (Mattioli et al., 2020[64]). Conversely, protective measures put in place during the crisis led to fewer fatalities from other communicable illnesses, such as seasonal flu (Jones, 2020[65]). In addition, although in the early periods of the pandemic suicide rates were expected to increase due to a decline in the population's mental health, a deepening economic crisis and lack of access to mental health services, data from 2020 and 2021 do not show any considerable change compared to previous years (OECD, 2021[16]).

The anxiety induced by the pandemic and its aftermath is nevertheless likely to impact significantly on the consumption of addictive substances (Targets 3.5 and 3.a). The potential effects of stress and isolation on alcohol misuse (Target 3.5), tobacco consumption (Target 3.a), substance abuse and other addictions has been largely documented (Dubey et al., 2020[66]). The COVID-19 pandemic and its associated government measures to limit mobility have impacted pre-pandemic patterns and sites of alcohol consumption (OECD, 2021[67]). Some of the problems associated with harmful alcohol consumption were intensified by the crisis, such as engaging in harmful drinking to cope with stress or domestic violence (OECD, 2021[67]). Looking at preliminary data on government tax receipts, alcohol sales rose by 3% to 5% in Germany, the United Kingdom and the United States in 2020 compared to 2019 (OECD, 2021[67]). Early evidence based on household final consumption expenditure (System of National Accounts) suggests a significant increase in the aggregate, "Alcoholic beverages, tobacco and narcotics". Focusing on the different items separately suggests that most of this surge is led by a rise in the consumption of alcoholic beverages (while the decrease in the consumption of tobacco seems to be milder than it used to be in many countries, suggesting that either fewer smokers than usual quit tobacco in 2020 or that those who did not quit smoked more).

The substantial drops in mobility observed during lockdowns resulted in large decreases in road accidents (Target 3.6). The most recent data collected by the International Transport Forum (ITF, 2020[68]) show significant reductions in the number of road fatalities during the first few months of 2020.[38] However, ITF (2020[68]) also highlights that that the number of road deaths has not fallen in proportion to the decrease in traffic. Furthermore, country evidence (e.g. France (ONISR, 2020[69])) suggests an increase in motor vehicles' average speed and in the severity of road accidents. Fewer road fatalities reflect, however, the strict containment measures and are not likely to last as more cars come back on the road and economic activity resumes.

The disruption of health services induced by the COVID-19 crisis may have short-term effects on access to reproductive health care (Target 3.7) and vaccinations (Target 3.b). Stringent and lengthy lockdown measures adopted to avoid health systems being overwhelmed have resulted in significant disruption of essential services. Based on a survey conducted among 105 countries at various levels of development from different world regions, WHO (2020[70]) suggested that routine immunisation services and family planning and contraception services had been among the most impacted.

The confinement measures put in place to reduce the spread of the virus led to temporary reductions of air pollution in the early periods of the pandemic (Target 3.9), largely due to reduced traffic and other activities. Reviewing 11 studies from EU and non-EU countries, Brunekreef et al. (2021[71]) concluded that reductions in air pollution related to COVID-19 lockdowns were most pronounced for traffic-related pollutants. The concentration of nitrogen dioxide (NO_2) resulting from road transport decreased by 30% to 50% during lockdowns in Europe, while reductions in concentrations of particulate matter ($PM_{2.5}$ and PM_{10}), mostly from residential heating, agriculture and industry, was much less pronounced.[39] Although air quality levels have now returned to pre-lockdown levels in many parts of the world, this period revealed some of the beneficial health impacts that could be achieved from a lasting and sustainable reduction in air pollution (Giani et al., 2020[72]; Venter et al., 2020[73]).

While there is no evidence yet that the COVID-19 pandemic will affect global health preparedness in the long run (Jacobsen, 2020[74]), and despite the fact that many countries were unprepared for COVID-19, even those with high IHR scores, **control of public health risks**, including infectious disease outbreaks, **is at the heart of the 2030 Agenda**. In particular, Target 3.d directly aims at *"*strengthening the capacity for early warning, risk reduction and management of national and global health risks*"*. Still, as highlighted by the OECD (2021[39]), the pandemic revealed that preventive and curative health-care systems were not ready to absorb such a shock: *"*pandemic preparedness needs improvement, and the distribution of medical equipment and drugs needs better co-ordination*"*.

Table 2.6. Summary impact of the COVID-19 pandemic on Goal 3 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
3.1 – Maternal mortality	none	none
3.2 – Death of newborns and children	positive	none
3.3 – Communicable diseases	negative	
3.4 – Premature mortality	negative	negative
3.5 – Prevention of substance abuse	negative	negative
3.6 – Road traffic accidents*	positive	none
3.7 – Access to sexual health care	negative	
3.8 – Health coverage	none	none
3.9 – Deaths and illness from pollution	positive	none
3.a – Tobacco consumption	positive	none
3.b – Vaccination		
3.c – Health work force		
3.d – Health emergency preparedness		

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect the OECD's work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 4 – Quality education

Goal 4 is the education goal. It calls countries to *"*ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*"*. Despite some variation among OECD countries, school enrolment and attendance – from pre-primary schools to upper secondary education – are high, and an increasing share of adults has access to education and training opportunities. However, the achievement of Goal 4 by 2030 is not assured in OECD countries, as too many children, youth and adults currently lack the basic skills needed to become engaged citizens and live better lives. Inequities in education start early in life and tend to accumulate owing to a number of different factors, including socio-economic background, gender and geographic location.

Education has been much affected by the COVID-19 crisis. The lockdowns have interrupted education at all levels, with nationwide closures of schools, universities and training facilities in most OECD countries. While education systems in OECD countries have made important efforts to maintain learning continuity during this period, especially through remote learning using digital technology, children and students have had to rely more on their own resources to continue learning remotely. However, some programmes such as vocational education and training are less suited to remote delivery. Not only is work-based learning difficult to replicate in a virtual setting, but a number of employers have also cut back in providing apprenticeships due to confinement measures and economic slowdowns. Moreover, among more disadvantaged students lower connectivity and access to digital materials, and a less quiet learning environment at home risk impeding learning.

Assessing OECD countries' performance on Goal 4

This report uses data from the *SDG global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 2.7 shows that data allow the monitoring of nine of the ten targets underpinning Goal 4, but only four of them can be assessed over time. For this goal, seven indicators sourced from the OECD complement the *SDG Global Database*. In most cases, they align with the global indicator framework.[40] Yet, drawing from OECD databases allows increasing country coverage (e.g. 4.2.2) or meeting higher statistical standards by preserving a strict comparability.[41] In other cases, a proxy measure from OECD sources is included in order to allow monitoring the target, while the available data in the *SDG Global Database* cover only a few OECD countries.[42] On top of the indicators listed in the table below, the database includes one extra data series for Target 3.a, but it is considered to be mainly informative in the context of Goal 4 (details and data for all indicators are available at http://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-2-people.xlsx).

Table 2.7. Available data series supporting the monitoring of Goal 4

Indicator Code	Indicator Label	Available over time	Primary Source
4.1.1	Proportion of 15-year-olds achieving at least PISA level 2 in mathematics	Yes	OECD
4.1.1	Data series on the proportion of children and young people achieving a minimum proficiency level in i) mathematics and ii) reading at the end of (a) primary education and (b) lower secondary education	Yes	*SDG Global Database*
4.1.2	Completion rate – lower secondary education	Yes	*SDG Global Database*
4.1.2	Completion rate – upper secondary education	Yes	*SDG Global Database*
4.2.2	Participation rate in organised learning (one year before the official primary entry age)	Yes	OECD
4.2.2	Participation rate in organised learning (one year before the official primary entry age)	Yes	*SDG Global Database*
4.3.1	Participation rate in formal and non-formal education and training	Yes	*SDG Global Database*
4.3.1	Participation rate of adults in formal and non-formal education	Yes	OECD
4.4.1	Data series on the proportion of youth and adults with information and communications	Some	*SDG Global Database*

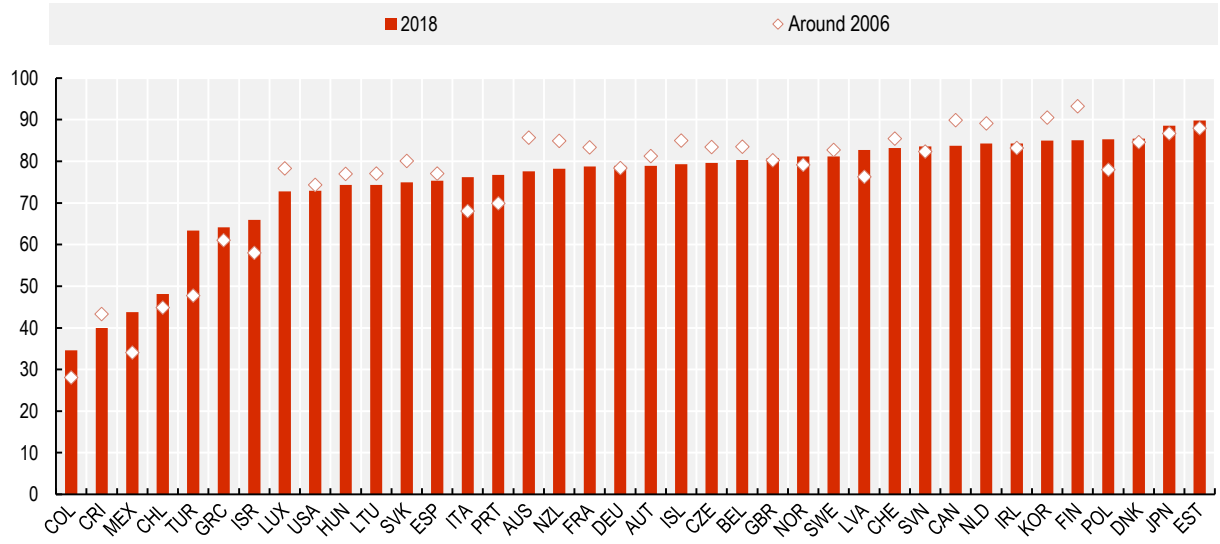
Indicator Code	Indicator Label	Available over time	Primary Source
	technology (ICT) skills, by type of skill		
4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	Some	*SDG Global Database*
4.5.1	*Socio-economic parity index (based on PISA ESCS Index) - math*	Yes	OECD
4.6.1	Proportion of population achieving at least a fixed level of proficiency in functional skills – literacy	No	*SDG Global Database*
4.6.1	Proportion of adults achieving at least a fixed level of proficiency in functional numeracy skills	No	OECD
4.6.1	Proportion of population achieving at least a fixed level of proficiency in functional skills – numeracy	No	*SDG Global Database*
4.7.1	Extent to which global citizenship education and education for sustainable development are mainstreamed in national education policies	No	*SDG Global Database*
4.7.1	Extent to which global citizenship education and education for sustainable development are mainstreamed in student assessment	No	*SDG Global Database*
4.7.1	Extent to which global citizenship education and education for sustainable development are mainstreamed in curricula	No	*SDG Global Database*
4.7.1	Extent to which global citizenship education and education for sustainable development are mainstreamed in teacher education	No	*SDG Global Database*
4.a.1	Data series on the proportion of schools offering basic services	No	*SDG Global Database*
4.c.1	*Proportion of teachers who received in-service training in the last 12 months*	No	OECD

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Recent trends in educational attainment and achievement in OECD countries are remarkably stable, meaning that, on current trends, Target 4.1 will be missed in 2030. Target 4.1 seeks to ensure that all students achieve a basic standard of learning while they are in school. The target encompasses both the quantity of schooling (through completion rates) and its quality (through measures of students' proficiency in reading and mathematics). While school completion rates are high on average, many young people still leave school without meeting the minimum proficiency levels in reading and mathematics, and the situation was not improving even before the COVID-19 pandemic hit. In 2014, on average among OECD countries, more than 95% of children complete lower secondary. 22 OECD countries have already achieved universal completion rates[43] for lower secondary education, and four additional countries are within a short distance of the target. Yet, two countries, Colombia and Costa Rica, remain far from the target with more than one in four children leaving school before completing lower secondary. In addition, on average one in five children in OECD countries still does not complete upper secondary education, and nine OECD countries are considered to be far from the target, with completion rates below 78% (down to less than 60% in Turkey, Costa Rica and Mexico).

Beyond school completion, Target 4.1 is also monitored through measures of students' proficiency in reading and mathematics at different stages of schooling (operationalised at 97% of students meeting the minimum proficiency requirements). In 2018 (or latest available year), at the end of primary schooling and at the end of lower secondary around 25% of students, on average, do not meet the minimum proficiency requirements in mathematics, and in reading around 10% fail to do so at the end of primary but 25% at the end of lower secondary. This rate can rise to 50% or above in some countries, such as Chile, Mexico, Costa Rica and Colombia (Figure 2.10). Recent trends suggest that learning outcomes are stable in most countries, with improvements observed in only a handful of cases – most notably in Poland, Portugal and Turkey – but no OECD country is expected to meet Target 4.1.

Figure 2.10. Proportion of 15-year-olds achieving at least PISA level 2 in mathematics (Target 4.1)



Note: Around 2006 refers to 2006 for Colombia, Chile, Israel, Lithuania, the United Kingdom, Slovenia and Estonia; 2009 for Costa Rica; and 2003 for otherwise.
Source: OECD, *PISA 2018 Database*, https://www.oecd.org/pisa/data/2018database/ (accessed on 29 October 2021).

StatLink https://stat.link/381xjm

Target 4.2 seeks to ensure that all children benefit from quality early childhood education and care (ECEC). **Available measures show high levels of access to quality ECEC in most OECD countries.** The SDG global indicators on early childhood education refer to the proportion of children under age 5 who are "developmentally on track in health, learning and psychosocial well-being". This is a complex outcome, for which a methodology was approved only recently by the Inter-Agency and Expert Group on SDG Indicators (which includes the OECD as an observer). Until the new methodology is more widely adopted, Target 4.2 focuses only on access to quality early childhood care and education as measured by the participation rate in organised learning (one year before the official primary entry age), with the target level set at 97%. This report includes data from both the *SDG Global Database* and OECD. However, while the two sources are almost perfectly aligned,[44] this report only discusses estimates based on OECD data sources, as the country coverage is broader. In 2018, on average across OECD countries, 96% of children one year younger than the official primary school entry age were enrolled in ECEC. Some countries, including Australia, the Slovak Republic and Turkey, are still far from universal coverage, with more than one child in ten not being enrolled in these countries. While most OECD countries are expected to progress towards (or remain at) very high rates, nine countries do not show any progress in ECEC enrolment (and some of them, such as the Slovak Republic, the United States, Japan, Hungary and the Czech Republic, even show declines).

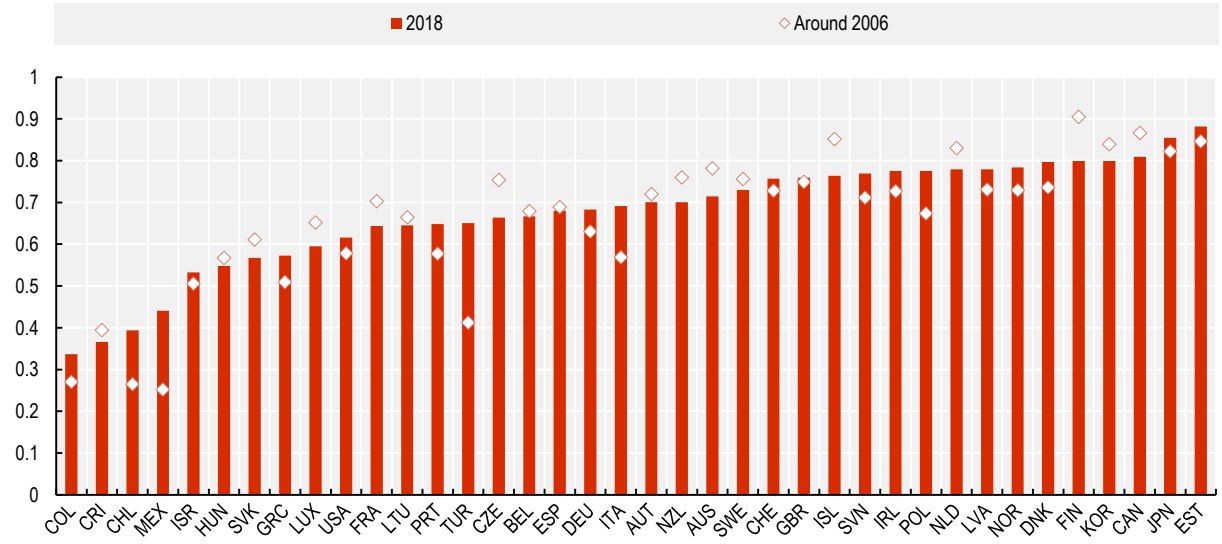
Beyond upper secondary education, lifelong learning has become more widespread, but large disparities among OECD countries remain in this area. Target 4.3 on quality Technical and Vocational Education and Training (TVET) and tertiary education recognises the many alternative paths through which young people and adults can acquire the necessary skills to ease their transition into the labour market, become engaged citizens and live better lives.[45] To monitor Target 4.3, the measure proposed by the IAEG-SDGs is the participation rate of youth and adults in formal and non-formal education and training in the previous 12 months. In this report, the target level is operationalised at 64% relative to the best performances observed in 2016 among OECD countries (Switzerland, the Netherlands, New Zealand and Sweden). On average, around half of youth and adults in OECD countries engaged in formal or non-formal education and training in the previous 12 months (whether for work or non-work purposes), but large

country disparities exist. Based on rates observed in 2015, eight countries (Sweden, Switzerland, New Zealand, the Netherlands, Norway, Austria, Canada and the United States) can be considered as having a large share of participation in formal and non-formal education – i.e. more than 57% of youth and adults. Conversely, in Lithuania, Poland, Ireland, Turkey and Greece, less than 30% of adults were engaged in education and training. On average, the number of students pursuing tertiary education has grown continuously over the past two decades, and it is expected to continue growing through to 2030 (OECD, 2018[75]), but progress is uneven; while 11 OECD countries are progressing or record high participation rates, 13 are stable at lower levels or are declining.

Information and communications technology skills vary greatly between OECD countries. Target 4.4 aims to increase the number of youth and adults with the necessary skills to thrive in the labour market. Since in today's increasingly digitalised economies, literacy and numeracy skills may not be sufficient to thrive in the labour market, Target 4.4 includes measures of skills in information and communications technology (ICT). ICT skills refer to nine computer-related activities with varying levels of difficulty, from transferring files between a computer and other devices to writing a computer programme using a specialised programming language. These skills are benchmarked against the best performance observed in 2015 among OECD countries, with performance varying largely across countries and skills.[46] For example, while on average, over 50% of adults over the age of 15 are able to transfer files between a computer and other devices, less than 10% them are able to use specialised programming language. Overall, four OECD countries (Iceland, Denmark, Norway and Luxembourg) are among the top performers on all ICT skills, while four of them (Italy, Poland, Turkey and Colombia) show relatively poor outcomes in all areas where data is available. Around three out of five OECD countries are considered to be within short or medium distances to target levels of ICT skills, and none are expected to fully meet these targets by 2030.

Differences in gender, socio-economic background and location explain a significant share of the differences in education outcomes. Leaving no one behind is one of the key principles of Agenda 2030. Target 4.5 calls for eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for vulnerable persons. The Goal 4 monitoring framework allows the disaggregation of education indicators by individual characteristics in many different areas. The high-level picture presented here relies on 44 different data series and includes parity indices (by socio-economic, gender, location and migration status) for different levels of education (pre-primary school, primary school, lower secondary, upper secondary as well as the training of youths and adults). By construction, the target levels were set to 1 (i.e. full parity). The richness of evidence provided by parity indices presented by the OECD (2018[75]; 2021[76]) shows that the performance of 15-year-olds is strongly associated with the location of their school (in rural or urban areas) and with their socio-economic background and migrant status. The socio-economic status of students also influences their participation in early childhood education, as well as in vocational and technical education.[47] Figure 2.11 shows that, in 2018, no OECD country was able to prevent socio-economic inequalities from affecting education outcomes. The impact of the financial, social, cultural and human capital resources available to students appears to be lowest in Japan and Estonia, while it is highest in Mexico, Chile, Costa Rica and Colombia. No OECD country has been able to reach the short distance to the targets for all the indicators included in this report. Still, the impact of inequality on education differs substantially among countries, with Canada, Estonia and Ireland being the countries reporting the lowest impact, while Chile, Japan, Costa Rica, Mexico, Turkey and Colombia show the highest impact. Trends differ among countries and indicators but, as confirmed by more specific analysis, in a vast majority of cases, besides gender inequality, inequalities have not decreased in the last decade (OECD, 2018[75]; OECD, 2021[76]).

Figure 2.11. Socio-economic parity index (based on PISA ESCS Index) (Target 4.5)



Note: Around 2006 refers to 2006 for Colombia, Chile, Israel, Lithuania, the United Kingdom, Slovenia, Estonia and Costa Rica and 2003 for otherwise.
Source: OECD, *PISA 2018 Database*, https://www.oecd.org/pisa/data/2018database/ (accessed on 29 October 2021).

StatLink https://stat.link/das314

Low-skilled adults make up a significant share of the population in most OECD countries. Target 4.6 aims at ensuring that most adults achieve literacy and numeracy proficiency (operationalised at 97% of the adult population being above the minimum proficiency level in literacy or numeracy). Using data from 2013, only two OECD countries can be considered to be at a short distance to target on at least one indicator: Colombia, where more than 90% of adults can be considered as having high skills in literacy,[48] and Japan, where more than 90% of adults meet the minimum proficiency level in both literacy and numeracy. Conversely, the distance to target is long in around half of OECD countries in numeracy and in one-third of them in literacy (i.e. more than 20% of the adult population is below the minimum proficiency level). In Chile, Mexico and Turkey, this rate exceeds 45% in both dimensions. The available data does not allow to monitor progress over time.

Despite the paucity of data, early estimates suggest a great diversity of outcomes among OECD countries when it comes to education to promote sustainable development. As emphasised in the 2030 Agenda, education is also key in ensuring that youth become engaged citizens and participate in society. In particular, Target 4.7 aims at *"*ensuring that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development*"*. Indicator 4.7.1 measures the extent to which i) global citizenship education and ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: a) national education policies, b) curricula, c) teacher education and d) student assessment, for which the target levels are 1 (i.e. fully mainstreamed). Following the Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Targets 12.8 and 13.1. Technical work led by the UNESCO Institute for Statistics (UIS) and supported by the OECD is underway to produce instruments for measuring this indicator. Early results suggest that in 2020, among the 24 OECD countries for which some data is available, a few such as France, Spain, Germany and Latvia are already mainstreaming global citizenship education and education for sustainable development in at least three of the measured areas. Conversely,

some countries such as Canada, Austria, Denmark, the Slovak Republic, the Czech Republic, the United Kingdom and New Zealand seem to be much further from achieving Target 4.7. Yet, the limited data availability and the stark differences among the different domains may nuance this assessment. For instance, while 13 OECD countries can be considered as close to target when focusing on national education policies, the same is true for six countries on teacher education and only one (France) for curricula.

Target 4.a addresses the need for adequate physical infrastructure and safe, inclusive environments that nurture learning for all, regardless of a person's background or disability status. It is monitored through the proportions of schools offering different types of basic services.[49] **All schools in most OECD countries offer basic facilities to support teaching and learning,** including electricity, safe drinking water and sanitation facilities. In addition, with a few exceptions (mainly in Colombia, Costa Rica, Italy, Israel and Mexico), almost all students in OECD countries have access to computers and the Internet at school. Available measures, however, do not provide information on how often computers are used or made available to students or on how well technology is integrated into learning practices.

The distance to target is not assessed for Target 4.b on education scholarships available to developing countries. Beyond measures of learning outcomes, ensuring equitable participation and skills acquisition relies on the availability of resources. Target 4.b aims to measure the extent to which international education assistance is targeted to the countries that are most in need. To monitor Target 4.b, the indicator proposed by the global indicator framework is the volume of ODA flows for scholarships by sector and type of study. As detailed for other aid-related indicators, such measures are not assessed in this report. Unlike total ODA, which has a clear international benchmark, the sectoral breakdown of aid depends on many contextual factors. Still, it provides useful information, and it is discussed extensively in OECD reports (OECD, 2018[75]). Official development assistance for scholarships is concentrated among five donor countries and institutions (France, Japan, EU institutions, Saudi Arabia and Turkey), which provided more than half of the total in 2019.

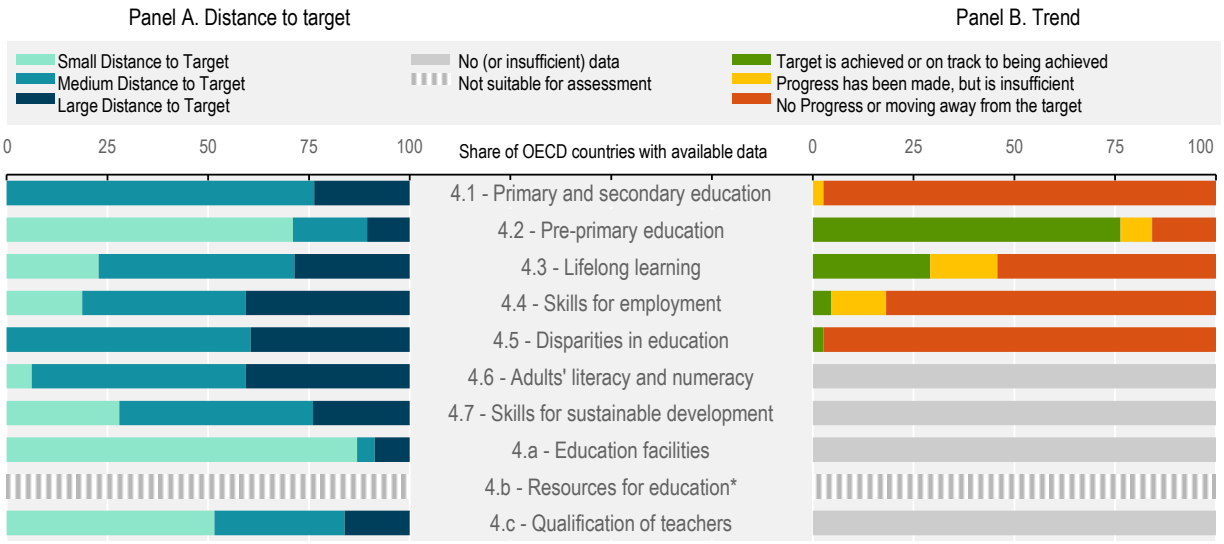
Despite some differences between OECD countries, most teachers benefit from regular training. Target 4.c aims at increasing the supply of qualified teachers. It is to be measured through the proportion of teachers with the minimum required qualifications. Still, few OECD countries are covered by the data series available in the *SDG Global Database*. Therefore, the assessment for Target 4.c relies on OECD sources to measure the proportion of teachers who received in-service training in the last 12 months (operationalised at 97%). Teachers are often at the centre of initiatives to improve the quality of education, as their work shapes the quality of instruction and student learning outcomes (Ainley and Carstens, 2018[77]). Continuous professional development (CPD) is a vital element of teachers' career path, providing training that can affect both classroom and school practice, and it is a key component of Target 4.c. Overall, the OECD Teaching and Learning International Survey (TALIS) showed that in 2018 participation in some kind of in-service training was commonplace among teachers in all OECD countries, with more than 90% of teachers and principals attending at least one continuous professional development activity in the year prior to the survey. Five countries (France, Chile, Portugal, Japan and Mexico) nonetheless report lower shares of teachers participating in CPD, although still with levels of participation above 80%.

Summing up

While inclusive and equitable quality education is key to achieve sustainable development, no OECD country is expected to meet all the targets relating to Goal 4 on quality education by 2030. Even prior to the pandemic, most OECD countries were showing no progress towards or were even moving away from most of the education targets. Target 4.2 on access to early childhood education and care was the only exception, with the majority of countries expected to meet this target (Figure 2.12, panel B). While school enrolment and completion rates are high on average, no OECD country is close to achieving the relevant learning outcomes and too many young people cannot meet the minimum proficiency levels in

reading and mathematics (Target 4.1). Worse, inequities in education (Target 4.5) start early in life and tend to accumulate, owing to a number of different factors, including socio-economic background, gender and geographic location, leading to literacy and numeracy skills that are below target levels even among adults in most OECD countries (Target 4.3). Yet, formal and non-formal education and training have become more prevalent in most countries (Target 4.6). Besides literacy and numeracy skills, developing skills in information and communication technology has become indispensable in different aspects of daily life, ranging from the labour market to access to services, and even more so since the onset of the pandemic (see Impact of the COVID-19 pandemic on Goal 4). Still, the majority of young people and adults lack ICT skills in most OECD countries (Target 4.4).

Figure 2.12. Distance to target and trends over time in OECD countries, by SDG target, Goal 4



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of their recent changes in the indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those countries whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data with which to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see methodological annex for details.
Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 4

The unprecedented health crisis that we are experiencing, linked to the rapid spread of COVID-19 throughout the world, is having strong impacts on education systems (Targets 4.1 and 4.2). Schools have had to close for several months in most countries, with school closures representing roughly 28% of total instruction days over a typical academic year at pre-primary and more than 56% at upper secondary level on average across OECD countries (OECD, 2021[78]). Governments have reacted to ensure pedagogical continuity over this period, and distance learning has taken over rather effectively. In many

cases, this had to be done immediately. However, this is not necessarily the most appropriate response for the most disadvantaged students who need more individualised support, nor for the less well-off families, who do not necessarily have sufficient equipment or material comfort to provide their children with the conditions they need to follow their courses and not drop out. Preliminary analysis has shown that learning disruptions may have significant repercussions on students' performances. For instance, the World Bank estimated that learning disruptions could lead to a 25% increase in the share of secondary students performing below PISA level 2 (Azevedo et al., 2020[79]). Other studies estimated that students who missed in-school instruction due to the pandemic are likely to return in autumn 2020 with approximately 63%-68% of the learning gains in reading relative to a typical school year and with 37%-50% of the learning gains in math (Kuhfeld et al., 2020[80]).The UNESCO Institute for Statistics estimates that for Europe and North America, it may take 4 to 10 years to catch up the lost learning resulting from the lockdowns in lower primary, from 6 to 13 years in upper primary and from 6 to 15 years in upper secondary (UIS, 2021[81]).

Access to education and training for adults (Target 4.3) was heavily disrupted in 2020, particularly for vocational education and training programmes (VET) (Table 2.8**)**. Survey data show that all OECD countries had at least partially closed VET institutions during 2020 (OECD, 2021[82]). While the more academic streams have been able to offer more flexible learning options, VET suffered from a double disadvantage. First, although VET institutions also used online platforms during closures, whether they are school-based or combined school- and work-based programmes, practical teaching forms a particularly important part of their curricula, which is difficult to do at a distance (OECD, 2021[82]). Second, the lockdown had serious consequences on the work-based components of those programmes. For example, apprentices who were placed in companies and sectors that have come to a standstill have largely stopped their working activities. Further, with an economic crisis looming, it is also an open question whether companies will wish to continue to take on apprentices when their priority will be to relaunch their businesses (OECD, 2020[83]). In the long run, a reduced availability of work-based learning opportunities for VET students may also lead to fewer students choosing to enrol in VET programmes (OECD, 2021[82]).

The pandemic highlighted even further the key role of ICT skills for adults in a digitalised world (Target 4.4). From school to work, COVID-19 has resulted in a significant expansion of the online environment. The crisis highlighted some of the key barriers to digitalisation, including the prerequisites of adequate digital skills, computer equipment and Internet access to undertake training online and the difficulty of performing traditional work online. Yet the pandemic may also have induced gains in digital skills.

The impact of the crisis on education is far from being even (Target 4.5), with some groups, including girls, ethnic minorities and students with learning disabilities, being much more likely to be affected (Azevedo et al., 2020[79]; Hanushek and Woessmann, 2020[84]). In addition, while on average across OECD countries more than 90% of advantaged students report having a quiet place to study at home and a computer that they can use for schoolwork, only 69% of disadvantaged students have access to such facilities, putting them at greater risk of disengagement (OECD, 2019[85]). In addition, as stressed in (OECD, 2021[86]), parents from disadvantaged backgrounds may face more challenges in supporting their children with schoolwork (e.g. due to time constraints, or lack of familiarity with the learning material).Some studies even suggest that losing ground during the COVID-19 school closures would not be universal, with the top third of students potentially making gains in reading (Kuhfeld et al., 2020[80]).

Governments have reacted quickly to ensure pedagogical continuity during the lockdowns, and distance learning has taken over rather effectively. In many cases, this had to be done immediately and without specific preparation, which also challenged teachers to use new techniques and methods and further highlighted the need for thorough training in this area (Target 4.c) (OECD, 2020[83]). Few countries (Belgium, Colombia, Israel, Finland, Lithuania, Luxembourg and Turkey) have so far provided comparable data on the proportion of primary and secondary teachers with training in ICT tools before and after the onset of the pandemic, with all seven countries showing improvements (OECD, 2021[78]).

Table 2.8. Summary impact of the COVID-19 pandemic on Goal 4 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
4.1 – Primary and secondary education	negative	negative
4.2 – Pre-primary education	negative	negative
4.3 – Lifelong learning	negative	negative
4.4 – Skills for employment	negative	negative
4.5 – Disparities in education	negative	negative
4.6 – Adults' literacy and numeracy	none	none
4.7 – Skills for sustainable development		
4.a – Education facilities	none	none
4.b – Resources for education*		
4.c – Qualification of teachers		

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect the OECD's work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 5 – Gender equality

Goal 5 aims to "achieve gender equality and empower all women and girls". It primarily focuses on social norms, equal representation and violence against women. Available data suggest that despite progress, innumerable challenges remain, and women's rights and opportunities are still limited in both the private and public spheres. In OECD countries, no country has been able to reach the maximum score when it comes to having a legal framework that promotes gender equality, nor has any country reached equal representation at higher levels of decision making in political, economic and public life or been able to close the gender gap in wages and in paid and unpaid work. In addition, while more reliable information is still needed, the evidence already available shows that violence against women remains a serious problem. Progress has been observed in the few areas where data allow tracking progress over time, but to better understand both the magnitude and root causes of gender inequality, more comprehensive and more regular data collections are needed.

The pandemic has affected the levels of women's paid and unpaid work. As women make up a large share of workers in the sectors defined as essential, including health care and education, they have been facing exceptional work demands (OECD, 2021[24]). Women have also suffered from bigger employment losses and higher unemployment (OECD, 2020[87]). In addition, school closures and home confinement have increased their unpaid work time. The pandemic has, however, had effects on women far beyond time-use. Lockdowns are also likely to have undermined women's personal safety by exacerbating the problem of domestic violence.

Assessing OECD countries' performance on Goal 5

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 2.9 shows that data allow the monitoring of six of the nine targets underpinning Goal 5 on gender equality, but only two targets can be assessed over time. For this goal, five indicators sourced from the OECD complement the *SDG Global Database*. In most cases, these align with the global indicator framework, and drawing from OECD databases allows for higher country coverage (5.4.1 and 5.5.2). In other cases (5.3.2 and 5.b.1), although the OECD indicators slightly deviate from the global indicator framework, relying on OECD data sources allows monitoring indicators for which data are not available for enough OECD countries in the *SDG Global Database* (details and data for all indicators are available at http://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-2-people.xlsx).

Table 2.9. Available data series supporting the monitoring of Goal 5

Indicator Code	Indicator Label	Available over time	Primary Source
5.1.1	Legal frameworks that promote, enforce and monitor gender equality - Area 1: overarching legal frameworks and public life	No	*SDG Global Database*
5.1.1	Legal frameworks that promote, enforce and monitor gender equality - Area 2: violence against women	No	*SDG Global Database*
5.1.1	Legal frameworks that promote, enforce and monitor gender equality - Area 3: employment and economic benefits	No	*SDG Global Database*
5.1.1	Legal frameworks that promote, enforce and monitor gender equality - Area 4: marriage and family	No	*SDG Global Database*
5.2.1	Proportion of ever-partnered women and girls subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months	No	*SDG Global Database*
5.3.2	*Legal framework prohibiting female genital mutilation*	No	OECD
5.4.1	Proportion of time spent on unpaid domestic chores and care work	No	*SDG Global Database*
5.4.1	Gender gap in unpaid work	No	OECD

Indicator Code	Indicator Label	Available over time	Primary Source
5.4.1	Proportion of time spent on unpaid care work	No	*SDG Global Database*
5.4.1	Proportion of time spent on unpaid domestic chores	No	*SDG Global Database*
5.5.1	Proportion of elected seats held by women in deliberative bodies of local government	No	*SDG Global Database*
5.5.1	Proportion of seats held by women in national parliaments	Yes	*SDG Global Database*
5.5.1	Proportion of seats held by women in national parliaments	Yes	OECD
5.5.2	Proportion of women in senior and middle management positions	Yes	*SDG Global Database*
5.5.2	Proportion of women in managerial positions	Yes	*SDG Global Database*
5.5.2	Gender gap in the share of employed who are managers	Yes	OECD
5.b.1	*Proportion of women using the Internet*	Yes	OECD

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

While no OECD country has a comprehensive legal framework to end discrimination against women, some are closer than others. Target 5.1, which is about ending all forms of discrimination against women, is measured through the share of countries having at least minimum laws to promote, enforce and monitor gender equality, hence the natural target is 100% (operationalised at 97%).[50] Overall, in 2020, the picture is rather mixed. According to available data, Portugal appears to be the only OECD country that can be considered to be at a short distance to the target on average over the four dimensions of the legal framework, while 19 OECD countries are deemed to be at a medium distance. Conversely, 13 countries are, on average, at a long distance. Among these, Japan, Israel, Chile, the Czech Republic, Hungary and Ireland are not at a short distance in any sub-dimension of the index. Data from the *SDG Global Database* also allow disentangling the different aspects of the legal frameworks. Overall, OECD countries appear to be closest on the "employment and economic benefits" dimension (92% of laws covered on average), followed by laws on violence against women and on marriage and the family (83% and 84% on average) and furthest on the "overarching legal frameworks and public life" dimension (with 76% of laws on average). Yet, the lack of consistent time series prevents assessing trends.

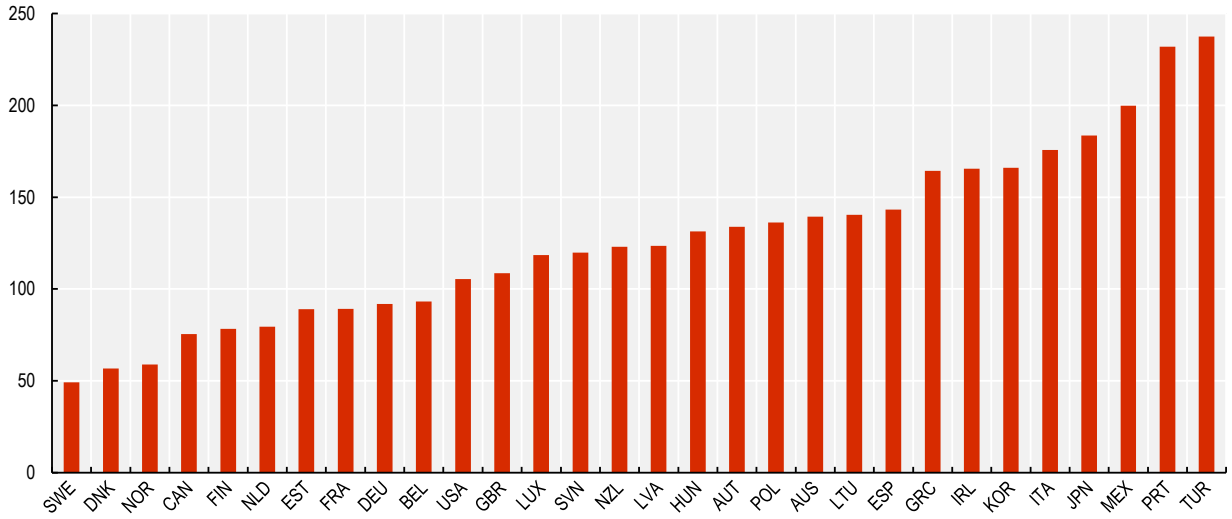
While more reliable information is needed, the available evidence shows that violence against women remains a serious problem. Violence against women is one of the most widespread, persistent and devastating violations of human rights in the world. Women face risks of violence wherever they go — at home, in public, at work and online. Target 5.2 calls for "eliminating all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation". For global monitoring, the IAEG-SDGs suggested that Target 5.2 would be measured by the proportion of women who experienced violence (whether physical or psychological) by an intimate or non-intimate partner in the previous 12 months. Unfortunately, available data fail to provide a comprehensive assessment. The *SDG Global Database* includes data only on violence committed by an intimate partner (current or former) over the past 12 months and is restricted to women aged 15-49. In addition, the lack of time series does not allow monitoring trends in violence against women over time. All forms of violence against women are unacceptable, which implies that the ideal target should be set at 0; however, the target level is operationalised (mainly for statistical reasons) at a slightly higher level of 3%. Among the 22 OECD countries for which data are available, in 2018, this rate was at 3% or lower only in Spain, Australia, Iceland, Canada and Switzerland. Conversely, in six countries, including Costa Rica, Korea, Finland, Mexico, Colombia and Turkey, this rate ranges from 7% to 12%. Factors such as inadequate public resources for data collection, shame and fear on behalf of the victim, as well as reluctance to identify and take action against the perpetrators, suggest that the real prevalence is likely to be well above reported levels (Queisser, 2020[88]).[51] In addition, special attention needs to be paid to the scope of the indicator. While violence against women may have long-term consequences, it is limited to the previous 12 months, focuses on intimate violence only and is restricted to women aged 15 to 49.

Few OECD countries offer a legal framework that protects women and girls from female genital mutilation. Target 5.3 aims at eliminating harmful practices such as early and forced marriage as well as female genital mutilation (FGM). However, such data are rarely collected in OECD countries (and even when they are, they are not reported in comparable forms). To overcome this issue and provide some elements of understanding, this report relies on a composite measure from the *OECD's Gender, Institutions and Development Database (GID-DB)*. Yet, while the *GID-DB* aims at including global data on laws, attitudes and practices related to different areas in which women face discrimination for OECD countries, the available data only allows tracking the legal aspect of FGM, and not attitudes towards FGM nor the actual prevalence among women. The measure ranges from 0, when the legal framework protects women and girls from FGM and when customary, religious and traditional laws or practices do not encourage the practice (0 is thus considered as the target level), to 1 (the legal framework does not at all protect women and girls from FGM). In 2019, the distances were deemed to be short for eight OECD countries, including Australia, Belgium, Sweden, the United States, Austria, Ireland, the United Kingdom and New Zealand. Yet, nine of them (Canada, Germany, the Netherlands, Italy, France, Switzerland, Portugal, Norway and Spain) have scores of 0.25 (some customary, religious and traditional laws or practices encourage the practice, but the law takes precedence over these laws or practices and protects women and girls from FGM). These countries are considered to be at a medium distance to the target. Finally, 21 countries are considered to be far from target, with scores exceeding 0.75 (the legal framework protects women and girls from FGM but does not foresee criminal penalties for all types of practitioners of FGM).

In all OECD countries, women still do the lion's share of unpaid work. When combining both paid and unpaid work, the very long hours spent in unpaid work (e.g. routine housework, care of children and frail elderly, shopping for household goods and services, travel related to household activities) leave women working longer hours than men in most OECD countries (OECD, 2020[49]). Target 5.4, which is about recognising and valuing unpaid work, is to be monitored by different measures of the allocation of time spent on unpaid domestic and care work by gender. Although the natural target is to have no difference between women and men, target levels for each data series used from the OECD and *SDG Global Database* have been operationalised at 3 minutes difference per day to allow for measurement errors. These data suggest that most OECD countries can be considered as being at a small to medium distance from target on gender gaps in care work (with the exceptions of Portugal, Costa Rica, Colombia, Chile, Australia and Mexico, where gender gaps are greater than 33 minutes per day[52]). Cross-country differences are even larger when it comes to domestic chores, with 12 OECD countries reporting gaps exceeding 94 minutes per day. Overall, gender gaps in time spent on unpaid work greatly vary among countries. When different types of activities (such as routine housework, shopping, care work, volunteering, travel related to household activities) are assessed together, no OECD country is close to the target (Figure 2.13). Yet, untimely data (for 5 OECD countries, the latest year available date back to 2005 or earlier, for instance) and the lack of consistent time series block an understanding of the evolution of unpaid work in most countries (OECD, 2021[89]).

Figure 2.13. Gender gap in unpaid work (Target 5.4)

In time spent in unpaid work, minutes per day



Note: Data are observed in 1999 for Portugal, 2001 for Denmark and Slovenia; 2003 for Latvia and Lithuania; 2005 for Ireland; 2006 for Australia; 2009 for Austria; 2011 for Norway; 2013 for Germany, Belgium, Luxembourg, Poland and Greece; 2014 for Korea, Italy and Mexico; 2015 for Canada, the United Kingdom and Turkey; 2016 for the Netherlands, Japan and the United States; and 2010 for otherwise.
Source: OECD, *Time Use Database*, https://stats.oecd.org/Index.aspx?DataSetCode=TIME_USE (accessed on 29 October 2021).

StatLink https://stat.link/1qw5z7

Despite progress, particularly in the political sphere, women remain under-represented in public decision making. Target 5.5 aims to "ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life". To monitor Target 5.5, the IAEG-SDGs proposes two indicators. The first indicator focuses on the proportion of seats held by women in i) national parliaments and ii) local governments (operationalised at 50%, i.e. equal representation). As highlighted by the OECD (2021[90]), in 2021, women's participation in the lower/single house of parliaments across OECD countries averaged at 32%. The level is considered at a short distance to the target (i.e. over 45%) in Costa Rica, Finland, Mexico, New Zealand and Sweden and at a large distance (i.e. less than 35%) in the majority of OECD countries. Distances are particularly large in Hungary and Japan, with less than 15% women's participation in parliament. Despite an overall positive trend in women representatives in national parliaments, ensuring a balance in women's representation in political decision making requires stronger action. In some countries (including in Germany, Iceland and Slovenia), the share of women in parliament has been falling (OECD, 2021[90]). The IAEG-SDGs' second indicator focuses on the economic sphere and the proportion of women in managerial positions, where women also appear to be under-represented. In 2019, three out of five OECD countries are at a medium to large distance to the target when it comes to closing the gender gap in managerial positions (target level set at 1, i.e. equal shares of men and women in managerial positions). The gap is highest in Japan and Korea. While there are signs of improvement, a glass ceiling continues to prevent women's full and effective participation.

The available data does not allow covering Target 5.6 on access to reproductive health. While measures do exist concerning the extent to which countries have laws and regulations that guarantee full and equal access to women and men to sexual and reproductive health care, information and education, these do not cover enough OECD countries to be included in this report. The IAEG-SDGs also suggests monitoring Target 5.6 through data on the share of women who make informed decisions regarding sexual

relations, contraceptive use and reproductive health care. Yet, data are lacking for all OECD countries on this front.

Women's land ownership rights (Target 5.a) are not assessed due to lack of data. No data are available to measure how many women own agricultural land in OECD countries, and data on policy measures related to women's rights to land ownership[53] are available only in Colombia, Costa Rica, Italy, Portugal, the Slovak Republic, Switzerland and Sweden.

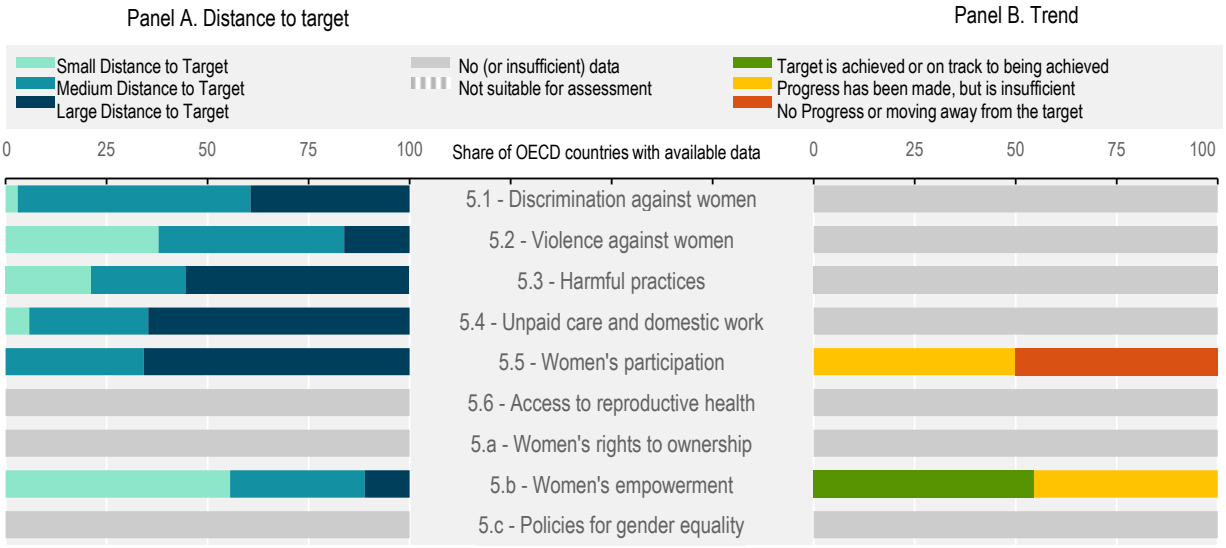
The majority of women in all OECD countries have access to ICT tools, and their use of them has been constantly increasing. Target 5.b calls to *"*enhance the use of enabling technology, in particular information and communications technology (ICT), to promote the empowerment of women*"*. The global indicator framework proposes the proportion of individuals who own a mobile telephone as a measure to monitor Target 5.b. As not enough OECD countries are covered in the available data for this measure in the *SDG Global Database*, this report includes a measure of the proportion of women using the Internet from OECD sources (operationalised at 96%). Based on this indicator, in 2019, 89% of women (on average across OECD countries) accessed to the Internet. Although distances to target are large in four countries (Italy, Greece, Mexico and Turkey – where around 25% of women do not use the Internet), all OECD countries are progressing towards the target.

There are no available data to assess Target 5.c. The adoption and strengthening of policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels (Target 5.c) is to be tracked through measures of systems to track and make public allocations for gender equality and women's empowerment. To date no data are available for OECD countries.

Summing up

While the lack of sufficient data hinders a comprehensive assessment of progress towards all the targets related to Goal 5, available data do suggest that most OECD countries are currently far from achieving gender equality and empowering women and girls in both public and private spheres (Figure 2.14, panel A). The picture is relatively positive for Target 5.b relating to women's use of enabling technology, as only one in ten OECD countries is at a large distance to target, and none of them are showing regressive trends (Figure 2.14, panel B). Yet, apart from women's access to technology, serious barriers to achieving gender equality persist. Violence against women is still widespread and remains a major issue in most OECD countries (Target 5.2). Only one in three OECD countries can be considered at a short distance to eliminating violence against women. Gender inequalities also persist in terms of unpaid work (Target 5.4). While the gap is smaller in some OECD countries, in all of them women still spend much more time on unpaid domestic and care work than do men. Similarly, in the political and economic spheres, no country has achieved equal representation of women and men at different levels of decision making (Target 5.5). Although half of OECD countries are currently making progress towards equal representation, none are expected to achieve it by 2030. While filling legal gaps helps women fully enjoy their human rights, most OECD countries fall short in this regard too. No OECD country has a comprehensive legal framework to promote and ensure gender equality in all its dimensions (Target 5.1), and most of them also lack a legal framework to prevent and criminalise harmful practices such as female genital mutilation (Target 5.3).

Figure 2.14. Distance to target and trends over time in OECD countries, by SDG target, Goal 5



Note: Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of their recent changes in the indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those countries whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/xvnwt2

Impact of the COVID-19 pandemic on Goal 5

Target 5.1 (on legal discrimination against women) cannot be considered as being directly impacted by the COVID-19 pandemic. Still, as highlighted by the OECD (2020[87]), by redirecting policy priorities the health crisis might well have slowed progress on introducing new legislation and implementing existing legislation in many countries (Table 2.10).

Early evidence on the impact of COVID-19 suggests a striking increase of domestic violence after lockdown measures were introduced (Target 5.2). However, the pandemic also multiplied the challenges in collecting data on gender-based violence. Preliminary data should therefore be interpreted with caution. As stressed by the UNODC (2020[91]), lockdown measures can act as a potential catalyst for violence against women in two conflicting ways: by increasing strains in the home (as women spend more time in isolation); and by reducing exposure to crime committed outside of the home. So far, the UNODC has concluded that the impact of the COVID-19 on violence against women is ambiguous: *"no significant, homogeneous effect on recorded incidents of crime across countries has been identified so far".* Still, the reporting of rape and sexual assault to the authorities decreased, suggesting a reduction in the number of incidents outside the domestic sphere (reported violence reverted to previous levels once confinement measures were relaxed). In addition, UNODC analysis shows that in most countries more women reached out to helplines and that the increase in calls was greater where lockdown measures were more stringent.

Finally, the UNODC reports that there was no notable change in the number of gender-related killings of women and girls, with a decrease in some countries.

While both men and women increased their participation in housework and childcare during the lockdown, most of the burden fell on women, who were already doing most of the housework before the crisis. With more time and people at home, household chores and care increased accordingly (Target 5.4). In particular, the widespread closure of schools and childcare facilities increased the amount of time that parents must spend on childcare and child supervision, and this also introduced responsibilities for home schooling. Preliminary evidence from many OECD countries suggests that both men and women were affected by this rise in unpaid work, but that most of the additional burden fell on women (Abdo et al., 2020[92]; Farre et al., 2020[93]; Craig and Churchill, 2020[94]; İlkkaracan and Memiş, 2021[95]). In the longer run, however, the impact of the COVID-19 pandemic could be positive (Table 2.10). Fathers who were staying home were able to take primary responsibility for childcare. This may help change social norms that currently contribute to a lopsided distribution of the division of labour in housework and childcare (Alon et al., 2020[96]).

The disruption of health services induced by the COVID-19 crisis may have short-term effects on access to reproductive health care (Target 5.6). Stringent and lengthy lockdown measures adopted to avoid overwhelming health systems resulted in a significant disruption of essential services. Based on a survey conducted among 105 countries at various levels of development from different world regions, WHO (2020[70]) has suggested that family planning and contraception services were among the most impacted.

Target 5.c (on "adopting and strengthening sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls") does not seem to have been substantially impacted by the COVID-19 pandemic. Yet, as highlighted for Target 5.1, by redirecting policy priorities, the health crisis might well have slowed progress on introducing new legislation and implementing existing legislation in many countries.

Table 2.10. Summary impact of the COVID-19 pandemic on Goal 5 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
5.1 – Discrimination against women	negative	none
5.2 – Violence against women	negative	
5.3 – Harmful practices		
5.4 – Unpaid care and domestic work	negative	positive
5.5 – Women's participation	none	none
5.6 – Access to reproductive health	negative	none
5.a – Women's rights to ownership	none	none
5.b – Women's empowerment	none	none
5.c – Policies for gender equality	negative	none

Note: The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect the OECD's work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

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Notes

[1] The preamble of the 2030 Agenda starts by saying that it is *"a plan of action for People, Planet and Prosperity [that] also seeks to strengthen universal Peace [with] all countries and all stakeholders, acting in collaborative Partnership"*. Yet, no official mapping between the 5Ps and goals and targets had been endorsed. The mapping proposed here was first proposed by the United Nations (UNESCWA, 2018[97]) but it should not be considered as binding; the SDGs are integrated and indivisible, and some goals might relate to more than one P.

[2]The aggregation at goal level assumes equal weights among the data series measuring the same SDG indicator and equal weights among the indicators measuring the same target. The OECD average refers to the unweighted average.

[3] According to the Quality Framework for OECD Statistical activities, data quality is defined in terms of seven dimensions including relevance; accuracy; credibility; timeliness; accessibility; interpretability; and coherence (OECD, 2011[98]).

[4] Based on a tracking of more than 800 measures in response to COVID-19 on food and agriculture conducted by the OECD, it seems that many of the policy measures will remain in place in the medium term. Out of the 54 countries tracked, a minimum USD 157 billion was earmarked for the sector, with half for food assistance (OECD, 2021[36])

[5] While Target 1.1 refers to *"*eradicating extreme poverty*"* (i.e. attaining a 0% level by 2030), the World Bank suggested that, due to statistical errors and friction costs, the target could be considered as attained upon reaching a level of 3%.

[6] For a few SDG targets, the 2030 Agenda relies on relative end-values, i.e. the level of achievement to be attained is defined as a fraction or multiple of the country's starting position. This is the case for Target 1.2, which refers to reducing by half the proportion of people living in poverty based on national measures. In order to allow for comparability between countries, the target to be reached is defined as a share of the OECD median in 2015. For Target 1.2, the median relative poverty rate was 10.9% in 2015, thus the target to be reach for all countries was set at 5.45% by 2030.

[7] While poverty has traditionally been defined as the lack of money, a person who is poor can suffer multiple disadvantages at the same time – for example, they may have poor health or malnutrition, a lack of clean water or electricity, poor quality of work or little schooling. The OECD average for multidimensional poverty should be interpreted carefully, as it includes only 24 countries, mostly European as well as Mexico, and because the design of measures of multidimensional poverty may not be consistent across countries.

[8] While Colombia is expected to meet the target, the assessment relies only on the measure of multidimensional poverty.

[9] The reference population is different for the different indicators. For instance, in the case of work injury the reference population is the employed population, while in the case of unemployment cash benefits, the reference population is the unemployed population, etc.

[10] Social protection consists of policies and programmes designed to reduce poverty and vulnerability notably by addressing the risks of unemployment, poverty, sickness, disability and old age, as well as through programmes targeting vulnerable groups with special needs.

[11] Both the share of population above statutory pensionable age receiving an old-age pension as well as the share of population with severe disabilities receiving disability cash benefit seem to be constant at a rather high rate and thus likely to remain above the target level by 2030.

[12] Around one-third of OECD countries have progressed towards their target on the share of poor working-age population receiving secondary out-of-work benefits (safety nets) or the share of unemployed receiving unemployment cash benefit over the last decade, and only two of them are on track to meet their target.

[13] The very high rates of coverage and the absence of any notable trend create some noise in the measurement and may explain why complete coverage would not be expected by 2030.

[14] For data series supporting 1.5.1, the target level to be reached is set at 0 deaths and missing persons per 100 000 inhabitants. Similarly, for 1.5.2 (the direct economic loss attributed to disasters relative to GDP), the target level was set at 0% of GDP. The data series supporting the measurement of 1.5.3 and 1.5.4 are policy measures concerning the adoption and implementation of DRR strategies in line with the Sendai Framework at national and local levels. For those indicators, the target level was set at 100% (full adoption and implementation).

[15] While Italy scored 40% on the adoption and implementation of national DRR strategies in line with the Sendai Framework, another nine countries (Canada, Denmark, Iceland, Ireland, Israel, the Netherlands, the Slovak Republic, Sweden and Turkey) have a score of 0%. Yet, some of these data has not followed an official validation process and may be subject to revision at a later date, for instance, according to the Canada SDG hub, this score is 100% in Canada.

[16] Yet, given the nature and the volatility of the indicator, careful interpretation is needed. In the last 30 years, the number of disasters has significantly increased across OECD Member countries (OECD, 2017[102]). In addition, as acknowledged by the United Nations Office for Disaster Risk Reduction (UNDRR), some of the data feeding these indicators have not been officially validated and may be revised at a later date. Also, their full economic impact remains largely unknown, especially the cost of smaller disasters and indirect impacts such as those due to business disruptions (OECD, 2018[103]).

[17] While possible trajectories vary a lot between countries depending on the existing economic stabilisers and extraordinary policy packages put in place, all studies show that safety nets prevented or at least limited the expected rise in poverty. However, the results also depend on whether the poverty line is anchored to the pre-crisis level. When not doing so, most studies suggest that the impact of the crisis could be negligible in most countries.

[18] While informative, these estimates should be interpreted carefully, as not all of the budgeted allocations will be used (for instance, due to a low take-up). According to official estimates, the effective take-up of credit guarantees as a percentage of outstanding commitments was 4% in Australia (as of end August), 6% in Germany (as of end September), and 80.5% in Spain, 41.7% in France, 22.2% in the United Kingdom and 24% in Italy (as of end October) (OECD, 2020[100]).

[19] Estimates are derived from microdata from the United States Census Bureau, and flash estimates produced by Eurostat and Statistics Canada, using nowcasting techniques based on microsimulation.

[20] *"*Enhanced work to reduce exposure and vulnerability, thus preventing the creation of new disaster risks, and accountability for disaster risk creation are needed at all levels. More dedicated action needs to be focused on tackling underlying disaster risk drivers, such as the consequences of … pandemics and epidemics*."* (UNISDR, 2015[99])

[21] In September 2021, the UN Food Systems Summit was held as a part of the Decade of Action for delivery on the SDGs by 2030. Serving as a catalyst for discussions on SDG2 and beyond, the aim of the Summit was to *"*deliver progress on all 17 of the SDGs through a food systems approach, leveraging the interconnectedness of food systems to global challenges such as hunger, climate change, poverty and inequality*"* (see https://www.un.org/foodsystemssummit).

[22] While nitrogen surplus is important, the measurement could rely on a few other indicators such as: land use, water use, greenhouse gas emissions and ammonia emissions (OECD, 2021[101]). Still, these additional measures confirm that OECD countries increased their agricultural production in the last decade, and the agriculture sector's environmental performance registered mixed results. In particular, progress was achieved in reducing phosphorus balances, ammonia emissions and nitrogen balances. While progress was also made in reducing the intensities of greenhouse gas (GHG) emissions, the overall GHG emissions volumes did not fall.

[23] Primarily, the IFPA focuses on cereal products (maize and maize products, wheat and wheat flour, rice, sorghum and millet), which accounts for the most important caloric intake. Yet, to be more comprehensive, the FAO also calculates the IFPA on countries' officially reported food price indices. This facilitates cross-country comparisons, as it uses a national level food basket covering all the most important commodities consumed. While the basket differs from country to country, this approach is more reflective of national and global trends, as countries have predefined the commodities that have the greatest impact on local consumers. This approach also facilitates the implementation of the indicator, as countries will not be asked to create a new index or modify existing methodologies.

[24] The FAO (which developed this measure) mentions that the IFPA is considered to be normal below 0.5, moderately high when it ranges between 0.5 and 1, and abnormally high when it is above 1. Therefore, the end value had been set at 0.5. Given the distribution in OECD countries, it turns out that distances are considered short when the IFPA is below 0.80 and long when it goes above 1.50.

[25] Following the 2030 Agenda, the target level for maternal mortality has been set at 70 per 100 000 live births, while the target regarding the proportion of births attended by skilled personnel is set at 97% to allow for measurement errors.

[26] HIV infection causes the onset of AIDS (Acquired Immunodeficiency Syndrome), which manifests itself through many different diseases, such as pneumonia and tuberculosis, as the immune system is no longer able to defend the body, leaving it susceptible to different infections and tumours. There is a time lag between HIV infection, AIDS diagnosis and death, which can vary greatly depending on the treatment administered.

[27] The 2030 Agenda calls for a reduction of premature mortality by one-third. In order to preserve comparability among OECD countries, the target level was set at 7.5% – i.e. two-thirds of the median risk of dying between the ages of 30 and 70 from cardiovascular disease, cancer, diabetes or chronic respiratory disease. Therefore, a rate below 10% is considered to be at a short distance to the target.

[28] The target level for suicide rates is set at 3 deaths per 100 000 people.

[29] While Turkey, Greece and Mexico are considered to be close to target using both OECD and UN sources, Israel and Italy appear to be close to target when using only one source.

[30] Target 3.6 aimed at halving the number of global deaths from road traffic accidents by the end of 2020 – i.e. less than 2.7 deaths from road traffic per 100 000 inhabitants. In order to preserve comparability between countries, the target has been operationalised in this study as half the 2015 OECD median rate.

[31] The target had been set using the 10th percentile of the OECD distribution in 2015, with Denmark, Korea, Switzerland and the Netherlands being the countries with the highest performance.

[32] The Universal Health Coverage Index was developed by the WHO. It aims at measuring the access to health services (including reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). It is presented on a scale of 0 to 100.

[33] Latest year refers to 2016 for Mexico, Turkey, Colombia, Poland, Chile and Greece; 2015 for Japan and Korea; 2013 for the United Kingdom and the United States; 2012 for Slovenia, Israel and Costa Rica; 2009 for Latvia; 2007 for Estonia; 2004 for Switzerland; and 2010 otherwise.

[34] The target levels for all of the mortality rates relating to Target 3.9 are operationalised at 3% to allow for measurement errors.

[35] Yet, in 2018, this rate was 10% when relying on the *SDG Global Database*.

[36] Core capacity is defined as the essential public health capacity that State Parties are required to have in place throughout their territories. The IHR lists 13 core capacities, namely: (1) Legislation and financing; (2) IHR Coordination and National IHR Focal Point Functions; (3) Zoonotic events and the human-animal health interface; (4) Food safety; (5) Laboratory; (6) Surveillance; (7) Human resources; (8) National Health Emergency Framework; (9) Health service provision; (10) Risk communication; (11) Points of entry; (12) Chemical events; (13) Radiation emergencies.

[37] Data was collected with the same questionnaire until 2017, and a new IHR State Parties Annual Assessment and Reporting Tool has been implemented since 2018. Current distance to the target is then assessed through the latter, while trends are assessed using the former.

[38] Preliminary data shows that in all OECD countries (with the exception of Denmark, where the lockdown was phased out from 15 April 2020, as well as the Netherlands and Sweden, where there was no lockdown), deaths from road traffic accidents in April 2020 were significantly lower than 12 months earlier.

[39] The different studies included in the meta-analysis showed that $PM_{2.5}$ decreased by 5% to 20% while PM_{10} concentrations only marginally decreased.

[40] The United Nations Educational, Scientific and Cultural Organization (UNESCO) oversees the education SDG agenda in the context of the UN-led SDG framework. As the custodian agency for most of the Goal 4 indicators, the UNESCO Institute of Statistics (UIS) is co-ordinating global efforts to develop the indicator framework to monitor progress towards Goal 4 targets. In addition to collecting data, the UIS works with partners to develop new indicators, statistical approaches and monitoring tools to better assess progress across the education-related SDG targets. In this context, the OECD is working with the UIS, the Goal 4 Steering Committee and the technical working groups that have been put in place to help build a comprehensive data system for global reporting and to agree on the data sources and formulae to be used

for reporting on the Goal 4 global indicators and on selected thematic indicators for OECD and partner countries (OECD, 2021[76]).

[41] Indicators 4.1.1 and 4.5.1 rely on both OECD and UN data sources. Using indices from the OECD's Programme for International Student Assessment (PISA) allows better comparability. The same applies for 4.3.1 (the participation rate of adults in formal and non-formal education) and 4.6.1 (the proportion of adults achieving at least a fixed level of proficiency in functional numeracy skills), both of which are based on the OECD PIAAC survey.

[42] For Indicator 4.c.1, the *SDG Global Database* provides data series on the proportion of teachers with the minimum required qualifications for only a few OECD countries. Therefore, this report uses a measure of the proportion of teachers who received in-service training in the last 12 months, using OECD sources.

[43] Given possible measurement errors, universal completion is understood as 97% of students completing school for a given level.

[44] The *SDG Global Database* and OECD estimates are in principle perfectly aligned for Goal 4. Still, estimates may vary slightly due to differences in the time spans and timeliness of the data series.

[45] Formal and non-formal education and training can be offered in a variety of settings, including schools and universities, workplace environments and others, and can have a variety of durations.

[46] Benchmarked against the best performances observed in 2015 among OECD countries, the target levels are set at 60% for using basic arithmetic formulas in a spreadsheet, 74% for copying or moving a file or folder, 73% for using copy-and-paste tools to duplicate or move information within a document, 54% for creating electronic presentations with presentation software, 12% for writing a computer programme using a specialised programming language, 70% for finding, downloading, installing and configuring software, and 63% for transferring files between a computer and other devices.

[47] Children from a lower socio-economic status are less likely to participate in early childhood education and care, while it is the other way around for vocational training. In this latter case, children from lower socio-economic backgrounds are more likely to enter an upper secondary vocational track than a general one. This then impacts their opportunities to access tertiary education, as not all upper secondary vocational programmes provide access to tertiary education.

[48] Measures of literacy skills in Colombia do not rely on the same source. Significant variations in methodology between the different surveys might affect data comparability.

[49] The target levels are set at 97% for the data series sourced from the *SDG Global Database*.

[50] The Inter-Agency Expert Group on Gender Statistics (IAEG-GS) agreed to assess the legal frameworks "that promote, enforce and monitor gender equality" through 42 yes/no questions falling under four areas of law: i) overarching legal frameworks and public life; ii) violence against women; iii) employment and economic benefits; and iv) marriage and family. Results of the four areas are reported as percentages on a dashboard. The score for each area (a number between 0 and 100) therefore represents the percentage of achievement of that country in that area, with 100 being the best practice achieved on all questions in the area.

[51] These factors are also likely to vary across countries and societies and may thus have an impact on cross-country comparisons.

[52] In Latin American countries, comparability is limited, as time-use estimates in the region are based on modules of Labour Force Surveys rather than on detailed diaries, as in most OECD countries. As a result, unpaid work is usually overestimated in the region.

[53] The indicator aims at measuring the level to which a country's legal framework supports women's land rights, by testing that framework against six proxies drawn from international law and internationally accepted good practices. In particular, it considers the Convention on the Elimination of Discrimination Against Women (CEDAW), ratified by 189 countries (including all OECD countries besides the United States). It also considers the Voluntary Guidelines for the Responsible Governance of the Tenure of Land Fisheries and Forestry (VGGT), endorsed by the Committee of Food Security (made of UN agencies, NGOs, international agricultural research institutions, international and regional financial institutions as well as private sector associations and philanthropic foundations).

3 Planet

The “Planet” theme of the 2030 Agenda focuses on protecting the planet through limiting climate change and encouraging more sustainable consumption and production along with the sustainable management of water resources, oceans and terrestrial biodiversity. Relying on the global indicator framework, this chapter assesses whether OECD countries are likely to achieve the SDG targets on the Planet. It shows where OECD countries are standing in terms of their current performance but also in terms of changes over time, and what part of the 2030 Agenda on the Planet currently remains unmeasurable. It also discusses some of the main impacts of the COVID-19 pandemic on the Planet targets.

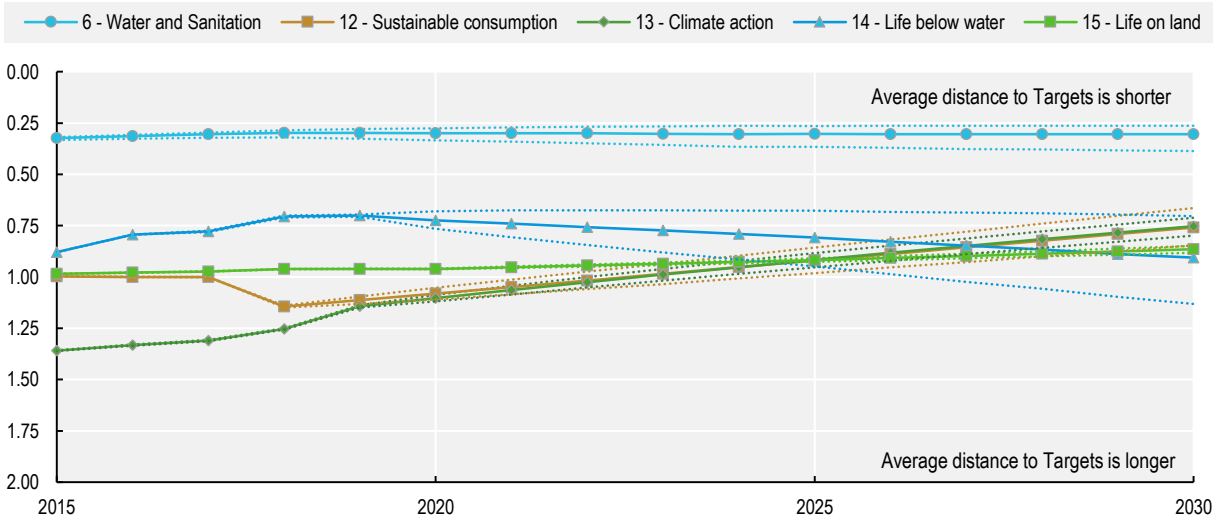
Introduction

The 2030 Agenda is a call to all countries to take action for a better and more sustainable future. At its core is a set of 17 Sustainable Development Goals balancing the three dimensions of sustainable development: economic, social and environmental. Since the adoption of the sustainable development agenda in 2015, its broad scope has often been characterised by five core themes, the "5Ps" (UN, 2015[1]): People, Planet, Prosperity, Peace and Partnerships.[1] The goals and targets belonging to the "Planet" category focus on the protection of the planet from degradation through more sustainable consumption and production (Goal 12); the sustainable management of water resources (Goal 6); oceans and marine biodiversity (Goal 14) and terrestrial biodiversity (Goal 15); and limiting climate change (Goal 13).

Making progress towards the Planet goals can also generate co-benefits that ensure advancement on inter-related goals such as food security (Brooks, 2016[2]), gender equality and women's empowerment (OECD, 2021[3]) or health, income and wealth, and work and job quality (OECD, 2021[4]). For instance, although air pollution has decreased in most OECD countries over the past two decades, it remains above WHO guidelines in most of them. This has serious consequences for people's health and mortality: in the EU for example, estimates attributed between 168 000 and 346 000 deaths to air pollution from fine particles ($PM_{2.5}$) alone in 2018 (OECD/European Union, 2020[5]). More broadly, the effects of climate change (Goal 13) and environmental degradation (Goals 14 and 15) are unevenly distributed between and within countries, meaning policies to tackle them will also have to take into account the inter-country and intra-country dynamics of inequality (Goal 10), strengthening national institutions (Goal 16) and working in partnerships (Goal 17) with various stakeholders, such as NGOs or the private sector, as well as across government.

Even before the pandemic hit, OECD countries were not on track to achieve the targets of the "Planet" goals. Figure 3.1 shows how OECD countries are on average performing on the 2030 Agenda over time. At the SDG starting block, the OECD countries[2] were closest to the targets for goals related to Water and sanitation (Goal 6), Life below water (Goal 14), Life on land (Goal 15) and Sustainable production and consumption (Goal 12); they were, however, starting from a more challenging position when it came to Climate-related targets (Goal 13). Between 2015 and 2021, OECD countries have been progressing on all goals, with the exception of Life below water (Goal 14). However, the rate of progress varies among goals, with Water and sanitation (Goal 6), Sustainable production and consumption (Goal 12) and Life on land (Goal 15) showing very little change, while Climate (Goal 13) shows stronger progress. Projecting trends up to 2030 suggests that, unless additional policies are urgently implemented, the goal on Water will be the only one that may come close to being achieved, while all the other goals are likely to remain behind – including on many targets of Goals 14 and 15, which were supposed to be met in 2020 (see overview chapter for details). To overcome some of the challenges relating to composite measures, this chapter dives into the details of the underlying targets and provides an exhaustive picture of where OECD countries stand in terms of meeting the targets.

Figure 3.1. OECD countries' average distance to SDG targets over time by goal, Planet



Note: This figure shows the average distance that OECD countries could travel towards the SDGs based on recent trends; hence these distances are based on existing policies and do not account for the additional measures that OECD countries may have introduced since the latest observation available. Distances are measured in standardised units (see the methodological annex for details), with 0 indicating that the 2030 level has already been attained. Full lines show OECD countries' average performance against all targets under the relevant goal. Dashed lines show the confidence interval (10th and 90th percentiles of estimated trends). When data are not available for specific years, these are imputed using linear interpolation between the two closest available observations. Past (i.e. before the first available year) and future (i.e. after the latest available year) trajectories are imputed using Monte Carlo simulations (see the Methodological Annex for details).
Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Many of the Planet goals lack good quality data, which hampers countries' ability to evaluate policy outcomes and determine priorities for future action. For instance, while Goal 6 is on average at a very short distance to the target, it does not include any data on irrigation. Still, this sector is the main source of water use in many countries. Goal 6 is therefore not able to provide a strong indication of water sustainability. In addition, although there is current data available on almost 70% of the targets pertaining to the Planet category, only one in three Planet category SDG targets can be monitored over time due to the limited availability of robust time-series data.

As further detailed in sections below, the reduction in economic activity induced by the pandemic in all OECD countries has led to an overall improvement of environmental conditions, highlighting the significance of human interference with the climate, ecosystems and biodiversity. For instance, the COVID-19 crisis resulted in a short-term reduction in global emissions of greenhouse gases (see Impact of the COVID-19 pandemic on Goal 13 for details and references); it also led to a temporary improvement in water quality in waterways and coastal zones (Impact of the COVID-19 pandemic on Goal 6), and to reduced pressures on biodiversity (Impact of the COVID-19 pandemic on Goal 15). Yet, in the absence of further measures these benefits will not last. At the same time, the pandemic also resulted in new sources of pollution (Impact of the COVID-19 pandemic on Goal 12), while the reduction of surveillance operations induced by mobility restrictions may have favoured illegal fishing and the killing of wildlife (Impact of the COVID-19 pandemic on Goal 14).

Goal 6 – Clean water and sanitation

Goal 6 aims at "ensuring availability and sustainable management of water and sanitation for all". Across OECD countries, almost all residents have convenient access to drinking water and proper sanitation services, and most of them benefit from public wastewater treatment. However, it is challenging to maintain high levels of the water supply and sanitation services while preserving quality through increasingly stringent environmental and health regulations, including for new and emerging contaminants. Beyond water quality, the main challenge faced by OECD countries is to ensure sustainable management of water resources, as well as avoiding over-abstraction and degradation. This is particularly important as climate change makes water demand and availability more uncertain (OECD, 2013[8]; OECD, 2014[9]; OECD, 2017[10]). While most OECD countries face at least seasonal or local water quantity problems, overall, data used for global monitoring suggest that resources are efficiently managed, and freshwater abstraction has been largely decoupled from economic growth. Yet, OECD analysis shows that the pressures on the quantity and quality of natural resources have increased significantly over recent decades (OECD, 2017[11]) and have led to the use of groundwater beyond natural recharge in many regions, in some cases with significant negative economic and environmental impacts (OECD, 2015[12]). Furthermore, in the long run, drought and over-abstraction have led to non-negligible loss of surface water in some countries.

The pandemic has shown the importance of sanitation, hygiene and adequate access to clean water. Yet, besides some (temporary) improvement in water quality in waterways and coastal zones, the pandemic should not have a direct impact on the targets underlying Goal 6.

Assessing OECD countries' performance on Goal 6

This report uses data from the *UN Global SDG database* together with OECD sources. Yet, the starting point always remains the Global SDG Indicator Framework, curated by the IAEG-SDGs. Table 3.1 shows that data allow the monitoring of six of the eight targets underpinning Goal 6, and four of them can be assessed over time. For this goal, four data series are sourced from the OECD, and three depart from the global indicator framework. For all of them, drawing from OECD sources either provides longer time series (6.3.1, 6.4.1 and 6.4.2) or allows covering specific aspects of multifaceted targets (6.6.1). On top of indicators listed in Table 3.1, the database includes 11 additional data series under Target 6.6 and one under Target 6.a. These are considered to be mainly informative in the context of Goal 6 and are not assessed in this report (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-3-planet.xlsx).

Table 3.1. Available data series supporting the monitoring of Goal 6

Indicator code	Indicator Label	Available over time	Primary source
6.1.1	Proportion of population using safely managed drinking water services	Yes	*SDG Global Database*
6.2.1	Proportion of population practicing open defecation	Yes	*SDG Global Database*
6.2.1	Proportion of population using safely managed sanitation services	Yes	*SDG Global Database*
6.3.1	Proportion of domestic wastewater flows that are not safely treated	No	*SDG Global Database*
6.3.1	*Population not connected to public sewage treatment*	Yes	OECD
6.3.2	Proportion of groundwater bodies with good ambient water quality	No	*SDG Global Database*
6.3.2	Proportion of open water bodies with good ambient water quality	No	*SDG Global Database*
6.3.2	Proportion of bodies of water with good ambient water quality	No	*SDG Global Database*
6.3.2	Proportion of river water bodies with good ambient water quality	No	*SDG Global Database*
6.4.1	Water use efficiency (USD per cubic meter)	Yes	*SDG Global Database*

Indicator code	Indicator Label	Available over time	Primary source
6.4.1	*Freshwater abstraction per capita*	Yes	OECD
6.4.2	Water stress	Yes	OECD
6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Yes	*SDG Global Database*
6.5.1	Degree of integrated water resources management implementation	No	*SDG Global Database*
6.5.2	Proportion of transboundary river and lake basins with an operational arrangement for water co-operation	No	*SDG Global Database*
6.5.2	Proportion of transboundary aquifers with an operational arrangement for water co-operation	No	*SDG Global Database*
6.5.2	Proportion of transboundary basins (river and lake basins and aquifers) with an operational arrangement for water co-operation	No	*SDG Global Database*
6.6.1	Extreme or high lake water turbidity	No	*SDG Global Database*
6.6.1	Extreme or high lake water trophic state	No	*SDG Global Database*
6.6.1	*Converted from permanent water to non-permanent water (not water or seasonal)*	No	OECD

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Basic access to water and sanitation, the objective of Targets 6.1 and 6.2, **has already been met in most OECD countries** (Figure 3.3, panel A). Target 6.1 focuses on *"*achieving universal and equitable access to safe and affordable drinking water*"*. In the global indicator framework, this target is monitored by the proportion of population using safely managed drinking water services (the target level was set at 97% of the population to allow for possible uncertainties). As of 2020, 25 OECD countries had already reached complete coverage, while only three (Costa Rica, Mexico and Colombia) had coverage below 90%, ranging from 81% in Costa Rica to 43% in Mexico. All OECD countries (except Switzerland, which has been stagnating at 94% of the population over the past two decades) are progressing towards universal coverage, but, with no change to current trajectories, eight countries may not be able to be at target level by 2030.

Target 6.2, focusing on *"*achieving adequate and equitable access to sanitation and hygiene for all and ending open defecation", is measured by the proportion of population using i) safely managed sanitation services and ii) a hand-washing facility with soap and water (as in the global indicator framework). Since data on hand-washing facilities from the *SDG Global Database* do not cover OECD countries, this report relies only on measures of access to sanitation services (the proportion of population using sanitation services and the proportion of population practicing open defecation).[3] All OECD countries have essentially eliminated the routine practice of open defecation and 19 OECD countries have already reached (or are close to reaching) safely managed sanitation services for all. Still, coverage of safe sanitation and hand-washing facilities is below 70% in Norway and Mexico and below 30% in Costa Rica and Colombia. While coverage is likely to remain complete or close to complete in most OECD countries, some countries have likely already reached the economic and technical limits in terms of connection to water and sanitation services and may rely on other ways of serving small and isolated settlements (OECD, 2017[10]). Otherwise, the lack of progress may prevent universal coverage rates by 2030 (Figure 3.3, panel B)[4]. For these targets, too, data gaps prevent a more comprehensive assessment.

Over the past two decades, access to wastewater treatment has improved in all OECD countries but still varies significantly across countries (Figure 3.3). Target 6.3 aims at *"*improving water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse*"*. It is to be measured by the proportion of domestic and industrial wastewater flows safely treated and the proportion of bodies of water with good ambient water quality. As concerns wastewater flows, the measurement relies on two distinct data series: the proportion of domestic wastewater flows that are not

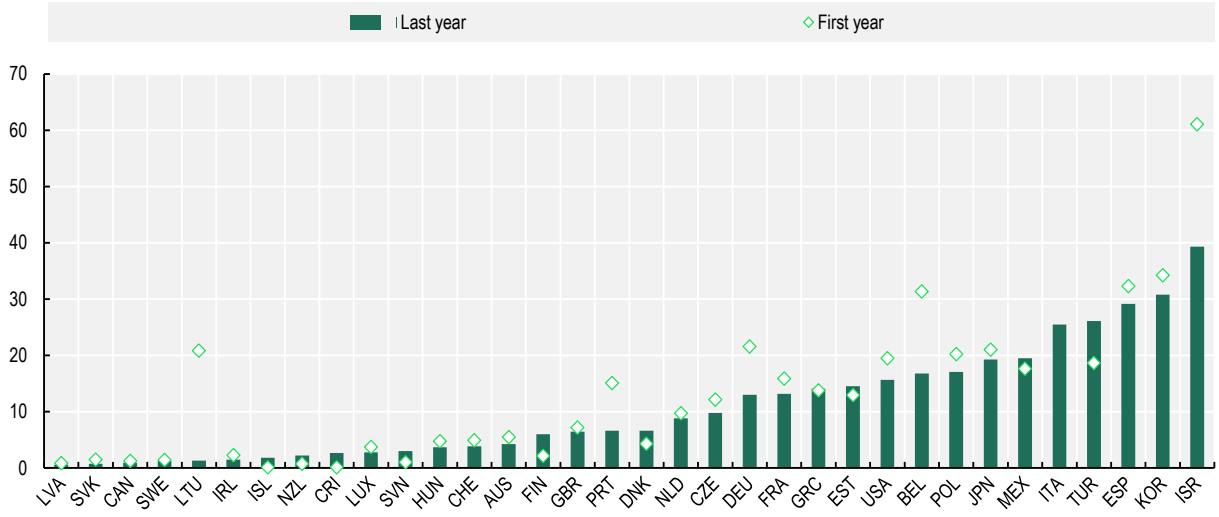
safely treated – from the *SDG Global Database*[5] – and the share of population not connected to public sewage treatment – from OECD data sources. Following the language of the target, the target levels are operationalised at 4.5% and 9.0% respectively, i.e. half the OECD median in 2015 (or closest available year). The latter shows that as of 2019, all OECD countries with available data but Turkey, Mexico, Costa Rica and Iceland[6] had over three quarter of their population connected to public sewage treatment. The first measure also provides similar results, with 23 of 38 OECD countries safely treating more than 90% of their domestic wastewater flows in 2020. Yet, five countries (Slovenia, Turkey, Mexico, Costa Rica and Colombia) had more than 30% of their domestic wastewater flows not safely treated. In addition, four indicators are used to assess the proportion of water bodies with good ambient water quality, in particular groundwater bodies, open water bodies, river water bodies and more generally all bodies of water. Overall, results show a great variety of outcomes among countries but also among types of water bodies. When the various measures are aggregated, nine OECD countries are close to reaching the target (Iceland, Lithuania, Finland, the Netherlands, Korea, Poland, Australia, Austria and the United Kingdom), while eight appear to be much further (Sweden, Denmark, New Zealand, Mexico, Germany, Japan and the United States). Unfortunately, trends can be assessed only for public sewage treatment. While progress is evident in almost all countries (Figure 3.3, panel B), the main challenge in the future will be to ensure proper financing for renewing and upgrading existing and often ageing networks and treatment plants (OECD, 2020[13]). More efforts will be needed to increase advanced wastewater treatment where economically viable and environmentally justified and to cope with new and emerging pollutants, such as pharmaceutical residues and micro-plastics.

While most OECD countries face seasonal or local water quantity problems, available data suggests that a majority of them report good performance on water use. Target 6.4 aims at *"*increasing water-use efficiency and ensure sustainable withdrawals and supply of freshwater*"*. It is monitored through measures of change in water-use efficiency and water stress. In the *SDG Global Database*, water-use efficiency is defined as the value added divided by the volume of water used. In this report, this measure is completed by the volume of freshwater abstraction per capita. The two measures provide comparable results (the rank correlation is 0.75), but freshwater abstraction per capita is better able to show different performances across countries. In the absence of an obvious benchmark, this report has set the target in comparison to the level achieved by OECD top performers in 2015 (i.e. less than 165 cubic meters per inhabitant). Based on this benchmark, per capita abstractions can be considered as high (above 1 900 cubic meters per inhabitant) in three OECD countries (Iceland, Colombia and New Zealand) but are below 740 cubic meters per inhabitant in most other countries. As shown by OECD (2020[13]), average water abstractions throughout OECD countries have been decoupled from economic and population growth, with per capita abstractions declining over the past two decades. This decline is, however, not likely to be large enough to allow many countries to reach the 165 cubic meters per inhabitant target achieved by the top performers in 2015. Only seven OECD countries (Ireland, the Czech Republic, Israel, Latvia, the Slovak Republic, Lithuania and Luxembourg) are expected to meet the target.

When it comes to water scarcity, performance also varies greatly among countries. No major water stress on available resources is considered as taking place whenever freshwater abstractions as a share of total renewable resources are below 10% (Figure 3.2). Overall, 20 OECD countries are below this threshold, while five (Italy, Turkey, Spain, Korea and Israel) have levels more than twice as high (i.e. above 25%). Since early 2000, water stress decreased in 19 OECD countries, but likely not fast enough in seven of them. When looking beyond national averages, most countries face seasonal or local water quantity problems (OECD, 2020[13]), and most of them are expected to face high water risks in the years to come (OECD, 2017[14]). Several OECD countries also have extensive arid or semi-arid regions where water availability is a constraint on economic development and human well-being.

Figure 3.2. Water stress (Target 6.4)

Freshwater abstraction as percentage of renewable resources



Note: First year refers to 1990 for Finland and the United Kingdom; 1993 for Switzerland; 1994 for Ireland; 1996 for Canada, Sweden, Iceland and Belgium; 1997 for Spain; 1998 for Portugal, Germany, Estonia, Mexico and Korea; 2000 for France, Greece, the United States, Japan, Turkey and Israel; 2001 for Australia and the Netherlands; 2005 for Costa Rica; and 1999 for otherwise. Last year refers to 1998 for Italy; 2004 for the United Kingdom; 2006 for Finland; 2009 for Ireland; 2012 for Switzerland; 2014 for Iceland and the New Zealand; 2015 for Canada, Sweden, Belgium and the United States; 2016 for Spain, Germany, Luxembourg and Japan; 2017 for Portugal, Estonia, Mexico, Korea, France, Australia and Costa Rica; and 2018 for otherwise.
Source: (OECD, 2022[15]), "Water withdrawals" (indicator), https://doi.org/10.1787/17729979-en (accessed on 29 October 2021).

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Management of water resources remains a challenge for many OECD countries.[7] Target 6.5 aims at "implementing integrated water resources management at all levels". It is monitored through a composite measure aimed at assessing the stages of development and implementation of the integrated management of water resources (ranging from 0, in the case of no implementation, to 100% for full implementation) and through a set of measures of the proportion of transboundary water with an operational arrangement for co-operation. In both cases, the target is fixed at 100%. According to available data, the first index shows that in 2020, only four OECD countries (Denmark, the Netherlands, Japan and France) were close to the target and achieved high implementation scores (i.e. above 91%), while 12 reported scores below 74% (with Mexico and Chile reporting scores below 50%) and are thus considered as far from target.[8] The second indicator shows that, in most cases, transboundary basins (rivers, lakes and aquifers) in OECD countries are regulated by an operational arrangement. However, around one-quarter of OECD members have less than 40% of their transboundary water sources covered by such agreements (in particular, the United Kingdom and Korea have no agreement at all). None of the data series included to monitor this target allow for a dynamic analysis – time series are considered as missing when there are two or fewer data points for each country.

Loss in surface water is unevenly distributed among OECD countries. Target 6.6 aims at "protecting and restoring water-related ecosystems" and is to be measured globally by measures of the change in the extent of water-related ecosystems. The indicator is multifaceted, and the *SDG Global Database* includes data on different types of freshwater ecosystems. Concretely, it provides a series of indicators informing on the *quantity* and *quality* of surface water for different types of ecosystems and at different points in time. On water quality, the data include proxy measures tracking turbidity (a measure of water clarity) and trophic state (referring to the biological productivity of the surface water body).[9] Since changes in turbidity and trophic state are indicative of degradation of a lake's environmental conditions, the natural target for these

measures are 0, i.e. no lake shows high or extreme deviations from the baseline in turbidity and trophic state. In 2019, on average across OECD countries, 33% of the lakes showed high to extreme deviations from the baseline level in turbidity. With this share ranging from 18% in Greece to 44% in Ireland, all OECD countries were at large distances from the target level of 0. On the other hand, the trophic state of the lakes was more stable, with an OECD average of 7% of total lakes showing extreme or high deviations from their trophic states in 2019. While 15 OECD countries were close to the target level of 0, the distances to target were larger in seven countries (Ireland, Colombia, Chile, the Czech Republic, United Kingdom, Norway and Costa Rica), with more than 12% of the lakes in their territories experiencing high to extreme deviations. The available data do not allow to gauge how turbidity and trophic state have varied over time.

Target 6.6 also includes measures on the extent of water surface area. While informative, this is an indirect measure of change, therefore this report relies on OECD data that capture the *actual* changes in water surface (the target level is operationalised at 0% i.e. no change in water surface). However, none of the data series allow to project trends. While 11 OECD countries lost less than 3% of their water surface from the mid-1980s to 2015, in seven of them (Japan, Costa Rica, Mexico, Colombia, Korea, Luxembourg and Australia) the loss was above 10%. Surface water is mainly lost through drought and unsustainable abstraction for irrigation (OECD, 2020[13]). While this report relies only on measures of surface loss, it is important to note that both water losses and water gains can be detrimental to biodiversity and ecosystems. Inundating areas, mainly through dam building, fragments river systems and potentially blocks migration routes (Haščič and Mackie, 2018[16]). Nor does this report capture the changes in groundwater. Yet, in addition to surface water, groundwater provides an important source of water supply for drinking, irrigation and industry, and it contributes to sustaining groundwater-dependent ecosystems, such as streams and wetlands. Pressures on the quantity and quality of this resource have increased significantly over recent decades (OECD, 2017[11]) and have led to the use of groundwater exceeding natural recharge in many regions, in some cases with significant negative economic and environmental impacts (OECD, 2015[12]).

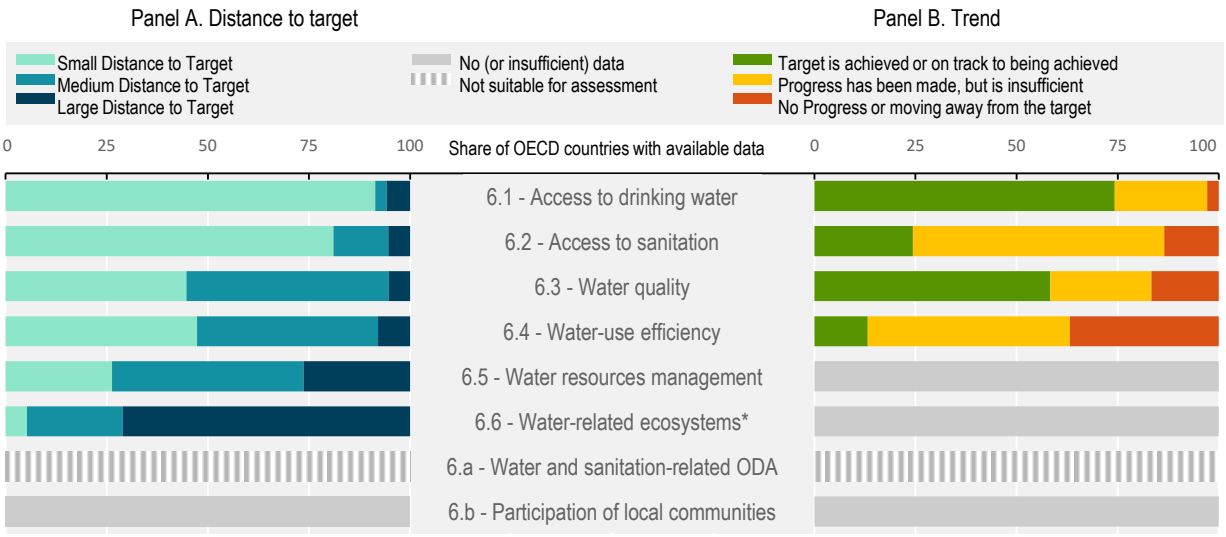
The two "means of implementation" targets under this goal (Targets 6.a and 6.b) are considered to be only informative and are not assessed in this section. As for other ODA-related targets, the indicators for Target 6.a on ODA related to water and sanitation do not have a clear normative direction. While an international benchmark has been defined for total ODA provided by donor countries (0.7% of gross national income), the ideal sectoral breakdown of this aid will depend on the needs of each recipient and the priorities of each donor. Target 6.b, which focuses on the participation of local communities in improving water and sanitation management, is not included due to lack of data. Even so, OECD data (OECD, 2021[17]) show that ODA disbursements to the water sector have been on the rise over the past two decades, from around USD 4 billion in early 2000 to more than USD 9 billion in 2019.

Summing up

Looking at country variation across the Goal 6 targets, most OECD countries provide access to drinking water and sanitation services to virtually all their residents (Targets 6.1 and 6.2), and most countries are making progress towards them. Still, challenges related to water quality, water-related ecosystems and sustainable management of water resources remain. Improving water quality and treating wastewater, while providing a high level of water and sanitation services at the same time, remains a challenge for less than one in ten OECD countries (Target 6.3). Although eight in ten OECD countries show progress in wastewater treatment (Figure 3.3, panel B), some countries have already reached their economic and technical limits and therefore need to find alternative ways to expand services to isolated settlements, such as by developing independent on-site treatment systems (OECD, 2020[13]). On water-use efficiency (Target 6.4), per capita water abstraction has decoupled from economic and population growth and is declining in most OECD countries. While levels of water stress vary among and within countries, they have also decreased since 2000, and this resource seems to be more efficiently managed today (OECD, 2020[13]). Still, the pace of decline is expected to be sufficient to reach the target by 2030 in only a few countries (Figure 3.3, panel B). Finally, seven in ten OECD countries are far from

achieving Target 6.6 on the protection of water-related ecosystems, mostly due to poor results on changes in lake water turbidity, indicating deterioration of the environmental conditions of lakes.

Figure 3.3. Distance to target and trends over time in OECD countries, by SDG target, Goal 6



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 6

The pandemic has highlighted the importance of sanitation, hygiene and adequate access to clean water to limit the spread of infection. According to the WHO, handwashing is one of the most effective actions a person can take to reduce the spread of pathogens and prevent infections, including the COVID-19 virus (WHO, 2020[18]). That said, **the pandemic should not have any significant long-term impact on the trajectories of OECD countries towards the targets underpinning Goal 6.** Early evidence suggests that the reduction in economic activity led to an improvement in water quality (Target 6.3) in a number of waterways and coastal zones (OECD, 2021[19]). However, this is likely to be a temporary phenomenon, as water pollution is expected to increase once economic activity resumes (Table 3.2). In addition, as highlighted by the World Bank (IFC, 2020[20]), the outbreak of COVID-19 may slow down investment in the water sector worldwide and thus might have an indirect impact on Goal 6 by delaying the renewal and upgrade of existing networks and treatment plants, which would have a delayed impact on wastewater treatment (Target 6.3). Finally, it may be noted that while there were labour shortfalls on perishable agricultural produce, some farmers have delayed fruit production, thus limiting their water use (the irrigation

sector uses 70% of water globally and more than 40% in many countries). Conversely, some countries, such as Israel, raised the water quota for farmers more than usual to ensure their supplies of fresh produce on local markets (OECD, 2021[21]). Therefore, the impact on water-use efficiency (Target 6.4) is mixed (Table 3.2).

According to preliminary data collected by the OECD, ODA reached its highest level ever in 2020 due in part to support for the COVID-19 crisis (OECD, 2021[22]). Many Development Assistance Committee (DAC) members indicated that they would protect ODA budgets in 2020, and several have indicated they would continue to maintain or increase them in 2021. Yet, detailed 2020 data are not available at the time of preparing this publication, and the impact of the COVID-19 pandemic on water and sanitation-related ODA (Target 6.a) remains unknown (Table 3.2).

Table 3.2. Summary impact of the COVID-19 pandemic on Goal 6 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
6.1 – Access to drinking water	none	none
6.2 – Access to sanitation	none	none
6.3 – Water quality	positive	negative
6.4 – Water-use efficiency	mixed	none
6.5 – Water resources management	none	none
6.6 – Water-related ecosystems*	none	none
6.a – Water and sanitation-related ODA		
6.b – Participation of local communities	none	none

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: “positive” if the COVID-19 pandemic has a favourable impact on the target, “negative“ if the COVID-19 pandemic has a deleterious impact on the target, “mixed“ if the impact on the target is different among countries or among the different dimensions of the target, “none” when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 12 – Responsible consumption and production

Goal 12 aims at "ensuring sustainable consumption and production patterns". Material resources form the physical foundation of the economy, but the use of raw materials and the related production and consumption processes have environmental, economic and social consequences in countries and beyond national borders. On the positive side, as further detailed below, OECD countries are implementing legal and institutional frameworks to guide sustainable consumption and production of these resources; the consumption of materials in OECD countries has been largely decoupled from economic and population growth, and more and more waste is being diverted from landfills and fed back into the economy through recovery and recycling. On the other side, the reduction of the domestic consumption of natural resources also reflects the substitution of domestic production by imports. Few OECD countries have exhaustive accounting tools to gauge the sustainability of tourism, and too many governments keep providing support to fossil fuel production and use. Unfortunately, the lack of ambitious targets and significant data gaps seriously limit the scope of the analysis of Goal 12.

The pandemic has significantly aggravated the challenges related to resource use and waste management. While, driven by lower demand, domestic material consumption (DMC) may shrink in the short term, it will rapidly revert to pre-crisis levels if OECD countries do not move towards a more resource-efficient and circular economy. Additional challenges could arise because of the major increases in medical waste and in demand for single-use plastics. Yet, the disruption caused by COVID-19 has also brought fuel prices and subsidy levels to record lows, which provides a golden opportunity to pursue the pricing reforms that are the only durable way to eliminate consumption subsidies.

Assessing OECD countries' performance on Goal 12

This report uses data from the *UN Global SDG database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 3.3 shows that data allow the monitoring of 8 of the 11 targets underpinning Goal 12, but only three of them can be assessed over time. For this goal, two data series are sourced from the OECD. The first complements the data series sourced from the *SDG Global Database* by offering timelier data and longer time series (12.2.2). The other, while not fully aligned with the global indicator framework, allows monitoring Target 12.5 on substantially reducing waste generation, which cannot be covered using the data from the *SDG Global Database*. On top of the indicators listed in Table 3.3, the database includes two additional data series under Target 12.6, and 3 under Target 12.c. These additional indicators are considered to be mainly informative in the context of Goal 12 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-3-planet.xlsx).

Table 3.3. Available data series supporting the monitoring of Goal 12

Indicator code	Indicator Label	Available over time	Primary source
12.1.1	Countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or target into national policies	No	*SDG Global Database*
12.1.1	Countries with policy instrument for sustainable consumption and production	No	*SDG Global Database*
12.2.2	Domestic material consumption per unit of GDP	Yes	*SDG Global Database*
12.2.2	Domestic material consumption per GDP	Yes	OECD
12.2.2	Domestic material consumption per capita	Yes	*SDG Global Database*
12.3.1	Data series on food waste per capita at the i) retail, ii) household and iii) food service levels	No	*SDG Global Database*
12.4.1	Data series on parties meeting their commitments and obligations in transmitting information as required by i) Basel Convention, ii) Stockholm Convention, iii) Rotterdam	No	*SDG Global Database*

Indicator code	Indicator Label	Available over time	Primary source
	Convention, iv) Montreal Protocol and v) Minamata Convention on hazardous waste, and other chemicals		
12.5.1	*Material recovery rate of municipal waste (recycling and composting)*	Yes	OECD
12.7.1	Number of countries implementing sustainable public procurement policies and action plans	No	*SDG Global Database*
12.8.1	Data series on the extent to which global citizenship education and education for sustainable development are mainstreamed in i) national education policies, ii) student assessment, iii) curricula and iv) teacher education	No	*SDG Global Database*
12.b.1	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism (SEEA tables)	Yes	*SDG Global Database*
12.b.1	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism (Tourism Satellite Account tables)	Yes	*SDG Global Database*

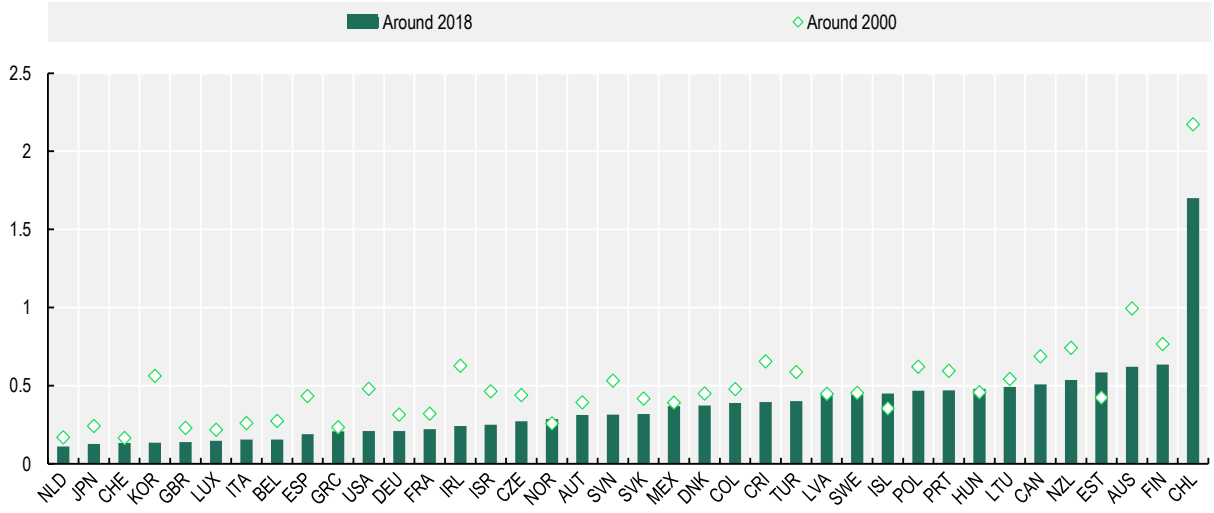
Note*:* Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

All OECD countries have implemented legal and institutional frameworks to guide sustainable consumption and production (SCP). Target 12.1 fosters the implementation of the 10-Year Framework of Programmes on SCP Patterns, and it is assessed through binary indicators of whether countries implemented SCP national action plans or mainstreamed SCP as a priority or target into national policies, and, more generally, whether they implemented policies, instruments and mechanisms for SCP. The target level is set at 1 (i.e. the relevant measures exist) in both cases. As of 2020, 26 OECD countries had developed such institutional frameworks. Since the indicator considers only the adoption of such frameworks but not their quality or full implementation, it is not possible to judge how much real progress was made on sustainable consumption and production institutional frameworks.

OECD countries are decoupling the consumption of materials from economic and population growth. Target 12.2 focuses on the sustainable management and use of natural resources. In the global indicator framework, this measure is underpinned by indices of material footprint (not available for OECD countries so far) and measures of domestic material consumption (DMC) per unit of GDP and per capita.[10] Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, these indicators are repeated under Target 8.4. While there is an agreement on the need to reduce DMC, there is no agreement on an ideal level to be reached. To overcome this problem, the target level to be achieved has been set in this report using the best performances observed in 2015[11] (i.e. 10 tons of DMC per capita and 140 g of DMC per unit of GDP)[12]. Overall, slightly less than half of OECD countries are close to these thresholds, while a few of them report much higher levels. Regarding DMC per unit of GDP, the distance to target is found to be high (more than 0.55 kg per USD) in four countries (most notably in Chile, where it rises to 1.7 kg per USD), while for DMC per capita distances are also found to be high (i.e. above 21 tons of DMC per capita) in eight countries (Norway, Luxembourg, New Zealand, Finland, Canada, Australia, Estonia and Chile) – see Figure 3.4. Since 2000, DMC per capita decreased in around half of OECD countries, and a few of them are expected to reach a level below 10 tons of DMC per capita by 2030 (the United Kingdom, Japan, Greece, Portugal and Colombia). In some countries, however, such as the Baltic countries, Mexico and Turkey, per capita material consumption is on the rise, driven by economic growth and infrastructure development. In the vast majority of OECD countries, material productivity has been improving, reflecting efficiency gains in production processes, changes in the materials mix and the decreasing demand for materials following the 2008 financial crisis (OECD, 2020[13]). However, this development also reflects the substitution of domestic production by imports. When accounting for all materials needed to satisfy final demand in OECD countries, i.e. including materials extracted abroad and embodied in imports (i.e. a demand-based measure), progress is more modest (OECD, 2020[13]).

Figure 3.4. Domestic material consumption per GDP (Target 12.2)

Non-energy materials, kilogram per USD constant prices using 2010 base year and Purchasing Power Parities



Note: Around 2000 refers to 1998 for Japan, Korea, the United States, Israel, Mexico, Colombia, Costa Rica, Turkey, Canada, New Zealand, Australia and Chile; 2006 for Norway; 2011 for Iceland; and 2000 for otherwise. Around 2018 refers to 2017 for Japan, Korea, the United States, Israel, Mexico, Colombia, Costa Rica, Turkey, Canada, New Zealand, Australia, Chile and Iceland; 2018 for Switzerland and Norway; and 2019 for otherwise.

Source: (OECD, 2022[23]), "Material productivity" (indicator), https://doi.org/10.1787/dae52b45-en (accessed on 29 October 2021).

StatLink https://stat.link/yuz5fw

Food waste is widespread in most OECD countries, although the available data have limitations. Target 12.3 aims at "halving per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains". The target is measured by indices of food loss and food waste, but only the latter is available. This index measures food waste at both retail and consumer levels (households and food service).[13] Still, while this phenomenon is attracting growing attention, and it is widely acknowledged to contribute to Interlinked sustainability challenges such as food security, climate change and water shortages, the pattern and scale of food waste throughout the supply chain remains poorly understood. Little data are currently available on food waste, and measurement approaches have been highly variable. Therefore, results need to be interpreted with caution.[14] While results differ greatly, on average over the three different sectors, in 2019, Slovenia was the only country that can be considered close to the target while 12 countries (Portugal, Australia, Hungary, Switzerland, Turkey, Mexico, Denmark, France, Ireland, Greece, the United States and Israel) were far from the target. Available data does not allow to monitor progress towards this target over time.

There are considerable disparities across OECD countries in the management of hazardous waste and other chemicals as dictated by international agreements. Target 12.4 aims at "achieving the environmentally sound management of chemicals and wastes". Indicators proposed by the IAEG-SDGs cover both policy and output aspects. Regarding the former, the measures focus on countries' commitments and obligations in transmitting information on hazardous waste and other chemicals, as required by the Basel, Minamata, Rotterdam and Stockholm Conventions as well as the Montreal Protocol.[15] Results vary significantly between the different conventions and protocols. All OECD countries report the highest possible score (i.e. 100) on the implementation of the Montreal protocol on the substances that deplete the ozone layer, while none reach this level for the Minamata convention on mercury.[16] There are also large disparities across OECD countries. For instance, nine report high scores on four of the five conventions and protocols (Canada, Ireland, Estonia, the United Kingdom, Colombia, the Czech Republic, Belgium, Australia and Poland) while five report high scores in only one (Chile, the

United States, Israel, Iceland and Korea). Available output indicators include the generation and treatment of hazardous waste. Unfortunately, these aspects cannot be covered properly with the available data.

More and more waste is being diverted from landfills and incinerators and is feeding back into the economy through recovery and recycling. Target 12.5 calls on countries to reduce waste generation, which is measured through the national recycling rate. The target for the material recovery rate of municipal waste (recycling and composting) was set at 53% on the basis of the top performance observed among OECD countries (Austria, Belgium, Korea, Germany and Slovenia) in 2015. In 2019, 16 OECD countries were considered to be close to this target (i.e. material recovery rate is above 42%), but six countries (Greece, Japan, Turkey, Costa Rica, Mexico and Chile) were still far from the target (i.e. below 22%). The recovery of waste through recycling and composting is progressing in almost all OECD countries beside the Netherlands, Austria, Norway, Spain, Turkey and Costa Rica (where no specific trend could be identified), but only one-third of them are expected to reach the target value by 2030.[17]

Available data do not allow assessing the distances to Target 12.6. As the private sector has a critical role to play in the attainment of the SDGs, Target 12.6 specifically focuses on the practices of private sector entities. Concretely, indicator 12.6.1 counts the number of companies producing *"*sustainability reports*"*. While informative, this indicator is an absolute number and cannot be used to benchmark countries. Moreover, sustainability reporting is only the first step; ultimately the data flowing from these reports need to be used to assess the contribution of the business sector to meeting the goals and targets of the 2030 Agenda, which should provide an incentive for companies to contribute to solutions (see Box 3.1).

Box 3.1. Sustainability reporting

Sustainability reporting can provide a better understanding of how businesses affect society and the environment, it can inform policies, guide the strategic decisions of firms and investors, and encourage a "race to the top". Businesses contribute to the well-being of societies in many ways, including by influencing the current well-being of their stakeholders and through the creation as well as depletion, of economic, human, social and natural capital resources. Greater transparency and accountability on business impacts is a necessary step to hold businesses accountable for their impacts and to provide the framework conditions to allow businesses to be part of the solution.

To support the measurement and reporting of business sustainability impacts, many initiatives, standards, frameworks and principles have emerged, scattered across a range of users and topics.[1] This multitude of instruments hampers accountability and transparency, as well as market recognition of business non-financial impacts. Greater coherence of metrics of business non-financial performance with established measures of economic performance and societal progress (at national level) could better inform public policies relevant to businesses and allow businesses to benchmark their own performance. It is also important that business sustainability measurement frameworks adequately take into account the wide-ranging well-being outcomes that matter to stakeholders (Siegerink, Shinwell and Žarnic, 2022[24]).

So far, no universal framework for reporting on non-financial performance has emerged. In November, 2021, the International Financial Reporting Standards Foundation (IFRS) announced the creation of a standards board with the goal of setting a global baseline for sustainability disclosures.[2] It is understood that this International Sustainability Standards Board (ISSB) will initially focus on disclosures that are relevant from the perspective of how sustainability issues affect enterprise value. In the future, such disclosures may also capture the impacts that firm have on society and the environment. The European Commission, which is preparing to launch a first set of sustainability reporting requirements in 2022,[3]

will take a different approach, including in its standards both the sustainability impacts that are relevant for the firm, as well as for society as a whole.

Notes:
1. The Impact Management Platform provides an overview of the various steps that businesses should take to measure and manage their impacts and lists some of the key resources in this area: https://impactmanagementplatform.org/.
2. See the announcement by the IFRS Foundation: https://www.ifrs.org/news-and-events/news/2021/11/ifrs-foundation-announces-issb-consolidation-with-cdsb-vrf-publication-of-prototypes/.
3. Details here: https://www.efrag.org/Activities/2010051123028442/Non-financial-reporting-standards.

Most OECD countries already implement sustainable public procurement policies, which is the subject of Target 12.7. At global level, the IAEG-SDGs suggested to monitor this target through an index measuring the degree of sustainable public procurement policies and the implementation of action plans. In 2020, 23 OECD countries implemented sustainable public procurement policies and action plans and are therefore considered to be meeting the target. As stressed for other targets relying on binary measures, trends cannot be assessed.

Despite the paucity of data, early estimates suggest a great diversity of outcomes among OECD countries when it comes to education for sustainable development. As emphasised in the 2030 Agenda, education is also key in ensuring that youth become engaged citizens and participate in society. In particular, Target 12.8 aims at *"*ensuring that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature*"*. It is monitored by measures on the extent to which i) global citizenship education and ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment. For all four measures, the target levels are 1 (i.e. the highest score possible). Technical work led by the UNESCO Institute for Statistics (UIS) and supported by the OECD is underway to produce instruments for measuring this indicator. Early results suggest that in 2020, among the 23 OECD countries for which some data are available, a few countries, such as France, Spain, Germany and Latvia, were already mainstreaming global citizenship education and education for sustainable development at three or more levels. Conversely, some countries, such as Canada, Austria, Denmark, the Slovak Republic, the Czech Republic, the United Kingdom and New Zealand, seem to be much further from achieving Target 12.8. Yet, the limited data availability and the stark differences among the different domains may limit this assessment. For instance, while 13 OECD countries can be considered as close to target when focusing on national education policies, the same is true for six countries on teacher education and only one (France) for curricula.

The distances to Target 12.a cannot be assessed for OECD countries. Target 12.a focuses on the support to developing countries in strengthening their scientific and technological capacity to move towards more sustainable patterns of consumption and production. It is monitored through an indicator of the installed renewable energy-generating capacity per capita. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Target 7.b. This indicator focuses on developing countries and, as such, the target cannot be assessed for OECD countries.

Few OECD countries have exhaustive accounting tools to gauge the sustainability of tourism. Target 12.b aims at *"*developing and implementing tools to monitor sustainable development impacts for sustainable tourism*"*. Concretely, the target is measured through the degree of implementation of the Tourism Satellite Account (TSA) and the System of Environmental and Economic Accounts (SEEA) tables considered most relevant and feasible for monitoring sustainability in tourism (seven TSA tables and four SEEA tables). In 2018, while nine OECD countries have implemented all the seven TSA tables, only one has already implemented the four required SEEA tables (the Netherlands). Overall, only five OECD countries show a high implementation of both accounting tools (Australia, Colombia, Denmark, Mexico and

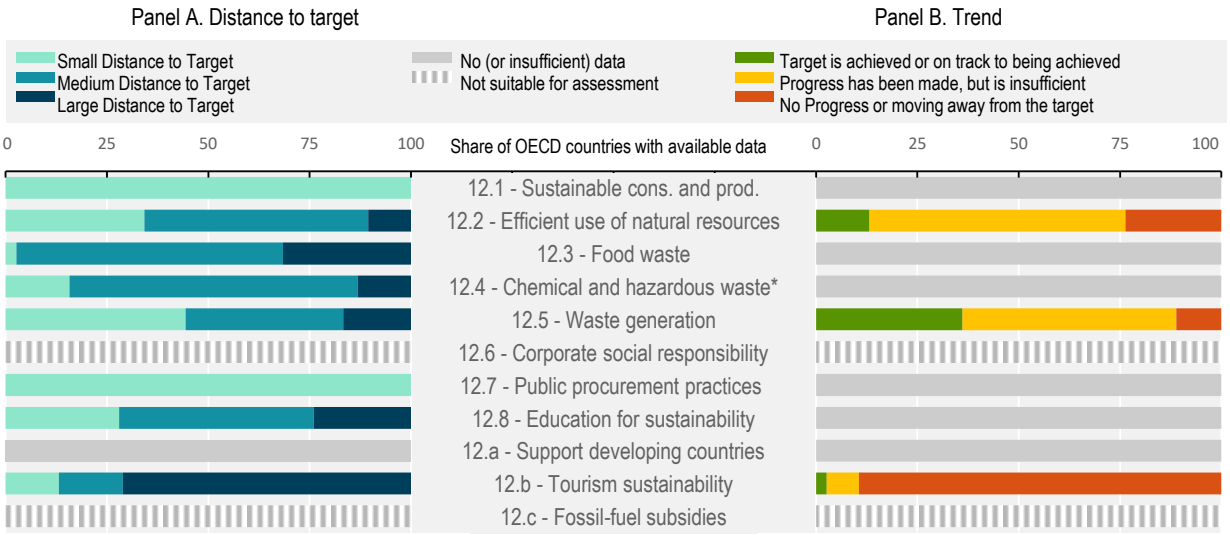
the Netherlands), while four report poor implementation of both (Greece, Italy, Costa Rica and Korea). Over time, implementation is progressing in some countries, but at very diverse rates. Overall, however, nine out of ten OECD countries are unlikely to make progress towards the target.

Many governments continue to provide financial support for the production and use of fossil fuels. As stressed by OECD (2021[25]), this undermines the effectiveness of environmental policies and can impose strains on government budgets. Target 12.c calls on countries to *"*rationalize inefficient fossil-fuel subsidies*"* and is tracked through measures of fossil-fuel subsidies. While very informative, this measure may not be suitable for cross-country comparison.[18] Therefore, it is not used to gauge progress in this report. However, work from the OECD and the International Energy Agency (OECD/IEA, 2021[26]) shows that, despite the 2009 G20 pledge to gradually phase out inefficient fossil fuel subsidies, major economies still support the production and consumption of coal, oil and natural gas with hundreds of billions of US dollars each year. Overall, total support in OECD Member countries has remained similar to 2010 levels, at around USD 100 billion, having increased substantially to 2013 then receded in the interim (OECD, 2021[27]).

Summing up

Overall, data gaps prevent a comprehensive assessment of OECD countries' progress towards Goal 12 on ensuring sustainable production and consumption patterns, but available data suggest a mixed picture. On the policy dimension, most OECD countries have implemented legal and institutional frameworks to guide sustainable consumption and production (Target 12.1) as well as sustainable public procurement policies and action plans (Target 12.7), see Figure 3.5, panel A. Yet, results vary significantly when it comes to ensuring environmentally sound management of hazardous wastes and other chemicals in line with the relevant international agreements (Target 12.4). Output measures suggest more mitigated results. On the one hand, more than half of OECD countries show declining trends in domestic material consumption (Target 12.2), and nearly all of them have put significant effort into reducing waste generation through material recovery and recycling (Target 12.5) – see Figure 3.5, panel B. On the other hand, domestic material consumption is reducing slowly, and part of this reduction actually reflects the substitution of domestic production by imports. In addition, despite increasing amounts of materials being fed back into the economy, much is lost to the economy or recycled into low-value products (OECD, 2020[13]). Finally, almost all OECD countries generate high levels of food waste (Target 12.3).

Figure 3.5. Distance to target and trends over time in OECD countries, by SDG target, Goal 12



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/t24vdk

Impact of the COVID-19 pandemic on Goal 12

Domestic material consumption (DMC) levels may well shrink during the pandemic before reverting to pre-crisis levels. The pandemic has led governments and companies to take exceptional measures to contain the spread of the virus and protect the lives of residents and workers. These measures have highly disrupted global production and supply chain systems and will likely lead to a sharp decline in the consumption of raw materials (Target 12.2) in the short term – see Table 3.4. However, this one-off decline is not likely to have a long-term impact on DMC levels unless structural changes lead to consumption patterns that fall consistently below pre-pandemic levels.

Waste management challenges (Target 12.5) **have increased significantly** as a result of the pandemic, as governments have had to cope with major increases in medical waste (due mostly to disposable personal protective equipment), mounting demand for single-use plastics (for groceries, food delivery, health care and e-commerce packaging), reduced recycling capacity and a collapse of the market price for recycled plastics. With many governments mandating masks for large segments of the general population, the use of disposable medical masks has skyrocketed, creating significant waste management and environmental challenges (OECD, 2020[28]). In addition, in the short term, the pandemic has resulted in cutbacks in waste management programmes in some OECD countries (Zambrano-Monserrate, Ruano and Sanchez-Alcalde, 2020[29]).

As noted above, while preliminary data suggest that ODA reached its highest level ever in 2020, detailed figures on 2020 data are not available at the time of drafting this publication, and the impact of the COVID-19 pandemic on ODA support to strengthen scientific and technological capacity (Target 12.a) remains unknown (Table 3.4).

Tourism is probably one of the sectors hardest hit by the coronavirus pandemic. Early estimates suggest that international tourism may have fallen by around 80% in 2020, and the outlook remains highly uncertain (OECD, 2021[30]). While destinations that rely heavily on international, business and events tourism are particularly struggling, domestic tourism has restarted and is helping to mitigate the impact on jobs and businesses in some destinations. Yet, the crisis sometimes has appeared to be an opportunity to rethink the tourism system. For instance, some destinations have been using the crisis as an opportunity to revamp their tourism development model, and the decline in tourism has not always been unwelcome – particularly in cities previously experiencing "over-tourism" (OECD, 2020[31]). Still, Target 12.b aims at *"*developing and implementing tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products*"*, and therefore, the pandemic is not likely to have a direct impact on Target 12.b (Table 3.4).

The fall in both fossil fuel prices and consumption caused by the COVID-19 pandemic brought down global subsidies for fossil fuel consumption in 2020 (IEA, 2020[32]) (Target 12.c). The lockdowns and economic slump have brought market-based fuel prices closer to the low end-user prices that prevail in many countries, decreasing the value of the subsidy per unit of consumption. Lower fossil fuel consumption in many countries due to reductions in transport activity has further reduced support. Therefore, the fall is largely due to declining fuel prices and consumption rather than to a favourable policy change and will not be sustained given the steep increase of oil prices in 2021, unless reform of support measures is undertaken. The IEA estimates that consumption subsidies will more than double in 2021 due to higher fuel prices and energy use, coupled with hesitancy on fossil fuel pricing reforms (OECD, 2021[33]).

Table 3.4. Summary impact of the COVID-19 pandemic on Goal 12 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
12.1 – Sustainable consumption and production	none	none
12.2 – Efficient use of natural resources	positive	none
12.3 – Food waste		
12.4 – Chemical and hazardous waste*	none	none
12.5 – Waste generation	negative	none
12.6 – Corporate social responsibility	none	none
12.7 – Public procurement practices	none	none
12.8 – Education to sustainability	none	none
12.a – Support developing countries		
12.b – Tourism sustainability	none	none
12.c – Fossil-fuel subsidies	positive	

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 13 – Climate action

Goal 13 commits countries to *"*taking urgent action to combat climate change and its impacts*"*. Emissions of greenhouse gases from human activities disturb the radiative energy balance of the earth-atmosphere system. They exacerbate the natural greenhouse effect, leading to temperature changes and other disruptions of the Earth's climate. Climate change is of global concern; it threatens ecosystems and biodiversity and affects water resources, human settlements and the frequency and scale of extreme weather events, with significant consequences for food production, human well-being, socio-economic activities and economic output. At national level, despite some progress achieved in decoupling greenhouse gas emissions from population and GDP growth, emissions are still rising in some OECD countries.

The COVID-19 crisis resulted in only a short-term reduction in global emissions of greenhouse gases and will not contribute significantly to emissions reductions by 2030 unless countries pursue an economic recovery that incorporates ambitious measures towards carbon neutrality.

Assessing OECD countries' performance on Goal 13

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 3.5 shows that data allow the monitoring of three of the five targets underpinning Goal 13, but only one of them can be assessed over time. For this goal, one indicator sourced from the OECD complements the *SDG Global Database* to provide data on all OECD countries (13.2.2). On top of the indicators listed in Table 3.5, the database includes an additional data series on bilateral climate-related ODA under Target 13.a. This indicator provides contextual information for Goal 13 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-3-planet.xlsx).

Table 3.5. Available data series supporting the monitoring of Goal 13

Indicator code	Indicator Label	Available over time	Primary source
13.1.1	Number of deaths and missing persons attributed to disasters per 100 000 population	No	*SDG Global Database*
13.1.1	Number of directly affected persons attributed to disasters per 100 000 population	No	*SDG Global Database*
13.1.2	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework	No	*SDG Global Database*
13.1.3	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	No	*SDG Global Database*
13.2.2	Greenhouse gas emissions, intensities per unit of GDP	Yes	OECD
13.2.2	Total greenhouse gas emissions without LULUCF for Annex I Parties	Yes	*SDG Global Database*
13.3.1	Data series on the extent to which global citizenship education and education for sustainable development are mainstreamed in i) national education policies, ii) curricula, iii) student assessment and iv) teacher education	No	*SDG Global Database*

Note*:* Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries. LULUCF stands for land use, land use change and forestry.

When it comes to the planet's resilience to shocks and disasters, distance to target varies greatly among OECD countries (and specific indicators). Target 13.1 calls on countries to *"*strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries*"*. Four data series are available to assess OECD countries' current performance on Target 13.1: i) the score of adoption and implementation of national disaster risk reduction strategies (DRR) in line with the Sendai Framework, ii) the proportion of local governments that adopt and implement local DRR strategies in line

with national DRR strategies, iii) the number of directly affected persons attributed to disasters, and iv) the number of deaths and missing persons directly attributed to disasters. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, these indicators are repeated under Targets 1.5, 11.5 and 11.b. Target levels have been set at 1, which is the highest score, for the first two indicators relating to DRR strategies, and 0 for the other indicators, since everyone should be protected from disasters. Overall, most OECD countries are at a rather short distance to the target, but available data neither allow covering all aspects of the target nor gauging progress over time. Disasters cost lives and disrupt socio-economic activities and livelihoods, causing important economic costs each time they occur. Available data show that on average among OECD countries, natural disasters directly affected 557 persons per 100 000 inhabitants, and less than 1 person per 100 000 inhabitants died or went missing due to disasters in 2018. While significant, the economic loss associated with such events is not included under this target – see People and Prosperity chapters (Targets 1.5 and 13.1) for details. In addition, given the nature and the volatility of the indicator, careful interpretation is needed. Furthermore, in the last 30 years, the number of disasters has significantly increased across OECD Member countries (OECD, 2017[34]). On policy indicators, as of 2019, around half of OECD countries have already adopted DRR strategies at both national and local levels. However, at the national level, 11 OECD countries (including Sweden, Iceland, Canada, Ireland, Portugal, the Slovak Republic, the Netherlands, Israel, Italy, Turkey and Denmark) are at a large distance to the target, with a score on the adoption and implementation of DRR strategies below 0.5 (1 being full adoption and implementation).[19]

Box 3.2. IPAC

In the context of the 2021 OECD Ministerial Council Meeting, the OECD announced the creation of the International Programme for Action on Climate (IPAC), led by France.

The objective of IPAC is to offer participating countries a new steering instrument, complementary to and consistent with the United Nations Framework Convention on Climate Change (UNFCCC) and the 2015 Paris Agreement, to pursue progress towards the transition to the net-zero greenhouse gas emissions goal and a more resilient economy by mid-century, thanks to a precise evaluation of countries' actions and the sharing of good practices.

IPAC leverages the OECD's proven working methods to develop evidence-based analysis and the sharing of good practices and results, building on existing data and indicators, policy tools, advice and guidance developed by the OECD family, including the International Energy Agency (IEA), the International Transport Forum (ITF) and the Nuclear Energy Agency (NEA).

The IPAC programme has four pillars:

- An Annual Climate Action Monitor, building on a set of commonly agreed climate-related indicators, which will provide a digest of countries' progress towards their climate policy objectives, their alignment with the Paris Agreement goals and examples of good practices.
- A dashboard of climate-related indicators. A small number of indicators will be used for benchmarking national efforts and performances, and a broader set of indicators will complement the analysis. This will allow for a tailored assessment of countries' progress against national and international objectives in a timely manner.
- Concise country notes with targeted policy advice, informed by the set of climate-related indicators. The country notes will take into account countries' economic structure and specific social and geographical factors.

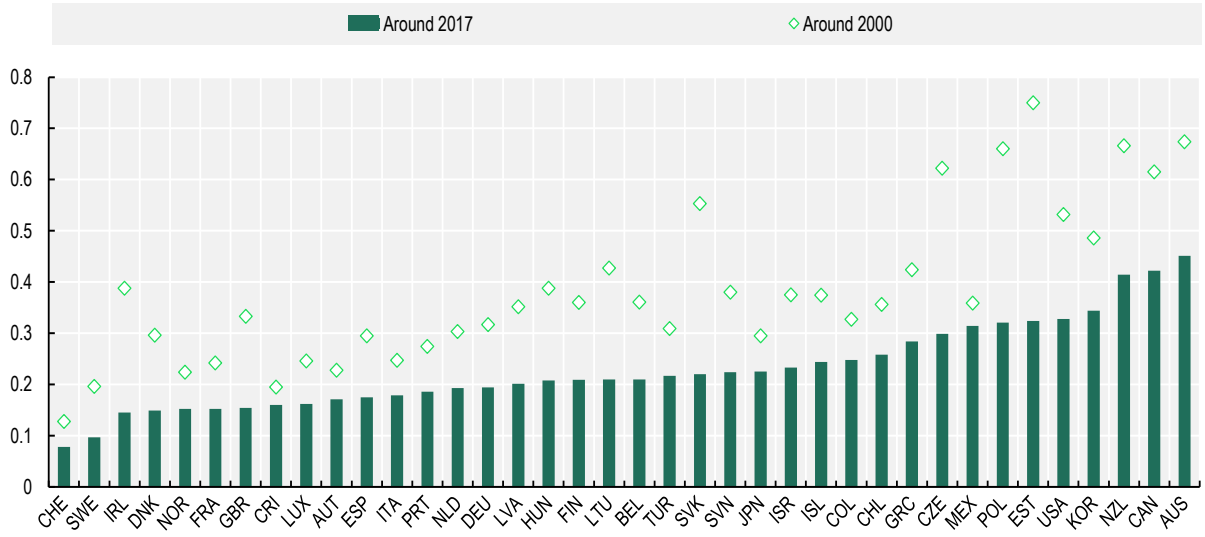
- An interactive platform for dialogue and mutual learning across countries. The platform will provide online discussion among countries using a dedicated Community site.

The IPAC initiative seeks to be broader than OECD membership. It will be open to OECD Key Partners, the six prospective OECD members and G20 countries. IPAC will be funded by voluntary contributions (more info are available at: https://www.oecd.org/climate-action/ipac/).

Despite some progress achieved in decoupling greenhouse gas (GHG) emissions from population and GDP growth, emissions are hardly decreasing. There is today agreement on the critical need to reduce GHG emissions and achieve net-zero CO_2 emissions by 2050 to give the world a chance of limiting the global temperature rise to 1.5°C, as required by the Paris Agreement. Target 13.2, which calls on countries to *"*integrate climate change measures into national policies, strategies and planning*"*, is measured in the global indicator framework by a policy indicator assessing "nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications*"* and measures of GHG emissions. On the latter, ideally, targets would be nationally determined and proportionate so as to recognise the different starting positions, circumstances and opportunities that face countries on their way towards net zero emissions. Yet, given the comparative nature of this report, it is key to go beyond nationally determined contributions (NDCs) and propose a common target level of emissions per capita.[20] It is likely that using the lowest emissions observed in 2015 would allow to provide targets that would allow achieving net-zero CO_2 emissions by 2050. In order to overcome this absence of target in a critical area, the current report suggests to aim at halving 2015 levels.[21] As detailed by the OECD (2021[25]), emission intensities per unit of GDP and per capita decreased since 2005 in almost all OECD countries, revealing an overall decoupling from economic growth (Figure 3.6). Yet, overall progress is insufficient, and only five countries are expected to reach the targeted level by 2030 (Figure 3.7, panel B). GHG emissions of OECD countries peaked in 2007 and have been declining in most OECD countries since then (OECD, 2021[25]). This fall can, however, be partly attributed to a slowdown in economic activity following the 2008 economic crisis, as well as to strengthened climate policies and changing patterns of energy consumption. Using more advanced forecasting tools and taking into account the effects of nationally determined contributions confirms that total GHG emissions are expected to be 16% above 2010 levels by 2030, whereas a 45% reduction would be needed to be consistent with the 1.5°C emissions pathway (UNFCCC, 2021[35]).

Figure 3.6. Greenhouse gas emissions (Target 13.2)

Intensities per unit of GDP, USD at 2015 PPPs



Note: Around 2000 refers to 1995 for Colombia; 1996 for Mexico; 1999 for Chile and Korea; 2005 for Costa Rica; and 2000 for otherwise. Around 2017 refers to 2014 for Colombia; 2015 for Costa Rica and Mexico; 2018 for Israel, Korea and Chile; and 2019 for otherwise.
Source: (OECD, 2022[36]), "Greenhouse gas emissions: Total GHG excluding LULUCF per unit of GDP", *OECD Environment Statistics (database)*, https://stats.oecd.org/Index.aspx?DataSetCode=AIR_GHG (accessed on 29 October 2021).

StatLink https://stat.link/p786if

Despite the paucity of data, early estimates suggest a great diversity of outcomes among OECD countries when it comes to education for sustainable development. As emphasised in the 2030 Agenda, education is also key in ensuring that youth become engaged citizens and participate in society. In particular, Target 13.3 aims at "improving education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". In the global indicator framework, indicator 13.3.1 measures the extent to which i) global citizenship education and ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment, for all of which the target levels refer to 1 (i.e. the highest score possible) in this report. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Targets 4.7 and 12.8. Technical work led by the UNESCO Institute for Statistics (UIS) and supported by the OECD is underway to produce instruments for measuring this indicator. Early results suggest that in 2020, among the 23 OECD countries for which some data are available, a few countries, such as France, Spain, Germany and Latvia, are already mainstreaming global citizenship education and education for sustainable development at three or more levels. Conversely, other countries, such as Canada, Austria, Denmark, the Slovak Republic, the Czech Republic, the United Kingdom and New Zealand, seem to be much further from achieving Target 13.3. Yet, the limited data availability and the stark differences among the different domains may limit this assessment. For instance, while 13 OECD countries can be considered as close to target when focusing on national education policies, the same is true for six countries on teacher education and only one (France) for curricula.

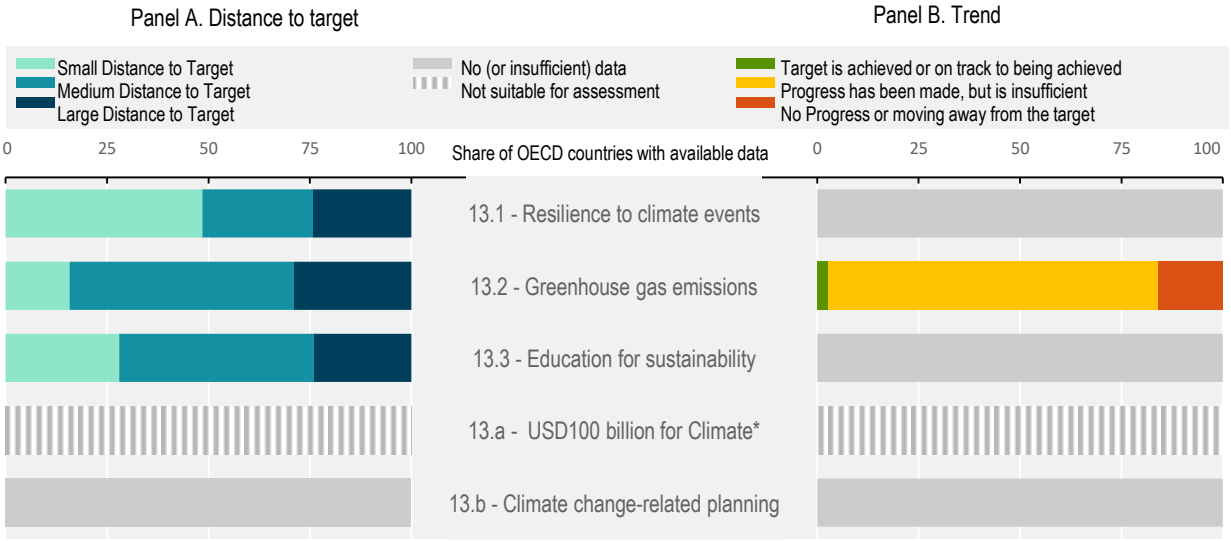
Although finance for climate action has been increasing, it remains well below the USD 100 billion target. At the 15th Conference of Parties (COP15) of the UNFCCC in Copenhagen in 2009, the developed countries committed to a collective goal of mobilising USD 100 billion per year by 2020 for climate action in developing countries, in the context of meaningful mitigation actions and transparency on

implementation (UNFCCC, 2010[37]). In 2015, this target had been incorporated in the 2030 Agenda (Target 13.a). Since then, total climate finance provided and mobilised by the developed countries has increased, reaching USD 79.6 billion in 2019 from USD 58.5 billion in 2016 (OECD, 2021[38]). A one-year jump of more than USD 20 billion would, therefore, be required to meet the USD 100 billion goal for 2020. At COP26, countries reaffirmed the duty to fulfil the USD 100 billion commitment and conveyed a call to double the provision of finance by developed countries for climate adaptation by 2025 (based on current flows of circa USD 20 billion, that would imply reaching USD 40 billion by mid-century).

Summing up

Overall, despite significant progress, climate action remains insufficient across OECD countries. Climate change is increasingly affecting human lives, biodiversity, ecosystems and national economies. Against this backdrop, the challenge is to curb GHG emissions and to build resilience to climate change-related risks. In terms of resilience to natural disasters, around half of OECD countries can be considered to be close to target, with DRR strategies implemented at national and local levels and with relatively moderate losses from natural disasters (Figure 3.7, panel A). However, the picture may be more nuanced, as data gaps hamper the assessment. While OECD countries historically account for the largest share of global emissions, they have recently decoupled emissions from economic and population growth. Therefore, emission intensities (per capita and per unit of GDP) have been decreasing in most OECD countries since 2005 (OECD, 2021[25]). Still, such reductions are insufficient and vary significantly across OECD countries (Target 13.2) – see Figure 3.7. Moreover, the downward trend in overall emissions may reverse due to recent increases in energy use and CO_2-related emissions (OECD, 2021[25]). Besides the targets on emissions and resilience, Target 13.3 aims at improving education about climate change, but on this front performances greatly vary among OECD countries.

Figure 3.7. Distance to target and trends over time in OECD countries, by SDG target, Goal 13



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 13

Target 13.1 on resilience towards environmental shocks includes measures of both the policy stance and impact of disasters. As the indicators of the impact of shocks on mortality and GDP should encompass economic, social and environmental shocks, the excess mortality induced by the COVID-19 pandemic will dramatically impact the second part of the target. More generally, however, it is key to underline that preventing crises such as the one associated to the ongoing pandemic lies at the heart of the 2030 Agenda. In particular, this target includes an indicator on risk reduction (a score based on adoption and implementation of "national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030"), which cover the risks of epidemics and pandemics.[22]

The COVID-19 crisis has resulted in a short-term reduction in global GHG emissions, but this reduction is largely insufficient to meet targets by 2030 (Target 13.2) – see Table 3.6. According to the IEA (IEA, 2020[39]), global energy-related CO_2 emissions decreased by about 6% in 2020. The COVID-19 crisis triggered the largest annual drop in global energy-related CO_2 emissions since the Second World War – around twice as large as the combined total of all previous reductions since then. However, carbon dioxide can stay in the air for centuries, and despite lower CO_2 emissions, atmospheric concentrations of these gases have continued to increase during the pandemic (NOAA, 2021[40]). In addition, the overall decline in emissions masks significant variations depending on the region – reductions were estimated to

be larger in advanced economies than in emerging market and developing economies – and the time of year – after hitting a low in April, global emissions rebounded strongly (IEA, 2020[39]). Recent data show that global emissions were 2% higher in December 2020 than they were in the same month of the previous year. Across countries, variations are also significant and largely mirror the stringency of COVID-19-related measures. While 2020 marked the largest absolute decline in global CO_2 emissions in history, the evidence of a rapid rebound in energy demand and emissions in many economies underscores the risk that CO_2 emissions are likely increase significantly in 2021. Global GHG emissions are projected to significantly decline by 2030 only if COVID-19 recovery packages are used to accelerate the transition to net zero emissions (IEA, 2020[41]).Further, and as highlighted by the OECD (IEA, 2020[39]), policy uncertainty about the journey towards net-zero carbon emissions is hindering investment in clean energy and infrastructure. The longer governments wait, the greater the risks of an abrupt transition in which energy prices are higher and more volatile. Inaction therefore increases the risks to people's living standards and may undermine public support for the energy transition.

Due to time lags in official reporting, the climate finance planned and mobilised by developed countries in 2020 will not be available before 2022 (Target 13.a). According to preliminary data collected by the OECD, ODA reached its highest level ever in 2020 due in part to support for the COVID-19 crisis (OECD, 2021[22]). Many DAC members indicated that they would protect ODA budgets in 2020, and several have indicated they would continue to maintain or increase them in 2021. Yet, detailed figures on 2020 data are not available at the time of preparing this publication and the impact of the COVID-19 pandemic on sectoral ODA remains unknown.

Table 3.6. Summary impact of the COVID-19 pandemic on Goal 13 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
13.1 – Resilience to climate events	negative	none
13.2 – Greenhouse gas emissions	positive	none
13.3 – Education for sustainability	none	none
13.a – USD 100 billion for climate*		

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 14 – Life below water

Goal 14 calls on countries to "conserve and sustainably use the oceans, seas and marine resources for sustainable development". Oceans are a shared global resource. Ocean-related industries in many countries have expanded with insufficient consideration for the environment, risking the natural resources and essential marine ecosystem services on which economies and the well-being of people depend. While efforts to reduce nutrient inputs into coastal zones and to expand marine protected areas are showing progress in some countries, acidification, marine debris and eutrophication are direct threats to life below water, while overfishing, illegal, unregulated and unreported fishing and aquaculture practices can place further stress on marine ecosystems.

As detailed in the subsection on the Impact of the COVID-19 pandemic on Goal 14, the COVID-19 pandemic has introduced new sources of marine pollution and led to the reduction of surveillance operations due to travel restrictions, which may have favoured illegal, unregulated and unreported fishing. Still, the global lockdown measures used to curb the spread of the coronavirus pandemic also have, to a certain degree, wreaked havoc on the fishing, tourism and maritime transport industries. This drastic reduction in human activities may however ultimately offer a chance for the oceans to recuperate if recovery measures ensure more responsible use and progress towards the restoration of the ocean, seas and coasts. Otherwise, in the absence of further measures, these (limited) benefits will not last. Overall, the implications of the pandemic on human interaction with the ocean are still to be fully assessed.

Assessing OECD countries' performance on Goal 14

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 3.7 shows that data allow the monitoring of five of the ten targets underpinning Goal 14, but only two of them can be assessed over time. For this goal, two indicators sourced from the OECD complement the *SDG Global Database*. One aligns with the global indicator framework. Drawing from OECD sources allows providing longer time series and tracking progress over time (14.5.1). In the other case, relying on OECD sources allows monitoring an indicator for which data are not available for most OECD countries (14.4.1). On top of the indicators listed in Table 3.7, the database includes two additional data series under Targets 14.1 and 14.7. These indicators provide contextual information about Target 14.1 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-3-planet.xlsx).

Table 3.7. Available data series supporting the monitoring of Goal 14

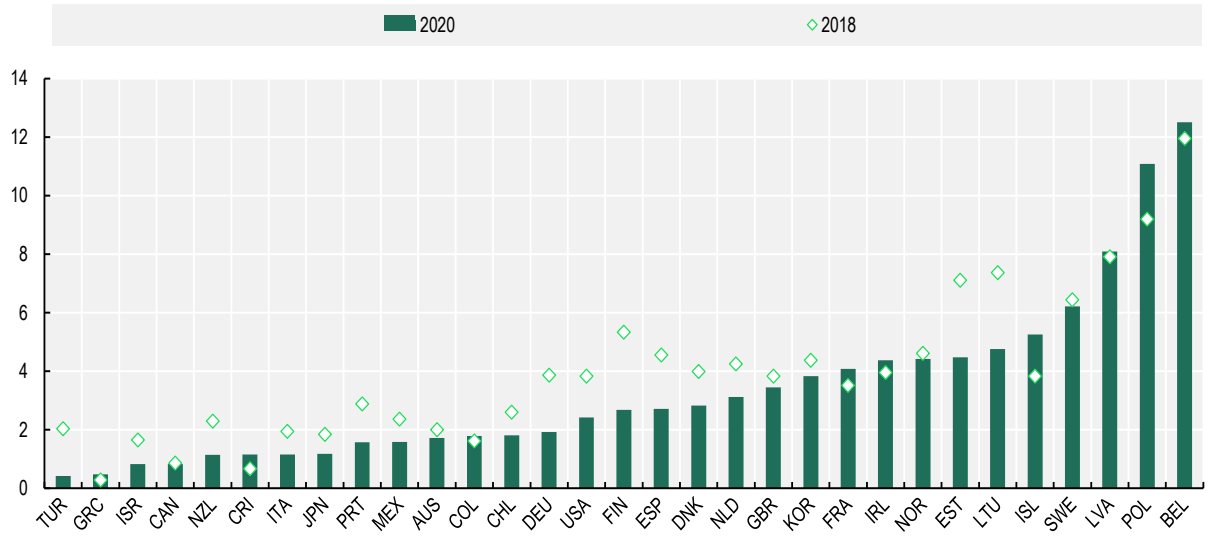
Indicator code	Indicator Label	Available over time	Primary source
14.1.1	Chlorophyll-a deviations	Yes	*SDG Global Database*
14.1.1	Extreme or high chlorophyll-a anomaly	No	*SDG Global Database*
14.1.1	Beach litter per square kilometre	No	*SDG Global Database*
14.4.1	*Aggregated indicator for policies and practices against illegal, unreported and unregulated (IUU) fishing*	No	OECD
14.5.1	Coverage of protected areas in relation to marine areas (exclusive economic zone)	No	*SDG Global Database*
14.5.1	Average proportion of marine key biodiversity areas (KBAs) covered by protected areas	Yes	*SDG Global Database*
14.5.1	Protected areas as a share of the exclusive economic zone	Yes	OECD
14.6.1	Progress by countries in the degree of implementation of international instruments aiming to combat IUU fishing	No	*SDG Global Database*
14.b.1	Degree of application of a legal/regulatory/policy/institutional framework which recognises and protects access rights for small-scale fisheries	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

While efforts to reduce nutrient inputs into coastal zones are showing success in some countries, marine debris and algal blooms indicate that marine pollution continues to be a challenge. Target 14.1 on marine pollution has two main dimensions: marine debris and nutrient pollution. As highlighted by the UN (2021[42]), knowledge gaps remain with regard to both recognised and emerging pollutants, and in several regions capacity gaps remain in applying consistent, coherent policies and related enforcement to prevent and control inputs of pollutants into the ocean. Marine debris is monitored through the amount of beach litter per square km (log value). Ideally, there should be no debris on beaches, but given the limitations of the data (beach litter data are derived from citizen-generated data before being modelled), the threshold was set at 20 debris per square km to allow some degree of flexibility. Still, no OECD country has reached or even come close to this threshold in 2019 (or closest year available). Beach litter is estimated to be lower in Ireland (440 debris per square km) and to exceed 1 000 000 debris per square km in Mexico, Estonia, Costa Rica, Chile and Israel. On the other hand, marine pollution includes two measures of nutrient pollution based on observed variations of chlorophyll-a concentration.[23] The two measures are highly correlated (0.74). Overall, six OECD countries are at a large distance from targets on both indicators (Latvia, Sweden, Norway, Iceland, Poland and Belgium), while eight are at a short distance on both indicators (Turkey, Greece, Italy, Costa Rica, Japan, Israel, Mexico and Canada). The index of Chlorophyll-a deviation is the only measure that allows assessing progress on nutrient inputs on coastal zones over time. It shows that chlorophyll-a anomalies in countries' exclusive economic zones are decreasing in half of OECD countries (Figure 3.8), but two (Greece and Turkey) are on a path of getting back to the baseline value from 2000-04 (Figure 3.9, panel B).

Figure 3.8. Chlorophyll-a anomaly (Target 14.1)

Remote sensing, extreme or high frequency Chlorophyll-a concentration as percentage of national exclusive economic zones



Source: (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg (accessed on 29 October 2021).

StatLink https://stat.link/o9jtb2

No data are available to assess Target 14.2. Despite the 2020 deadline for Target 14.2 on the management and protection of marine and coastal ecosystems, the indicator attached to this target (proportion of the national exclusive economic zone managed using ecosystem-based approaches) is still missing from the *SDG Global Database*.

Despite the scarcity of data, available measures show a decrease in marine acidity in all OECD countries with available data. Target 14.3 aims at *"*minimizing and addressing the impacts of ocean acidification*"*. At the time of drafting this report, marine acidity measures were available in 17 different OECD countries (Australia, Belgium, Canada, Chile, Finland, France, Iceland, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Spain, United Kingdom and United States) and thus does not allow to provide a comparative assessment. Still, available data show a consistent decrease in the pH of oceans in almost all countries where there is monitoring.

Illegal, unregulated and unreported fishing (IUU) undermines the effectiveness of management of life below water and threatens the sustainability of fishing stocks. Target 14.4 aims at *"*regulating harvesting and end overfishing, IUU and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics*"* by 2020. For global monitoring, this target is meant to be tracked by an indicator of the "proportion of fish stocks within biologically sustainable levels*",* but available data cover only 10 OECD countries and do not allow assessing the distances to target. To overcome this lack of coverage, in this report the target is assessed through an aggregate index of IUU fishing developed by the OECD (see Hutniczak, Delpeuch and Leroy (2019[43]) for details). This index is based on policy indicators and investigates the extent to which countries meet their responsibilities in the different dimensions of government intervention in relation to IUU fishing. Therefore, it allows capturing only one of the many facets of Target 14.4: whether OECD countries have legal frameworks in place to address IUU fishing. The indicator shows that the average up-take of best practices is around 80% (the target is set at 100% of best practices put in place), with large variations between the different dimensions of the index. The OECD (2020[44]) reports that some areas remain insufficiently implemented (transparency over vessel registration and authorisation processes; stringency of transhipment regulation; and market measures aimed at increasing traceability and closing access to markets and fisheries services to IUU fishing operators). At country level, the average up-take is above 95% only in Mexico but below 85% in most countries, and even 75% in Korea, Chile, Costa Rica, Colombia and Turkey. The OECD (2020[44]) has shown that there has been progress since 2005 in all areas of government intervention against IUU fishing.

By the end of 2020, two in three OECD countries had expanded their marine protected areas (MPAs)[24] beyond 10% of their exclusive economic zone, as agreed in both Aichi Target 11 of the Convention on Biological Diversity (CBD) and the Sustainable Development Goals. Target 14.5 commits countries to *"*conserving at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information*"* by 2020. MPAs have been receiving increasing attention from policy makers as a policy instrument for biodiversity conservation and the sustainable use of marine resources. Over the past two decades, all OECD countries increased their protected areas, but stricter marine reserves and no-take zones (marine "sanctuaries") are still rare. Beyond MPA coverage, for which the target level is 10% in line with the wording of the 2030 Agenda, the *SDG Global Database* includes an additional measure capturing the proportion of "marine key biodiversity areas" covered by protected areas. In this case, as no quantified target has yet been identified, the distance is measured relative to the best performances among OECD countries observed in 2015 (for Estonia, Latvia, the Netherlands and Belgium, more than 93% of marine KBAs are protected). Overall, this indicator shows that in 2020, 12 OECD countries (all European) protect more than 81% of their marine key biodiversity areas (and are thus considered at a short distance to the target), while nine of them protect less than half of their marine KBAs (Costa Rica, New Zealand, Korea, Canada, the United States, Chile, Iceland, Turkey and Israel). In addition, similarly to what is reported more generally for MPAs, the share of marine KBAs that are protected has been growing in all OECD countries. Yet, pressures on oceans do not stop with national boundaries, and only 1% of marine areas beyond national jurisdictions have been protected so far (UN, 2021[42]).

While the indicator for global monitoring suggests that all OECD countries have implemented international instruments aiming to combat illegal, unreported and unregulated fishing, the WTO negotiations called for by Target 14.6 are still ongoing, and the 2020 deadline was missed. Target 14.6 calls to "prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation". Therefore, the primary objective of this target was to conclude negotiations at the WTO by 2020. These negotiations were still ongoing at the time of drafting this report. Still, beyond the negotiations, the IAEG-SDGs suggested that this target be monitored primarily through an indicator on *"*the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing*",* with scores ranging from 1 to 5 (the maximum score is the target level). While in 2020 virtually all OECD countries implemented the different international instruments, only Mexico, Costa Rica, Norway and Turkey failed to reach the highest possible score.

The indicators underpinning targets 14.7 and 14.a are not suitable for assessing OECD countries. Target 14.7 aims at increasing the economic benefits from the sustainable use of marine resources and is monitored through an indicator of the value added of sustainable marine capture fisheries as a proportion of GDP. However, it explicitly targets Small Island Developing States and least developed countries and is thus not considered relevant for OECD countries. Similarly, Target 14.a, which is defined as national ocean science expenditure as a share of total research and development funding, is not considered to be suitable for comparative assessments, as the ideal sectoral breakdown of research and development is likely to depend on the needs, priorities and expertise of each country.

Most OECD countries grant small-scale artisanal fishers access to marine resources and markets. Target 14.b focuses on *"*providing access for small-scale artisanal fishers to marine resources and markets*"* and is assessed through a policy indicator that measures the degree of application of a legal/regulatory/policy/institutional framework that recognises and protects access rights for small-scale fisheries (the level of implementation is lowest at 1 and highest at 5, which is therefore the target level in this report). While all OECD countries besides Korea and New Zealand had a relatively high degree of the application of frameworks in 2020, the high homogeneity of scores penalises the countries that do not reach the maximum score. Thus, only six OECD countries are considered to be at a short distance from the target (Costa Rica, Chile, Mexico, Colombia, Japan and Turkey). Available data do not allow assessing progress over time.

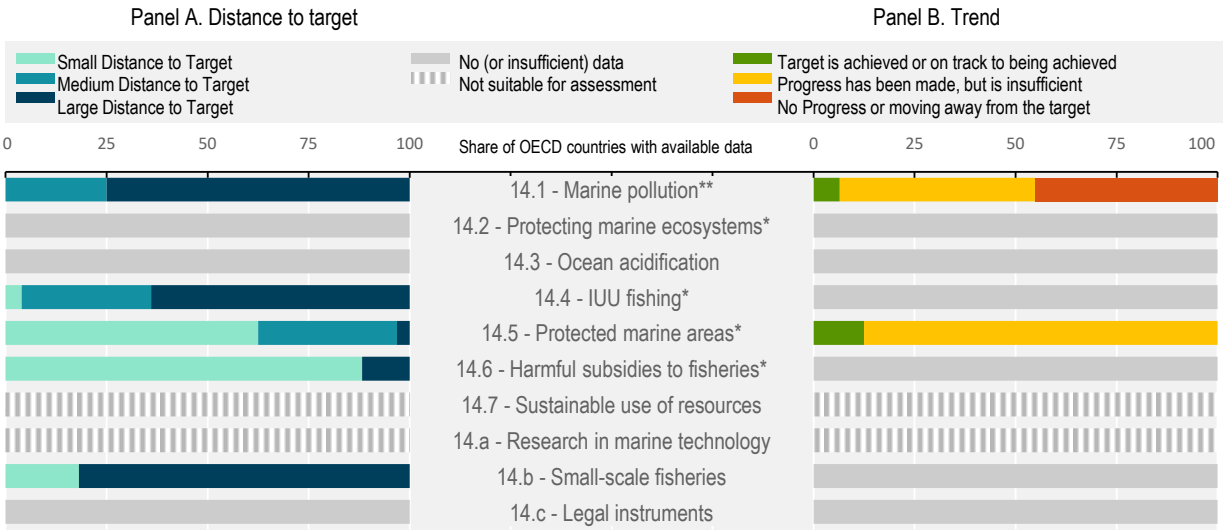
The distances to Target 14.c are not assessed due to insufficient data. Target 14.c aims at *"*enhancing the conservation and sustainable use of oceans and their resources*"*. It is monitored through policy indicators measuring the degree of implementation of ocean-related instruments, such as the United Nations Convention on the Law of the Sea, but this measure does not cover enough OECD countries to be included in the analysis presented in this report.

Summing up

Overall, despite progress in some OECD countries, the pressures on marine ecosystems keep growing. Although more than half of OECD countries are reducing nutrient pollution in their exclusive economic zone, the pace of progress is insufficient to significantly reduce marine pollution Figure 3.9, panel B). While nutrient pollution favour algal blooms and eutrophication, the high levels of marine debris are adding an extra pressure to life below water (Target 14.1). On a more positive side, both the shares of marine areas and marine KBAs that are protected is expanding in all OECD countries. Yet, while two in three OECD countries have been able to expand their marine protected areas beyond 10% of their exclusive economic zone (Target 14.5), most of them are not able to protect enough KBAs. Regarding fishing practices, the performance of OECD countries is considered to be mixed. Most countries properly

implemented the international instruments on harmful subsidies to fisheries (Target 14.6) and provided access rights for small-scale artisanal fishers to marine resources and markets (Target 14.b). In addition, most countries are underperforming in terms of the government response to illegal, unregulated and unreported fishing practices, putting the sustainability of fish stocks at risk (Target 14.4).

Figure 3.9. Distance to target and trends over time in OECD countries, by SDG target, Goal 14



Note: * refers to targets with a 2020 deadline. ** refers to targets with a 2025 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 14

Lockdowns and changes in consumption behaviours have generated new sources of plastics that may end in the oceans and directly contribute to marine pollution (Target 14.1) if wastes are not treated properly. As underscored in the section above focusing on Goal 12, waste management challenges have increased significantly with the pandemic. The extensive use of disposable personal protective equipment (in particular facemasks) has become a common tool to prevent the spread of the virus, with many jurisdictions mandating the wearing of masks in public. In addition, containment measures have led to an increased demand for single-use plastics (packaging for groceries, food delivery, health care and e-commerce) that, when discarded, can be transported to the sea by wind or rainwater, making oceans the end point for a vast amount of waste. It is therefore quite likely that the crisis will lead to a significant increase of marine debris in the years to come if this waste is not treated properly. By the end of 2020, beach surveys already showed that the number of masks entering the environment was staggering

(Phelps Bondaroff and Cooke, 2020[45]). On a more positive note, COVID-19 prevention measures that restricted people's movement have led to a significant (but temporary) decrease in the amount of marine litter on beaches (Okuku et al., 2021[46]; Soto et al., 2021[47]). The short-term impact of the pandemic on distances to target is thus summarised as mixed in Table 3.8.

While the reduction of CO_2 emissions might provide a chance to slow down ocean acidification (Target 14.3), the benefits will not last unless significant measures are put in place. As highlighted in the previous section, the pandemic and its associated containment measures have led to a 6% drop in annual fossil-fuel CO_2 emissions in 2020. As stressed by Diffenbaugh et al. (2020[48]), there is strong evidence that the slower growth of atmospheric CO_2 concentration would lead to a reduced ocean carbon sink and, thus, to a temporary reduction in the rate of ocean acidification (see Table 3.8). Yet, the evidence of a rapid rebound in CO_2 emissions is likely to mask this effect. In addition, the COVID pandemic has resulted in the cancellation of scientific research cruises as well as difficulties in the deployment and maintenance of moorings and buoys, leading to a potential gap in observations of ocean acidification.

By reducing compliance monitoring, the crisis associated to the pandemic is likely to lead to higher IUU fishing (Target 14.4). Travel and other restrictions adopted in response to the COVID-19 pandemic have made in-person on-board observations, at-sea inspections and other forms of surveillance more challenging. Consequently, in-person observation requirements were waived by several regional fisheries management organisations (RFMO). There is a widespread expectation among RFMO secretariats that the reduced compliance monitoring will lead to increased IUU fishing in some of these cases, but currently where and the extent to which this could be happening is unknown. The impacts of the pandemic on IUU fishing will depend on the type and the stringency of the observer requirements waived as well as on how fisheries respond to the changes in prices and costs generated by this crisis (OECD, 2021[49]).

Table 3.8. Summary impact of the COVID-19 pandemic on Goal 14

	Short-term impact of the pandemic	Long-term impact of the pandemic
14.1 – Marine pollution**	mixed	negative
14.2 – Protecting marine ecosystems*	none	none
14.3 – Ocean acidification	positive	none
14.4 – Overfishing and IUU fishing*	negative	none
14.5 – Protected marine areas*	none	none
14.6 – Harmful subsidies to fisheries*	none	none
14.7 – Sustainable use of resources	none	none
14.a – Research in marine technology		
14.b – Small-scale fisheries	none	none
14.c – Legal instruments	none	none

Note: * refers to targets with a 2020 deadline. ** refers to targets with a 2025 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 15 – Life on land

Goal 15 calls on countries "to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss". Despite the 2020 deadline associated with many SDG targets that support Goal 15 as well as some encouraging developments in protecting ecosystems, threats to terrestrial biodiversity are increasing, and negative trends in nature, in ecosystem functions and in many of nature's contributions to people are projected to continue, due to the projected impacts of increasing land-/and sea-use change, the exploitation of organisms and climate change. Negative impacts arising from pollution and invasive alien species (IAS) will likely exacerbate these trends (IPBES, 2019[50]). Overall, OECD countries have made some progress in reducing these pressures. For instance, 27 OECD countries met the SDG and Aichi 2020 target to protect at least 17% of their land area, while the protection of mountains is growing almost everywhere, and policy indicators do confirm progress. Yet, despite this many pressures remain, and outcome indicators that aim at assessing the state of major species groups, as well as ecosystems, confirm that the loss of biodiversity is a growing concern shared by most countries. In addition, the measures for this goal do not cover the main drivers of terrestrial biodiversity loss, i.e. land use and land cover change, land degradation and infrastructure development (see Goal 11, Chapter 4 for details).

The COVID-19 pandemic has been a reminder of the significance of human interference with biodiversity in helping to create the conditions for pathogens to leap from animals to humans.[25] Actions taken to control the pandemic have conspicuously reduced economic activity and potentially alleviated pressures on biodiversity – at least in the short term. Yet, this reduced human disturbance was also beneficial to invasive alien species (IAS). Further, IAS also benefited from delay in conservation initiatives. In addition, by reducing compliance monitoring, the economic crisis associated to the pandemic is likely to have led to increased poaching and illegal killing of wildlife (see Impact of the COVID-19 pandemic on Goal 15).

Assessing OECD countries' performance on Goal 15

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 3.9 shows that data allows the monitoring of eight of the 12 targets underpinning Goal 15, but only four of them can be assessed over time. For this goal, two indicators sourced from the OECD complement the *SDG Global Database.* Under Targets 15.1 and 15.2, OECD sources allow to monitor additional aspects of the targets. On top of the indicators listed in Table 3.9, the database includes seven additional data series under Targets 15.1, 15.2, 15.8, 15.a and 15.b. These are considered to be mainly informative in the context of Goal 15 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-3-planet.xlsx).

Table 3.9. Available data series supporting the monitoring of Goal 15

Indicator code	Indicator Label	Available over time	Primary source
15.1.2	Average proportion of Terrestrial Key Biodiversity Areas covered by protected areas	Yes	*SDG Global Database*
15.1.2	Average proportion of Freshwater Key Biodiversity Areas covered by protected areas	Yes	*SDG Global Database*
15.1.2	*Protected areas as a share of total land*	Yes	OECD
15.2.1	Forest area annual net change rate	No	*SDG Global Database*
15.2.1	Proportion of forest area under a long-term management plan	Yes	*SDG Global Database*
15.2.1	*Intensity of use of forest resources*	Yes	OECD
15.2.1	Proportion of forest area within legally established protected areas	Yes	*SDG Global Database*
15.3.1	Proportion of land that is degraded over total land area	No	*SDG Global Database*

Indicator code	Indicator Label	Available over time	Primary source
15.4.1	Average proportion of Mountain Key Biodiversity Areas covered by protected areas	Yes	*SDG Global Database*
15.4.2	Mountain Green Cover Index	No	*SDG Global Database*
15.5.1	Red List Index	Yes	*SDG Global Database*
15.6.1	Countries that have legislative, administrative and policy frameworks or measures reported through the Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture	No	*SDG Global Database*
15.6.1	Countries that are contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture	No	*SDG Global Database*
15.6.1	Countries that have legislative, administrative and policy frameworks or measures reported to the Access and Benefit-Sharing Clearing-House	No	*SDG Global Database*
15.6.1	Countries that are parties to the Nagoya Protocol	No	*SDG Global Database*
15.8.1	National Biodiversity Strategy and Action Plan targets alignment to Aichi Biodiversity target 9 set out in the Strategic Plan for Biodiversity 2011-2020	No	*SDG Global Database*
15.8.1	Countries with an allocation from the national budget to manage the threat of invasive alien species	No	*SDG Global Database*
15.8.1	Legislation, Regulation, Act related to the prevention of introduction and management of invasive alien species	No	*SDG Global Database*
15.9.1	Countries that established national targets in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020 in their National Biodiversity Strategy and Action Plans	No	*SDG Global Database*
15.9.1	Countries with integrated biodiversity values into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Twenty-seven OECD countries met Target 15.1 and Aichi Biodiversity Target (ABT) 11 of the Convention on Biological Diversity (CBD) to protect at least 17% of their land area by 2020 (while, as highlighted above, 20 of them also met the target to protect at least 10% of coastal and marine areas). Target 15.1 aims at "ensuring the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements" by 2020. The global indicator framework suggests tracking Target 15.1 through the proportion of forest area compared to total land area and the proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas. The analysis relies only on the second indicator, as the first indicator is considered mainly informative of the national context. While forests covered an average 36% of total land area in OECD countries in 2020, they are very unevenly distributed, ranging from less than 10% of total land in Iceland and Israel to more than two-thirds in Japan, Sweden and Finland. As detailed in OECD (2021[25]), differences in geography and ecology, pre-existing patterns of human settlement in the territory as well as political willingness explain the large variations between countries in the extent of terrestrial protected areas and the objectives of their management (from strict nature reserves where human visits, use and impacts are strictly controlled, to protected areas with sustainable use of natural resources, where ecosystems and habitats are protected together with associated cultural values and traditional natural resource management systems). Beyond protected areas, the SDG Global Database includes additional measures that capture the proportion of KBAs covered by protected areas for both Freshwater and Terrestrial areas. As it is not possible to set a specific target for this indicator, the distance is measured relative to the best performances among OECD countries observed in 2015 (95% in both cases based on the results from Ireland, Denmark and Latvia for freshwater and Lithuania, Latvia, the Czech Republic and Estonia for terrestrial areas). Both measures are highly correlated (0.90). Overall, around one-third of OECD countries (all European) are at a short distance from meeting this element of the target (i.e. more than 80% of their key biodiversity areas are protected), while another third is at a large distance from the target (i.e. less than half of key biodiversity areas are

protected). This bottom third includes all OECD non-European countries besides Japan, which is at a medium distance on both indicators.

While worldwide forests are threatened by overexploitation, fragmentation, degradation and conversion to other types of land use, the situation is less dramatic in OECD countries. Target 15.2 is based on Aichi Target 7 of the CBD and aims to *"*promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally*"* by 2020. The global indicator framework proposes a measure of progress towards sustainable forest management to monitor Target 15.2. In this report, three data series from the *SDG Global Database* and one from OECD data sources support the assessment of this target: the proportion of forest area within legally established protected areas and under a long-term management plan; the annual net change rate of forest area; and the intensity of use of forest resources. While a desirable level of achievement could be set for the latter two indicators,[26] this is not the case for the other two. These indicators are thus benchmarked against the level prevailing in the top 10% of OECD countries with the best performance in 2015.[27] Overall, the performance of OECD countries is rather mixed (Figure 3.11). Yet, a closer look suggests a more positive situation. The area of forests and wooded land has been stable or increasing almost everywhere (OECD, 2020[13]), and most OECD countries have achieved a sustainable use of their forest resources. This means that, in forests available for wood supply, most OECD countries do not over-harvest their forest resources, maintaining the intensity of use below 100%. Among 30 OECD countries for which data are available to assess trends, 27 are expected to remain below this level, whereas only Belgium, the Czech Republic and Estonia may exceed it. In addition, Israel is the only country with a negative annual net change of forest area and with a large distance to the target level. While the situation is less positive regarding the proportion of forest area that is protected (only one in five OECD countries is at a short distance from target) and under long-term management planning (only one in three OECD countries is at a short distance), most countries are making progress – more than six in ten OECD countries are on an upward trend for both indicators.

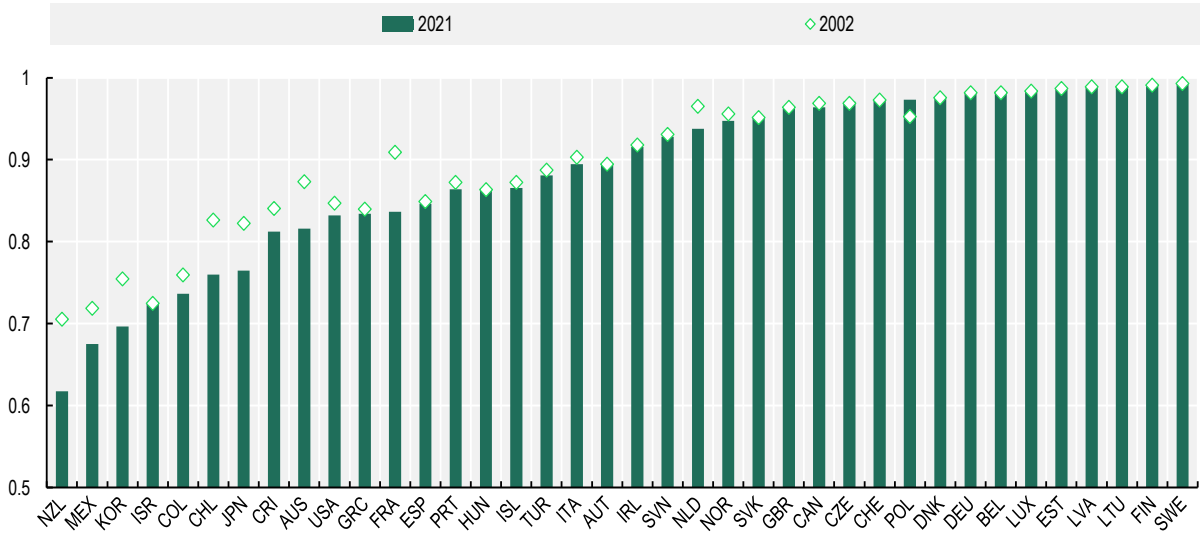
While for now, the proportion of degraded land area concerns only a few OECD countries, the picture may change as a result of climate change. Target 15.3 calls on countries to *"*combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world*"* by 2030. The target is assessed through an indicator of the proportion of land that is degraded over total land area (the target level is operationalised at 0%). The limited amount of available data[28] suggests a great variety of situations among OECD countries. Degraded land area accounts for less than 6% of total land (and thus at a short distance to target) in seven countries (Finland, Chile, Lithuania, Luxembourg, the Slovak Republic, Poland and Slovenia), while this figure rises above 16% in Spain and 30% in Portugal and Mexico. Although currently few OECD countries have critical levels of degraded land area, climate change may exacerbate the effects of land degradation and render some options for avoiding, reducing and reversing land degradation unviable (IPBES, 2018[51]).

In OECD countries, mountain areas are receiving increasing protection, and overall measures show relatively healthy ecosystems. Target 15.4 stresses the need to *"*ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development*"*. Mountain ecosystems are monitored through two indicators: the proportion of mountain KBAs that are protected, and the mountain green cover index.[29] For both indicators, there are no agreed quantitative targets to be reached, so the benchmarks have been set in terms of the highest rates observed among OECD countries in 2015 (91% based on Finland, the Slovak Republic, the Czech Republic and Poland for the former and 99.5% based on Korea for the latter). Regarding the former, in 2020, while only ten OECD countries protected more than 78% of mountain KBAs and can thus be considered to be at a short distance from target, protected areas are increasing in all of them. However, the current dynamics may be sufficient to reach (or exceed) the target level in only five of these countries (the top four performers from 2015 plus France). The second indicator, which is defined by measuring the

changes in green vegetation in mountain areas, reveals that a vast majority of OECD countries report rather high scores. However, these indicators should be interpreted with care; while informing on protected areas and on the potential pressures on ecosystems and biodiversity, they do not assess the direct state of mountain wildlife.

The pressures on biodiversity are increasing almost everywhere, and very few OECD countries are showing progress (see Figure 3.10). Target 15.5 reinforces Aichi Target 12 of the CBD and urges countries to *"*take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species*"*. It is assessed through the Red List index,[30] which ranges from 0 (all species have gone extinct) to 1 (no species are expected to go extinct in the near future). This report operationalises the target level at 1, meaning that no species is known to be at risk of extinction. On average in 2021, OECD countries had a score of 0.89. Yet, this average masks large variations between countries. For instance, while 15 OECD countries have scores of 0.95 or above (and are thus considered to be at a short distance from the target), 13 have a score below 0.85 (and are thus considered to be at a large distance from the target). Distances are particularly large (with scores below 0.75) in five countries (New Zealand, Mexico, Korea, Israel and Colombia). In addition, out of the 38 OECD countries, only ten show some progress over the past 25 years (Lithuania, Luxembourg, Belgium, Germany, Poland, the Czech Republic, the Slovak Republic, Austria, Israel and Hungary), but none at a sufficiently fast pace to reach the target by 2030.

Figure 3.10. Red List index (Target 15.5)



Note: Based on the IUCN Red List of Threatened Species, the Red List Index is an indicator of the extinction risk across groups of species. The index value ranges from 1, equating to all species qualifying as Least Concern (i.e. not expected to become extinct in the near future), to 0, equating to all species are categorised as "Extinct".
Source: (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg (accessed on 29 October 2021).

StatLink https://stat.link/m4djvr

Access to genetic resources varies greatly among countries. Target 15.6, which aims to *"*promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed*"*, is monitored through four policy indicators assessing the existence of a legislative, administrative and policy framework or measures to report to: i) the Access and Benefit-Sharing Clearing-House, ii) the Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture, being party to iii) the Nagoya Protocol and to iv) the International Treaty on Plant Genetic Resources for Food and

Agriculture. These four indicators are all binary, with 0 when the measure does not exist and 1 when the measure exists (for all of them, the target level is set to 1). Overall, total scores range between 4 (all measures already exist) in ten OECD countries (Switzerland, the United Kingdom, the Netherlands, Germany, Denmark, Finland, Norway, Japan, Sweden and Spain) to 0 (no measure already exists) in Israel and New Zealand. Distances to the target are also considered to be large in Colombia, Iceland, Lithuania and Turkey, where only one of the four measures has already been implemented.

The distances to Targets 15.7 and 15.c cannot be assessed as no data are available. Pressures on biodiversity can be physical (e.g. habitat alteration and fragmentation through changes in land use and sea use, changes in land cover, over-exploitation of natural resources), chemical (toxic contamination, acidification, oil spills, other pollution from human activities) or biological (the alteration of population dynamics and species structure through invasive alien species), and climate change is projected to become an increasingly important direct driver of changes in nature (IPBES, 2019[50]). Yet, pressures on biodiversity can also be commercial, in particular through the use of wildlife resources. Therefore, Goal 15 includes targets on the poaching and trafficking of protected species of flora and fauna: Targets 15.7 and 15.c. Both aim at measuring the proportion of traded wildlife that was poached or illicitly trafficked. However, no data are available to assess the performance of OECD countries in this field.

All OECD countries have adopted national legislation relevant to the prevention or control of invasive alien species. Target 15.8 calls on countries to "introduce measures to prevent the introduction and significantly reduce the impact of IAS on land and water ecosystems and control or eradicate the priority species" by 2020. The global indicator framework focuses on the adoption of relevant national legislation and the provision of adequate resources for the prevention or control of IAS. Therefore, three binary indicators underpin this target: i) the existence of National Biodiversity Strategy and Action Plan targets alignment to ABT 9, ii) countries with an allocation from the national budget to manage the threat of invasive alien species, iii) the existence of Legislation, Regulation, Act related to the prevention of introduction and management of IAS (for all countries, the target level was set to 1, i.e. the measure had been implemented already). This report also includes an extra data series on the recipients of global funding for projects related to IAS management, but it is considered to be informative, providing insights on resources to combat IAS. Overall, most OECD countries report a high level of compliance. In 2020, all of them had already adopted relevant national legislation, and only four OECD countries (Iceland, Israel, Latvia and Italy) had not aligned their IAS -related targets with global targets. Yet, nine countries (Chile, the Slovak Republic, Greece, the Czech Republic, Luxembourg, Colombia, Israel, Italy and Austria) did not make allocations from their national budgets to IAS management. Global funding complemented resources from national budgets in Turkey and Mexico, but it was the only resource in Chile. As these indicators are binary policy measures, they are not assessed over time.

Policy indicators confirm that, despite some encouraging developments in measurement, biodiversity outcomes remain under threat. Target 15.9, on "integrating ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts" by 2020, is monitored by two policy indicators: i) status of national targets in accordance with ABT and ii) integration of biodiversity values into national accounting and reporting systems.[31] Regarding the former, evidence confirms the insights from other targets and statements on biodiversity from international organisations (Secretariat of the Convention on Biological Diversity, 2020[52]; OECD, 2020[13]): out of the 26 OECD countries that have national targets reflecting ABT,[32] one OECD country (Chile) is not progressing, 17 OECD countries are progressing at "insufficient pace" and only eight of them are on track to achieve national targets (but in none of them is progress on track to exceed these). On the measurement side, according to the *SDG Global Database*, all OECD countries have integrated biodiversity values into national accounting and reporting systems following the System of Environmental-Economic Accounting.

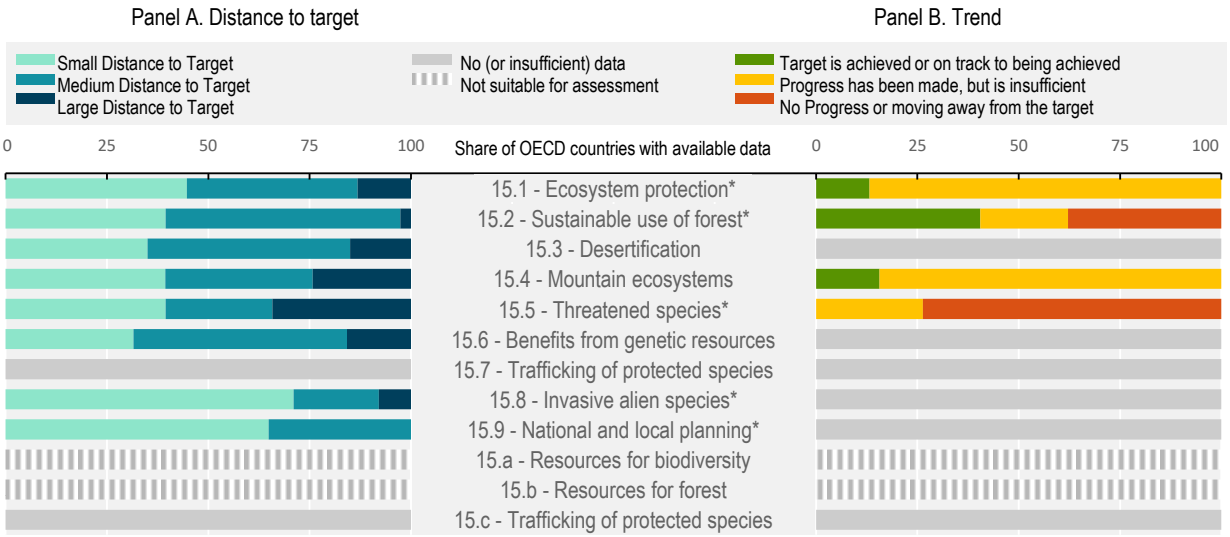
Distances to target cannot be computed for two of the three "means of implementation" targets under this goal: Target 15.a, on mobilising resources to conserve and sustainably use biodiversity and ecosystems (monitored through data on ODA that focus on conservation and sustainable use of

biodiversity and on the revenue generated and the finance mobilised from biodiversity-relevant economic instruments) and **Target 15.b,** on mobilising resources on sustainable forest management and providing adequate incentives to developing countries to advance such management, including for conservation and reforestation (monitored through the same indicators as Target 15.a). Yet, as mentioned for other aid-related targets, the best sectoral breakdown of ODA depends on the needs of each recipient and the priorities of each donor (if total ODA is kept constant, an increase in a specific area would imply a reduction in other sectors of ODA). Therefore, these indicators are considered as informative and are not used in this report to benchmark countries' performance. For instance, on biodiversity-relevant economic instruments (including taxes, fees and charges, tradable permit schemes and biodiversity-relevant positive subsidies), the OECD's Policy Instruments for the Environment (PINE) database shows that while the use of biodiversity-relevant economic instruments has increased since 1980, there has been a general plateau since 2010, and instruments remain underutilised (OECD, 2020[53]).

Summing up

The deadline for many targets that support Goal 15 passed in 2020, without most OECD countries making sufficient progress to halt biodiversity loss. Yet, on some fronts, OECD countries did make considerable progress. For instance, the proportion of protected areas has increased to levels above 17% of national land area in more than two-thirds of OECD countries, meeting Aichi target 11 of the CBD (SDG Target 15.1). The coverage of key freshwater and terrestrial biodiversity areas (Target 15.1) and of mountain key biodiversity areas (Target 15.4) are also progressing everywhere, but at an insufficient rate for most countries (Figure 3.11, panel B). In addition, although most OECD countries are considered to use forest resources in a sustainable way, some still have long distances to travel to achieve the legal protection and long-term management planning of forest areas as called for by Target 15.2. On policy indicators, the picture is more nuanced. On the one hand, around seven in ten OECD countries are close to Targets 15.8 (on the introduction of measures to prevent invasive alien species) and 15.9 (on the integration of biodiversity values into national and local planning and alignment of national biodiversity targets with global targets). On the other hand, there are large disparities among OECD countries when it comes to the existence of measures to share information on the benefits from genetic resources (Target 15.6). In any case, pressures on biodiversity and land resources continue. The risk of species extinction is increasing in two-thirds of OECD countries (Target 15.5), most of which also report rather high levels of land degradation (Target 15.3, Figure 3.11, panel A), which is a major factor threatening biodiversity and ecosystem services (IPBES, 2018[51]).

Figure 3.11. Distance to target and trends over time in OECD countries, by SDG target, Goal 15



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[6]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[7]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/pte6gb

Impact of the COVID-19 pandemic on Goal 15

The pandemic has been a reminder of the significance of human interference with biodiversity in creating the conditions for pathogens to leap from animals to humans. Deforestation, habitat degradation and fragmentation, agriculture intensification, wildlife trade and climate change have all played a role in the development of zoonotic diseases. While the origin of the pandemic is still to be understood (Bloom et al., 2021[54]), many deadly pathogens in recent memory – Ebola, HIV, dengue, SARS, MERS, Zika, West Nile – have made this interspecies leap (OECD, 2020[28]).

Targets 15.1 to 15.4 focus on different aspects of legislation or legislative measures to conserve and use ecosystems sustainably and thus are not likely to be directly impacted by the pandemic (Table 3.10). As many parliaments have taken different steps to narrow the overall legislative agenda (HDP and SDC, 2021[55]) so as to prioritise legislation with a primary focus on COVID-19, the health crisis might have slowed progress in introducing new legislation and implementing existing legislation in many countries by redirecting policy priorities.

Actions taken to control the COVID-19 pandemic have conspicuously reduced economic activity and potentially alleviated pressures on biodiversity (Target 15.5). The worldwide lockdowns induced by the pandemic provided an unprecedented opportunity to understand how large-scale shifts in human activities impact wildlife. Research shows that animal behaviours can change rapidly in response to newly

favourable conditions (Manenti et al., 2020[56]; Derryberry et al., 2020[57]). For instance, the reduction of human disturbance allowed wildlife to exploit new habitats and increase their daily activity; it also promoted species richness in temporarily less-disturbed habitats, improved the breeding success of aerial insectivorous birds, and reduced the road-killing of amphibians and reptiles. Yet, it will be some time before the full impact of COVID-19 on biodiversity is known. Few data are already available, and even when they are, the long-term implications are difficult to determine (OECD, 2021[58]).

On the other hand, the pandemic may have also allowed the increased poaching and illegal killing of wildlife (Targets 15.7 and 15.c). While the changes in human activity may benefit biodiversity conservation in some ways, the impacts of COVID-19 on conservation may have been negative overall. For instance, the crisis may lead to reduced funding for environmental protection, restrictions on the operations of conservation agencies, and greater human threats to nature (Lindsey et al., 2020[59]; Manenti et al., 2020[56]).

The lower human disturbance linked to lockdown was also beneficial for invasive alien species (IAS) (Target 15.8). In some areas, the COVID-19 lockdown interrupted activities for the control of IAS, and thus hampered conservation activities targeting threatened species. For instance, Italy saw an increase in the daytime activity of the Eastern cottontail (Sylvilagus floridanus), an IAS introduced to Italy from North America (Manenti et al., 2020[56]).

Table 3.10. Summary impact of the COVID-19 pandemic on Goal 15 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
15.1 – Terrestrial ecosystems*	none	none
15.2 – Sustainable use of forest*	none	none
15.3 – Desertification	none	none
15.4 – Mountain ecosystems	none	none
15.5 – Biodiversity*	positive	none
15.6 – Benefits from genetic resources	none	none
15.7 – Trafficking of protected species	negative	none
15.8 – Invasive alien species*	negative	none
15.9 – National and local planning*	none	none
15.a – Resources for biodiversity		
15.b – Resources for forest		
15.c – Trafficking of protected species	negative	none

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: “positive” if the COVID-19 pandemic has a favourable impact on the target, “negative“ if the COVID-19 pandemic has a deleterious impact on the target, “mixed“ if the impact on the target is different among countries or among the different dimensions of the target, “none” when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

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Notes

[1] The preamble of the 2030 Agenda starts by saying that it is "a plan of action for People, Planet and Prosperity [that] also seeks to strengthen universal Peace [with] all countries and all stakeholders, acting in collaborative Partnership". Yet, no official mapping between the 5Ps and the SDG goals and targets has been endorsed. The mapping proposed here was first proposed by the United Nations (UN, 2015[1]), but it should not be considered as binding, as the SDGs are integrated and indivisible and some goals might relate to more than one P.

[2] The aggregation at goal level assumes equal weights among the data series measuring the same SDG indicator and equal weights among the indicators measuring the same target. "OECD average" refers to the unweighted average.

[3] To allow for measurement errors, the target levels are operationalised at 97% for the proportion of population using safely managed sanitation services and at 3% for the proportion of population practicing open defecation.

[4] The very high rates of coverage and the absence of obvious trends create some noise in the measurement and may explain why complete coverage would not be expected by 2030 in some countries.

[5] To make the indicator (and the target level) consistent with the label of the Target 6.3, the indicator from the *SDG Global Database* was reversed so that it now reads *"*proportion of domestic wastewater flows that are not safely treated".

[6] Timeliness of the data may impact this assessment. The latest year available is 1999 for Iceland and 2010 for Mexico. In addition, data is not available for Italy and New Zealand.

[7] Beyond the 2030 Agenda, since 2016, the OECD Council Recommendation on water offers an international standard that provides high-level policy guidance on the management of water resources and the delivery of water services. In addition to crosscutting general principles, it focuses on managing water quantity, improving water quality, managing water risks and disasters, ensuring good water governance and ensuring finance, investment and pricing for water and water services.

[8] The responsibility for implementing integrated watershed management in Canada is under provincial/territorial jurisdiction. Each province and territory in Canada has developed unique approaches or governance models to guide decision making in that regard. Therefore, the measure is not available for Canada.

[9] The data represent the number of lakes affected by a degradation of their environmental conditions (i.e. showing a deviation in turbidity and trophic state from the baseline) relative to the total number of lakes in a country. In order to calculate deviations in turbidity and trophic state, baseline data was produced, comprised of monthly averages of observations between 2006 and 2010. Based on these five years of data, averages for each month of the year were calculated. For 2017, 2018 and 2019, monthly deviations from the baseline were then calculated with the following equation: (Month average – Month baseline) / Month baseline x 100. For each lake, a count was made of the number of valid observations and the number of months with monthly deviations, falling into one of the following value ranges: 0-25% (low), 25-50% (medium), 50-75% (high), 75-100% (extreme). This report includes the share of lakes with high or extreme levels of deviation in turbidity and trophic state.

[10] Data from the OECD and from the *SDG Global Database* may differ. *Global SDG Database* relies on the *Global Material Flows Database* from the UN Environment Program (International Resource Panel) while OECD data relies on Eurostat for EU member states. Harmonisation with Eurostat data is underway. Therefore, it should be borne in mind that the data should be interpreted with caution and that the time series presented here may change in future as work on methodologies for material flows accounting progresses.

[11] In 2015, the countries with the lowest DMC per capita were Costa Rica, Colombia, Japan and the United Kingdom, while the Netherlands, Japan and the United Kingdom reported the lowest levels of DMC per unit of GDP.

[12] Beyond the total amount of DMC, the nature of the materials consumed may also play a role in the sustainability of consumption patterns. For instance, the natural and social impact induced by extracting one tone of an industrial mineral such as phosphate is likely to be different from the effect induced by cutting trees to obtain the same amount of wood. Similarly, national circumstances and availability of materials may also play a role in shaping sustainability.

[13] As the 2030 Agenda aims at *halving* per capita food waste, the target levels are set at 38 tons for household level, 13 tons for food service level and 6 tons for retail level i.e. half the OECD median in 2015 (or closest available year).

[14] Available data suggests that seven OECD countries report high-quality data compatible with SDG 12.3.1(b) in all three sectors (household, retail and food service): Australia, Austria, Denmark, Germany, Sweden, the United Kingdom and the United States. Conversely, estimates for 10 OECD countries are associated with a low (or very low) confidence: Chile, Costa Rica, the Czech Republic, Iceland, Latvia, Lithuania, Portugal, Korea, the Slovak Republic and Turkey. Overall, 24% of estimates are classified as a high confidence estimate, 31% as medium confidence, 32% as low confidence and 11% as very low confidence.

[15] The Basel Convention focuses on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Stockholm Convention on Persistent Organic Pollutants; the Montreal Protocol on Substances that Deplete the Ozone Layer; and the Minamata Convention on Mercury.

[16] To be considered as having implemented the Minamata Convention, countries are required to submit by December 2021 national reports on the measures taken to implement the provisions of the Convention, on the effectiveness of such measures, and on possible challenges in meeting the objectives of the Convention.

[17] Although available data do not allow to derive a clear assessment of trends in Austria and the Netherlands, they have already reached the target level (with material recovery rates of municipal waste of 59% and 57% in 2019, respectively).

[18] Data used include direct budgetary transfers and tax expenditures that may provide a benefit or preference for fossil-fuel production or consumption relative to alternatives. Unlike direct budgetary expenditures, where outlays can be measured, tax expenditures are estimates of the fiscal revenue that is foregone due to a particular feature of the tax system that reduces a tax rate relative to a benchmark tax rate. It is important to note that definitions of tax expenditures, and the benchmarks used to estimate their size, are nationally determined. Therefore, tax expenditure estimates require caution when used for international comparability of fossil-fuel support. In addition, higher amounts can also be due to better transparency.

[19] While Italy scored 40% on the adoption and implementation of national DRR strategies in line with the Sendai Framework, another ten countries (Canada, Denmark, Iceland, Ireland, Israel, the Netherlands, the Slovak Republic, Sweden, Turkey and Portugal) have a score of 0%. Yet some of these data has not followed an official validation process and may be subject to revision at a later date, for instance, according to the Canada SDG hub, this score is 100% in Canada.

[20] This report defines end values with the purpose of shedding light on the trends in OECD countries towards achieving the SDGs. The OECD recognises that the definition of end values by a country is a political process based on the knowledge of the contextual strengths and challenges and should be accompanied by a consultative process with local stakeholders. For this reason, it should be kept in mind that the end values defined in this framework are just a means to exemplify how the SDG indicators can be used to inform policy makers. These end values do not correspond to any political decision or prioritisation process of any subnational government, hence they should not be regarded as a rule or as a hard policy recommendation.

[21] In the 2020 Emissions Gap Report (UNEP, 2020[60]), UNEP estimates that by 2030 global greenhouse gas emissions would need to be around half of 2015 levels to limit a global temperature increase to below 1.5°C by 2100. This class of scenarios is consistent with the scenarios in IPCC SR1.5°C that limit warming to 1.5°C with no or limited overshoot. Some caveats remain, suggesting that this target is not ambitious enough. First, it is based on a global estimate, and halving GHG emissions could probably be judged as insufficient for OECD countries, as richer nations have historically emitted the bulk of global GHGs. Second, the target is defined in absolute levels, not per capita nor per unit of GDP (for comparison purposes, data series included here are measures of intensities). It nevertheless offers a useful benchmark to gauge achievement and progress.

[22] “Enhanced work to reduce exposure and vulnerability, thus preventing the creation of new disaster risks, and accountability for disaster risk creation are needed at all levels. More dedicated action needs to be focused on tackling underlying disaster risk drivers, such as the consequences of […] pandemics and epidemics.” (United Nations Office for Disaster Risk Reduction, 2015[61])

[23] Chlorophyll-a is a widely used proxy for measuring phytoplankton biomass. By being predominantly affected by changes in nutrient availability, through either natural (e.g. turbulent ocean mixing) or anthropogenic (e.g. agricultural runoff) processes, changes in phytoplankton biomass are a key measure

of anthropogenic pressures on coastal waters. Indices of chlorophyll-a deviations measure the percentage of an exclusive economic zone area where measures of chlorophyll-a deviate by more than 50% from the baseline. This indicator is complemented by intra-annual coastal zone chlorophyll-a anomalies defined as the number of days a pixel is calculated to have a high (deviation greater than 50%) anomaly based on the number of days of acceptable data. In both cases, the target value is set at 0.

[24] Though no single definition exists, MPAs are generally described as any defined area within or adjacent to the marine environment which has been reserved by legislation or other effective means so that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings.

[25] While the origin of the pandemic is still to be understood (Bloom et al., 2021[54]), many deadly pathogens in recent memory – Ebola, HIV, dengue, SARS, MERS, Zika, West Nile – have taken interspecies leaps (OECD, 2020[28]).

[26] Regarding the intensity of use of forest resources, it is desirable that countries maintain the use intensity below 100% in order to not over-harvest their forest resources, and the Aichi target 5 clearly spells out that, "By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where ***feasible brought close to zero***, and degradation and fragmentation is significantly reduced". On the other hand, the target level for the annual net change rate of forest area is operationalised at 0%, as Target 15.2 sets the target of *halting* deforestation.

[27] For the proportion of forest area under a long-term management plan, the target level is 100%, and the best performances as of 2015 were observed in Turkey, Lithuania, Japan, Latvia, the Slovak Republic, the Czech Republic, Hungary and Finland. For the proportion of forest area within legally established protected areas, the target level (36%) is benchmarked against the performances of Costa Rica, Spain and the Netherlands in 2015.

[28] Available data series cover only 20 of the 38 OECD countries and do not provide time series despite the focus on land degradation *neutrality,* which requires a dynamic analysis.

[29] The green coverage of mountain areas is generally positively correlated with their state of health and therefore with their capacity to fulfil their ecosystem roles.

[30] Based on the IUCN Red List of Threatened Species, the Red List Index is an indicator of the changing state of global biodiversity. It defines the conservation status of major species groups and measures trends in extinction risk over time. By conducting conservation assessments at regular intervals, changes in the threat status of species in a taxonomic group can be used to monitor trends in extinction risk.

[31] The first indicator includes five levels: 0 (no national target reflecting ABT 2), 1 (national target reflecting ABT 2 exists, but moving away from it), 2 (national target reflecting ABT 2 exists, but no progress), 3 (national target reflecting ABT 2 exists and progress is there, but at an insufficient rate) and 4 (national target reflecting ABT 2 exists and progress is on track to achieve it). The target level for this indicator is the highest score, 4. The second indicator is a binary measure, for which the target level is 1 (i.e. biodiversity values are integrated into the national accounting and reporting system).

[32] In 2020, 11 OECD countries did not have national targets reflecting ABT: Ireland, Iceland, Colombia, Slovenia, the Netherlands, Luxembourg, Norway, Denmark, Australia, Lithuania and the Czech Republic.

4 Prosperity

The “Prosperity” theme of the 2030 Agenda aims at ensuring “access to prosperous and fulfilling lives” and covers the interactions between economic, social and technological progress and the environment. Relying on the global indicator framework, this chapter assesses whether OECD countries are likely to achieve the SDG targets focusing on Prosperity by 2030. It shows where OECD countries are standing in terms of their current performance but also considers recent changes over time, and what part of the 2030 Agenda currently remains unmeasurable. It also discusses some of the main impacts of the COVID-19 pandemic on the Prosperity targets.

Introduction

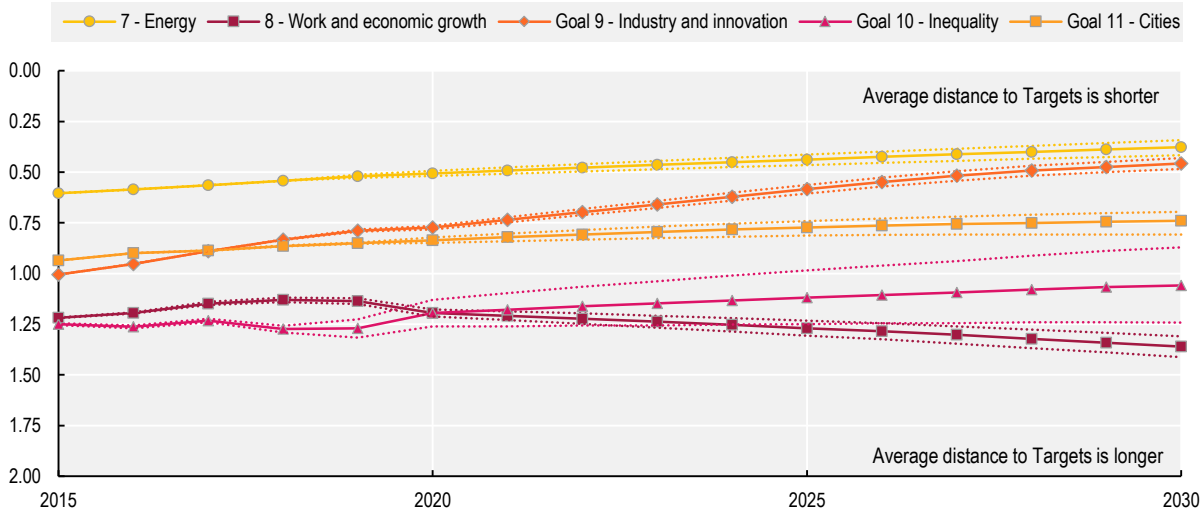
The 2030 Agenda is a call to action for all countries to act for a better and more sustainable future for all. At its core is a set of 17 Sustainable Development Goals balancing the three dimensions of sustainable development: economic, social and environmental. Since the adoption of the sustainable development agenda in 2015, its broad scope has often been characterised by five broad themes, i.e. the "5Ps" (UN, 2015[1]): People, Planet, Prosperity, Peace and Partnerships. The goals and targets that belong to the Prosperity category focus on ensuring *"*access to prosperous and fulfilling lives*"* and on the interactions between economic, social and technological progress, on one side, and the environment, on the other. This category encompasses targets on energy (Goal 7); growth, productivity and labour market outcomes (Goal 8); infrastructures, industry and innovation (Goal 9); inequality within and between countries (Goal 10); and cities and urbanisation (Goal 11).

All SDGs are interconnected. Therefore, making progress towards the Prosperity SDGs also provides an opportunity to empower people and ensure inclusiveness and equality. Reducing residential segregation and providing access to good-quality affordable housing (Goal 11) for instance, requires consideration of policies for poverty reduction (Goal 1), health improvement (Goal 3), better child development (Goal 4), and equality of opportunity and social inclusion (Goal 10). More broadly, economic growth (Goal 8) needs to be made sustainable if it is to be consistent with climate goals (Goal 13). To ensure long-term prosperity, economic frameworks also need to consider natural resource efficiency and the critical interlinkages between water (Goal 6), energy (Goal 7) and terrestrial and marine biodiversity (Goals 14 and 15) (OECD, 2019[2]).

Even before the pandemic hit, OECD countries were not on track to achieve the targets of the Prosperity goals. Figure 4.1 shows how OECD countries are on average performing on the 2030 Agenda over time. In 2015, OECD countries were on average[1] closest to reaching the targets for the goals on energy (Goal 7) and industry, innovation and infrastructures (Goal 9) and furthest from achieving the targets for the goals on the economy (Goal 8), cities (Goal 11) and inequality (Goal 10).

OECD countries are making modest progress towards Prosperity goals, although the pace of progress varies among the goals – with no substantial progress on the economy (Goal 8), inequality (Goal 10) and cities (Goal 11), but steady gains for energy (Goals 7) and infrastructure (Goal 9). Based on this performance, a projection of these trends suggests that, unless additional policy actions are taken, countries are unlikely to achieve the Prosperity goals. Energy and Infrastructure would come closest, but no OECD country is on track to reach all the targets even for these goals. For example, while the Goal 7 target on the availability of reliable electricity will likely be met in OECD countries, it is very unlikely that they will meet the targets relating to clean energy and sustainable use. One important point to keep in mind is that all goals cover many different aspects, and focusing on the aggregated results may mask the heterogeneity of achievements (see Box 4.1). To overcome some of the challenges relating to composite measures, this chapter dives into the details of the underlying targets to provide a more exhaustive picture of where countries stand on the 2030 Agenda.

Figure 4.1. OECD countries' average distance to SDG targets over time by goal, Prosperity



Note: Based on available data series. This figure shows the average distance that OECD countries are projected to travel towards the SDGs based on recent trends; hence these distances are based on existing policies and do not account for the additional measures that OECD countries may have introduced since the latest observation available. Distances are measured in standardised units (see the methodological annex for details), with 0 indicating that the 2030 level has already been attained. Full lines show OECD countries' average performance against all targets under the relevant goal. Dashed lines show the confidence interval (10th and 90th percentiles of estimated trends). When data are not available for specific years, these are imputed using linear interpolation between the two closest available observations. Past (i.e. before the first available year) and future (i.e. after the latest available year) trajectories are imputed using Monte Carlo simulations (see the methodological annex for details).

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/396ai7

The COVID-19 pandemic has affected countries' progress towards achieving Prosperity targets in different ways. The economic impact on output growth has been significant in all countries, contributing to a fall in OECD economies of almost 5% in 2020 (OECD, 2021[5]). Still, helped by government and central bank support but also by progress in vaccination, the economic recovery proved to be strong while remaining uneven among countries (OECD, 2021[6]). Beyond GDP growth, the pandemic has exacerbated some of the long-standing structural weaknesses of OECD countries that risk causing long-term damage to job prospects and living standards. In most OECD countries, government support measures have helped offset some of the adverse implications of the COVID-19 crisis on economic and social conditions. Support measures to firms and workers are offsetting the impact of the crisis but the pandemic has disrupted employment dynamics – around 22 million jobs disappeared by the end of 2020 (OECD, 2021[7]). In addition, the highly sectoral nature of the crisis has meant that some workers have shouldered the bulk of the burden, while others not only suffered less, but benefited more quickly from the recovery. Young people for instance have been particularly affected by the ravages of the crisis. Overall, while the COVID-19 crisis has highlighted the importance of ICT infrastructures and, more generally, the capacity of science, technology and innovation systems to respond strongly and flexibly to a world crisis, large differences in vaccination rates between countries are adding to the unevenness of the recovery and may exacerbate inequality between countries.

Goal 7 – Affordable and clean energy

Goal 7 aims at *"*ensuring access to affordable, reliable, sustainable and modern energy for all*"*. Almost all OECD countries provide universal access to energy, and over the past two decades the share of renewables has increased. Nonetheless, current energy mixes still rely predominantly on fossil fuels, implying that the greening of energy systems, as set out in the 2030 Agenda, requires a strong increase in the share of renewables. Beyond access to clean energy, Goal 7 also aims at reducing the energy intensity of economic activities. Meeting this objective will require ramping up energy efficiency policies.

As further detailed below (see Impact of the COVID-19 pandemic on), the COVID-19 pandemic has impacted the energy sector in many different ways, and renewables have covered a greater share of electricity generation as a result of lockdown measures and low electricity demand. Yet, as stressed by the International Energy Agency (IEA), the rapid but uneven economic recovery from the COVID-induced recession is putting major strains on parts of today's energy system, sparking sharp price rises in natural gas, coal and electricity markets. For all the advances being made by renewables and electric mobility, 2021 is seeing a large rebound in coal and oil use (IEA, 2021[8]).

Assessing OECD countries' performance on Goal 7

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 4.1 shows that data allow the monitoring of three of the five targets underpinning Goal 7. For this goal, one indicator on the renewable energy share in the total electricity generation sourced from OECD databases[2] complements the *SDG Global Database*. Although it is not aligned with the global indicator framework, which focuses on the renewable energy share in total final energy consumption, drawing from IAE sources allows covering a complementary aspect of the energy mix, namely energy supply.[3] On top of the indicators listed in Table 4.1, the database includes an extra data series to monitor Target 7.a to provide additional context to the understanding of Goal 7 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-4-prosperity.xlsx).

Table 4.1. Available data series supporting the monitoring of Goal 7

Indicator code	Indicator Label	Available over time	Primary source
7.1.1	Proportion of population with access to electricity	Yes	*SDG Global Database*
7.1.2	Proportion of population with primary reliance on clean fuels and technology	Yes	*SDG Global Database*
7.2.1	Renewable energy share in the total final energy consumption	Yes	*SDG Global Database*
7.2.1	*Renewable energy share in the total electricity generation*	Yes	OECD
7.3.1	Energy intensity level of primary energy	Yes	*SDG Global Database*

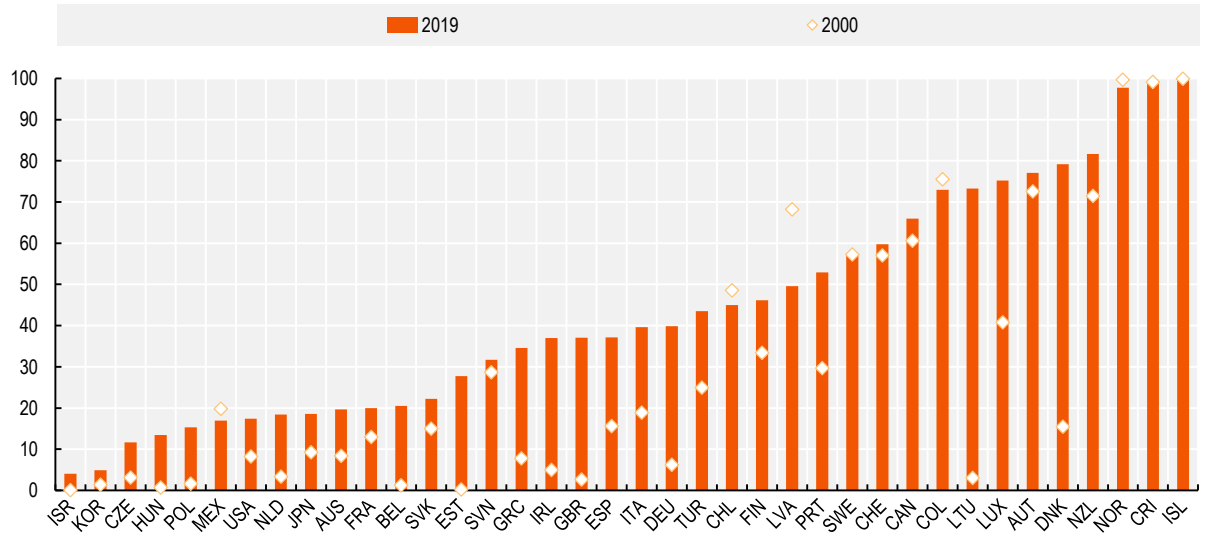
Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Figure 4.3, panel A, shows that almost **all OECD countries provide universal access to modern energy services**. In the global indicator framework, Target 7.1, which aims at *"*ensuring universal access to affordable, reliable and modern energy services*"*, is measured through two indicators. The first refers to the proportion of population with access to electricity; in this respect, in 2019, all OECD residents had access to electricity. The second indicator is a measure of "primary reliance on clean fuels and technology".[4] These two indicators confirm the high achievements of OECD countries in terms of access to modern energy services, with countries such as Colombia and Mexico still possessing margins to modernise their energy systems.[5] Colombia will be on track, though, if the positive trend observed over

the past two decades continues. Conversely, Mexico has stagnated on this indicator since 2003 and is unlikely to be on a path that would allow meeting the target.

Despite progress in most OECD countries, in 2019, the current energy mix is still far from being green, with contribution of renewables to total primary energy supply limited to around 10% (OECD, 2022[9]). Beyond access to electricity, Goal 7 promotes clean sources of energy through Target 7.2, which calls on countries to "increase substantially the share of renewable energy in the global energy mix". For global monitoring, the IAEG-SDGs proposes as indicator the share of renewable energy in the total final energy consumption. In addition to this indicator, this report also includes an indicator based on OECD data sources for the share of renewable energy in the total electricity generation. While no quantified objective is specified by the 2030 Agenda for this target, the International Renewable Agency (IRENA) suggested in 2013 to double the share of renewables to achieve the energy transition (IRENA, 2013[10]). The target level to be reached by 2030 has been operationalised in this report as doubling the OECD median value observed in 2015, i.e. reaching 33% of renewable energy on the consumption side and 61% on the production side. The two data series are highly correlated across countries (0.78) and show that 14 countries (Nordic and Baltic countries besides Estonia, as well as Austria, Colombia, Canada, Costa Rica, Switzerland, Portugal and New Zealand) are getting close to meeting the target (on average over both measures). Conversely, seven OECD countries are at a large distance from the target, with Israel and Korea being furthest. Focusing on the production side of energy, Figure 4.2 shows that 14 OECD countries were considered to be close to the target (i.e. above 48%), and with an upward trend since 2000. Yet, in Chile and Mexico both measures of the share of renewables are not displaying any progress, while in Turkey, Colombia, Latvia and Israel only one of the two measures is increasing over time.

Figure 4.2. Renewable energy share in the total electricity generation (Target 7.2)



Source: (OECD, 2022[11]), "Green growth indicators", *OECD Environment Statistics* (database), https://doi.org/10.1787/data-00665-en (accessed on 21 March 2022).

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While energy efficiency plays an essential role in accelerating the transition to a less energy-intensive economic system, only half of OECD countries have made progress on this over the past two decades. Goal 7 aims at providing universal access to clean energy, and it also includes a specific commitment to "double the global rate of improvement in energy efficiency by 2030" (Target 7.3). To measure this target, total primary energy supply is benchmarked against GDP in order to assess its intensity.[6] In line with the wording of the 2030 Agenda, the target level is set as doubling the OECD median

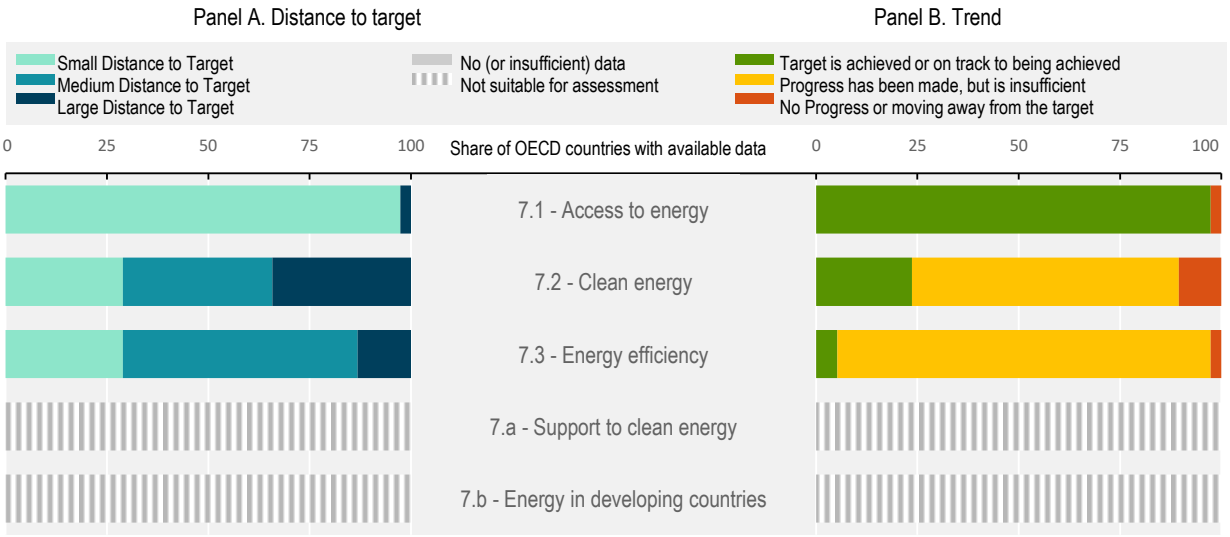
value observed in 2015 – i.e. 1.73 mega joules (MJ) per unit of GDP. Based on this measure and target level, in 2018, five OECD countries were at a large distance from the target, with intensity levels above 4.7 MJ per unit of GDP; these include Korea, Estonia, Finland, Canada and Iceland (where intensity was around 10 times higher than the target value). Available data suggest that all OECD countries except Iceland have been reducing their energy intensity over the past 20 years. Still, as stressed by the IEA, energy intensity gains would need to more than double to help close the gap between government pledges and a 1.5 C trajectory over the next ten years – and to underpin further emissions reductions post-2030 (IEA, 2021[8]).

The distance to target is not assessed for the two "means of implementation" targets under this goal (7.a and 7.b). Target 7.a aims at *"*enhancing international cooperation to facilitate access to clean energy research and technology*"* and *"*promoting investment in energy infrastructure and clean energy technology*"*. It is monitored through a measure of International financial flows in support of clean energy research and development and renewable energy production. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Target 12.a. Target 7.b focuses on infrastructure and technology for modern and sustainable energy services in developing countries and is to be monitored through a measure of the power of installed renewable energy-generating capacity.[7] Rather than indicators of performance, for which one can say what is good performance and what is poor performance, these indicators are considered as informative and are useful to contextualise Goal 7. In addition, no data are available to monitor performance on the latter indicator.

Summing up

Overall, despite considerable progress on clean energy targets in most OECD countries over the past two decades, current efforts fall short of increasing energy efficiency and the use of renewables. On the relatively positive side, virtually all OECD residents have access to modern energy services (Target 7.1, Figure 4.3, panel A), and the share of renewable energy is increasing on both consumption and production sides in the majority of OECD countries (Target 7.2, Figure 4.3, panel B). Yet fossil fuels still dominate the energy mix. Similarly, available data suggest that few OECD countries can be considered as energy efficient, and less than half are progressing towards greater efficiency (Target 7.3).

Figure 4.3. Distance to targets and trends over time in OECD countries, by SDG target, Goal 7



Note: Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of their recent changes in the indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 7

Renewables have claimed a greater share of electricity generation as a result of low electricity demand during the lockdown period (Target 7.2). In all regions that implemented lockdown measures, the electricity supply underwent a notable shift towards low-carbon energy sources in the first quarter of 2020. Aside from renewables, which are largely unaffected by electricity demand, most other sources of electricity declined in the first quarter of 2020. In the European Union, the share of renewables in electricity generation increased in the weeks following the onset of lockdown measures (in part due to lower demand, which drove coal and gas out of the power mix). In the United States, the decline of coal-fired generation accelerated in the weeks that followed the lockdown measures, while gas-fired generation fell slightly, and generation from renewables rose (IEA, 2020[12]). In addition, in 2020, even while economies bent under the weight of COVID-19 lockdowns, renewable sources of energy such as wind and solar PV continued to grow rapidly, and electric vehicles set new sales records (IEA, 2021[13]). Yet, the rapid but uneven economic recovery from the COVID-induced recession is putting major strains on parts of today's energy system, sparking sharp price rises in natural gas, coal and electricity markets. For all the advances being made by renewables and electric mobility, 2021 is seeing a large rebound in coal and oil use. Largely for this reason, it is also seeing the second-largest annual increase in CO_2 emissions in history. Public spending on sustainable energy in economic recovery packages has mobilised only around one-third of the investment required to jolt the energy system onto a new set of rails (IEA, 2021[8]). As summarised in Table 4.2, the effect on distances to target is likely to be positive in the short-term but may not last over time.

Even before the COVID-19 crisis, further action to increase energy efficiency (Target 7.3) was urgently needed to counteract the declining pace of energy efficiency improvement observed since 2015 (IEA, 2020[14]). As a result of the crisis and of continuing low energy prices, energy intensity improved by only 0.8% in 2020, roughly half the pace (corrected for the effects of the weather) achieved in 2019 (1.6%) and 2018 (1.5%). As stressed by the IEA (2020[14]), annual improvements in energy efficiency are well below the pace needed to achieve global climate and sustainability goals. But the COVID-19 crisis also adds a new layer of uncertainty. While it threatens to delay investments by businesses and households in more efficient technologies, the crisis may also trigger changes to behaviour that could reduce energy intensity in some instances but increase it in others.[8] Thus, while the full impact of the COVID-19 crisis may take years to properly play out, the crisis clearly poses both risks and opportunities for global energy efficiency (IEA, 2020[14]). As summarised in Table 4.2, the effect on distances to target is likely to be negative in the short-term but is much more uncertain in the longer run.

Table 4.2. Summary impact of the COVID-19 pandemic on Goal 7 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
7.1 – Access to energy	none	none
7.2 – Clean energy	positive	mixed
7.3 – Energy efficiency	negative	
7.4 – Support to clean energy		
7.5 – Energy in developing countries		

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusion. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 8 – Decent work and economic growth

Goal 8 aims at promoting "sustained, inclusive and sustainable economic growth" as well as employment and decent work. Even before the pandemic hit, many economies were struggling with sluggish growth and structural problems (OECD, 2021[15]). Labour productivity growth in the OECD area remained well below rates observed before the 2008 global financial crisis, while labour markets featured stubbornly high long-term unemployment, poor job quality and high insecurity. Yet, there were also some areas of progress. For instance, while the material footprint of OECD countries remains at levels that are not sustainable, a vast majority of them have decoupled consumption of materials from economic growth. Beyond macro-economic measures of performances, Goal 8 also includes other objectives such as protecting labour rights or strengthening access to financial services, areas where OECD countries show a rather good performance.

The economic impact of the COVID-19 crisis on output growth has been significant in all countries. While it contributed to a fall in OECD economies of 4.6% in 2020, the strong policy support, the deployment of effective vaccines and the resumption of many economic activities allowed OECD GDP to rise above its pre-pandemic level in the third quarter of 2021. Still, the recovery is uneven within advanced economies. The COVID-19 pandemic exposed a number of long-standing structural weaknesses that have exacerbated the short-term costs of the crisis and risk leaving long-term scars on GDP growth and job prospects. Despite support measures to firms and workers, the pandemic has disrupted employment dynamics, and the labour market remains imbalanced. Labour market conditions are currently recovering, with job retention measures such as short-time work schemes and wage subsidies continuing to help preserve employment. Still, by the end of 2020, around 22 million jobs had disappeared in OECD countries (OECD, 2020[16]).

Assessing OECD countries' performance on Goal 8

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 4.3 shows that data allow the monitoring of eight of the 12 targets underpinning Goal 8. For this goal, five indicators sourced from the OECD complement the *SDG Global Database*. While three of them align with the global indicator framework, drawing from OECD data sources allows for being timelier (8.4.2, 8.5.2 and 8.6.1), offers longer time-series (8.4.2 and 8.6.1) and/or provides a wider country coverage (8.5.2). In the case of indicators focusing on GDP and productivity growth, departing from the indicators from the global indicator framework by focusing on a 15-year time frame rather than annual rates allows avoiding results being driven by cyclical fluctuations (8.1.1 and 8.2.1). On top of the indicators listed in Table 4.3, the database includes eight additional data series to monitor Targets 8.1, 8.2, 8.9, 8.10 and 8.a, but these are considered to be mainly informative in the context of Goal 8 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-4-prosperity.xlsx).

Table 4.3. Available data series supporting the monitoring of Goal 8

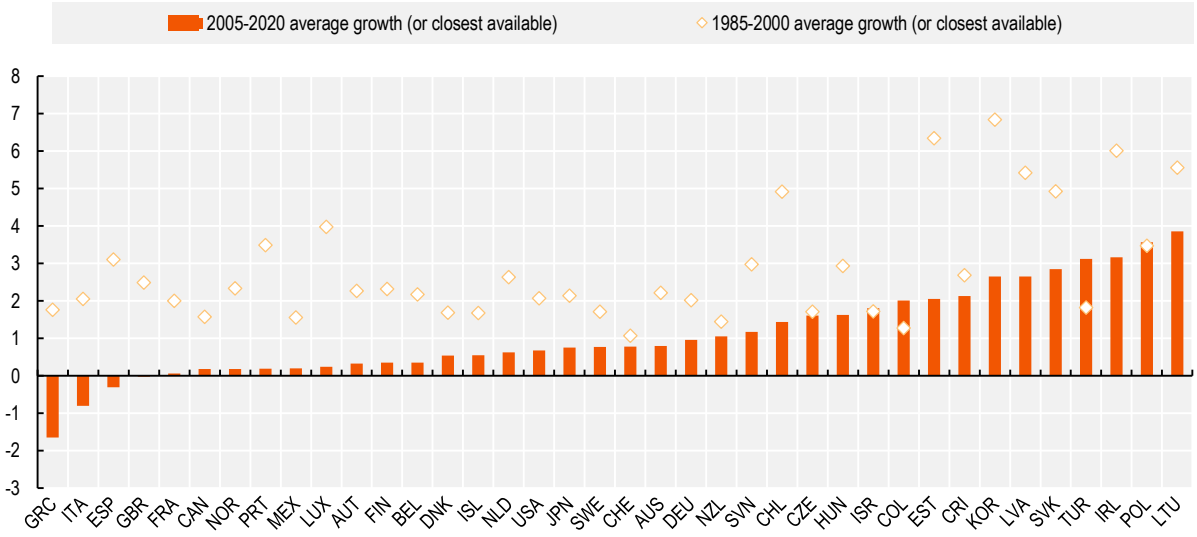
Indicator code	Indicator Label	Available over time	Primary source
8.1.1	*15 years average annual growth rate of real GDP per capita*	Yes	OECD
8.2.1	*15 years average annual growth rate of real GDP per hours worked*	Yes	OECD
8.4.2	Domestic material consumption per unit of GDP	Yes	*SDG Global Database*
8.4.2	Domestic material consumption per GDP	Yes	OECD
8.5.1	Average hourly earnings of employees	Yes	*SDG Global Database*
8.5.2	Unemployment rate	Yes	OECD
8.5.2	Unemployment rate, by sex and age	Yes	*SDG Global Database*

Indicator code	Indicator Label	Available over time	Primary source
8.5.2	Unemployment rate, by sex and disability	No	*SDG Global Database*
8.6.1	Proportion of youth not in education, employment or training	Yes	OECD
8.6.1	Proportion of youth not in education, employment or training	Yes	*SDG Global Database*
8.8.1	Fatal occupational injuries among employees	Yes	*SDG Global Database*
8.8.1	Non-fatal occupational injuries among employees	Yes	*SDG Global Database*
8.8.2	Level of national compliance with labour rights (freedom of association and collective bargaining) based on ILO textual sources and national legislation	No	*SDG Global Database*
8.10.2	Proportion of adults with an account at a financial institution or mobile-money-service provider	Yes	*SDG Global Database*
8.b.1	Existence of a developed and operationalised national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

The COVID-19 pandemic hit while many OECD economies were already struggling with sluggish growth (OECD, 2021[15]). Target 8.1 focuses on economic growth, calling upon countries to "sustain per capita economic growth in accordance with national circumstances" and is measured through the annual growth rate of GDP per capita. Yet, this report rather considers the 15-year average per capita growth, sourced from OECD databases. Using a 15-year horizon, which is the time period of the Agenda, allows smoothing out variance in the data due to cyclical economic fluctuations. Hampered by the COVID-19 pandemic and the 2008 global financial crisis, in 2020 the long-term growth was low in 27 OECD countries (i.e. below 1.7%), while only Turkey, Ireland, Lithuania and Poland achieved long-term growth greater than 3.1% a year (Figure 4.4).[9] The remaining six countries (the Slovak Republic, Latvia, Korea, Estonia and Costa Rica) are at a medium distance from the target. Over time, developments highlight the slowdown of economic growth in almost all OECD countries. Over the past two decades, long-term growth has been on an upward trend only in Colombia and Turkey.

Figure 4.4. 15 years average annual growth rate of real GDP per capita (Target 8.1)



Note: The earlier period refers to the 15-year period prior to 2000 for Japan; 2005 for the Czech Republic and Poland; 2006 for Hungary and Costa Rica; 2007 for the Slovak Republic; 2008 for Estonia; 2010 for Slovenia, Israel, Latvia and Lithuania; and 2001 for otherwise. The later period refers to the 15-year period prior to 2019 for Japan and 2020 for otherwise.
Source: OECD calculations based on (OECD, 2022[17]), "Gross domestic product (GDP)" (indicator), https://doi.org/10.1787/dc2f7aec-en (accessed on 29 October 2021).

StatLink https://stat.link/ox1e4s

In 2020, labour productivity growth in the OECD area remained weak and well below rates observed before the global financial crisis.[10] Target 8.2 calls on countries to "achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors". At a global level, this target is measured through the annual growth rate of real GDP per employed person. In this report, it is measured by the 15-year average growth rate of real GDP per hours worked. Two different reasons underpin this choice. First, adjusting for hours worked provides a more accurate assessment of labour productivity and is particularly important in a cross-country comparison (Ward, Zinni and Marianna, 2018[18]; Ahmad et al., 2003[19]).[11] Second, averaging over 15 years, which is the time period of the Agenda, allows smoothing out variance in the data and avoiding the results being driven by cyclical fluctuations. Given the lack of a clear target to be reached, performance is benchmarked against the highest growth rates observed in 2015 (i.e. 3.6% of the average annual growth rate of real GDP per hours worked between 2000 and 2015 based on growth observed in Korea, Lithuania, Latvia and the Slovak Republic). With 15-year average growth ranging from 3.2% to 4.1%, only five OECD countries can be considered to be at a short distance to the target (Ireland, Costa Rica, Colombia, Korea, and Lithuania), while seven are considered to be at a medium distance, and 27 at a large distance – with Finland, the Netherlands, Italy, Norway, Luxembourg, Mexico and Greece being furthest away. Since 2000, annual growth in labour productivity has slowed in all OECD countries, with only the exceptions of Turkey, Colombia, Iceland, Israel and Costa Rica. Despite rapid technological change, the increasing participation of firms and countries in global value chains, and rising education levels, productivity growth has slowed across all advanced economies.[12] As stressed by the OECD (2019[20]), the slowdown in productivity growth has affected all major sectors, while being particularly evident in manufacturing.

The distances to Target 8.3 are not assessed due to insufficient data. One target (8.3) of the 2030 Agenda focuses specifically on decent work and informality, calling on countries to "promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized

enterprises including through access to financial services". For global monitoring, the IAEG-SDG proposed to measure Target 8.3 with data on the proportion of informal employment in total employment. While this share is estimated to be about 18% in developed countries (OECD/ILO, 2019[21]), available measures do not allow covering enough OECD countries to come up with a comparative assessment. This target is therefore not discussed further in this report.

OECD countries have been decoupling the consumption of materials from economic growth. Target 8.4 calls upon countries to "improve progressively through 2030 global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programs on sustainable consumption and production with developed countries taking the lead". This target, which focuses on the use of resources, is measured through data on domestic material consumption (DMC) per unit of GDP. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Target 12.2.[13] While the need to reduce DMC has been clearly recognised in a number of fora, there is no agreement on the level to be reached. To overcome this problem, the target level has been set in this report using the distribution of OECD outcomes as observed in 2015 (i.e. 143 g of DMC per unit of GDP in the three best-performing OECD countries, including the Netherlands, the United Kingdom and Japan).[14] Overall, slightly less than half of OECD countries are close to this target level, with a few of them reporting much higher levels. The distance from the target level is considered to be large (i.e. more than 0.55 kg per unit of GDP) in four countries, most notably in Chile, where it exceeds 1.7 kg per USD. Since 2000, material productivity has improved in more than three-quarters of OECD countries, reflecting efficiency gains in production processes, changes in material mixes and lower demand for materials following the 2008 financial crisis (OECD, 2020[22]). However, this gain may also reflect the substitution of domestic production of material by imports. When accounting for all materials needed to satisfy domestic final demand in OECD countries, i.e. including materials extracted abroad and embodied in imported goods (i.e. a demand-based measure), progress is more modest, and the material footprint, including materials extracted abroad and embodied in international trade, has increased in many OECD countries (OECD, 2020[22]).

The COVID-19 crisis has exacerbated structural problems in many labour markets, including high long-term unemployment, persistent inequality, poor job quality and insecurity (OECD, 2021[15]). Target 8.5 aims at fostering employment and decent work, calling upon countries to "by 2030 achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value". The global indicator framework identifies two measures to monitor this target: the average earnings of employees (indicator 8.5.1) and the unemployment rate (8.5.2). Regarding the former, country performance is benchmarked using the level of hourly (rather than per employee) earnings prevailing in the three top-performing countries (Switzerland, Denmark and Norway) in 2015 (i.e. constant USD 2015 PPP 24 per hour). On this basis, the distance from target is short (i.e. greater than constant USD 2015 PPP 20 per hour) in 12 OECD countries, with distances being shortest in Switzerland, Denmark, Norway, Luxembourg and the United States. Conversely, 11 OECD countries are at a large distance from the target (i.e. with hourly earnings below USD 13 per hour, i.e. almost half the target level), with Turkey, Costa Rica, Portugal, Chile, Colombia and Mexico being the furthest. As noted in OECD (2018[23]), growth in real earnings remained sluggish over the past decade due to weak productivity growth and an increase in low-pay jobs[15] but also due to the decoupling between wages and productivity.[16] As a result, only a minority of OECD countries have achieved a statistically significant increase in hourly earnings (13 out of 27).

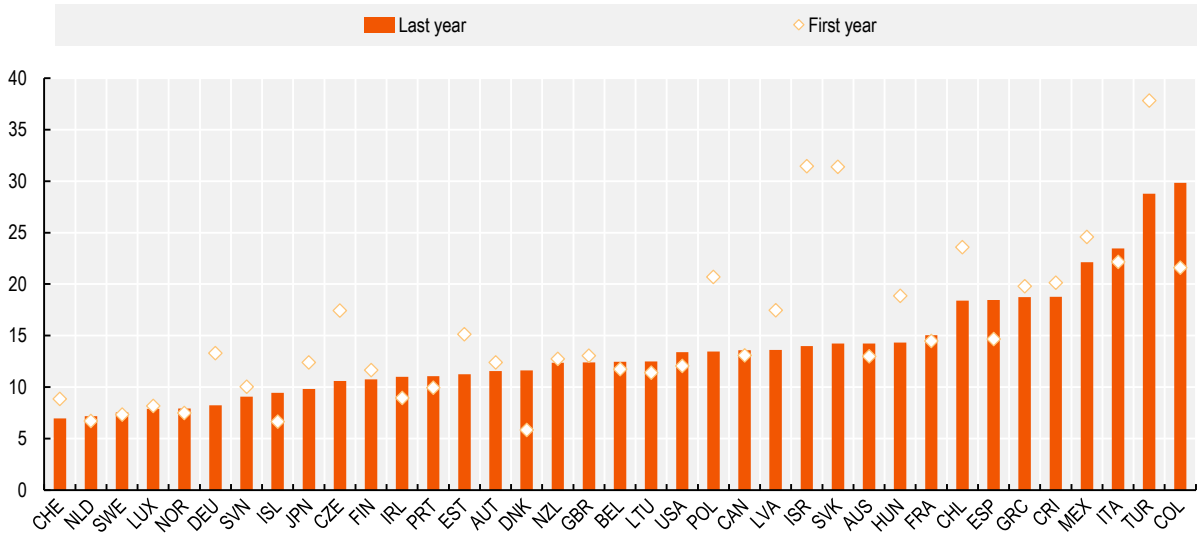
Beyond the level of earnings, Target 8.5 is also monitored through the share of the labour force who are unemployed (while the target aims at "achieving full employment", the target level has been operationalised at 3% to reflect frictional unemployment and possible measurement errors). In 2020, OECD countries presented a diverse picture. The pandemic led to record unemployment rates across the OECD area, and even if rates have been falling from their April 2020 peak, they remain above the rates observed in

February 2020, before the COVID-19 pandemic hit.[17] Overall, 14 OECD countries are at a short distance from the target (with unemployment rates below 5% for people aged 15 and over). For instance, the Czech Republic, Japan, Germany and Poland exhibit rates as low as 3%, while many other countries (including the Netherlands, the United Kingdom and Mexico) cluster around 4%. On the other hand, the unemployment rate is still strikingly high in the southern European countries (at 16% in Greece and Spain, and at 9% in Italy) but also in Latin American countries (at 20% in Costa Rica, 16% in Colombia and 11% in Chile). Since 2000, some OECD countries have achieved large falls in unemployment, particularly Germany and Israel, where the unemployment rate more than halved over the last decade, as well as the Czech Republic, Japan and Poland.[18] Yet, no reduction in unemployment (or even the opposite, i.e. an increase) is evident in the majority of OECD countries (30 out of 38).

While the share of youth Not in Employment, Education or Training (NEET) remained large in a vast majority of OECD countries in 2019, many of them have made progress over the last two decades. Beyond employment for all (Target 8.5), the 2030 Agenda also includes a specific target (8.6) on youth, calling countries to *"*by 2020 substantially reduce the proportion of youth not in employment, education or training*"*. As in the case of unemployment, the target level for the share of NEET has been set in this report at 3%. Despite some differences between OECD and UN data,[19] both suggest that very few OECD countries were at a short distance to the target in 2019 (i.e. with NEET rates below 6%). Using OECD data, no OECD country falls in this category, while UN data suggest that Japan, the Netherlands, Iceland, Norway and Sweden are close to this target level. Similarly, both measures suggest that most OECD countries are at a large distance from the target (i.e. with NEET rates above 11%),[20] with Mediterranean countries (including Israel, Spain, Greece, Italy and Turkey) and Latin American countries (including Chile, Costa Rica, Mexico and Colombia) being furthest away. Over the past two decades, around 40% of OECD countries showed some progress, with reductions in NEET rates being largest in Germany, Poland, the Czech Republic, Chile, Turkey, the Slovak Republic, Hungary and Israel (Figure 4.5).

Figure 4.5. Youth not in education, employment or training (Target 8.6)

As a percentage of the total number of young people (aged 15-29 years)



Note: First year refers to 2000 for Germany, Denmark and Turkey; 2002 for Latvia and Israel; 2003 for Slovenia, Iceland, Finland and Estonia; 2004 for Austria and New Zealand; 2005 for Lithuania; 2009 for Chile; 2013 for Costa Rica and Colombia; and 2001 for otherwise. Last year refers to 2014 for Japan; 2017 for Chile; 2019 for Germany, Denmark and Turkey; and 2020 for otherwise.
Source: (OECD, 2021[24]), "Youth not in employment, education or training (NEET)" (indicator), https://doi.org/10.1787/72d1033a-en (accessed on 29 October 2021).

StatLink https://stat.link/ypm4rk

Target 8.7 on forced labour cannot be assessed due to lack of data. Target 8.7 focuses on the elimination of more exploitative forms of labour (calling on countries to *"*take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms*"*), with global monitoring based on measures of the prevalence of child labour. The lack of comparable data for OECD countries prevents the inclusion of this target in this report. While the prevalence of child labour is strongly correlated with countries' level of economic development, it is typically overlooked in more advanced economies. Yet, dedicated data collection is also needed in OECD countries, for instance, to assess how adolescents combine work at home or in paid employment with school attendance and how technological changes affect the risk of children being exposed to hazardous forms of work (Thévenon and Edmonds, 2019[25]).

Despite some disparities, compliance with labour rights in OECD countries is generally high, and there are few (and declining) work-related fatalities. Target 8.8 (*"*protect labour rights and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment*"*) is monitored at the global level through two indicators, as proposed by the global indicator framework. The first indicator focuses on the prevalence of work accidents (fatal and non-fatal), and the target value has been set at 0 (i.e. no fatal or non-fatal work accidents). As stressed by the OECD (OECD, 2007[26]), workplace accidents are the most visible manifestation of the hazards of paid work. Most work accidents are non-fatal. Around 2015, fatal work accidents were most frequent (and thus the distance from target was larger) in Mexico, Turkey, Costa Rica and the United States (with more than 5 deaths per 100 000 employees), but rates are the lowest in Iceland, Colombia, the Netherlands and the United Kingdom (less than 1 death per 100 000 employees).[21] In a majority of OECD countries (25 of 34), death rates have been declining over the past two decades. Non-fatal accidents are more common, ranging in 2015 from less than 900 cases per 100 000 workers in 14 OECD countries (thus considered to be at a short distance to the target) to more than 2 700 cases per 100 000 workers in seven of them (Portugal, Mexico, Chile, France, Spain, the Netherlands and Costa Rica). Yet, they also appear to have declined in most OECD countries (23 out of 34). These downward trends can be explained by many factors, including the contraction of some of the most dangerous industries, such as coal mining and shipping, and the expansion of the service sector (OECD, 2007[26]; OECD, 2017[27]), but also due to the tightening of insurance rules, which may have increased employers' incentives to under-report minor accidents. Beyond workplace accidents, Target 8.8 is also monitored through a measure of countries' compliance with labour rights (mainly freedom of association and collective bargaining), ranging from 0 (highest level of compliance and the target level) to 10 (worst level of compliance).[22] Based on this measure, compliance in OECD countries is generally high. Using the distribution of outcomes in the OECD area, distances are considered to be short when they fall below 0.5 and large when they are above 1.5. Overall, most OECD countries (21) are at a short distance to the target value, with 12 having reached the target already (Austria, Belgium, Estonia, Finland, Ireland, Iceland, Israel, Italy, Latvia, Norway, the Slovak Republic and Sweden). Five are far from target (Australia, Chile, Mexico, Colombia and Turkey), while three are not assessed due to lack of data (New Zealand, Korea and the United States).

The data available on Target 8.9 are not suitable for assessment. Target 8.9 aims at implementing policies to promote sustainable tourism (*"*by 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products*"*). Yet, the indicator selected for global monitoring (tourism direct value-added as a proportion of GDP[23]) only captures the size of the tourist sector. In the context of this report though, this indicator is considered to be informative of the national context. Therefore, OECD countries' performance with respect to this target is not assessed.

Most OECD residents already have access to banking services, but financial inclusion remains an issue for some. Target 8.10 focuses on *"*strengthening the capacity of domestic financial institutions to encourage and to expand access to banking, insurance and financial services for all*"* and is monitored through indicators on the number of commercial bank branches and automated teller machines (ATMs)

per 100 000 adults and the share of adults with a bank account. This target is assessed only partially in this report, as the densities of ATMs and of commercial bank branches are considered to be mainly informative of the national context. While greater access to financial services may be related to a higher number of ATMs and commercial branches, digital technologies significantly reduce the importance of geographical proximity to these facilities. As stressed by the OECD (2018[28]), the importance of physical locations for providing financial services has dropped considerably over time, thereby reducing the usefulness of this measure.

The second indicator pertaining to this target shows that many OECD countries (16) are already at or close to universal access (operationalised at 97% of adults having a bank account to allow for uncertainties in the measurement), while in 10 additional OECD countries the share of adults with a bank account is above 89%, and the distance from target is short. Yet, 11 countries are still at a medium distance (in Poland, Greece, the Slovak Republic, Lithuania, the Czech Republic, Hungary and Chile access varies from 72% to 89%) or at a long distance (in Turkey, Costa Rica, Colombia and Mexico the share is below 72%). Assessing trends in this indicator over time is not straightforward. While 20 OECD countries are likely to stay at (or attain) universal coverage, and five are likely to significantly improve their performance, 10 do not show any specific trends in this indicator or experienced a fall. Yet, as stressed by the OECD (2021[29]), financial inclusion goes well beyond having a bank account. For instance, in OECD countries, many people's knowledge does not extend beyond basic transactions.[24]

Target 8.a focuses on aid for trade ("increase Aid for Trade support for developing countries, particularly LDCs [Least Developed Countries], including through the Enhanced Integrated Framework for LDCs"), **but despite available data for global monitoring, it is not covered in this report.** As in the case of other aid-related targets, despite the existence of a clear international benchmark for total ODA provided by donor countries (0.7% of gross national income), the preferred sectoral breakdown of this aid will depend on the needs of each recipient and the priorities of each donor, implying that a higher share of ODA devoted to trade would necessarily come at a cost for other sectors of ODA.

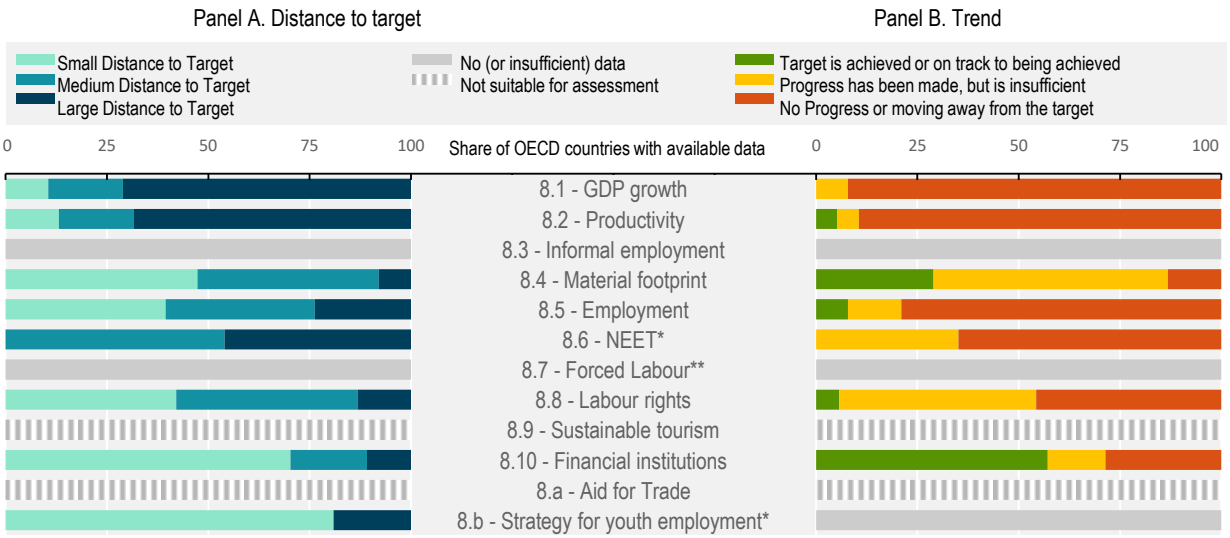
Very few OECD countries lack a national strategy for youth employment. Target 8.b calls on countries to *"*develop and operationalise a global strategy for youth employment and implement the ILO Global Jobs Pact*"* by 2020. The target is monitored through a measure that captures the existence of a developed and operationalised national strategy for youth employment, ranging from 0 (worst possible score) to 3 (best possible score and thus target value). The measure, produced by the International Labour Organisation (ILO), is available only for 21 OECD countries and suggests that most of them (17) have such national strategies. Yet, available data suggest that, in 2020, Chile, New Zealand, Turkey and Costa Rica still had some way to travel towards the full implementation of such frameworks.

Summing up

Overall, OECD countries show a very diverse performance across the different dimensions of Goal 8 on economic growth and decent work. Most OECD countries have been grappling with slow(ing) long-term economic growth (Target 8.1) and labour productivity growth (Target 8.2) (Figure 4.6, panel A). Apart from economic growth and labour productivity, more than half of OECD countries also face high unemployment rates and low hourly earnings of employees (Target 8.5). Despite some progress in the past decades, too many young adults remain not in employment, education or training (Target 8.6). On a more positive side, domestic material consumption has decoupled from economic growth and is decreasing in about nine in ten OECD countries, albeit at an insufficient rate (Target 8.4, Figure 4.6, panel B) and quite often at the cost of higher CO_2 emissions embodied in international trade. On working conditions, available data show that compliance with labour rights in OECD countries is generally high, and there are few (and declining) work-related fatalities (Target 8.8). Goal 8 also includes other areas such as developing national strategies for youth employment (Target 8.b) and strengthening access to banking

services (Target 8.10), where around three in four OECD countries show high performance (Figure 4.6, panel A).

Figure 4.6. Distance to targets and trends over time in OECD countries, by SDG target, Goal 8



Note: * refers to targets with a 2020 deadline. ** refers to targets with a 2025 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.
Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 8

After a sharp GDP decline of 4.7% in 2020 in the OECD, prospects for a global recovery have been improving, helped by the gradual deployment of effective vaccines and continued macroeconomic policy support. In many countries, the scale of the economic disruption from the pandemic has been exceptionally large, and the recovery is likely to be prolonged (Target 8.1). The decline in OECD GDP was substantially larger than in the 2008 global financial crisis. In the third quarter of 2020, GDP growth rates started to recover across OECD countries and returned to pre-pandemic levels in the first quarter of 2021 (OECD, 2021[30]). This reflects the prompt and massive policy support for firms and households from the outset of the crisis, including the additional measures announced this year, successful public health measures to limit transmission of the COVID-19 virus and, above all, the rapid rollout of effective vaccines (OECD, 2021[6]). Yet, the economic upturn since mid-2020 has been uneven and remains far from complete. The pandemic affected all countries' GDP in 2020 but with some noticeable disparities. Cross-country variation in GDP growth arises from many different sources, including the timing and severity of the pandemic and of the associated policy responses and the different sectoral mixes of economic activities in each country

but also differences in statistical practices (OECD, 2021[5]). Though current OECD projections are highly uncertain and subject to future revision, as summarised in Table 4.4, they suggest that, beyond the pandemic's short-term effect, its economic consequences may be long-lasting: average annual global growth of potential output from 2019 to 2022 could be around 0.25 percentage point weaker than estimated prior to the pandemic. If this persists, and there are no offsetting policies, the effect of the pandemic on GDP may last for more than a decade in most OECD countries (OECD, 2021[5]).[25]

The effects of the pandemic on productivity are also complex (Target 8.2). The health and economic crisis due to the COVID-19 pandemic, and the physical distancing measures introduced to cope with it, have forced many firms to introduce telework (working from home) on a large scale. This may catalyse a wider adoption of teleworking practices after the crisis, with a broad range of uncertain effects on productivity (OECD, 2020[31]). Overall, the data available so far show significant cross-country discrepancies in developments in labour productivity (per hour worked) between 2019 and 2020, with for example large increases in Canada, Italy and the United States, and overall stability in France and Germany (the effect is then considered to be mixed in Table 4.4). Looking ahead, the sectoral developments underlying these aggregate evolutions will need to be carefully analysed. In the longer term, the main risk to productivity depends on whether the crisis will have long-lasting effects on the productive capacity of the economy by triggering a surge in bankruptcies, not only of the least productive firms as in the usual creative destruction process, but also of more productive ones due to falling revenues and short-term insolvencies (OECD, 2021[32]).

Domestic material consumption (DMC) is likely to decline sharply in 2020 before reverting to (or exceeding) pre-crisis levels (see Table 4.4). The pandemic has led governments and companies to take exceptional measures to contain the spread of the virus and protect the lives of citizens and workers. These measures have disrupted global production and supply chain systems and are likely to have resulted in a sharp decline in the consumption of raw materials (Target 8.4) in the short term. However, this one-off expected decline is not likely to have a long-term impact on DMC unless structural changes lead to consumption patterns that differ significantly from pre-pandemic ones.

After a peak of unemployment in the first quarter of 2020, labour market conditions are improving gradually, but the scars of the crisis may last for long (see Table 4.4). Unemployment data are among the timeliest of those used for global monitoring of the 2030 Agenda, and they allow assessing Target 8.5 in almost real time. In the first months of the crisis, the impact of COVID-19 on OECD labour markets was much larger than that observed in the first months of the 2008 global financial crisis. Following the pandemic onset, the average OECD unemployment rate rose from 5.4% in the first quarter of 2020 to 8.6% in the following quarter (OECD, 2021[30]). Unemployment rates and countries' initial unemployment response to the COVID-19 crisis nevertheless varied starkly. In a few countries, unemployment immediately jumped to record levels, while in others it increased only modestly or not at all.[26] Yet, the extent of the shock on the labour market goes beyond the number of unemployed (OECD, 2020[16]). Despite a massive shift to telework, in all countries the number of those effectively working collapsed as companies put part of their workforce on hold through subsidised job-retention schemes. As people and governments have come to learn how to live alongside the virus, behaviours have adapted, and restrictions have become looser and more targeted. This has enabled many to return to work (OECD, 2021[7]). The OECD area's unemployment rate declined since its peak in April 2020 but remains above the level observed in February 2020, before the COVID-19 pandemic hit. Labour market conditions are projected to improve gradually, with unemployment rates unlikely to fall back to their pre-pandemic levels until after end 2022 in many countries (OECD, 2021[5]). Still, the highly sectoral nature of the crisis has meant that some workers have shouldered the bulk of the burden, while others not only suffered less but benefited more quickly from the recovery. Young people and temporary workers, for instance, have been particularly affected by the ravages of the crisis (OECD, 2021[7]).

Youth employment took a dive with the pandemic (Target 8.6). The current crisis reveals the vulnerability of young people in the labour market. In April 2020, the OECD-average unemployment rate

among 15-24 year-olds surged to 19%, the highest rate in decades. In May 2020, 12.8 million youth were unemployed in the OECD area, a 38% increase from January 2020. Although youth unemployment declined in the following months – as did the unemployment figures for older generations – it remains considerably above the pre-crisis figures. Moreover, many young people gave up their job search – and thus no longer classify as unemployed, but as inactive – as companies have frozen hiring in response to the strict social distancing measures and reduction in their activities.

International tourism suffered a dramatic 80% fall in 2020 as the pandemic hit, with the decline highlighting the sector's major impact on the environment and on local communities (Target 8.9). As an activity that is inherently dependent on people's movement and interactions, tourism has been one of the sectors hardest hit by the pandemic and may be one of the last to recover. In 2019, international tourist arrivals reached 1.5 billion, with domestic tourism accounting for a further 9 billion. Tourism contributed directly to 3% of GDP in G20 economies, 6% of G20 total exports and 6% of G20 employment. Then in March 2020, tourism came almost to a standstill. International tourist arrivals fell by almost 80% in 2020. Scenarios from the UN World Tourism Organization (UNWTO) indicate that it may take between two-and-a-half and four years for international arrivals to return to pre-pandemic levels. The halt in tourism is also having a knock-on impact on the wider economy, owing to supply chain effects and other linkages, leading to estimated total losses that are up to three times greater than those seen directly in the sector itself (OECD, 2021[33]). Yet, the pandemic also highlighted further that, for many destinations, tourism growth in recent years was economically, socially and environmentally unbalanced, negatively affecting the environment and the host communities upon which tourism depends. The pandemic has therefore dramatically changed the policy context for tourism. Looking beyond the immediate challenge of minimising the negative impacts of the crisis, fostering safe travel, and supporting a sustainable recovery, many countries are now exploring the opportunity to fast track the move to greener, more sustainable tourism development (OECD, 2021[34]).

Table 4.4. Summary impact of the COVID-19 pandemic on Goal 8 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
8.1 – GDP growth	negative	negative
8.2 – Productivity	mixed	
8.3 – Informal employment		
8.4 – Material footprint	positive	none
8.5 – Employment	negative	negative
8.6 – NEET*	negative	negative
8.7 – Forced Labour**		
8.8 – Labour rights		
8.9 – Sustainable tourism	mixed	positive
8.10 – Financial institutions		
8.a – Aid for Trade		
8.b – Strategy for youth employment*		

Note: * refers to targets with a 2020 deadline. ** refers to targets with a 2025 deadline. The table summarises the likely impact of the pandemic in the short run (i.e. one to two years after the pandemic hit) and long run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 9 – Industry, innovation and infrastructure

Goal 9 calls on countries to "build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation". Where performance can be measured, OECD countries report short distances from targets and significant progress over time. However, performance can be measured for only four of the eight targets underpinning Goal 9. The remaining targets cannot be unambiguously benchmarked, because the normative direction (what is good performance and what is poor performance) is unclear. While Goal 9 encompasses issues such as the quality of transport infrastructures, the inclusiveness and sustainability of the industrial sector, the scientific and technological capabilities of countries and access to modern communication infrastructures, performance can only be assessed for the environmental impacts (CO_2 emissions) of infrastructure, the level of investment in R&D and access to information and communication technologies.

Despite the paucity of data, early evidence suggests that the effects of the pandemic on transport and infrastructures may last. The crisis hit the manufacturing sector harder than did the financial crisis of 2007-08, and while government support prevented it from taking its toll on small-scale industries, many headwinds persist. The COVID-19 pandemic has also created new opportunities for small- and medium-sized enterprises, due to shifting global value chains, stronger local business ecosystems and the green transition. It also highlighted the resilience of communication infrastructure and, more generally, the capacity of science, technology and innovation systems to respond strongly and flexibly.

Assessing OECD countries' performance on Goal 9

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 4.5 shows that data allow the monitoring of four of the eight targets underpinning Goal 9. For this goal, four indicators sourced from the OECD complement the *SDG Global Database*. While three of them align with the global indicator framework, drawing from OECD sources allows being timelier and offering longer time-series (9.5.1 and 9.5.2) or allows greater comparability (9.4.1).[27] In other cases, relying on OECD data sources allows tailoring the analysis to OECD countries in order to mirror specific conditions (9.c.1). On top of the indicators listed in Table 4.5, the database includes 16 extra data series to monitor Targets 9.1, 9.2, 9.a, 9.b and 9.c, but these are considered to be mainly informative in the context of Goal 9 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-4-prosperity.xlsx).

Table 4.5. Available data series supporting the monitoring of Goal 9

Indicator code	Indicator Label	Available over time	Primary source
9.2.1	Manufacturing value added per capita	Yes	*SDG Global Database*
9.2.1	Manufacturing value added as a proportion of GDP	Yes	*SDG Global Database*
9.4.1	Carbon dioxide emissions from fuel combustion per unit of GDP	Yes	OECD
9.4.1	Carbon dioxide emissions per unit of GDP	Yes	*SDG Global Database*
9.4.1	Carbon dioxide emissions per unit of manufacturing value added	Yes	*SDG Global Database*
9.5.1	Gross domestic expenditure on research and development as a percentage of GDP	Yes	OECD
9.5.1	Research and development expenditure as a proportion of GDP	Yes	*SDG Global Database*
9.5.2	Researchers (in full-time equivalent) per million inhabitants	Yes	*SDG Global Database*
9.5.2	Researchers per capita	Yes	OECD
9.c.1	*Total fixed broadband subscriptions per 100 inhabitants*	Yes	OECD
9.c.1	Proportion of population covered by at least a 4G mobile network	Yes	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Given the lack of data, Target 9.1 cannot be assessed in this report. Global monitoring of Target 9.1 ("develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all") relies on a measure of individual access to infrastructure (the proportion of rural population who live within 2 km of an all-season road) and a measure of passenger and freight volumes. While the former has a clear normative direction and would have a natural target (all residents should be able to access infrastructures), data are not available for OECD countries. The assessment is less clear-cut for the latter indicator. The level of passenger and freight volumes by mode of transport provides useful insights, yet it is highly dependent on the national context and cannot be included as a measure of performance in this report.

The intensity of manufacturing value added varies greatly among OECD countries in terms of trends and levels. Target 9.2 ("promote inclusive and sustainable industrialization, and by 2030 raise significantly industry's share of employment and GDP in line with national circumstances, and double its share in LDCs") focuses on industry, with global monitoring focused on two dimensions: i) manufacturing value added (measured as a proportion of GDP and per capita) and ii) manufacturing employment (measured as a proportion of total employment). However, while all countries could legitimately aim at maximising manufacturing value added, the share of manufacturing (in total employment or in GDP) is highly dependent on the national context and does not lend itself to an assessment whereby higher shares always imply better outcome. Therefore, the comparative assessment included in this report relies only on the measure of manufacturing value added,[28] while the relative size of manufacturing is considered to be a measure informing on the national context. As no target level of value added is specified in the 2030 Agenda, country performance is gauged vis-à-vis the level prevailing among the top OECD countries with higher shares in 2015 i.e. slightly above 20% of GDP (namely in Switzerland, Korea, Japan and Ireland) and above constant USD 2015 PPP 7 500 per capita (i.e. in Switzerland, Germany and Ireland). Overall, in 2020, when aggregating both measures of manufacturing value added, seven OECD countries are close to the 2030 target (Ireland, Korea, Switzerland, Japan, the Czech Republic, Slovenia and Germany), while 12 are far from it (but only Chile, Latvia, Costa Rica, Colombia and Greece report large distances to both targets). Differences in the levels of GDP per capita partly mitigate these results. High levels of GDP per capita in Luxembourg and Norway imply a much shorter distance when manufacturing value added is benchmarked against population rather than against total GDP (while the opposite is true for Slovenia and the Czech Republic). Over time, 18 OECD countries appear to be on a stable (or even declining) trend for both measures, while 14 appear to be progressing in both cases. Yet, the pace of progress on both indicators is likely to be sufficient to reach the target for only two countries (Ireland and Korea) and another two countries (the Czech Republic and Switzerland) on only one indicator.

Target 9.3 is not assessed in this report. Target 9.3 ("increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets") aims at increasing the integration of small-scale firms in value chains and markets. It is monitored by two indicators: i) the proportion of small-scale enterprises in industry value added and ii) the proportion of small-scale enterprises with a loan or a line of credit. As for Target 9.2, the share of small-scale enterprises in industry value added is dependent on the national context and does not lend itself to an assessment whereby higher shares always imply better outcomes. Therefore, this indicator is considered to be mainly informative of the national context, but it is not used to assess performance. The latter indicator (proportion of small-scale enterprises with a loan or a line of credit) is available only for 18 OECD countries and cannot be included in the report.

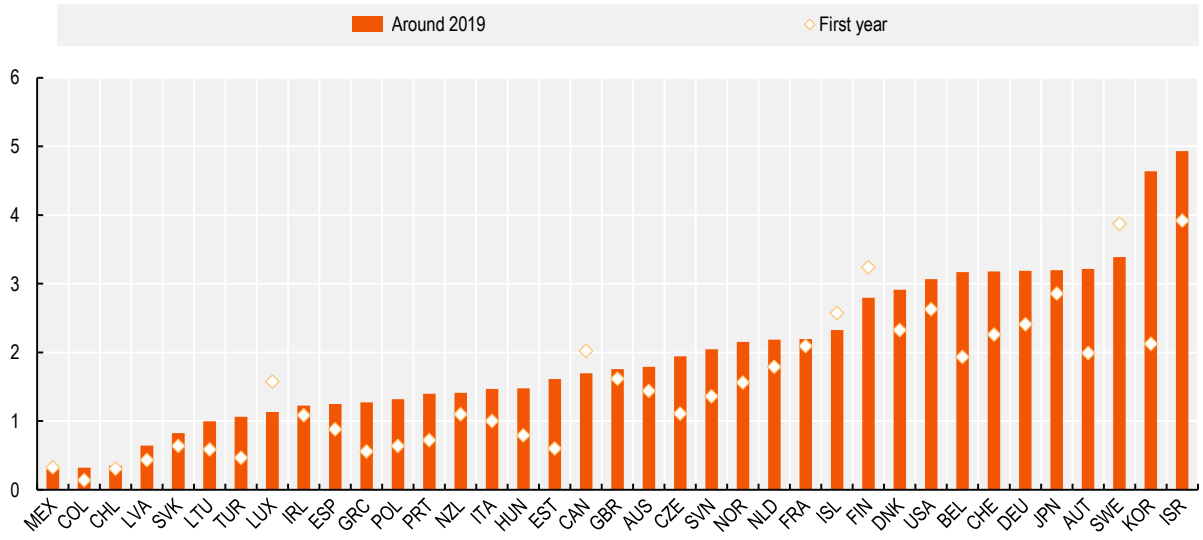
While CO_2 emissions are being decoupled from GDP, emissions per unit of manufacturing value added are still increasing in some OECD countries. Target 9.4 ("by 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities") aims at making infrastructure and industries sustainable. It

is monitored through an indicator on the amount of carbon dioxide emissions (per unit of GDP, per unit of GDP from fuel combustion, and per unit of manufacturing value added). While the need to reduce industrial emissions is obvious, no target level is defined by the 2030 Agenda. For the purpose of this report, the target is benchmarked based on the level of emissions observed in 2015 in OECD countries with the lowest emissions – i.e. around 100 g of CO_2 emissions per unit of GDP and 85 g of CO_2 per unit of manufacturing value added.[29] Overall, around 2019,[30] Switzerland, Ireland, Sweden and Denmark were the OECD countries with the lowest level of industrial emissions and were therefore considered as having already achieved the target for both measures. In addition, on average across different measures, eight more OECD countries are considered to be close to the target (the United Kingdom, France, Costa Rica, Lithuania, Italy, Austria, Latvia and Norway), while eight are considered as being still far away from the target (Turkey, the Czech Republic, the Slovak Republic, Korea, Estonia, Poland, Canada and Australia). Due to differences in the structure of national economies, some differences arise when looking at performance per unit of GDP or per unit of manufacturing value added. For instance, Korea and Estonia report much better results when CO_2 emissions are benchmarked against manufacturing value added. Over time the picture depends on the metric used. Emissions per unit of GDP are decreasing in all OECD countries except Chile. Yet, progress achieved over the past two decades is not likely to allow reaching the target for a vast majority of them (23 or 27 of the 38 member states, depending on the source used). Patterns on emissions per unit of manufacturing value added are even less encouraging, with six OECD countries not reporting any progress (Luxembourg, New Zealand, Israel, Greece, Mexico and Costa Rica).

Scientific research was enhanced in almost all OECD countries. Target 9.5 aims at enhancing scientific research ("Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending") and is monitored by the amount of R&D expenditure as a share of GDP and the number of researchers (in full-time equivalent) per million inhabitants. While the 2030 Agenda clearly states that the number of researchers as well as the budgets devoted to research should be increased, it does not provide any numerical value to be reached. Following the procedures defined in the methodological annex, the target is based on the levels of R&D expenditure and the densities of researchers observed in 2015 in OECD countries with the highest performance – i.e. 3.3% of GDP devoted to R&D and around 5 900 researchers (in full-time equivalent) per million inhabitants.[31] The two indicators are highly correlated (0.83) and, with a few exceptions, they suggest that, in 2019, eight countries were at short distances to the target on both indicators (Sweden, Korea, Austria, Denmark, Switzerland, Japan, Germany and Belgium), and another eight countries do well on only one of the two indicators (Israel[32], Iceland, the United States, Norway, the Netherlands, New Zealand, Ireland and Finland) – using the OECD distribution of outcomes, distances are short if R&D expenditures are greater than 2.8% of GDP and researcher density is above 5 000 per 1 000 000. Conversely, 10 countries (Poland, Spain, Italy, the Slovak Republic, Turkey, Latvia, Chile, Mexico, Costa Rica and Colombia)[33] were considered as far from the target for both indicators, and another nine were far for only one indicator (New Zealand, Ireland, Portugal, Canada, Luxembourg, Estonia, Hungary, Greece and Lithuania). Over the past two decades, R&D intensity and/or employment in research increased in the vast majority of OECD countries – see Figure 4.7 for R&D expenditure. Yet, as stressed by OECD work on science and technology data and indicators (OECD, 2021[35]), this aggregate picture may hide significant disparities among the different streams of research. For instance, an experimental mapping of government R&D support onto SDG clusters suggests that support for "industry and knowledge" is more than twice the support to the other sectors assessed (health and society, planet and infrastructure and security) (OECD, 2021[35]).

Figure 4.7. Research and development expenditure (Target 9.5)

As a percentage of GDP



Note: First year refers to 1998 for Australia; 2001 for Mexico, Greece, New Zealand, Canada, Norway, Denmark, Australia and Sweden; 2007 for Chile; and 2000 for otherwise. Around 2019 refers to 2017 for Australia and Switzerland; 2018 for Chile; 2020 for Mexico, Canada and Australia; and 2019 for otherwise.
Source: (OECD, 2021[36]), "Main Science and Technology Indicators", *OECD Science, Technology and R&D Statistics* (database), https://doi.org/10.1787/data-00182-en (accessed on 29 October 2021).

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As with other ODA-related targets, Target 9.a is not assessed in this report. Target 9.a aims at *"*facilitating sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, LDCs, LLDCs [Landlocked Developing Countries] and SIDS [Small-Island Developing States]*"*, and it is monitored by an indicator of the total official international support to infrastructure. Despite available data, the indicator is not analysed in this report, as a higher share of total ODA to one area would imply lower shares in other areas, which are also targeted by the 2030 Agenda. Yet, OECD data show that official development aid for economic infrastructure has been constantly on the rise over the last decade. Within this total, the main sectors assisted were transport and the banking and financial services sector.

Target 9.b is not assessed in this report. Target 9.b aims at *"*supporting domestic technology development, research and innovation in developing countries including by ensuring a conducive policy environment for inter alia industrial diversification and value addition to commodities*"*. The target is monitored through an indicator on the proportion of medium and high-tech manufacturing value added in the total value added of developing countries. As such, this indicator is not used to assess performance (increasing the share of medium- and high-tech manufacturing in total value added would be detrimental to other sectors).

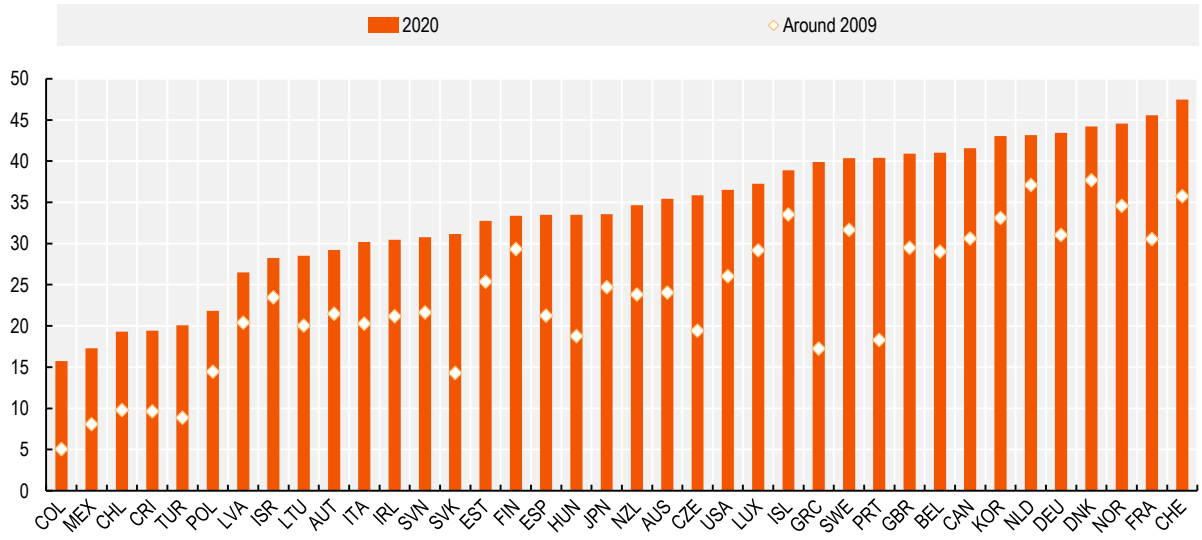
Almost all OECD residents are connected to mobile networks. Target 9.c aims at *"*significantly increasing access to ICT and striving to provide universal and affordable access to internet in LDCs by 2020*"*. The global indicator framework proposes to measure this through data on the proportion of population covered by different generations of the mobile network (2G, 3G and 4G). However, as operators in many OECD countries have announced the "shutting down" of legacy wireless networks (e.g. 2G/3G networks) and the transition to the next evolution of mobile networks (OECD, 2020[37]), this report does not take into account mobile coverage of 2G and 3G networks.[34] In order to account for possible measurement errors, the target level is set in this report at 97% of the total population. Overall, in 2019,

almost all OECD residents were connected to mobile networks. In a few cases, though, some countries are still slightly below the 97% threshold. For instance, 4G mobile coverage ranges between 88% and 97% of the population in seven OECD countries, including Chile, Ireland, Mexico, Costa Rica, Israel, Latvia and Turkey. Over time, though, all OECD countries have been progressing very rapidly towards universal coverage, and 33 out of 38 OECD countries are expected to meet the target by 2030.

Still, persistent connectivity divides remain. While the global indicator framework proposes to monitor access to ICT through a mobile network, relying on this measure alone for OECD countries may mask significant connectivity gaps. Therefore, to assess whether people and firms are actually connected, the present report also assesses connectivity through measures of broadband penetration. Given that fixed broadband subscriptions are usually shared by all members of a household, it is not obvious what would be the minimum value for which access would be universal. For this reason, the target value has been set at 40 subscriptions per 100 inhabitants, using the 10th percentile of the OECD distribution in 2015, with Denmark, the Netherlands and Switzerland being the top three-performing countries.[35] Figure 4.8 shows that, in 2020, 16 OECD countries were already at this rate or close to it (i.e. there were more than 36 subscriptions per 100 inhabitants), but seven were considered as far from the target with subscription rates below 27 (Turkey, Chile, Latvia, Poland, Costa Rica, Mexico and Colombia). Yet, even in countries with higher penetration rates, some difference in the levels of access may occur in terms of geography (e.g. as urban and rural areas), by gender, by age, by skill level, and in general, by different vulnerable groups in society (OECD, 2021[38]). Still, subscription rates are increasing in all OECD countries.

Figure 4.8. Total fixed broadband subscriptions (Target 9.c)

Per 100 inhabitants



Note: Around 2009 refers to 2012 for Costa Rica and 2009 for otherwise.
Source: (OECD, 2021[39]), "Fixed broadband subscriptions" (indicator), https://doi.org/10.1787/902e48ee-en (accessed on 29 October 2021).

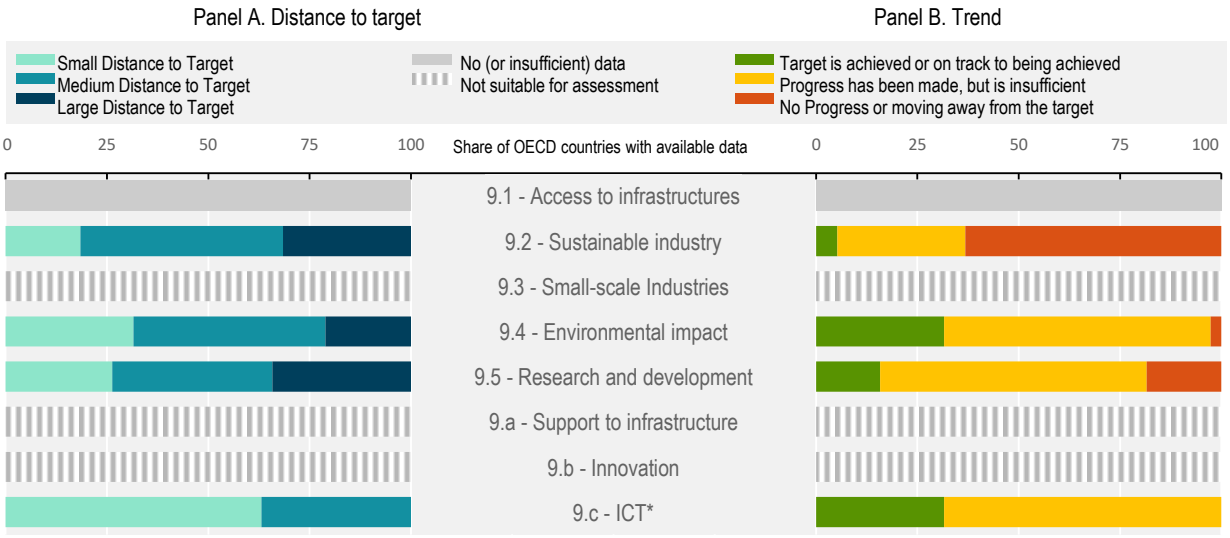
StatLink https://stat.link/s5pgyw

Finally, while it may be out of the scope of this report, it is important to stress that closing the connectivity divide means not only providing access to broadband but also accessing the high-quality communication networks and services at affordable prices. To do this, it would be important to measure the availability of broadband through indicators such as coverage, penetration and uptake as well as the performance (i.e. quality) of the broadband connection within and across countries (OECD, 2021[38]).

Summing up

Overall, the assessment of Goal 9 is limited to only half of the targets underpinning it. Among those, the current performances vary, and while a majority of OECD countries show some progress, few will be able to reach the target by 2030 if current trajectories continue (Figure 4.9, panel B). First, the intensity of manufacturing value added varies considerably among OECD countries, and six out of ten countries are not making any progress towards the target or even moving further away (Target 9.2). Second, despite significant progress in reducing the environmental impacts of industry in most OECD countries over the past two decades, only one-third of them are expected to have made adequate reductions in industrial CO_2 emission levels by 2030 (Target 9.4). Beyond the targets relating to industry and manufacturing, Goal 9 also includes targets relating to innovation and infrastructure. For the most recent year, only one in four OECD countries is close to the desired levels, but almost all of them are raising their levels of research and development expenditure and the density of researchers (Target 9.5). Finally, while connectivity gaps remain an issue, available data suggest that no OECD country appears to be far from reaching target on increasing ICT and internet access – the only target with a 2020 deadline (Target 9.c, Figure 4.9, panel A).

Figure 4.9. Distance to targets and trends over time in OECD countries, by SDG target, Goal 9



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

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Impact of the COVID-19 pandemic on Goal 9

While the pandemic has not had a direct impact on individual access to infrastructure, it is likely to have a lasting impact on transport (Target 9.1). As highlighted by the International Transport Forum (ITF, 2021[40]), the COVID-19 pandemic has posed an unprecedented challenge to the transport sector (both passenger and freight volumes). It has brought cities to a standstill, halted international travel and strained supply chains, forcing logistics operations to pivot radically to keep goods flowing. Early evidence collected by the ITF illustrates the strong impact that each wave of COVID-19 had on the total volumes of travel and its different modes. Given that the impact of the pandemic on Target 9.1 is likely to be uneven within economies and among mode of transports, the expected effect is classified as mixed (Table 4.4).

Beyond access to infrastructure, Goal 9 also encompasses many other dimensions, including the promotion of an inclusive and sustainable industrialisation (Target 9.2). **The blow to the manufacturing sector was greater from the pandemic than from the global financial crisis.** While service sectors requiring close proximity between consumers and producers, or between large groups of consumers, were hard hit across all economies, manufacturing was also affected. The unprecedented protective policy that governments deployed preserved firms and jobs and the economic fabric more generally in most advanced economies. As a result, the manufacturing sector is now growing rapidly, with merchandise trade rebounding strongly as borders gradually reopen and travel slowly resumes (OECD, 2021[5]). While recovery packages have the potential to shape the medium-run impact of the COVID crisis on the manufacturing sector and to incentivise firms to further contribute to the SDGs (OECD, 2021[41]), too many headwinds persist, and there is some uncertainty about the evolution in the medium to long-term (Table 4.4). As highlighted by OECD (2021[42]), disruption in the supply chains during the COVID-19 outbreak highlighted the interconnectedness between countries through global value chains and spurred renewed debate about the costs and benefits of globalisation. The pandemic may encourage some reshoring motivated by strategic considerations. This would in turn affect the dynamics of the manufacturing sector.[36]

Small-scale industries have been strongly affected by the pandemic (Target 9.3). With limited cash reserves to survive lockdowns and drops in sales, the crisis posed a significant challenge to many of them. The coronavirus pandemic has affected SMEs on both the supply side (companies experience a reduction in the supply of labour) and demand side (a dramatic and sudden loss of demand and revenue for SMEs severely affects their ability to function, and/or causes severe liquidity shortages). The various impacts are hitting both larger and smaller firms. However, the effect on SMEs has been especially severe, particularly because of higher levels of vulnerability and lower resilience related to their size (OECD, 2020[43]). Yet, in the longer run, considerable uncertainty surrounds the situation of small and medium-sized enterprises (SMEs) in general (Table 4.4). While they account for the bulk of companies, value added and employment in OECD countries, preliminary evidence suggests that SMEs have been more affected by COVID-19 than other firms (Chetty et al., 2020[44]), and that policy support has been crucial in keeping them afloat (OECD, 2020[45]). Nevertheless, little is known about their financial position. Most of the analysis on SMEs currently relies on simulations and indicates that small firms are facing more critical liquidity and solvency issues than are large ones, and to a potentially large number of near-term insolvencies (OECD, 2021[5]).

As highlighted in the Planet chapter, the severe reduction in economic activity and mobility has caused an unprecedented decline of global carbon dioxide emissions (Target 9.4). According to the IEA (2021[8]), global energy-related CO_2 emissions fell by about 6% in 2020, the largest annual drop in global energy-related CO_2 emissions since the Second World War – around twice as large as the combined total of all previous reductions since that time. However, carbon dioxide can stay in the air for centuries, and, despite lower CO_2 emissions, atmospheric concentrations of these gases continued to increase during the pandemic (NOAA, 2021[46]). In addition, the overall decline in CO_2 emissions masks significant variations among countries and over the time of year. For instance, compared to 2019, reductions in energy-related CO_2 emissions were estimated to be larger in advanced economies than in emerging

market and developing economies (IEA, 2020[47]). In addition, while 2020 marked the largest absolute decline in global CO_2 emissions in history, the evidence of a rapid rebound in emissions and energy demand in many economies underscores the risk that CO_2 emissions could rise significantly in 2021 (IEA, 2020[48]).

Science, technology and innovation systems have responded strongly and flexibly to the COVID-19 crisis (Target 9.5). Newly funded research initiatives worth billions of dollars have been set up in record time, and research and innovation have led to the rapid development of vaccines. At the same time, such widespread engagement risks diverting research efforts away from non-COVID-19-related topics. The effects of the pandemic, particularly lockdowns, have also disrupted the normal functioning of innovation systems, endangering key productive and innovation capabilities, especially in hard-hit sectors. On an aggregate basis, business investments in research and innovation are pro-cyclical, and thus prone to contracting in times of crisis. This crisis may be different, since some of the top global R&D players expanded their activities during the crisis. The pandemic could exacerbate existing gaps in business research and innovation activities between "leading" and "laggard" sectors, large and small firms, and geographical areas (OECD, 2021[49]).

The COVID-19 pandemic has fuelled demand for high-quality connectivity. With mobility restricted during the pandemic, many residents of OECD countries have been working and studying from home. In this unprecedented situation, the resilience and capability of broadband networks have become even more critical. Not only has the COVID-19 pandemic fuelled demand for high-quality connectivity, but it has also increased the awareness among policy makers across the OECD that it is now urgent to act to close connectivity divides, in particular with rural and remote areas (OECD, 2021[38]). Yet, the COVID-19 pandemic has also delayed the deployment of major recent technologies such as 5G (OECD, 2020[37]). Overall, while the impact of the pandemic on Target 9.c is deemed to be mixed in the very short run, operators are catching up quickly, and many countries are investing to expand broadband as a way to recover from the crisis. Therefore, the pandemic's overall impact on connectivity should be rather positive in the longer term (Table 4.4).

Table 4.6. Summary impact of the COVID-19 pandemic on Goal 9 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
9.1 – Access to infrastructures	mixed	mixed
9.2 – Sustainable industry	negative	
9.3 – Small-scale Industries	negative	
9.4 – Environmental impact	positive	none
9.5 – Research and development	mixed	
9.a – Support to infrastructure		
9.b – Innovation		
9.c – ICT*	mixed	positive

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 10 – Reduced inequalities

Goal 10 aims at reducing inequality within and between countries. Income inequality had been on the rise in most OECD countries over the past decades, and around one in ten OECD residents is considered as relatively income poor. In addition, while tax and benefit systems remain key to prevent people falling into poverty and to reduce inequality, they have become less redistributive over time. Beyond inequality within countries, Goal 10 also aims at reducing inequality between countries. In particular, it covers issues such as the representation of developing countries in global institutions, migration and mobility, and access to international markets and international development flows (such as ODA, FDI and remittances). Despite the paucity of data, the situation seems to be more positive on this front. On migration, for instance, it appears that most OECD countries have developed policies to facilitate migration and mobility. Yet, despite encouraging trends, many OECD countries keep tariff barriers to least developed countries on some segments of their economies, and more efforts are needed to reduce the cost of remittance transfers.

The COVID-19 pandemic has had a diverse impact on Goal 10, exposing pre-existing inequalities and risking the widening of structural gaps. Within countries, redistribution through tax and transfers has been key to limit the economic impact of a crisis on vulnerable populations. In most OECD countries, government support measures to households have helped offset some impacts of the COVID-19 crisis on income inequality and poverty. It has nevertheless affected almost every dimension of people's lives, with differential impacts across countries and groups of people. The pandemic also has had a direct impact on inequalities between countries. The pandemic's economic impact has been uneven among economies, shifting the composition of GDP across sectors. It also has had dramatic consequences on both migration and development and financial flows (including ODA, FDI and remittances).

Assessing OECD countries' performance on Goal 10

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 4.7 shows that data allow the monitoring of eight of the 10 targets underpinning Goal 10. For this goal, five indicators sourced from the OECD complement the *SDG Global Database*. While three of these indicators align with the global indicator framework, drawing from OECD sources allows offering longer time-series (10.1.1, 10.4.1 and 10.4.2) or being timelier (10.2.1 and 10.4.1). Relying on OECD sources also allows monitoring Target 10.3, for which data in the *SDG Global Database* insufficiently cover OECD countries. On top of the indicators listed in Table 4.7, the database includes three extra data series to monitor Targets 10.7 and 10.a, but these are considered to be mainly informative in the context of Goal 10 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-4-prosperity.xlsx).

Table 4.7. Available data series supporting the monitoring of Goal 10

Indicator code	Indicator Label	Available over time	Primary source
10.1.1	Growth rates of household expenditure or income per capita (difference)	No	*SDG Global Database*
10.1.1	*Difference between the annual average growth rates among the bottom 40 percent of the population and the total population (3-year average)*	Yes	OECD
10.2.1	Relative income poverty rate	Yes	OECD
10.2.1	Proportion of people living below 50 percent of median income	Yes	*SDG Global Database*
10.3.1	*Share of population that believes their place of residence is a good place to live for racial and ethnic minorities*	Yes	OECD
10.4.1	Labour share of GDP	Yes	*SDG Global Database*
10.4.1	Compensation of employees as a share of GDP	Yes	OECD

Indicator code	Indicator Label	Available over time	Primary source
10.4.2	Relative redistribution	Yes	OECD
10.4.2	Redistributive impact of fiscal policy, Gini index	No	*SDG Global Database*
10.5.1	Non-performing loans net of provisions to capital	Yes	*SDG Global Database*
10.5.1	Regulatory Tier 1 capital to risk-weighted assets	Yes	*SDG Global Database*
10.5.1	Regulatory capital to assets	Yes	*SDG Global Database*
10.5.1	Return on assets	Yes	*SDG Global Database*
10.5.1	Net open position in foreign exchange to capital	Yes	*SDG Global Database*
10.5.1	Non-performing loans to total gross loans	Yes	*SDG Global Database*
10.5.1	Liquid assets to short-term liabilities	Yes	*SDG Global Database*
10.7.2	Countries with migration policies to facilitate orderly, safe, regular and responsible migration and mobility of people, by policy domain	No	*SDG Global Database*
10.a.1	Proportion of tariff lines applied to imports with zero-tariff	Yes	*SDG Global Database*
10.c.1	Corridor remittance costs as a proportion of the amount remitted	No	*SDG Global Database*
10.c.1	SmaRT corridor remittance costs as a proportion of the amount remitted	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Over the past two decades, income inequality has risen in most OECD countries. Target 10.1 ("by 2030 progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average") aims at fostering income growth of the bottom 40% of the population, and thus indirectly at reducing income inequality. The target is measured by the difference in percentage points between the income growth rate observed among the bottom 40% of the population and that observed among the total population.[37] When income is growing faster for the poorer population than the national average, inequality falls; conversely, when the income growth of the poor is lower than the national average, income inequality rises. The 2030 Agenda does not provide any ready-to-use target. Country performances are thus benchmarked in this report against the level prevailing in the top-performing OECD countries in 2015 (i.e. namely a pro-poor growth of 0.9 percentage point higher than the national average over the past five years).[38] In 2018, OECD data were available for 34 OECD countries. Six of them (Costa Rica, Lithuania, Luxembourg, Denmark, Switzerland and the United Kingdom) are classified as close to the target (on average, over the past five years, the income of the bottom 40% rose more than 0.5 percentage point faster than the national average), and 15 are considered as far from the target (income growth of the bottom 40% was 0.3 point below the national average), with the furthest being Greece, Estonia and Mexico (more than 2 percentage points below average growth). This means that, on average, inequality remains on the rise in most OECD countries. Taking a longer time-span confirms that most OECD countries have become more unequal. OECD data suggest that 18 countries (out of the 25 for which time series are available) showed no progress (or are even regressing) on Target 10.1. These patterns are in line with previous OECD analysis showing that, in many OECD countries, the 40% of the population at the lower end of the distribution benefited little from economic growth. In some cases, low earners have even seen their incomes fall in real terms (OECD, 2015[50]).

Beyond income inequality, poverty remains an issue in most OECD countries. Goal 10 also aims at empowering and promoting social, economic and political inclusion, operationalised through measures of relative income poverty. Target 10.2 calls on countries to "empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status" by 2030. While the language of the 2030 Agenda does not provide guidance for Target 10.2, the target was set in line with Target 1.2 for the sake of consistency (i.e. a relative poverty rate of 5.5%). For the latest year available (2018 in most OECD countries), one in ten OECD residents is considered as relatively income poor. This means that, on average, OECD countries still have a large distance to travel to meet the target. As underlined by Morelli, Smeeding and Thompson (2015[51]), most OECD countries

have not shown any improvement on relative income poverty. Data included in this report suggest that only four OECD countries achieved some reduction in relative income poverty over the past 15 years (Ireland, Mexico, Poland and the United Kingdom). Yet, OECD (2019[52]) notes that, keeping the value of the relative poverty line constant (i.e. using an "anchored" poverty line) may have a significant impact on the picture, with increases in income poverty much higher than what is suggested by "relative" income poverty.

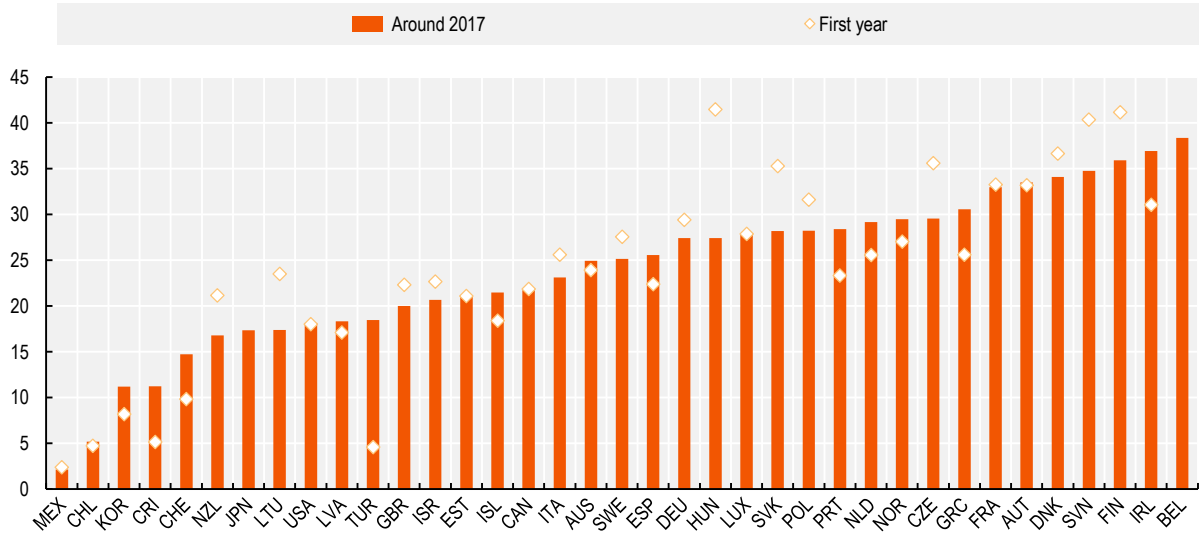
In terms of ensuring equal opportunity to racial and ethnic minorities, two in five OECD countries are regressing. Target 10.3 focuses on inequality of opportunity ("ensure equal opportunity and reduce inequalities of outcome, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions in this regard"). Usually, inequality of opportunity (or "ex ante inequality") refers to how different circumstances involuntarily inherited or faced by individuals could affect their economic achievements later in life (Bourguignon, 2018[53]). For instance, it may refer to the impact of family background on education and skills (see discussion on Target 4.5 in the People chapter for more info). According to the global indicator framework, this target should be monitored through an indicator on the "proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law", yet UN data do not cover enough OECD countries on a comparable basis to be included in this report. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Target 16.b. Still, the share of population believing their place of residence is a good place to live for racial and ethnic minorities, an indicator that is based on non-official surveys, provides some insights.[39] While, in theory, the target level should be set at 100%, it has been operationalised at 97% to allow for measurement errors. In 2021 (or most recent year), only four OECD countries (Norway, Canada, Portugal and New Zealand) are at a short distance to the target, with more than 88% of the population feeling that their place of residence is a good place to live for racial and ethnic minorities. Conversely, in 13 OECD countries, this share falls below 70%. It is even below 60% in Greece and Lithuania and below 50% in Israel. While a majority of countries are on an upward trend (21 of 37 with available data), Portugal and Norway are the only OECD countries that are on a trend that would allow reaching the target by 2030. In addition, it may be important to note that inequality of outcomes (see discussion on Targets 10.1, 10.2 and 10.4) and inequality of opportunities go hand in hand, largely because higher outcome inequality curbs social mobility and opportunities for the poor and people from disadvantaged backgrounds (OECD, 2015[50]).

In all OECD countries, income inequality is greatly reduced through tax and benefit systems, but these redistributive effects have weakened over time. Target 10.4 (*"*adopt policies especially fiscal, wage, and social protection policies and progressively achieve greater equality*"*) aims at narrowing income inequality. While the range of policies mentioned in the target is wide, the global indicator framework benchmarks it against two different indicators: i) the labour share of GDP[40] and ii) the redistributive impact of fiscal policies.[41] The labour share is the share of economy-wide value added allocated to labour compensation. While labour shares have long been stable, a growing body of evidence suggests that they have been subject to a secular decline (ILO and OECD, 2015[54]). As no ideal level of the labour share can be defined, performance is benchmarked against the highest levels of labour share prevailing among OECD countries in 2015. Using OECD data on the compensation of employees from the National Accounts, this benchmark is set at 52% of GDP (with the top-performing countries being Switzerland, Germany, France and the United States).[42] In 2019, most OECD countries (21) were close to or even above this threshold (i.e. more than 48% of GDP going to employees). For eight of them, however, this share was below 41%, with these countries considered as far away from the target (Greece, Poland, Italy, Chile, Colombia, Turkey, Ireland and Mexico). The dynamic analysis confirms that many OECD countries (18) have been experiencing a decline of the labour share. If the trends observed over the past 20 years were confirmed, then only six OECD countries would be at target level by 2030 (Canada, Estonia, Latvia, Slovenia, Germany and Switzerland).

Beyond labour compensation, Target 10.4 also includes a measure of redistribution through taxes and cash transfers. In all OECD countries, these government programmes significantly reduce income inequality. This is why "net" or "disposable" income inequality is much lower than "market" income inequality. Given that no target level for redistribution is set in the 2030 Agenda, performance is gauged vis-à-vis the highest levels of redistribution observed among OECD countries in 2015 (the target level is operationalised at 38%, benchmarked against the levels observed in Finland, Belgium, Slovenia and Ireland).[43] In 2018 (or closest available year), six OECD countries (Belgium, Ireland, Finland, Slovenia, Denmark and Austria) are considered to be close to the target, with redistribution reducing the pre-tax Gini by more than a third (Figure 4.10). Conversely, in 16 of them, the redistribution rate is below 23%, and it is even below 15% in Switzerland, Costa Rica, Korea, Chile and Mexico. Based on past trends, only seven OECD countries are progressing on this front (Greece, the Netherlands, Portugal, Iceland, Turkey, Switzerland and Costa Rica). These insights are confirmed by other OECD work highlighting the widespread decline in redistribution across the OECD, both on average and in the majority of countries for which data going back to the mid-1990s are available (OECD, 2015[50]; Causa and Hermansen, 2017[55]). This decline was primarily associated with a reduction in cash transfer redistribution and with reforms of tax systems that have cut marginal tax rates for high earners. Still, personal income taxes played a less important and more heterogeneous role across countries.[44]

Figure 4.10. Redistribution through taxes and cash transfers (Target 10.4)

Relative difference between Gini coefficient of household market incomes and Gini coefficient of household disposable incomes



Note: First year refers to 1999 for Finland; 2000 for Canada; 2002 for the United Kingdom; 2005 for Poland; 2006 for Latvia, Switzerland, Italy, Hungary, Portugal and Greece; 2007 for Spain and Australia; 2008 for Germany; 2009 for Chile; 2010 for Costa Rica; 2011 for New Zealand, Turkey, Israel, the Netherlands and Denmark; 2012 for Mexico, Australia and France; 2013 for the United States, Estonia and Sweden; 2015 for Korea and Luxembourg; and 2004 for otherwise. Around 2017 refers to 2014 for New Zealand; 2016 for the Netherlands; 2017 for Iceland, Switzerland, Hungary, Chile and the United States; 2019 for Canada, the United Kingdom, Latvia and Sweden; 2020 for Costa Rica; and 2018 for otherwise.
Source: (OECD, 2021[56]), *OECD Income Distribution Database*, https://stats.oecd.org/Index.aspx?DataSetCode=IDD (accessed on 29 October 2021).

StatLink https://stat.link/d0i7ws

Target 10.5 ("improve regulation and monitoring of global financial markets and institutions and strengthen implementation of such regulations") focuses on the regulation of global financial markets. It is monitored

through a series of financial indicators such as: i) non-performing loans to total gross loans; ii) return on assets; iii) regulatory capital to assets; iv) non-performing loans net of provisions to capital; v) regulatory Tier 1 capital to risk-weighted assets, vi) liquid assets to short-term liabilities and vii) net open position in foreign exchange to capital. In the absence of specific reference values, for all the indicators performance is gauged relative to the levels observed in the top-performing OECD countries.[45] Overall, a vast majority of OECD countries are at a medium distance from attaining Target 10.5. The most notable exceptions are Estonia and Switzerland, where the distance is short on average, and Greece, which is considered to be far from target. Looking at trends over time suggest that 13 OECD countries are on a stable to downward trend. Only 13 are experiencing improvements in most indicators (the United States, Latvia, Switzerland, Israel, Norway, the Netherlands, Germany, Sweden, Lithuania, Denmark, the United Kingdom, Korea and Estonia).

Target 10.6 is not suitable for assessment for OECD countries. Target 10.6 aims at ensuring an "enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions". It is monitored by the proportion of members and voting rights of developing countries in different international organisations. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, this indicator is repeated under Target 16.8. While this issue is key to reflect the good functioning of international co-operation, it is not included in this report as it is mainly relevant for non-OECD countries.

Most OECD countries have developed migration policies to facilitate migration and mobility. Target 10.7 calls on countries to "facilitate orderly, safe, and responsible migration and mobility of people, including through implementation of planned and well-managed migration policies" and is underpinned by indicators focusing on very different aspects: i) recruitment costs of foreign workers borne by the employee as a proportion of monthly income earned in the country of destination; ii) countries with migration policies that facilitate the orderly, safe, regular and responsible migration and mobility of people; iii) number of people who died or disappeared in the process of migration towards an international destination; and iv) proportion of the population who are refugees. At the time of drafting this publication, data were available only for the second and fourth indicators. Yet, given that the latter do not have a clear normative direction, this section will discuss only whether OECD countries have developed migration policies that "facilitate orderly, safe, regular and responsible migration and mobility of people".[46] By this measure, most OECD countries (18) were already at the target level in 2019. The 10 remaining countries for which data exist are considered as far from the target despite differences in achievement: nine countries (Italy, Germany, Australia, Ireland, Latvia, Slovenia, Denmark, Turkey and Japan) are classified as "partially meeting" the target, while Mexico is classified as "requires further progress". At present, the available time series do not allow understanding how national migration policies have been changing over time.

Duty-free treatment for the least developed countries and developing countries varies among OECD countries. Target 10.a calls on countries to "implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with WTO agreements". Progress on this target is monitored by the average share of national tariff lines that are free of duty for the least developed countries (LDCs) and developing countries.[47] As no ideal target can be set, the level to be achieved (69%) is defined using the observed OECD distribution of scores, with the best-performing countries being Iceland, Colombia, Chile and Luxembourg. In 2019, the results from OECD countries were quite diverse, ranging from 42% of tariff-lines that are free of duty in the United States to more than 75% in Chile. Overall, 11 OECD countries apply duty free for more than 64% of tariff-lines and are thus considered as close to the target (Chile, Iceland, Costa Rica, Estonia, Slovenia, Latvia, Colombia, Luxembourg, Greece, the Slovak Republic and Hungary). Conversely, 11 are considered as far from target, with rates below 54% (Italy, Korea, New Zealand, Belgium, Portugal, the United Kingdom, Canada, France, Japan, Turkey and the United States). Over time, the proportion of products imported worldwide from the least developed countries and developing countries that are exempted from tariffs has increased

in almost all OECD countries, with only four of them (most of which are considered to be close to target already) not showing significant improvement.

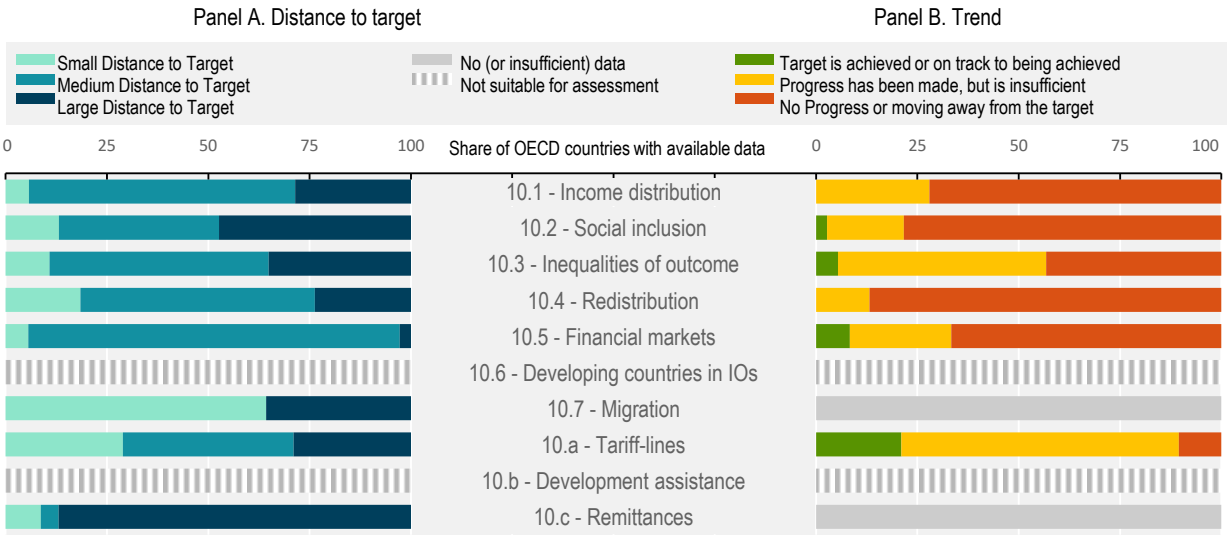
Target 10.b is not assessed in this report. Target 10.b focuses on "encouraging ODA and financial flows, including foreign direct investment, to states where the need is greatest, in particular LDCs, African countries, SIDS, and LLDCs, in accordance with their national plans and programs". As in the case of other aid-related targets, specific ODA streams are not assessed in this report.

Target 10.c commits countries to "reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%" by 2030. The global indicator framework proposes to monitor Target 10.c by an indicator of remittance costs as a proportion of the amount remitted. Although the *SDG Global Database* includes this indicator, it does not cover enough OECD countries. Hence, the present assessment relies on two other measures: i) the share of counterparts for which corridor remittance[48] costs are below 5%; and ii) the share of counterparts for which SmaRT corridor remittance costs are below 5%.[49] For Target 10.c, the 2030 Agenda provides clear guidance on the target to be reached. It pledges the elimination of remittance corridors with costs higher than 5%. As the indicator focuses on the counterparts for which these costs are below 5%, the target level is set at 97% to allow for some measurement error. Data for both indicators are available only for 23 OECD countries. In 2019, only two OECD countries reported corridor costs below this threshold among all counterparts (Chile and Korea), while all other countries are considered to be far from target, with corridor costs above 5% in over half of their counterparts. When it comes to SmaRT remittances, the situation is slightly better: six OECD countries (Chile and Korea but also Costa Rica, Austria, Norway and Spain) are close to the target and five (Japan, Switzerland, Australia, France and Belgium) are at a medium distance. Available data do not allow to gauge progress over time consistently.

Summing up

Overall, in the absence of stepped-up efforts, inequality is expected to remain a major issue for OECD countries. In terms of inequality within countries, most OECD countries are showing worsening trends. Income inequality is on the rise in most OECD countries (Target 10.1), and, for the few OECD countries that appear to be on a downward trend, progress is not likely to allow meeting the target (Figure 4.11, panel B). Similarly, the relative income poverty rate is increasing in eight in ten OECD countries (Target 10.2), and nor are trends encouraging when it comes to inequalities of outcome (Target 10.3). In addition, while redistributive tax-and-benefit systems help reducing inequality (Causa and Hermansen, 2017[55]), nine in 10 OECD countries have become less redistributive over the past decades (Target 10.4). Beyond inequality within countries, although some of the related targets cannot be assessed, available data suggest that OECD countries show a slightly more positive performance in terms of inequality among countries. Duty-free treatment for LDCs and developing countries is considered close to target for about one in four OECD countries, and the vast majority of them are making progress (Target 10.a). On migration, many OECD countries have already developed policies to facilitate safe and orderly migration and mobility (Target 10.7). Conversely, the cost of remittance corridors remains high, with large distances to the target level in the majority of OECD countries (Target 10.c). Finally, on financial soundness indicators, a vast majority of OECD countries are at a medium distance from attaining Target 10.5, and only 13 of them are experiencing improvements in most indicators.

Figure 4.11. Distance to targets and trends over time in OECD countries, by SDG target, Goal 10



Note: IOs refers to International Organisations. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/h1r4t6

Impact of the COVID-19 pandemic on Goal 10

In most OECD countries, government support measures to households have helped offset some impacts of the COVID-19 crisis on income inequality and relative poverty (Targets 10.1 and 10.2). While most macro-economic measures such as GDP or employment dramatically declined during the crisis, average household disposable income per capita (as measured by national accounts) increased by 3.9% in the second quarter of 2020, thanks to government cash transfers (OECD, 2020[57]) – and even by 8.2% between the end of 2019 and the first quarter of 2021. Job retention schemes have been one of the main policy tools used by a number of OECD countries to contain the employment and social fallout of the crisis. By reducing labour costs, job retention schemes have prevented a surge in unemployment, while they have mitigated financial hardship and buttressed aggregate demand by supporting the incomes of workers on reduced working time (OECD, 2020[58]). More concretely, while data on average household income do not allow meaningful inferences on the impact of the crisis on income poverty, recent research using micro-simulation models tend to confirm the positive role played by safety nets in reducing household poverty and income inequality[50] (Figari and Fiorio, 2020[59]; Brewer and Tasseva, 2020[60]; Almeida et al., 2020[61]; Lustig et al., 2020[62]; Li et al., 2020[63]; Han, Meyer and Sullivan, 2020[64]). In addition, beyond poverty, recent evidence suggests that low-income households have been largely sheltered from income drops, while the self-employed, mainly in the upper half of the income distribution, have been affected

more. While this implies stable relative poverty rates in the short run, it also points towards (possibly temporary) drops in income (Grabka, 2021[65]).

While it is difficult to appreciate the very short-term evolution of discrimination, there is some evidence suggesting that this has increased during the pandemic (Target 10.3 – see Table 4.8**)**. For instance, since the start of the pandemic the UN has documented a rise in discrimination, hate speech, social and economic exclusion, stigma and obstacles facing LGBTIQ+ people when it comes to accessing healthcare, education, employment and essential services (UN, 2021[66]). More generally, as stressed by the OECD (2020[67]), many studies suggest that discrimination strongly increases in times of a slack labour market.

As noted above, redistribution through tax and transfers (Target 10.4) has been key to limit the economic impact of a crisis on vulnerable populations, as it plays a critical role in softening the drop in income linked to the crisis. However, the heavy reliance on support measures also raises the possibility that progress may be reversed should the measures be withdrawn. Supporting everyone and closing social protection gaps will remain key priorities beyond the crisis (OECD, 2020[68]), in particular for the large number of non-standard workers who are left behind even in countries with the most advanced social protection schemes. So-called non-standard workers, i.e. part-time workers, the self-employed and workers on fixed-term contracts, account for around 40% of employment on average across OECD European countries, reaching more than 50% in Italy, the Netherlands, Spain and Greece. In many countries, non-standard workers have less access to social protection compared to full-time employees with open-ended contracts (OECD, 2020[45]).

As highlighted by the OECD (2021[5]), **the COVID-19 crisis has demonstrated that a sound financial system (Target 10.5) is key for effective monetary policy transmission and economic resilience during downturns**. Monetary policy remains very accommodative in advanced economies. Policy interest rates have been kept at historically low levels, and forward guidance has stressed that they would remain at their current levels for a considerable time. OECD countries rapidly deployed special COVID-19 emergency liquidity and lending facilities that are now been adjusted in line with changing market conditions. While accommodative monetary policies need to be maintained in the major advanced economies, as currently planned, to help preserve favourable financing conditions, the crisis should not be used as an excuse to roll back regulatory reforms and compromise common international standards and an international level playing field (OECD, 2021[5]).

The COVID-19 crisis has had major consequences for migration flows (Target 10.7). As stressed by the OECD (2020[69]), before the pandemic, permanent migration flows to the OECD amounted to 5.3 million people in 2019, with similar levels for 2017 and 2018. Following the onset of the pandemic, almost all OECD countries restricted admissions of foreigners, and permanent migration flows to OECD countries declined by more than 30% in 2020 (OECD, 2021[70]). Given weaker labour demand, severe travel restrictions as well as the widespread use of teleworking among high-skilled workers and remote learning by students, it is likely that mobility will not return to previous levels for some time. Migrant workers have often been on the frontline of the crisis in many OECD countries. They account for a large share of the OECD medical workforce and other key sectors, such as transport, cleaning, food manufacturing and IT services. Migrants are also more exposed to the health impacts of the pandemic, with studies in a number of OECD countries finding evidence of infection risk among migrants that is at least twice as high as that among the native-born (OECD, 2020[69]). While the majority of OECD countries used temporary measures to mitigate the effect of COVID-19, including specific measures to facilitate the entry of health care and seasonal agricultural workers, the lack of migrant workers risks creating bottlenecks and disruptions in supply chains.

Since the outbreak of the COVID-19 pandemic, most OECD countries implemented trade and trade-related measures (Target 10.a). The WTO (2021[71]) estimated that, among G20 countries, around two-thirds of these measures had a trade-facilitating nature, while one-third could have been considered as

trade restrictive (thus the short-term impact is summarised as positive in Table 4.8). Several of these measures, originally introduced in immediate response to the pandemic, have been extended in 2021. The reduction or elimination of import tariffs and import taxes make up 60% of the trade-facilitating measures taken, and several G2O economies reduced their tariffs on a variety of goods such as Personal Protective Equipment (e.g. face masks), sanitisers, disinfectants, medical equipment and medicine/drugs. Many OECD countries temporarily eliminated their import tariffs on COVID-19 vaccines (including the European Union, Japan, Korea, Mexico, the United Kingdom and the United States). In addition, some countries eliminated, suspended or waived the payment of other taxes and/or duties or decided to defer the payment of tariffs and other taxes on all imported products (WTO, 2021[72]).

The impact of the pandemic on official development assistance is uncertain (Target 10.b). Official development assistance can help absorb the shocks from the decrease in external private investment and remittances – especially in countries that do not have the fiscal resources and reserves to do so on their own. As part of the immediate response to the crisis, multilateral donors such as the IMF and the World Bank provided swift liquidity to developing countries. The economic and fiscal challenges in donor countries will have as-yet unclear short, medium and potentially long-term effects on official development finance (Table 4.8). With donor countries' budgets tightening due to increased domestic spending and public revenue shortfalls, they may face constraints in scaling up development spending. DAC members declared their ambition to "strive to protect ODA budgets" during the COVID-19 crisis (DAC/OECD, 2020[73]). Since many ODA budgets were finalised before the outbreak of COVID-19, the effect of the global economic recession on ODA levels might take time to materialise.

While the pandemic is not deemed to impact remittance costs directly, it could hit the volume of remittances more severely than any previous financial crisis (Target 10.c). To facilitate the transfer of remittances during the COVID-19 pandemic and mitigate the impact of the reduction and loss of remittances on receiving countries, OECD countries have concentrated their efforts on reducing the costs of sending remittances, promoting the use of digital channels and allowing universal access to safe and cheap remittance channels, for example by declaring remittances as essential services (EMN/OECD, 2020[74]). Despite this, in 2020, remittances to developing countries shrank by 20% from 2019 (World Bank, 2020[75]). Countries with fragile contexts along with small island developing states, which are most dependent on the inflow of remittances, will suffer most from this drop. In the medium to long-term, remittance levels will depend on the size of migration flows and on the global economic recovery. Barriers to migration remain and could stifle remittances in years to come, while it will take time to remove forced quarantines and entrance bans. The immediate decline of remittances will reverse if growth rebounds in the advanced economies, but it may take more time to remove the temporary barriers to migration. As a result, migration, whether through studying or working, could act as a brake on the income growth of countries traditionally sending migrants (OECD, 2020[76]).

Table 4.8. Summary impact of the COVID-19 pandemic on Goal 10 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
10.1 – Income distribution	positive	
10.2 – Social inclusion	positive	
10.3 – Inequalities of outcome	negative	
10.4 – Redistribution	mixed	
10.5 – Financial markets	mixed	
10.6 – Developing countries in IOs	none	none
10.7 – Migration	negative	negative
10.a – Tariff-lines	positive	
10.b – Development assistance		
10.c – Remittances	negative	

Note: The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 11 – Sustainable cities and communities

Goal 11 focuses on cities, aiming at making them more inclusive, safer, more resilient and more sustainable. Still, in the global indicator framework the country level remains the main spatial scale at which this report measures and reports progress towards the SDGs. While some work conducted at the OECD goes beyond national averages to uncover territorial disparities (see Box 4.1), the present chapter tracks national averages across dimensions that are particularly relevant for cities.

Economic development is typically associated with growing urbanisation, and cities are hotspots for a range of social and environmental challenges. Cities in OECD countries are getting cleaner. More and more waste is being diverted from landfills and incinerators to then feed back into the economy through recovery and recycling. Levels of fine particulate matter ($PM_{2.5}$) have also been decreasing in most urban areas. On the other hand, $PM_{2.5}$ remains a threat to human health, and urban sprawl remains a threat to biodiversity. Goal 11 aims at making cities "inclusive, safe, resilient and sustainable" and should therefore cover many other areas such as access to transport and green areas or protection of the world's cultural and natural heritage. Unfortunately, very little comparable data are available on these aspects for OECD countries.

The reduction in economic activity induced by the pandemic in all OECD countries has led to an overall improvement of environmental conditions in cities. As a result, the COVID-19 crisis has led to temporary improvements in air quality and reduced pressures on biodiversity. Yet, in the absence of further measures, these benefits will not last. Conversely, in many cases, the COVID-19 pandemic has highlighted or even exacerbated existing challenges, in particular inequalities in housing conditions and in access to green spaces.

Box 4.1. Measuring the distance to the SDGs in regions and cities

The OECD localised indicator framework for SDGs

The OECD has developed a framework to localise SDG targets and indicators and measure the distance that regions and cities need to go to reach each of the 17 SDGs. This consensual, comparable and standardised framework allows to benchmark performances within countries and across regions and cities in order to support public action across levels of government. The OECD localised indicator framework gets part of its inspiration from the OECD country-level framework presented in the series of *Measuring the Distance to SDG Targets* (OECD, 2019[77]), particularly for the methodology to measure distance and the definition of end values. However, due to the nature and objectives of each tool, there are methodological differences between the two frameworks.

In the context of OECD countries, around 105 out of the 169 SDG targets have been identified as very relevant for regions and cities. Through an extensive literature review and expert consultation, the 169 SDG targets from the United Nations (UN) indicator framework have been classified by their level of relevance (to be measured) at the subnational scale (place-relevant) and by their applicability to the context and specificities of OECD countries. The result is a selection of 105 SDG targets – and more than 100 indicators – for OECD regions and cities (also referred to as "subnational SDG targets"). With its 100+ indicators, the OECD localised framework covers at least one aspect of each of the 17 SDGs for both regions and cities. Nevertheless, the coverage in terms of indicators and targets is higher for regions than for cities (here defined as "Functional Urban Areas"). Although the set of indicators aims to cover the broad spectrum of all 17 SDGs, the coverage of indicators also varies across SDGs.

The OECD visualisation tool for SDGs in regions and cities

The OECD has developed a visualisation tool to help policy makers to measure the distance of regions and cities to the SDGs (see oecd-local-sdgs.org). In its current version, the tool covers around 600 regions and 600 cities from OECD and partner countries and includes more than 100 indicators to monitor progress across the 17 SDGs. These indicators can be visualised individually or as a composite index.

The web tool allows each region and city to visualise its distance to suggested end values for 2030 compare it to its country peer regions or cities and to the country average, as well as with respect to all OECD regions and cities. With the objective of enhancing partnerships and the sharing of best practices for the SDGs at the local level, the tool also suggests profiles of similar regions or cities from different countries that overall are performing better on their path towards achieving the SDGs.

Beyond its aim to foster peer-learning and policy dialogues across regions and cities, the tool also seeks to increase the accountability of governments with regards to the SDGs and raise awareness of the SDGs across the society at large.

Source: (OECD, 2020[78]), *A Territorial Approach to the Sustainable Development Goals: Synthesis report*, OECD Urban Policy Reviews, OECD Publishing, Paris, https://doi.org/10.1787/e86fa715-en.

Assessing OECD countries' performance on Goal 11

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 4.9 shows that data allow the monitoring of six of the 10 targets underpinning Goal 11. For this goal, four indicators sourced from the OECD complement the *SDG Global Database*. While two of them (indicators 11.6.1 and 11.6.2) align with the global indicator framework, drawing from OECD sources allows offering both more up-to-date data and longer time-series. In another two cases (11.1.1 and 11.3.1), relying on OECD sources allows monitoring countries' performance on targets for which no or insufficient data are available in the *SDG Global Database* (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-4-prosperity.xlsx).

Table 4.9. Available data series supporting the monitoring of Goal 11

Indicator code	Indicator Label	Available over time	Primary source
11.1.1	*Overcrowding rate*	Yes	OECD
11.3.1	*Average annual change in built area per capita*	Yes	OECD
11.5.1	Number of directly affected persons attributed to disasters per 100 000 population	No	*SDG Global Database*
11.5.1	Number of deaths and missing persons attributed to disasters per 100 000 population	No	*SDG Global Database*
11.5.2	Direct economic loss attributed to disasters relative to GDP	No	*SDG Global Database*
11.6.1	Municipal Solid Waste collection coverage	No	*SDG Global Database*
11.6.1	Material recovery rate of municipal waste (recycling and composting)	Yes	OECD
11.6.2	Annual mean levels of fine particulate matter	Yes	*SDG Global Database*
11.6.2	Mean population exposure to $PM_{2.5}$ in metropolitan areas	Yes	OECD
11.a.1	Countries that have national urban policies or regional development plans that respond to population dynamics, ensure balanced territorial development and increase local fiscal space	No	*SDG Global Database*
11.b.1	Score of adoption and implementation of national DRR strategies in line with the Sendai Framework	No	*SDG Global Database*
11.b.2	Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	No	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

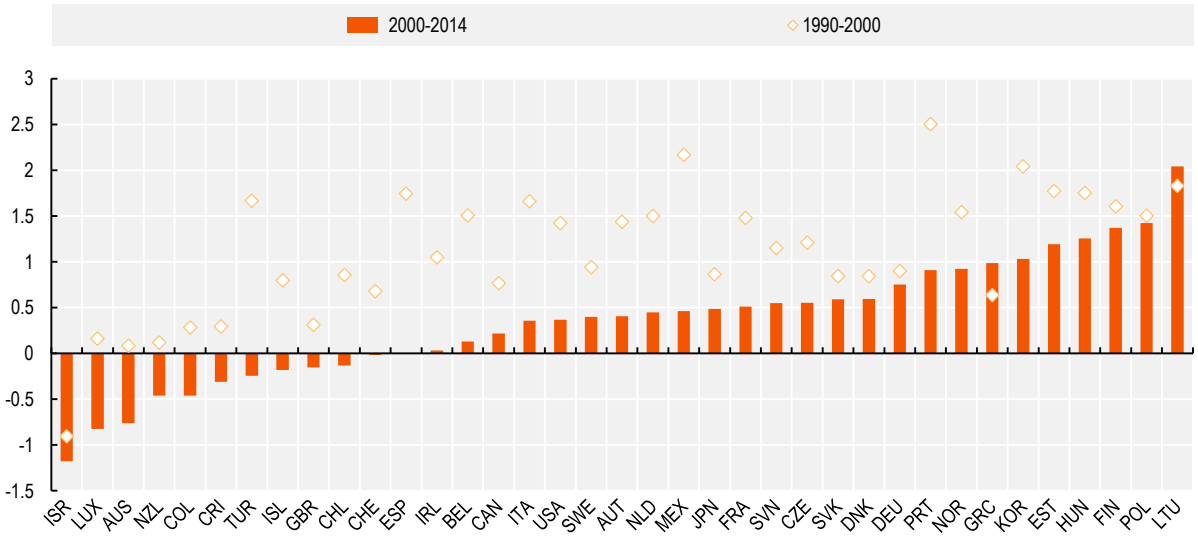
Overcrowded housing affects many people in OECD countries. Target 11.1 commits countries to "ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums" by 2030. Still, access to affordable housing has become increasingly challenging in many countries (OECD, 2021[79]). At global level, Target 11.1 is monitored in the global indicator framework by an indicator on the proportion of urban population living in slums, informal settlements or inadequate housing. Unfortunately, very few data on these aspects are available for OECD countries. To overcome this problem, this report measures the adequacy of housing through data on overcrowded housing. The overcrowding rate takes into account households' different personal space needs, depending on household members' age and gender and their relationships. As everyone needs sufficient space in their homes for privacy and health and to fulfil all the functions that a home should provide, such as space to study, spend time with family or entertain (OECD, 2011[80]), the aspirational target level for this indicator is zero. However, here it is set at 3% to allow for measurement errors. Based on data for the latest year available (around 2019), 15 OECD countries are close to the 2030 target (i.e. less than 8% households are considered overcrowded), among which three are already below 3% (Ireland, Japan and Canada). Distances are much larger in Mexico, Latvia, Poland, the Slovak Republic, Italy and Greece. Beyond the static snapshot, OECD countries' progress towards housing adequacy is mixed. While a few OECD countries (12) have made progress towards more adequate housing, most have made no progress in recent years or moved further away from the target (Figure 4.13, panel B).

Target 11.2 cannot be assessed due to lack of data. Target 11.2 commits countries to "provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons" by 2030 and, according to the global indicator framework, it is measured by the proportion of population with convenient access to public transport. Unfortunately, no internationally agreed methodology exists for measuring the convenience and service quality of public transport (UNSD, 2021[81]).[51]

Urban sprawl remains a threat to green space and biodiversity in many countries. Target 11.3 asks countries to "enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries". The global monitoring for

this target has two main components. First, the sustainability of urbanisation is assessed through the ratio of land consumption to population growth. Second, participation in urban planning is measured through an ad hoc index of the direct participation of civil society in urban planning. The *SDG Global Database* does not include data for either of these indicators yet. To overcome this limitation, this report relies on data on the average annual change in built area per capita.[52] Land use and land cover change, land degradation and infrastructure development are among the main drivers of the loss of green space and biodiversity (OECD, 2020[22]). Thus, decoupling the growth in land consumption from population growth is key. As no reference level for this indicator exists, the target (i.e. annual change of -0.46%) is based on the distribution of OECD outcomes in 2015, with the best-performing countries being Australia, Israel, New Zealand and Luxembourg. Based on this criterion, 10 countries are considered close to target (i.e. recent annual change was below -0.10% per year), while 11 are far from it (i.e. the annual change in built area exceeds 0.63% per year) – see Figure 4.12. Beyond this static snapshot, most (24 out of 27 countries for which dynamic analysis is available) OECD countries have recently achieved reductions in built area per capita and are thus getting closer to the target. Yet, the rate of reduction is expected to be insufficient to reach the target level in all of them except for Israel. As stressed in (OECD, 2020[22]), most newly built surfaces are on agricultural land, often cropland, while in some countries development takes place mostly on areas covered by trees, grass or shrub.

Figure 4.12. Average annual change in built area per capita (Target 11.3)



Source: (OECD, 2021[82]) "Built-up area" (indicator), https://doi.org/10.1787/7c06b772-en (accessed on 29 October 2021).

StatLink https://stat.link/ra2e6f

There is no data to assess performances on Target 11.4. Target 11.4 aims at "strengthening efforts to protect and safeguard the world's cultural and natural heritage". While the global indicator framework recommends measuring this through per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, no data have been produced so far.

Up to now, the impact of natural disasters has remained moderate in most OECD countries. Target 11.5 calls on countries to "significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations" by 2030. Three indicators are proposed by the global indicator framework to assess countries' current performance on Target 11.5: i) the number of deaths and missing persons due to disasters ; ii) the number of persons directly affected by natural disasters; and iii) the direct economic loss

attributed to disasters relative to GDP. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, these indicators are repeated under Target 1.5 and 13.1. Disasters cost lives and disrupt socio-economic activities and livelihoods, causing important economic costs each time they occur. Yet, given the large disparities existing between OECD countries, on average across these three indicators, most OECD countries (14 of 23) were at a rather short distance to the target in 2019 (or latest year). Available data do not allow gauging progress over time, however. In terms of loss of life due to disasters, the OECD average is around 1 death per 100 000 inhabitants. In terms of economic losses attributed to disasters, so far the available data imply a limited impact of natural disasters in most OECD countries, with the average economic loss corresponding to 0.20% of GDP. Yet, given the nature and the volatility of the indicator, careful interpretation is needed, and in the last 30 years the number of disasters has significantly increased across OECD Member countries (OECD, 2017[83]). In addition, as acknowledged by the United Nations Office for Disaster Risk Reduction (UNDRR), some of the data feeding these indicators have not been officially validated and may be revised at a later date. Still, their full economic impact remains largely unknown, especially the cost of smaller disasters and indirect impacts such as those due to business disruptions (OECD, 2018[84]).

Target 11.6 calls on countries to "reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management" by 2030. The residential sector accounts for 17% of energy and process-related emissions of greenhouse gases and 37% of emissions of fine particulate matter globally. Therefore, efforts to meet agreed emission targets require ambitious initiatives to reduce the carbon footprint of cities and building stock (OECD, 2021[79]). Yet, at global level, this target focuses only on wastes and air quality. The global indicator framework includes two distinct indicators: the proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, and the annual mean levels of fine particulate matter in cities. While the report includes both indicators sourced from the *SDG Global Database*, it discusses the results based on OECD sources for both, since they provide more up-to-date data and longer time-series.

In OECD countries, more and more waste is being diverted from landfills and incinerators and fed back into the economy through recovery and recycling. The target for the material recovery rate of municipal waste (recycling and composting) used in this report to monitor this target has been set at 53% on the basis of the top performances observed among OECD countries (Austria, Belgium, Korea, Germany and Slovenia) in 2015. In 2019, 16 OECD countries were close to this target (with a material recovery rate above 42%), but six countries (Greece, Japan, Turkey, Mexico, Costa Rica and Chile) were still far away (i.e. below 22%). The recovery of waste through recycling and composting has been progressing in almost all OECD countries besides the Netherlands, Austria, Norway, Spain, Turkey and Costa Rica (where no specific trend could be identified), but only in one-third of them is the pace sufficient to reach the target value by 2030.[53]

Beyond recycling, Target 11.6 also aims at improving air quality in cities. As stressed by OECD (2020[22]), **levels of fine particulate matter ($PM_{2.5}$) have been falling in most OECD countries, but human exposure to them remains too high**. In 2019, in two out of three OECD countries, inhabitants are exposed to levels exceeding the World Health Organization (WHO) air quality guideline value of 10 µg of $PM_{2.5}$ per cubic metre, and in six of them the mean exposure is more than twice the WHO threshold (Mexico, Colombia, Poland, Chile, Turkey and Korea). Yet, in a vast majority of OECD countries $PM_{2.5}$ exposure is decreasing. If OECD countries keep progressing at the same pace, 20 of them should meet the WHO reference values. Conversely, four OECD countries (Japan, Chile, Turkey and Korea) do not show significant progress. Lower emissions led to improved air quality and reduced human exposure to air pollution in many cities. Yet, it should be noted that exposure indicators provide only a partial and aggregated view of the consequences of air pollution, and there is no "safe level" of exposure to many pollutants. Even when standards or guidelines are met, substantial public health and economic benefits can be achieved through further improvements in air quality (OECD, 2020[22]).

No data are available to assess countries' performance on Target 11.7. Target 11.7 aims to "provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities". The global indicator framework proposes monitoring it through data on the share of the built-up area of cities that is open space for public use and on the proportion of persons who are victims of physical or sexual harassment in these places, stressing that access to green and public spaces should be safe for all. Unfortunately, no data capturing these aspects have been produced so far.

Almost all OECD countries have implemented national urban policies. Target 11.a focuses on the links between urban, peri-urban and rural areas ("support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning"). According to the global indicator framework, this is to be assessed through an indicator that measures the extent to which countries implemented "national urban policies or regional development plans that: respond to population dynamics; ensure balanced territorial development; and increase local fiscal space". According to data available on the *SDG Global Database*, all OECD countries with the exception of Canada and the United States had such policies in place in 2020.[54]

Half of OECD countries with available data have not properly implemented necessary disaster risk reduction strategies. Target 11.b is one of the few targets with a 2020 deadline. It calls on countries to "substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels". Two indicators put forward by the global indicator framework are available to assess OECD countries' current performance on Target 11.b: the adoption and implementation of disaster risk reduction strategies (DRR) in line with the Sendai Framework at i) the national and ii) local levels. Following the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, these indicators are repeated under Targets 1.5 and 13.1. Overall, as of 2019, around half of OECD countries had already adopted DRR strategies at both levels of government. However, at the national level, 10 OECD countries (Iceland, Canada, the Netherlands, Israel, Italy, Ireland, the Slovak Republic, Sweden, Denmark and Turkey) were at a large distance from the target, with a score for the adoption and implementation of DRR strategies below 0.5 (1 being full adoption and implementation).[55]

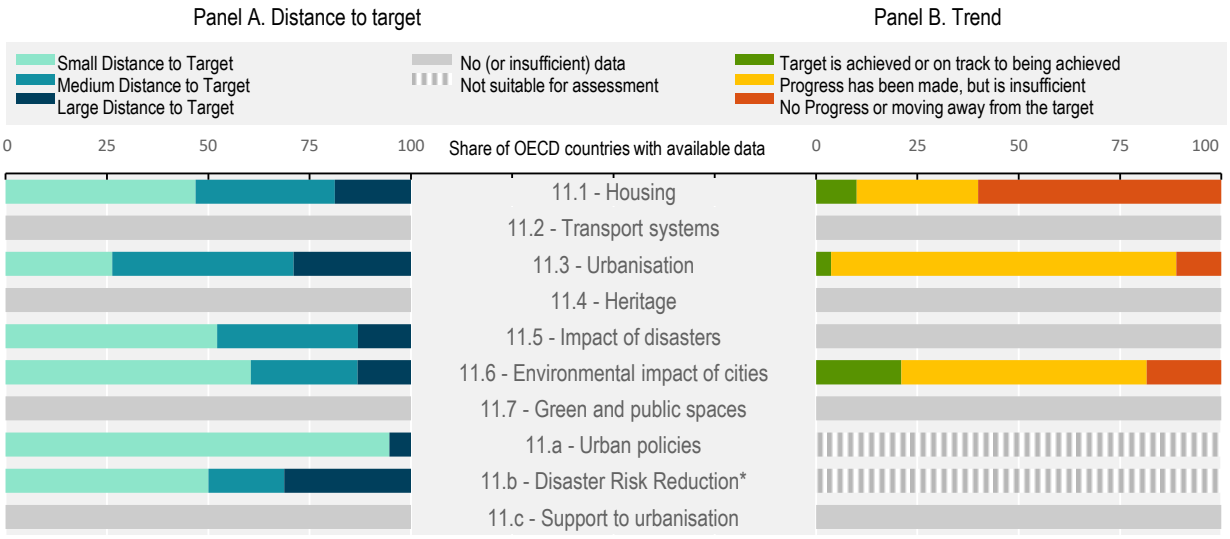
No indicator has been proposed to monitor Target 11.c, which aims at "supporting least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials". Despite the 2020 comprehensive review of the global indicator framework, no suitable indicator has been proposed to track this target; the global statistical community has been encouraged to develop an indicator that could be proposed for the 2025 comprehensive review.

Summing up

While available data suggest that cities in OECD countries are getting cleaner, persistent issues keep affecting OECD residents as well as impacting biodiversity. Yet, given the limited available data, careful interpretation is needed. Growing urbanisation is a salient challenge for OECD countries (OECD, 2015[85]). While almost all OECD countries already implemented urban policies or regional development plans that: respond to population dynamics; ensure balanced territorial development; and increase local fiscal space (Target 11.a), data suggest that only a quarter of them are able to limit urban expansion (Target 11.3) – see Figure 4.13, panel A. Although built area per capita is decreasing in a vast majority of OECD countries (9 in 10), the progress is not expected to be enough for most of them to ensure a sustainable urbanisation process by 2030 (Figure 4.13, panel B). In addition, in a few cases, suburbanisation is hiding behind this apparent densification – while densification is observed in urban areas, low-density areas can be growing faster and cities thus becoming more fragmented (OECD,

2018[86]). In most countries, cities have been able to reduce their environmental impact: most OECD countries put significant efforts into reducing waste and increasing recycling, while they also have been able to limit levels of exposure to fine particulate matter in urban areas (Target 11.6). In terms of access to housing, too many OECD households appear to be overcrowded; and six out of 10 OECD countries are even moving away from the target (Target 11.1). As for resilience to disasters, some OECD countries still suffer from their impact, with around half being at medium to large distances from eliminating the loss of life and economic damage attributed to disasters (Target 11.5). On the policy side, while around half of OECD countries have implemented disaster risk reduction strategies at both local and national levels, about one-third of them are far from the target (Target 11.b).

Figure 4.13. Distance to targets and trends over time in OECD countries, by SDG target, Goal 11



Note: * refers to targets with a 2020 deadline. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data is taken and adapted from (UNDESA, 2021[3]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[4]), *OECD.Stat,* https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/igeyo7

Impact of the COVID-19 pandemic on Goal 11

While overcrowding was not directly impacted by the pandemic, it is important to stress that housing conditions are a crucial determinant of people's experience of the COVID-19 pandemic. Government lockdown measures implemented to manage the health crisis have created greater challenges for those living in crowded conditions. For example, it has been harder for people to social distance and to isolate symptomatic individuals from other household members. Overcrowding can also threaten the mental health of household members, intensifying existing problems during periods of lockdown (OECD, 2021[30]). Yet, while the COVID-19 pandemic has a strong negative impact for

individuals, its impact on Target 11.1 is less straightforward ("ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums"). Still, as highlighted by the OECD (2021[6]), housing, together with food and energy, have been major sources of upward pressure on consumer prices over the past year, and these comprise a larger share of expenditures for lower-income households. Therefore, inflationary pressure on these components is likely to be keenly felt by many households.

COVID-19 has had an unprecedented impact on urban transport (Target 11.2 – see Table 4.10). The global response to the COVID-19 pandemic has involved measures ranging from limits on gatherings to strict stay-at-home orders. As a result, passenger transport activity in cities almost came to a halt. Use of public transport, road traffic and everyday mobility in cities collapsed to record low levels due to containment measures, with overall urban transport activity in 2020 at 19% of previously anticipated levels (ITF, 2021[40]). As the pandemic lingers, many uncertainties about its impact on urban mobility remain. Public transport has become a major casualty of COVID-19, while walking, cycling and micro-mobility have surged, supported by the authorities in many cities. However, the suppression of demand will probably not last in the long term. Travel by private vehicles recovered considerably in many cities worldwide between containment efforts, while public transport did not, and it may suffer longer-term losses without policy intervention. According to the ITF (2021[40]), despite the challenges of the pandemic, recovery does present potential opportunities to reshape our future trajectory.

Land consumption for built-up development (Target 11.3) halted during the first months of the pandemic but is likely to quickly revert to pre-crisis levels. During the first months of the pandemic, construction activities were among the most severely affected (OECD, 2021[87]). Yet, containment measures and the associated declines in mobility slowly appeared to have a smaller adverse impact on those activities. More recent restrictions have focused largely on service sectors with high levels of direct contact between consumers and producers, with manufacturing and construction activities generally affected only mildly (OECD, 2021[88]). Land use changes related to agriculture have been less affected by the pandemic, both in the short and long run. In the short run, the area devoted to cropland (harvested area) is more or less fixed, and the rapid rebound of food demand ensures that land use change remains very close to baseline levels (OECD, 2021[87]).

While in most cases heritage conservation activities continued during the crisis, UNESCO warns about the short to medium-term impact of the pandemic (Target 11.4). In particular, UNESCO (2021[89]) has stressed that, after the wave of massive emergency and recovery funding, subsidies to heritage conversation activities are likely to be reduced. Furthermore, over the medium-term, the anticipated lower levels of international and domestic tourism in general, together with reductions of private funding, could amplify this negative trend even further.

Target 11.5 focuses on resilience to economic, social and environmental shocks. Obviously, the excess mortality induced by the COVID-19 pandemic will dramatically impact measures such as the "number of deaths, missing persons and directly affected persons attributed to disasters". In addition, as stressed in many sections of this report, the economic consequences of the aftermath of the crisis have contributed to large GDP losses.

Waste management challenges (Target 11.6) **have increased significantly** as a result of the pandemic, as governments have had to cope with major increases in medical waste (due mostly to disposable personal protective equipment), increased demand for single-use plastics (for groceries, food delivery, health care and e-commerce packaging), reduced recycling capacity and a collapse of the market price for recycled plastics. With many governments mandating masks for large segments of the general population, the use of disposable medical masks has skyrocketed, creating significant waste management and environmental challenges (OECD, 2020[90]). In addition, in the short term, the pandemic has resulted in cutbacks in waste management programmes in some OECD countries (Zambrano-Monserrate, Ruano and Sanchez-Alcalde, 2020[91]).

The confinement measures put in place to reduce the spread of the virus led to a temporary reduction of air pollution in the early periods of the pandemic (Target 11.6), largely due to reduced traffic and other economic activities. Reviewing 11 studies from EU and non-EU countries, Brunekreef et al. (2021[92]) concluded that reductions in air pollution related to COVID-19 lockdowns were most pronounced for traffic-related pollutants. The concentration of nitrogen dioxide (NO_2) resulting from road transport fell by 30% to 50% during lockdown periods in Europe, while the reduction of concentrations of particulate matter ($PM_{2.5}$ and PM_{10}), mostly affected by residential heating, agriculture and industry, was much less pronounced.[56] Although air quality has now returned to pre-lockdown levels in many parts of the world, this period revealed some of the beneficial health impacts that could be achieved from a lasting reduction in air pollution (Giani et al., 2020[93]; Venter et al., 2020[94]).

While unequal access to green space pre-dates the pandemic (Target 11.7), the pandemic and the ensuing lockdowns have made inequalities in access to private green space even more visible, especially for those living in urban areas, the poor, the elderly and ethnic minorities (OECD, 2021[30]).

While the pandemic is not deemed to have a direct impact on urban policies and regional development plans (Target 11.a), it may be a catalyser for new urban development paradigms.

When it comes to resilience to economic, social and environmental shocks (the subject of Target 11.b), it is key to underline that preventing a crisis such as the one associated with the ongoing pandemic lies at the heart of the 2030 Agenda. In particular, this target includes an indicator on risk reduction (a score for adoption and implementation of "national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030"), which covers the risk of epidemics and pandemics.[57]

Table 4.10. Summary impact of the COVID-19 pandemic on Goal 11 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
11.1 – Housing	none	
11.2 – Transport systems	negative	
11.3 – Urbanisation	positive	none
11.4 – Heritage	negative	negative
11.5 – Impact of disasters	negative	
11.6 – Environmental impact of cities	mixed	none
11.7 – Green and public spaces	none	
11.a – Urban policies	none	none
11.b – Disaster Risk Reduction*	none	none
11.c – Support to urbanisation		

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. These findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

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Notes

[1]The aggregation at goal level assumes equal weights among the data series measuring the same SDG indicator and equal weights among the indicators measuring the same target. OECD average refers to the unweighted average.

[2] The underlying data on renewable electricity and total electricity generation are obtained from the World - Renewable and Waste Energy Statistics Dataset in the *IEA Renewables Information Statistics Database* (2022[105]).

[3] Methodological challenges associated with defining and measuring renewable energy (supply and consumption) are described in the Global Tracking Framework (World Bank and IEA, 2014[95]), Chapter 4 (available at: http://hdl.handle.net/10986/16537).

[4] The proportion of population primarily relying on clean fuels and technology is calculated as the number of people using clean fuels and technologies for cooking, heating and lighting divided by total population. "Clean" is defined by the emission rate targets and specific fuel recommendations (i.e. against unprocessed coal and kerosene) included in the WHO normative guidance for indoor air quality and household fuel combustion.

[5] This statement should be understood carefully. The normalisation procedure largely relies on the standard deviation observed among OECD countries in the most recent available year. When countries' outcomes are very similar among OECD countries, the standard deviation is small, and a small variation in the outcome variable translates into a significant increase in distance. For instance, while Colombia is only 1 percentage point away from the target, it is 0.5 standards units away from it.

[6] Energy intensity can be used as a proxy of energy efficiency (with higher energy intensity implying lower energy efficiency). However, this use should be considered carefully, as energy intensity depends on numerous elements beyond energy efficiency per se, such as climatic conditions, output composition, outsourcing of goods produced by energy-intensive industries, etc.

[7] The indicator is defined as the installed capacity of power plants that generate electricity from renewable energy sources divided by the total population of a country. Capacity is defined as the net maximum electrical capacity installed at the year-end, and renewable energy sources are as defined by the International Renewable Energy Agency (IRENA).

[8] For example, the unprecedented drop in aviation transport demand could change the energy intensity of international travel and freight forever, depending on how the aviation industry recovers after the pandemic. Meanwhile, increased rates of teleworking are changing the way people move around cities.

[9] Countries' distances to target are benchmarked against the growth rates achieved in 2015 (i.e. average growth between 2000 and 2015) by the four OECD countries (Lithuania, the Slovak Republic, Estonia and Latvia) with the highest performance (i.e. 3.8% annual growth). While having a common target for all OECD country may not reflect "national circumstances" such as ageing populations (e.g. Japan and Italy where the potential is much lower), it allows to preserve a strict comparability.

[10] To foster international co-operation between public bodies with responsibility for promoting productivity-enhancing policies, the OECD hosts the Global Forum on Productivity (GFP). The GFP provides a platform on which participants convene to exchange information and discuss best practices as well as a framework within which to undertake productivity analysis that is complementary to the OECD's regular work programme.

[11] Government responses to the COVID-19 pandemic even accentuated the need to focus on hours worked rather than employed persons. Indeed, the widespread implementation of job retention schemes in most countries led to a disconnection during the COVID-19 crisis between the number of persons employed and the number of hours worked. For the purpose of economic analysis and to maximise the comparability of statistical series across countries, it is better to focus on labour productivity per hour worked (OECD, 2021[32]).

[12] Prior to the COVID-19 crisis, considerable attention focused on the slowdown in long-term productivity observed across countries. This was referred to as the productivity paradox, as the productivity slowdown occurred at a time of significant technological change. The increasing diffusion of digital technologies in the 2000s was expected to spark a new wave of productivity growth, similar to those seen in the past, e.g. as a result of electrification (from the mid-1880s) and, to a lesser extent, ICT investments (in the 1990s). However, this has not, yet, materialised, raising a number of still largely open questions, ranging from the potential lagged effects of these new technologies, to structural factors, right through to measurement – see (OECD, 2021[32]) for a discussion of a number of views put forward to address the paradox.

[13] Domestic material consumption (DMC) refers to the amount of materials (in terms of weight) used in an economy, i.e. materials extracted or harvested in the country, plus materials and products imported, minus materials and products exported. The data refer to metals, non-metallic minerals (construction minerals, industrial minerals), biomass (wood, food) and fossil energy carriers.

[14] Domestic material consumption per unit of GDP is available in OECD and UN databases. While both measures should, in theory, be identical, some discrepancies exist (e.g. UN and OECD data may be rounded differently and may have a one-year lag).

[15] In particular, earnings of part-time workers have worsened relative to those of full-time workers, which is largely reflected in the rise of involuntary part-time employment in a number of countries. Moreover, comparatively poor working conditions among those who have regained employment after a spell of joblessness, combined with still high unemployment in some countries, has pushed up the number of lower-paid workers, thereby lowering average wage growth. This pattern is probably linked to the fact that, as a result of the protracted economic crisis, many workers were forced to accept low-paying jobs.

[16] Several OECD countries not only have been grappling with slow productivity growth but also have experienced a slowdown in real average wage growth relative to productivity growth, which has been reflected in a falling share of wages in GDP. At the same time, growth in low and median wages has been

lagging behind average wage growth, contributing to rising wage inequality. Together, these developments have resulted in the decoupling of growth in low and median wages from growth in productivity (OECD, 2018[106]).

[17] Some care is needed in interpreting the fall in the OECD area unemployment rate compared to the April 2020 peak, as this largely reflects the return of temporary laid-off workers in the United States and Canada, where they are recorded as unemployed. For Canada and the United States, the statistical treatment of people on temporary layoff is different from other countries, where these people are typically recorded as employed (Arnaud, 2020[96]).

[18] Over the period 2000-2020, the unemployment series for several countries are showing breaks. For this reason, changes should be interpreted with caution.

[19] This report includes two measures of NEET: one from the OECD and one from the *Global SDG Database*. Differences in the collection process and definitions may then result in differences in final measures of distance. Both measures are however highly correlated (0.93).

[20] While 13 OECD countries appear to be far for both measures, 11 additional countries appear to be far when using OECD data.

[21] While 2015 is the most frequent year, the latest year refers to 2013 in Iceland; 2016 in Lithuania, Estonia, Slovak Republic, Greece, Costa Rica, Turkey, Spain, Sweden, Austria, the Czech Republic and Hungary; 2017 in Australia, Mexico and Colombia; 2018 in Chile and the United States; and 2019 in Korea, Japan and Israel.

[22] The level of compliance is based on an analysis of textual sources and national legislation conducted by the International Labour Organization (ILO).

[23] Tourism Direct GDP is defined as the sum of the part of gross value added generated by all industries in response to internal tourism consumption plus the amount of net taxes on products and imports included within the value of this expenditure at purchasers' prices.

[24] The OECD/INFE developed a scoring methodology to measure overall financial literacy (OECD, 2018[97]). It measures a set of basic financial skills, behaviours and attitudes. While a top score means that an individual has acquired a basic level of understanding of financial concepts and applies some prudent principles in their financial dealings. On average, across 12 OECD countries, individuals who took the test score only 62% of the maximum financial literacy (OECD, 2020[43]).

[25] According to projections from the OECD, the global real output will be 3% lower than projected prior to the pandemic after five years, and about 5.5% lower after a decade (OECD, 2021[5]).

[26] Differences in the unemployment rate largely reflect differences in policy responses and firms' practices, but also statistical conventions (Arnaud, 2020[96]).

[27] For indicator 9.4.1, in the *UN Global database,* data on the carbon dioxide emissions from fuel combustion represent the total amount of emissions from fuel combustion, reported in millions of tonnes. By benchmarking the total amount against GDP, OECD data ensure comparability among countries.

[28] Some care is needed in interpreting manufacturing and service statistics, though. The information is based on industries, not tasks. In the compilation of national statistics, firms are usually allocated to an industry according to their primary activity. Many manufacturing firms, however, produce significant in-house services which will not be captured under services industry categories in the data used to construct

estimates. They will be classified as output of the manufacturing sector. Thus, although already significant, estimates for the services content of manufactured goods (based on industries) may underestimate the true underlying value added from services-based tasks. In addition, in many developed economies significant outsourcing of non-core (service) activities has occurred in recent decades, which may overstate growth in the real contribution of services. Therefore, countries that have outsourced ancillary services to manufacturing are recorded as services value-added in countries that outsource them (but manufacturing value-added in those that does not).

[29] The best performances are observed in Denmark, Switzerland and Ireland for the measure on CO_2 per unit of manufacturing value added. For the measure on CO_2 emissions from fuel combustion per unit of GDP, the target level is benchmarked against the figures observed in Costa Rica, Switzerland and Sweden in the OECD data sources, while France joins the list in the *UN Global database* in the measure on CO_2 per unit of GDP.

[30] The *UN database* report data up to 2018, while OECD data allow tracking CO_2 estimates up to 2020. Results are, however, very correlated (0.97).

[31] For the indicator on the amount of R&D expenditure, the best performances are observed in Israel, Korea and Switzerland for both UN and OECD data sources. Yet, for the indicator on the density of researchers, the list of countries changes slightly depending on the data source. While Denmark, Finland, Sweden and Korea are included in the list in both sources, there are two additional countries (Norway and Iceland) in the data series sourced from the OECD.

[32] R&D expenditures as a share of GDP is not available for Israel.

[33] While data for both indicators are available only in the *UN Global database* for Costa Rica, the same is true for Colombia for the indicator on the density of researchers.

[34] The first generation of mobile networks (1G, which has already been phased out) was intended to offer analogue voice services which were previously offered by landlines, while the second generation (2G) represented a jump from analogue to digital technology, with the main usage scenario being voice and simple data transmission, such as SMS. The third generation of wireless networks (3G) offered faster data transfers intended for multimedia use and, for the first time, users were introduced to mobile broadband. After 2010, the fourth generation of broadband wireless networks emerged (4G), offering greater data transmission capacity and faster mobile broadband. This was intended mostly to be an improvement to support video streaming, which had been growing rapidly in terms of data per user. 5G networks are being deployed in a majority of OECD countries (32 out of 38 OECD countries as of July 2021).

[35] While the target level had been set using the OECD distribution of outcomes, it may be noted that it is probably close to universal access as fixed subscriptions are usually shared among household members. According to the *OECD Family Database* (2021[100]), in 2015 the average number of people per household was around 2.5 among OECD countries. This means that if all households had a single subscription, universal access would be reached at this rate. More generally, it may be noted that the average household composition may have a marginal impact on the actual subscription rates.

[36] Simulations from the OECD (2021[42]) showed that the majority of countries are better off in an interconnected regime, both in terms of the levels and stability of economic activity. Thus, the modelling results suggest that the economic case for reshoring global value chains is weak, while pointing to the benefits of using a range of government policies to make supply chains more resilient.

[37] The available data come from the *UN Global Database* and the *OECD Income Distribution database* (2021[56]). While both data series are quite correlated (coefficient correlation is at 0.66), OECD sources are more up-to-date (most data are from 2019, while UN data mainly refer to 2017) and are based on more comparable definitions and income sources.

[38] Using the *OECD Income Distribution Database* (2021[56]), the target level was set at 0.9 percentage point, a level that only Estonia, Lithuania and Luxembourg exceeded in 2015. While the *UN Global Database* uses a slightly different definition, the target level is very close, set at 1 percentage point.

[39] Data on inequality of opportunity comes from the Gallup World Poll (2021[99]). The Gallup World Poll is conducted in more than 150 countries around the world based on a common questionnaire, translated into the predominant languages of each country. With few exceptions, all samples are probability based and nationally representative of the resident population aged 15 years and over in the entire country, including rural areas. While this ensures a high degree of comparability across countries, results may be affected by sampling and non-sampling error, and variation in response rates. Sample sizes vary between around 1 000 and 4 000, depending on the country and data should be interpreted carefully. These probability surveys are valid within a statistical margin of error, also called a 95% confidence interval. Results are based on binary questions created by Gallup: "Is the city or area where you live a good place or not a good place to live for racial and ethnic minorities?".

[40] Two distinct data series are used for the monitoring of labour shares. The first comes from the *UN Global SDG Indicators Database* and is sourced from the ILO. The second data series is derived from the *OECD Annual National Accounts database* (2021[103]). Although both sources based their data on a country's national account data (and overall, both data series are highly correlated, 0.83), some significant differences between the two estimates exist. On average, across OECD countries, the difference between the two estimates is 10 percentage points, with the gap exceeding 15 points in the Netherlands, Spain, Greece, Colombia, Italy and Chile. Given the greater timeliness of OECD data, UN data are not discussed in this section.

[41] Two distinct data series underpin the monitoring of redistribution. The first comes from the *UN Global SDG Indicators Database* and is based on estimates from the World Bank and the CEQ institute. The second data series is derived from the *OECD Income Distribution Database*. However, for most OECD countries, the World Bank uses OECD estimates. The two series are thus almost identical, and the only (minor) differences may come from differences in rounding and in timeliness.

[42] The target level for the data series sourced from the *UN Global database* is set at 62%, benchmarked against the performances of Belgium, the Netherlands and Switzerland.

[43] The assessment of indicator 10.4.2 also includes a data series from the *UN Global database,* for which the target level is set at 37%, which is benchmarked against the performances of Ireland, Slovenia and Finland.

[44] The redistributive effects of taxes and transfers is, however, likely to be underestimated for most OECD countries due to the absence of equalising in-kind transfers such as health, education, sanitation and housing services from micro-based sources. The distributional effects of in-kind transfers relative to consumption taxes are likely to vary between countries, depending on the specific design of each instrument and on structural features such as the socio-demographic composition of households across the distribution. To complement the estimates of redistribution, the OECD and Eurostat have developed methodology to measure disparities in line with national accounts (Zwijnenburg et al., 2021[104]).

[45] The seven indicators focusing on the regulation of financial markets have different "normative directions". This means that, for some of them, it is desirable to minimise the value of the indicator (i.e. the less, the better). This is the case for indicators focusing on non-performing loans and net position in foreign exchange to capital. In this case, the target levels are operationalised at 1% based on the values observed in Canada, Switzerland, Australia and Korea for non-performing loans to total gross loans; 2% based on Colombia, Mexico and Chile for non-performing loans net of provisions to capital; and -24% based on Israel, Norway and Switzerland for net open position in foreign exchange to capital. For the remaining indicators, it is desirable to maximise the value of the indicator (the more, the better). Then, target levels are operationalised at 2% based on Iceland, Colombia, Mexico and Estonia for return on assets; 12% based on the values observed in the United States, Colombia, Iceland and Ireland for regulatory capital to assets; 22% based on Estonia, Iceland and Lithuania for regulatory Tier 1 capital to risk-weighted assets; and 130% based on the Netherlands, Sweden, Germany and Switzerland for liquid assets to short-term liabilities.

[46] This assessment is conducted through a composite measure based on 30 sub-categories, grouped under six questions/domains. Most sub-categories have dichotomous "Yes/No" answers, coded "1" for "Yes" and "0" for "No". The composite index is defined as the unweighted average of the values across sub-categories. Yet, for ease of interpretation, the resulting country-level averages are categorised as follows: values of less than 0.40 are coded as "Requires further progress"; values of 0.40 to less than 0.80 are coded as "Partially meets"; values of 0.80 to less than 1.00 are coded as "Meets"; and values of 1.00 are coded as "Fully meets". The target level is deemed to be reached if a country is classified as "Meets". Data are source from the *UN Inquiry among Governments on Population and Development* (2021[101]), a questionnaire conducted on behalf of the UN Secretary-General and sent to all UN Permanent Missions in New York. The International Office for Migration (IOM) assisted in garnering country responses, and OECD, as partner agency for this indicator, supported the efforts for its member countries.

[47] The calculation of this indicator allows observing how many products developing countries and LDCs will have free access to on developed country markets. However, while duty-free treatment is an indicator of market access, it is not always synonymous with preferential treatment for beneficiary countries.

[48] A "remittance corridor" can be defined as the outflow of funds from one country to another. The World Bank in the *Remittance Prices Worldwide database* (2021[102]) covers 365 country corridors, from 48 sending to 105 receiving countries.

[49] In 2016, the World Bank introduced the Smart Remitter Target system (SmarRT) to monitor remittance transactions at a more granular level. SmarRT aims to reflect the cost that a "savvy consumer" with access to sufficiently complete information would pay to transfer remittances in each corridor. SmaRT is calculated as the simple average as the three cheapest services for sending the equivalent of USD 200 in each corridor and is expressed in terms of the percentage of the total amount sent. In addition to transparency, services must meet additional criteria to be included in SmaRT, including transaction speed (five days or less) and accessibility (determined by geographic proximity of branches for services that require a physical presence, or access to any technology or device necessary to use the service, such as a bank account, mobile phone or the Internet).

[50] While possible trajectories vary a lot between countries, depending on the existing economic stabilisers and extraordinary policy packages put in place, all studies show that safety nets prevented or at least limited the expected rise in poverty, and thus inequality. However, for poverty, results also depend on whether the poverty line is anchored to pre-crisis level. When not doing so, most studies suggest that the impact of the crisis could be negligible in most countries.

[51] The OECD and ITF have developed an urban accessibility framework covering EU countries only. It identifies which destinations can be reached on foot or by bicycle, public transport or car within a certain time (accessibility). It then measures how many destinations are close by (proximity). The comparison between accessible destinations and nearby destinations shows how well each transport mode performs (transport performance). These three indicators are calculated for destinations such as schools, hospitals, food shops, restaurants, people, recreational opportunities and green spaces in 121 cities in 30 European countries.

[52] "Built-up area" is defined as the presence of buildings (roofed structures). This definition excludes other parts of urban environments or human footprints such as paved surfaces (roads, parking lots), commercial and industrial sites (ports, landfills, quarries, runways) and urban green spaces (parks, gardens).

[53] Although trends could not be identified in Austria and the Netherlands, they have already reached the target level (with material recovery rates of municipal waste of 59% and 57% in 2019, respectively).

[54] Canada and the United States are both federal states. Therefore, urban development planning is often conducted at local level (provinces in Canada and states in the United States).

[55] Some of these data has not followed an official validation process and may be subject to revision at a later date, for instance, according to the Canada SDG hub, this score is 100% in Canada.

[56] The different studies included in the meta-analysis showed that $PM_{2.5}$ concentrations decreased by 5% to 20% while PM_{10} concentrations only marginally decreased.

[57] “Enhanced work to reduce exposure and vulnerability, thus preventing the creation of new disaster risks, and accountability for disaster risk creation are needed at all levels. More dedicated action needs to be focused on tackling underlying disaster risk drivers, such as the consequences of […] pandemics and epidemics.” (UNISDR, 2015[98]).

5 Peace and Partnerships

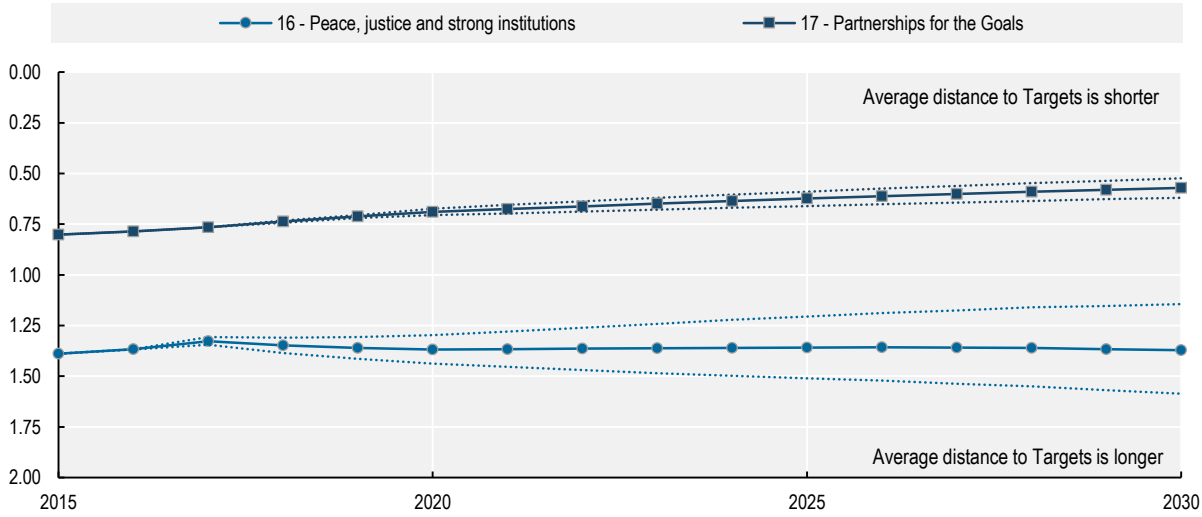
The “Peace” theme of the 2030 Agenda aims at promoting “peaceful, just and inclusive societies”, while the “Partnerships” theme looks at the means required to implement all the goals and targets of the 2030 Agenda. Relying on the global indicator framework, this chapter assesses whether OECD countries are likely to achieve the SDG targets pertaining to Peace and Partnership by 2030. It shows where OECD countries are standing in terms of their current performance but also in terms of recent changes over time. It also shows what part of the 2030 Agenda on Peace and Partnerships currently remains unmeasurable and discusses some of the likely impacts of the COVID-19 pandemic on the Peace and Partnership targets.

Introduction

The 2030 Agenda is a call to all countries to take action for a better and more sustainable future. At its core is a set of 17 Sustainable Development Goals balancing the three dimensions of sustainable development: the economic, social and environmental sphere. Since the adoption of the sustainable development agenda in 2015, its scope has often been characterised by five broad themes, i.e. the "5Ps" (UN, 2015[1]): People, Planet, Prosperity, Peace and Partnerships.[1] While the People, Planet and Prosperity themes were underpinned by five goals each, the Peace and Partnerships themes are each represented by a single goal: "Peace" focuses on targets related to peace, justice and strong institutions (Goal 16), which aim at promoting peaceful and inclusive societies; "Partnerships" focuses on the means to implement and revitalise the global partnership for sustainable development (Goal 17). Given the large number of targets, this last goal is broken down into five "sub-goals" on: improving countries' financial resources; fostering the use of information and communication technologies; enhancing international support for capacity-building; promoting a "universal, rules-based, open, non-discriminatory and equitable multilateral trading system"; and a last one dealing with a range of more systemic issues, such as policy and institutional coherence, multi-stakeholder partnerships, and data and monitoring issues.

Even before the pandemic hit, OECD countries were not on track to achieve the targets of the "Peace" and "Partnerships'" Goals. Figure 5.1 shows that in 2015, OECD countries were on average[2] closest to reaching targets for the goal on Partnerships for the Goals (Goal 17), and furthest from achieving the Institution-related targets (Goal 16), and they are likely to be making gradual progress on Goal 17, whereas there is much more uncertainty on Goal 16. Projecting current trends up to 2030 suggests nonetheless that, in the absence of additional measures, OECD countries on average may not be able to reach either of the two goals. The chapter dives into the details of the underlying targets to provide a more exhaustive picture of where OECD countries stand on the various targets of Goals 16 and 17.

Figure 5.1. OECD countries' average distance to SDG targets over time by goal, Peace and Partnerships



Note: Based on available data series. This figure shows the average distance that OECD countries could travel toward the SDGs based on recent trends; hence these distances are based on existing policies and do not account for the additional measures that OECD countries may have introduced since the latest observation available. Distances are measured in standardised units (see the methodological annex for details), with 0 indicating that the 2030 level has already been attained. Full lines show OECD countries' average performance against all targets under the relevant goal. Dashed lines show the confidence interval (10th and 90th percentiles of estimated trends). When data are not available for specific years, these are imputed using linear interpolation between the two closest available observations. Past (i.e. before the first available year) and future (i.e. after the latest available year) trajectories are imputed using Monte Carlo simulations (see the methodological annex for details).

Source: All data are taken and adapted from (UNDESA, 2021[2]), *SDG Global Database,* https://unstats.un.org/sdgs/unsdg and (OECD, 2021[3]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/qx3auw

The COVID-19 crisis has exposed OECD governments and institutions to severe stress (see Impact of the COVID-19 pandemic on Goal 16). Many governments have faced gaps and/or overlaps between the roles of different institutions and competing priorities (OECD, 2020[4]). Moreover, even when government institutions were able to cope with the major shock of COVID-19, they have often operated with lower standards of consultation, transparency, oversight or control of their processes. Beyond institutions, the pandemic has also put all sources of financing under pressure. The "scissors effect" of SDG financing (i.e. increasing needs and declining resources) has been magnified by the need to unlock the necessary financial resources, share technologies and create national capacities – as required by Goal 17 – to respond to the pandemic (see Impact of the COVID-19 pandemic on Goal 17 and Systemic issues section for further details).

Goal 16 – Peace, justice and strong institutions

Goal 16 aims at "promoting peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels". First, it calls on countries to reduce and prevent violence. On this front, with a few exceptions, most OECD countries report rather low rates of homicides, assaults and victimisation. However, looking at measures of feelings of safety rather than victimisation or homicide rates nuances this observation. In 2020, around one-quarter of citizens of OECD countries did not feel safe when walking alone at night in the area where they lived. Beyond violence, Goal 16 also aims at promoting the rule of law and fostering more accountable and more transparent institutions. Preliminary evidence suggests that many OECD countries still have a long road to travel to reach these targets, even if the currently available data do not allow a comprehensive assessment for all the targets.

The COVID-19 crisis has been an extreme stress test for government and institutions in all OECD countries. Countries have demonstrated some remarkable resilience. However, while institutions have been able to cope with the major shock of COVID-19, early evidence also suggests that governments and institutions have operated with lower standards of consultation, transparency, oversight and/or control of their operations (OECD, 2021[5]). As detailed below, the COVID-19 crisis also affected all other aspects of Goal 16, including violent crime, corruption and bribery, and discrimination.

Assessing OECD countries' performance on Goal 16

This report uses data from the *SDG Global Database* together with OECD sources. Yet, the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 5.1 shows that data allows the monitoring of 8 of 12 targets underpinning Goal 16. For this goal, 5 indicators sourced from the OECD complement the *SDG Global database*. In some cases (Indicators 16.1.1 and 16.1.4), they align with the global indicator framework. Yet, drawing from OECD databases provides more timely and longer time series[3] and also helps meet higher statistical standards.[4] In other cases, relying on OECD data sources provides monitoring indicators and targets for which no comparable data are currently available (Indicators 16.3.3, 16.6.2). It can also complement the measurement when targets are multifaceted (Indicator 16.7.1). On top of indicators listed in the table, the database includes 1 extra data series that is considered to be mainly informative (number of detected victims of human trafficking) in the context of Goal 16 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-5-peace-and-partnerships.xlsx).

Table 5.1. Available data series supporting the monitoring of Goal 16

Indicator code	Indicator Label	Available over time	Primary source
16.1.1	Number of victims of intentional homicide per 100 000 population, by sex	Yes	*SDG Global Database*
16.1.1	Deaths from assault	Yes	OECD
16.1.3	Proportion of population subjected to robbery in the previous 12 months	No	*SDG Global Database*
16.1.3	Proportion of population subjected to physical violence in the previous 12 months	No	*SDG Global Database*
16.1.4	Share of population feeling safe when walking alone at night in the city or area where they live	Yes	OECD
16.1.4	Proportion of population that feel safe walking alone around the area they live	No	*SDG Global Database*
16.3.1	Police reporting rate for robbery	No	*SDG Global Database*
16.3.2	Unsentenced detainees as a proportion of overall prison population	Yes	*SDG Global Database*
16.3.3	*Index of civil justice*	*Yes*	*OECD*
16.5.2	Bribery incidence (% of firms experiencing at least one bribe payment request)	No	*SDG Global Database*
16.6.2	*Citizens confidence with the judicial system*	*Yes*	*OECD*

Indicator code	Indicator Label	Available over time	Primary source
16.7.1	*Diversity of the central government workforce (Pilot index)*	*No*	*OECD*
16.7.1	Ratio of young members in parliament (Ratio of the proportion of young members in parliament (age 45 or below) in the proportion of the national population (age 45 or below) with the age of eligibility as a lower bound boundary), Lower Chamber or Unicameral	No	*SDG Global Database*
16.7.1	Ratio for female members of parliaments (Ratio of the proportion of women in parliament in the proportion of women in the national population with the age of eligibility as a lower bound boundary), Lower Chamber or Unicameral	No	*SDG Global Database*
16.7.1	Ratio for female members of parliaments (Ratio of the proportion of women in parliament in the proportion of women in the national population with the age of eligibility as a lower bound boundary), Upper Chamber	No	*SDG Global Database*
16.9.1	Proportion of children under 5 years of age whose births have been registered with a civil authority (% of children under 5 years of age)	No	*SDG Global Database*
16.10.2	Countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	No	*SDG Global Database*
16.a.1	Compliance with Paris Principle	Yes	*SDG Global Database*

Note: Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Acknowledging that "there can be no sustainable development without peace and no peace without sustainable development" (UN, 2015[1]), the first target of Goal 16 aims at "reducing all forms of violence and related death rates" (Target 16.1). Overall, aggregating results across all indicators pertaining to this goal suggests that, over the past two decades, violence has been declining in three out of four OECD countries (Figure 5.5), though it remains an issue in some: violence rates are the highest in Latin America and the United States, and the lowest in Nordic countries. At the global level, performance on this target is measured by four SDG indicators: the number of victims of intentional homicide per 100 000 population (Indicator 16.1.1); the number of conflict-related deaths per 100 000 population (Indicator 16.1.2); the proportion of population subjected to physical, psychological and/or sexual violence in the previous 12 months (Indicator 16.1.3); and the proportion of population that feel safe walking alone around the area where they live (Indicator 16.1.4). However, due to data limitations, conflict-related deaths are not reported in this chapter.

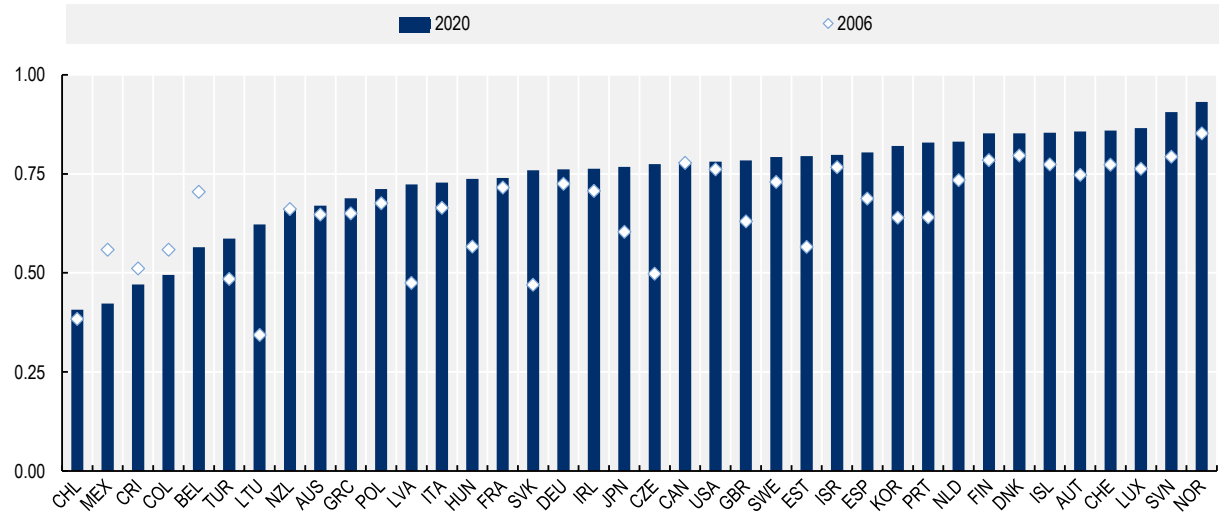
With a few exceptions, the prevalence of homicides and assaults is low in most OECD countries and has tended to decrease in recent years. The first indicator underpinning Target 16.1 refers to the number of victims of homicides, as reported to the authorities; these data are complemented in this report by OECD data on deaths from assaults.[5] While the ideal target level to be attained would be zero deaths, this has been operationalised here at 3 per 100 000 population to allow for measurement errors. Overall, the two measures provide very similar results,[6] but death from assault offers a broader country coverage and allows a better comparability over time and among countries. Both measures show that in 2018 (or in the latest available year), a vast majority of OECD countries (34) were close to the target (i.e. rates are below 5.5 per 100 000 population), and the homicide rate was around 2.5 per 100 000 population. However, a few OECD countries significantly exceed these rates. In the United States and Costa Rica, for example, the rate is more than twice the average level, while it is more than eight times higher in Colombia and Mexico. Since 2000, the prevalence of both death from assault and homicide has fallen in virtually all OECD countries. The only notable exceptions are Mexico and Costa Rica, where recent progress on both indicators reversed recently.

While the paucity of data limits the assessment of victimisation, most OECD countries report low rates. The indicator 16.1.3 proposed by the IAEG-SDGs aims at measuring the proportion of population subjected to physical, psychological and/or sexual violence over the previous year, based on data collected through sample surveys. Differences in victimisation surveys across countries imply that available data series capture only the proportion of population that experienced physical violence and robbery, and not

psychological and sexual violence. Even when data are available for only one of the two events, they cover only around half of OECD countries (and only 16 OECD countries report data for both). Despite these limitations, these data show that, in 12 out of 16 OECD countries where both data series are available, countries are at a short distance to the target (i.e. physical victimisation rates are below 4% and the robbery victimisation rate is below 5%). When considering all OECD countries with at least one available data point, Mexico and Costa Rica are the only countries reporting a large distance to target for at least one data series (i.e. the physical victimisation rate is greater than 6% and the robbery victimisation rate is greater than 9%).

Focusing on the feeling of safety rather than victimisation suggests a less rosy picture of the prevalence of violence in OECD countries. The last indicator considered by the IAEG-SDGs to assess violence focuses on people's self-reported feelings of safety rather than on "objective measures". It is measured by the share of population that feel safe when walking alone around the area they live. While, ideally, everyone should feel safe in the area they live, the target level for this indicator has been set at 97% of the population to allow for measurement errors. In 2020, Norway was the only country where more than 91% of people felt safe when walking alone at night where they live, and it is thus at a short distance from the target (Figure 5.2). Conversely, 22 OECD countries still have a very long road to travel to meet this target (i.e. the feeling of safety is below 78%), most notably Chile, Mexico, Colombia and Costa Rica – where more than one in two adults do not feel safe when walking alone at night in the area they live. Feelings of safety have been on an upward trend in 27 OECD countries, but they have declined in 11 (including in some of the countries where rates are the lowest).

Figure 5.2. Share of population that feel safe when walking alone around the area they live (Target 16.1)



Note: Although the data presented in this chart and the General Social Survey data or national survey data may look quite similar, it is important to note that they are not directly comparable. There are several differences in the question used, the sample size and the methodology. This data represent the proportion of those who answered yes to the question "Do you feel safe walking alone at night in the city or area where you live?"

Source: (Gallup, 2021[6]), Gallup World Poll, https://www.gallup.com/analytics/318875/global-research.aspx (accessed on 29 October 2021).

StatLink https://stat.link/3n9a4g

In addition to "reducing all forms of violence and related death rates", Goal 16 includes a target focusing on child violence. Target 16.2 calls on countries to "end abuse, exploitation, trafficking and all forms of violence against and torture of children". The IAEG-SDGs proposed three indicators to track Target 16.2: i) the proportion of children aged 1-17 years who experienced any physical punishment and/or

psychological aggression by caregivers in the past month; ii) the number of victims of human trafficking per 100 000 population; and iii) the proportion of young women and men aged 18-29 years who experienced sexual violence by age 18. Only one of these indicators, namely detected victims of human trafficking, is available. While the ideal target level would be zero victim of human trafficking, this has been operationalised here at 3 per 100 000 population to allow for measurement errors. The available data show that only 3 of 35 OECD countries with available data (Hungary, Norway and the Netherlands) report rates higher than 3 per 100 000 population. Yet it should be stressed that this is only a partial measure of human trafficking, as it excludes victims not detected by the authorities. While information on detected victims can provide valuable information, it does not allow monitoring the overall level of human trafficking, and it should be interpreted with caution, as its level and trend may be influenced by multiple factors such as law enforcement practices, legislation or victims' attitudes.

While the assessment is hampered by missing data, the available data suggest that a majority of OECD countries (28 of 38) still have a long road to travel in promoting the rule of law, encapsulated in Target 16.3. Beyond ending violence, Goal 16 aims at "promoting the rule of law… and ensuring equal access to justice" (Target 16.3). The concepts of both the rule of law and access to justice are multidimensional, and more than one indicator is required to cover their main elements. Victim's access to criminal justice is measured, according to the global indicator framework, by the proportion of people who were victims of violence in the previous 12 months and reported their victimisation to competent authorities (Indicator 16.3.1), while access to civil justice is monitored by the proportion of the population who have experienced a dispute in the past two years and who accessed a formal or informal dispute resolution mechanism (Indicator 16.3.3). In addition, the efficiency of the justice system is monitored through administrative data on the number of unsentenced detainees as a proportion of the overall prison population (Indicator 16.3.2).

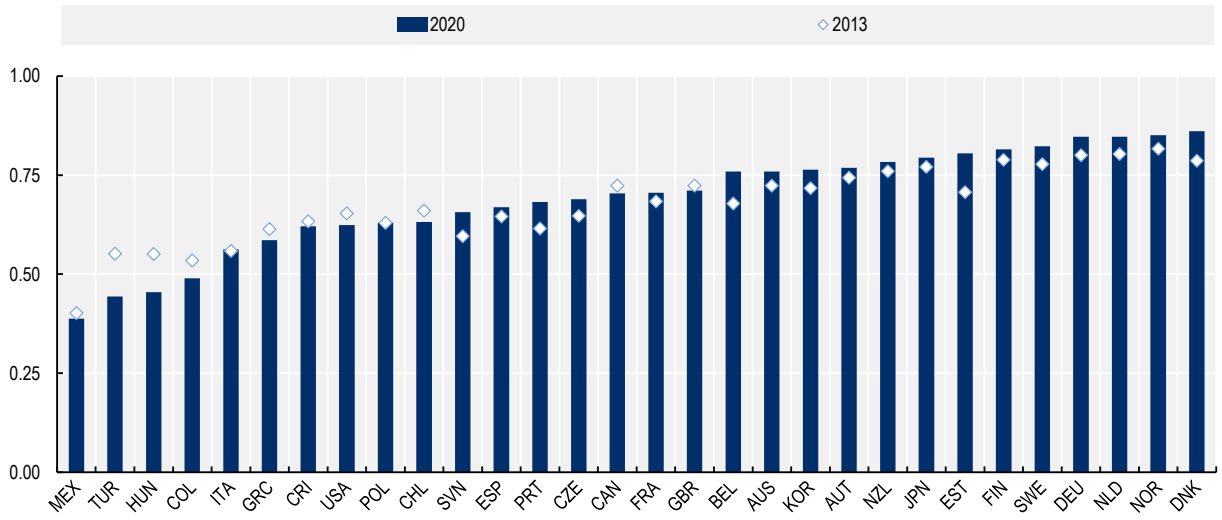
Every victim should feel confident enough to report a crime to competent authorities (Indicator 16.3.1). The available data suggest that this is not the case in any OECD country. While in some countries the lack of reporting may reflect the minor nature of the offence, in others it may result from a lack of trust and confidence in the ability of the police or other authorities to provide effective redress. Finally, in some countries objective and subjective difficulties in gaining access to the authorities could negatively influence the reporting behaviour of crime victims. Target 16.3 explicitly aims at "ensuring equal access to justice for all". Therefore, 100% of victims of crime in the previous 12 months should be able to report to competent authorities. Despite this, the target has been operationalised at 97% to allow for possible measurement errors. Based on available data, no OECD country will come close to achieving the target by 2030. Denmark is the country that is closest to target, with 77% of victims reporting robbery to competent authorities, but it cannot be considered to be close to the target either.[7] Fourteen of the 22 OECD countries with available data show a reporting rate below 50%, with rates below 20% in Estonia and Mexico.

The available data on the efficiency of the justice system show a great diversity of outcomes among OECD countries. The efficiency of the justice system is measured in the global indicator framework through the share of unsentenced detainees as a proportion of the overall prison population (Indicator 16.3.2).[8] The 2030 Agenda commits countries only to decrease this share, without providing any numerical value to be reached. Beyond exceptional cases, pre-sentence detention is unnecessary, diverts criminal justice system resources and imposes financial and physical burdens on the accused. In this context, the target to be reached by 2030 is set in this report at the level prevailing among the three OECD countries with the lowest share of unsentenced detainees in 2015 – i.e. 11% of the overall prison population. Based on this target, only eight OECD countries (Lithuania, Portugal, Poland, the Czech Republic, Iceland, Japan, Spain and the Slovak Republic) are at a short distance to the target (unsentenced detainees stands below 16% of the overall prison population). Conversely, 17 OECD countries are far from target, with more than one-quarter of the prison population being unsentenced, with this rate even exceeding one-third in Mexico, Belgium, Korea, Canada, Switzerland and Luxembourg.

Across 27 OECD countries, the share of unsentenced detainees has been stable or even increasing in recent years.

While the available data do not allow a full analysis of access to civil justice, the existing partial evidence is not encouraging. In 2020, the IAEG-SDGs revised the global indicator framework and added a third indicator to gauge access to civil justice (Indicator 16.3.3). While comparable data to compute this indicator are not available yet, the present report includes a composite measure – ranging from 0 (worst possible outcome) to 1 (best possible outcome) – developed by the World Justice Project to monitor civil justice.[9] Based on the distribution of outcomes across all OECD countries in 2015, distances are deemed to be short when the index is greater than 0.90 and long when the Index is lower than 0.80. Figure 5.3 shows that in 2020, while no OECD country could be considered as being at a short distance to the target, seven (Denmark, Norway, the Netherlands, Germany, Sweden, Finland and Estonia) can be considered to be at a medium distance. Conversely, with scores below 0.50, distances are largest in Colombia, Hungary, Turkey and Mexico. Since 2013, 40% of OECD countries for which World Justice Project data are available have followed a positive trend. Nevertheless, progress has been rather small and nowhere would current trends allow to reach the target level by 2030.

Figure 5.3. Index of civil justice (Target 16.3)



Source: (World Justice Project, 2021[7]), https://worldjusticeproject.org/rule-of-law-index/factors/2021/Civil%2520Justice (accessed on 29 October 2021).

StatLink https://stat.link/gx1m92

Global monitoring of Target 16.4 ("significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime") relies on a measure of illicit financial flows (both inwards and outwards) and on the proportion of seized, found or surrendered arms with an illicit origin. Unfortunately, the *SDG Global Database* does not include data to properly monitor this target, and no other OECD data are suitable for that use.

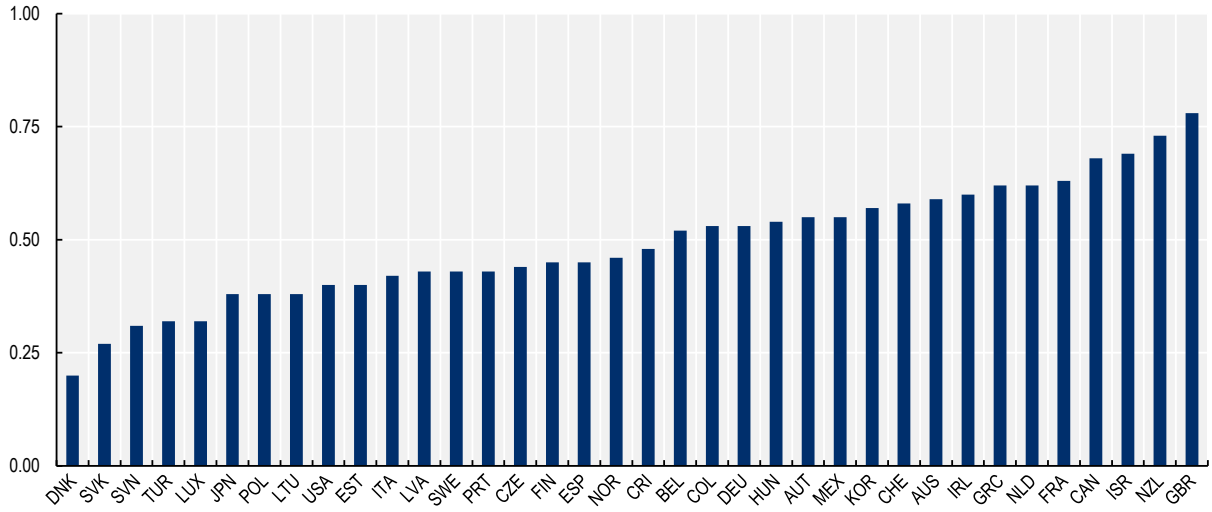
In general, corruption appears to be low in most OECD countries, yet the bribery incidence is significant in five of them. Target 16.5 aims at "substantially reducing corruption" and is monitored through data on the proportion of persons and businesses who report paying a bribe to a public official or were asked for a bribe by those public officials during the previous 12 months. So far, the *SDG Global Database* includes only data on bribery for business (i.e. the share of firms experiencing at least one bribe payment request, sourced from the World Bank Enterprise Surveys). While the 2030 Agenda does not spell out numerical targets, an ideal target would focus on the eradication of corruption or bribery. Yet in

this report, this target is set at 3% of firms to allow for measurement error. While available data barely cover half of OECD countries, it appears that business reporting of bribery is low (below 5%) in most OECD countries (15 out of 20); these countries can thus be considered as close to target. Only five OECD countries exceed this rate, with rates ranging between 5% and 10% in Greece, Colombia and Costa Rica to 10% or more in Italy and Mexico.[10]

While global data to monitor the accountability and transparency of public institutions are not yet available, proxy measures point to a very diverse picture in terms of both levels and trends. Target 16.6 calls on countries to "develop effective, accountable and transparent institutions at all levels". The UN global monitoring focuses on two indicators : i) primary government expenditures as a proportion of original approved budget, and ii) the proportion of population satisfied with their last experience of public services. Unfortunately, none of those measures could be included in this report. Data points on government expenditures as a proportion of approved budget are available for only 16 OECD countries, while data on people's satisfaction of public services are not available on a comparable basis across OECD countries.[11] Yet some (limited) understanding of the issue at stake can be provided by Gallup World Poll data on people's confidence in the judicial system. Although, ideally, the target should be set at 100% of the population having confidence in the judicial system, the target has, in reality, been set at 97% of the population to allow for possible measurement errors. Overall, in 2020, Norway is the only OECD country to be at a short distance to the target (with more than 88% of the population trusting the judicial system). With shares ranging from 70% to 88%, eight OECD countries (Germany, Luxembourg, Sweden, the Netherlands, Austria, Finland, Switzerland and Denmark) are at a medium distance from target. The vast majority of OECD countries are still far from target. Over the past 18 years, half of all OECD countries had been making some progress in this indicator, while the other half witnessed lower confidence in the judiciary. Distances are deemed to be furthest in Chile, the Slovak Republic, Korea and Colombia, where fewer than one resident in three reports having confidence in the judicial system.

Despite some progress, there is still much room to promote inclusion and diversity in the public workforce and to support the representation of women and young people. Target 16.7 ("Ensure responsive, inclusive, participatory and representative decision-making at all levels") focuses on the diversity and representativeness of national and local institutions. The IAEG-SDGs proposed two indicators to measure this target at global level. The first compares the distribution of positions in national and local institutions to the distribution of the population in each country, based on a number of demographic characteristics (including sex, age and disability status). Yet available data in the *SDG Global Database* refer only to gender (the gender ratio for members of national parliaments) and age (the ratio of members under age 45 in parliament). While no OECD country has reached age and gender parity based on these indicators, five of them can be considered as being close (i.e. Sweden, Finland, Norway, New Zealand and Belgium). Conversely, 14 OECD countries are considered as being far from target, with Slovenia, Hungary, Turkey, Japan and Korea being the furthest away. This report also includes a pilot index of diversity developed by the OECD as an additional measure (OECD, 2021[5]). This indicator captures the effort deployed by countries to develop a more diverse central government workforce.[12] As this indicator ranges from 0 (the worst possible outcome) to 1 (the best possible outcome), the target has been set at 0.97 to allow for some measurement error. Evidence from this indicator suggests that the United Kingdom is the only country that could be considered as being close to target, with a score above 0.75 (Figure 5.4). The outcomes vary significantly among other countries, with Poland, Japan, Luxembourg, Turkey, Slovenia, the Slovak Republic and Denmark being furthest from target (with scores below 0.40).

Figure 5.4. Diversity of the central government workforce (Pilot index) (Target 16.7)



Source: (OECD, 2020[8]), Public Service Leadership and Capability Survey, https://www.oecd.org/gov/pem/recommendation-on-public-service-leadership-and-capability.htm; (OECD, 2020[9]), Survey on the Composition of the Workforce in Central/Federal Governments, https://www.oecd.org/statistics/data-collection/publicgovernanceandregionaldevelopment.htm (accessed on 29 October 2021).

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Targets 16.8 aims to strengthen "the participation of developing countries in the institutions of global governance". It is monitored by the proportion of members and voting rights of developing countries in different international organisations. While this issue is key for the good functioning of international co-operation, the indicator is not relevant to judge OECD countries' performance.

Virtually all OECD countries provide a legal identity for all their citizens. Everyone has the right to be recognised as a person before the law, as enshrined in the Universal Declaration on Human Rights (Article 6) (UN General Assembly, 1948[10]). Target 16.9 calls on countries to provide "legal identity for all". While legal identity is defined as a credential, such as a birth certificate, identity card or digital identity credential that is recognised as proof of legal identity under national law, Target 16.9 is measured by the proportion of children under five years of age whose births have been registered with a civil authority (as a share of all children under age 5). The available data show that besides Colombia (96.8% of kids under age five had been registered) and Mexico (95%), all OECD countries already reach universal coverage (operationalised at 97%) based on this indicator.

At the global level, Target 16.10, which commits countries to "ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements", is monitored in the global indicator framework by two indicators. The first captures the number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention or torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months. So far, the *SDG Global Database* includes data for only seven world regions and at the world-level, which is insufficient to be used for this report. The second indicator is a binary measure ("yes" or "no") that indicates whether countries have adopted and implemented constitutional, statutory and/or policy guarantees for public access to information. All OECD countries have such guarantees in place.

Target 16.a calls on countries to "strengthen relevant national institutions, including through international co-operation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime". Overall, the IAEG-SDGs suggests monitoring this target with an index that measures a country's efforts to set up independent National Human Rights Institutions (NHRIs) in compliance with the Paris Principles.[13] While 24 OECD countries comply with the Paris Principles, five are

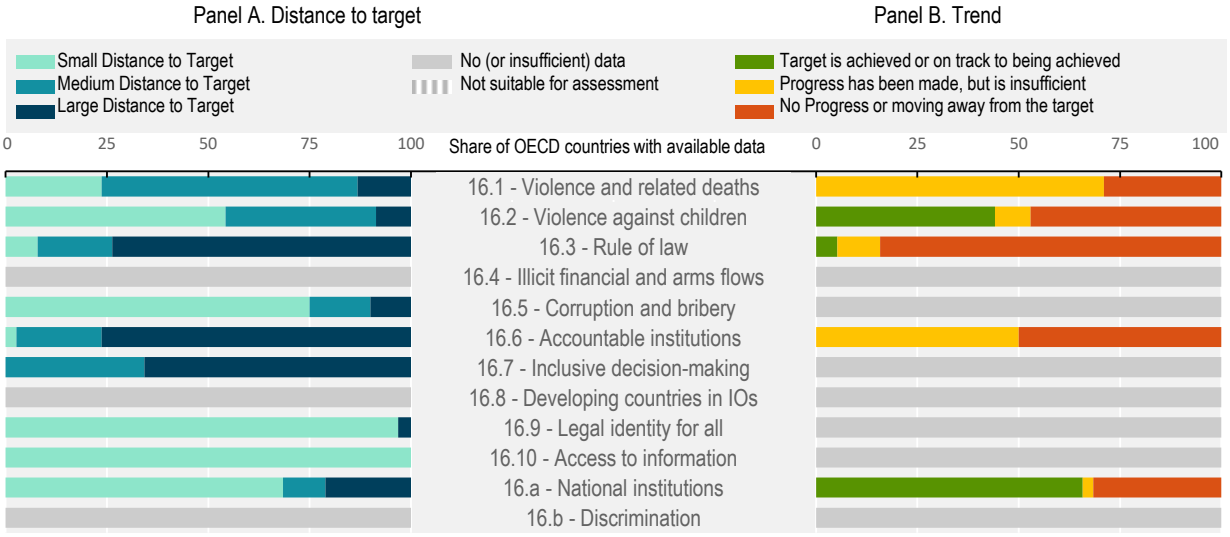
at a medium distance to target (i.e. NHRIs are not fully compliant with the Paris Principles) while nine are far from target (i.e. NHRIs are not compliant or have not applied for accreditation).

The available data do not allow properly tracking Target 16.b on discrimination ("promote and enforce non-discriminatory laws and policies for sustainable development"). According to the global indicator framework, this target should be monitored through an indicator on the "proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law", yet existing data from national surveys and compiled by the Office of the United Nations High Commissioner for Human Rights do not cover enough OECD countries on a comparable basis.

Summing up

Overall, Figure 5.5 shows that, despite some progress, few OECD countries will be able to meet even a handful of SDG targets for Goal 16. The available data for targets relating to safety and violence (Targets 16.1 and 16.2) and more broadly targets relating to social capital[14] (Targets 16.3 to 16.7) suggest that OECD countries are making progress (Figure 5.5, panel B). Yet the long distances to be travelled and the slow pace of progress suggest that, in the absence of additional measures, most OECD countries may not be able to reach their targets by 2030. Beyond measures of safety or social capital, Goal 16 also includes targets relating to basic human rights, such as having a legal identify (Target 16.9) or having access to information (Target 16.10), where virtually all OECD countries already meet their commitments.

Figure 5.5. Distance to targets and trends over time in OECD countries, by SDG target, Goal 16



Note: IOs refers to International Organisations. Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see the methodological annex for details.

Source: All data are taken and adapted from (UNDESA, 2021[2]), *SDG Global Database*, https://unstats.un.org/sdgs/unsdg and (OECD, 2021[3]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/p1m5qn

Impact of the COVID-19 pandemic on Goal 16

Data from a limited number of countries suggest that the effect of the COVID-19 pandemic on violent crime has been rather limited. Most countries will not publish comparable crime statistics until after the publication of this report, making it difficult to get an overall picture of the pandemic's impact on various crimes. However, evidence suggests that, with fewer people on the streets, there has been a decline in some types of criminal activities typically carried out in groups, outdoor crowds or otherwise empty homes (OECD, 2021[11]). Yet lockdowns, isolation, school closures and job losses during COVID-19 have also created fertile conditions for domestic abuse, and intimate partner violence against women and girls worldwide has increased since the pandemic outbreak (OECD, 2020[12]). The available data show very diverse trends (Table 5.2). In the United States, for instance, the FBI recorded a 14.8% increase in the number of murders and non-negligent manslaughter offenses during the lockdown (FBI, 2020[13]). Assault victimisations in New Zealand in 2020 also rose by 12.4% relative to the previous 12 months (New Zealand Police, 2021[14]). Mexico, meanwhile, recorded 3 000 homicides in March 2020, one of the highest monthly totals on record (UNODC, 2020[15]). On the other hand, homicide rates in early 2020 in European countries did not change much compared to pre-pandemic levels (or even decreased in the short term), and in Colombia the number of victims of homicides declined by one-third in April 2020 compared with the average level recorded for that month over the period 2015-2019 (though the number of victims had returned to the pre-COVID-19 baseline by June 2020) (UNODC, 2020[15]).

During the COVID-19 pandemic, many legal advice services that helped users to more effectively navigate the court system were affected by the lockdown measures. Providers of such services were not always equipped to operate virtually during the pandemic. However, many countries did manage the switch to digital means: Canada, Greece, Ireland, Israel, Italy, Latvia, Poland, Portugal, Romania, Slovenia, Spain, Switzerland, the United Kingdom and the United States, among others, carried out fully virtual court trials. In Mexico, mediators used videoconferencing software to conduct employment and civil mediations (OECD, 2021[5]). Therefore, while the pandemic's impact on access to justice (Target 16.3) may be largely negative in the short run, many OECD countries have been able to mitigate its effects.

The pandemic can also create environments that lead to higher corruption and bribery (OECD, 2020[16]). Some corruption risks arise immediately because of actions taken to mitigate the health and economic crisis: the financial stimulus and economic recovery measures taken by governments in the wake of the COVID-19 pandemic may also have heightened the risk of corruption and criminal offences (Csonka and Salazar, 2021[17]). Other risks may materialise only in the medium to long term as the consequences and impact of COVID-19 emergency measures take greater effect. Identifying and addressing corruption risks will be crucial to mitigate the impact of the pandemic on Target 16.5.

Emerging evidence suggests that many governments have operated with lower standards of consultation, transparency, oversight or control in their processes during COVID-19. Governments have mobilised extra resources and reduced spare capacity to provide the raw inputs (e.g. infrastructure, workforces or public funds) for their COVID-19 response. Government processes have then turned these inputs into the outputs citizens have needed, often at much greater speed and scale. Early evidence suggests that governments have innovated, changing their processes rapidly to deliver COVID-19 responses (OECD, 2021[5]). However, in several cases, the evidence also suggests that governments have lowered their operating standards to improve the scale and speed of their responses (the impact of the pandemic on Target 16.6 and 16.7 is thus categorised as negative in Table 5.2). While some relaxation of standards is inevitable during an emergency response, it is not always clear that this has been limited in time and scope, or planned in advance, nor that governments have clear plans for a return to normal, and/or are applying ex post controls such as evaluations (OECD, 2021[5]).

While it is difficult to have a sense of change in perceptions of discrimination in the very short term, there is some evidence suggesting that this has generally increased during the pandemic (Target 16.b). Since the start of the pandemic, the UN has documented a rise in discrimination, hate speech, social and economic exclusion, stigma and obstacles facing LGBTIQ+ people when it comes to accessing health care, education, employment and essential services (UN, 2021[18]). In addition, as stressed by the OECD (OECD, 2020[19]), many studies suggest that discrimination against migrants strongly increases in times of a slack labour market – first, employers are less likely to recruit migrants during economic downturns (Baert et al., 2015[20]), and second, migrants have fewer networks, while the importance of such networks increases when labour market conditions worsen (Behtoui, 2004[21]).

Table 5.2. Summary impact of the COVID-19 pandemic on Goal 16 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
16.1 – Violence and related deaths	mixed	none
16.2 – Violence against children	mixed	none
16.3 – Rule of law	mixed	none
16.4 – Illicit financial and arms flows		
16.5 – Corruption and bribery	negative	negative
16.6 – Accountable institutions	negative	
16.7 – Inclusive decision-making	negative	
16.8 – Developing countries in IOs	none	none
16.9 – Legal identity for all	none	none
16.10 – Access to information	none	none
16.a – National institutions	none	none
16.b – Discrimination	negative	

Note: * refers to targets with a 2020 deadline and IOs refers to International Organisations. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: “positive” if the COVID-19 pandemic has a favourable impact on the target, “negative“ if the COVID-19 pandemic has a deleterious impact on the target, “mixed“ if the impact on the target is different among countries or among the different dimensions of the target, “none” when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

Goal 17 – Partnerships for the goals

Goal 17 urges governments, international and non-governmental organisations, the private sector and civil society to team up to implement the SDG goals and targets. It stresses that, by working together, they can unlock the necessary financial resources, share technologies and create national capacities. On financial resources, the 2030 Agenda stresses that the financing for the sustainable development landscape is multifaceted. While tax revenue is the main long-term source to fund public expenditure, the 2030 Agenda suggests that it may not be enough for many developing countries. The available data show that the total official development assistance (ODA) provided by Development Assistance Committee (DAC) member countries in 2020, at 0.32% of their GNI, remained far from the target of 0.7% of GNI. Beyond the finance sub-goal, where the available data allow to measure the contribution of OECD countries to middle-income and least developed countries, the paucity of data prevent us from providing an exhaustive assessment of how OECD countries could foster development elsewhere in terms of the Technology, Capacity-Building and Trade sub-goals.

On the technology front, for instance, rather than focusing on co-operation on science, technology and innovation, the indicators featured in the global indicator framework focus on Internet access and use in individual countries, rather than on OECD countries' contributions to extend Internet access in developing countries. Beyond financial resources, technologies and national capacities, Goal 17 includes seven targets on "Systemic Issues" such as policy and institutional coherence, multi-stakeholder partnerships and data, monitoring and accountability. However, here as well, the lack of data hampers a comprehensive assessment of many of these targets.

The COVID-19 crisis is putting historic pressure on the financing for sustainable development landscape, spanning all sources of financing. The impact of the crisis may be less dramatic in terms of Technology, Capacity-Building and Trade when focusing on OECD countries. Yet, the primary objective of Goal 17 is to foster collaboration and support development beyond national borders. In many middle- and low-income countries, the consequences of the pandemic have been devastating. Partnerships with developing countries and development co-operation will be key to address the debt legacy of the crisis. On the technology front, for instance, while the COVID-19 crisis has spurred new practices in scientific communication as rapid sharing of data and scientific discoveries worldwide has become essential, stronger international efforts are needed to provide low-income countries with the resources needed to vaccinate their populations for their own and the world's benefit. In addition, while the pandemic may not have any direct impact on policy and institutional coherence, it has stressed even further how global co-operation and co-ordination remain essential (see Impact of the COVID-19 pandemic on Goal 17 section for further details).

Among the 17 goals of the 2030 Agenda, Goal 17 stands out for its unique features. While Goals 1 to 16 all focus on a specific thematic area such as quality education, poverty reduction or biodiversity, Goal 17 aims at supporting the implementation of the 2030 Agenda as a whole. Goal 17 is also supported by a greater number of targets than other goals – while there are, on average, around 10 targets supporting each goal, Goal 17 includes twice as many targets. For this reason (and as presented in the declaration endorsed by UN member states (UN, 2015[1])), the targets have been clustered in this section into five different areas: Finance (Targets 17.1 to 17.5), Technology (Targets 17.6 to 17.8), Capacity-building (Target 17.9), Trade (Targets 17.10 to 17.12) and Systemic Issues (Targets 17.13 to 17.19). Finally, from a measurement perspective, many targets are supported by indicators whose changes over time often lack a clear normative direction (i.e. whether more of it is better or worse). Therefore, many targets could not be properly assessed in this report despite data being available. For these reasons, the structure of this section is slightly different from others in this report; the section does not dive into the specific targets but rather discusses outcomes and data availability at the sub-goal level. This section is therefore more qualitative and less focused on OECD countries' actual distance to target and on changes in this distance over time.

Assessing OECD countries' performance on Goal 17

This report uses data from the *SDG Global Database* together with OECD sources. Yet the starting point always remains the global indicator framework, curated by the IAEG-SDGs. Table 5.3 shows that data allow the monitoring of seven of the 19 targets underpinning Goal 17. For this goal, two indicators sourced from the OECD are used to complement the *SDG Global Database*. As the OECD is the Custodian Agency for both indicators, they by definition align with the global indicator framework, but drawing from OECD databases allows timelier coverage[15] and encompasses a broader set of countries.[16] In addition to the indicators listed in the table, the UN database includes 27 additional data series that are considered to be mainly informative (e.g. total government revenue as a proportion of GDP or volume of remittances as a proportion of total GDP) in the context of Goal 17 (details and data for all indicators are available at https://www.oecd.org/wise/the-short-and-winding-road-to-2030-data-chapter-5-peace-and-partnerships.xlsx).

Table 5.3. Available data series supporting the monitoring of Goal 17

Indicator code	Indicator Label	Available over time	Primary source
17.2.1	Net official development assistance to developing and least developed countries as a percentage of GNI	Yes	OECD
17.2.1	Net official development assistance as a percentage of OECD-DAC donors' GNI	Yes	*SDG Global Database*
17.2.1	Net official development assistance to LDCs as a percentage of OECD-DAC donors' GNI	Yes	*SDG Global Database*
17.10.1	Worldwide weighted tariff-average, most-favoured-nation status	Yes	*SDG Global Database*
17.10.1	Worldwide weighted tariff-average, preferential status	Yes	*SDG Global Database*
17.12.1	Average tariff applied by developed countries, most-favoured nation status	Yes	*SDG Global Database*
17.12.1	Average tariff applied by developed countries, preferential status	Yes	*SDG Global Database*
17.15.1	Proportion of results indicators drawn from country-led results frameworks – data by provider	No	*SDG Global Database*
17.15.1	Extent of use of country-owned results frameworks and planning tools by providers of development co-operation - data by provider	No	*SDG Global Database*
17.15.1	Proportion of project objectives of new development interventions drawn from country-led result frameworks - data by provider	No	*SDG Global Database*
17.15.1	Proportion of results indicators which will be monitored using government sources and monitoring systems – data by provider	No	*SDG Global Database*
17.16.1	Progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals – data by provider	No	OECD
17.18.2	Countries with national statistical legislation exists that complies with the Fundamental Principles of Official Statistics	No	*SDG Global Database*
17.18.3	Countries with national statistical plans that are under implementation	No	*SDG Global Database*
17.18.3	Countries with national statistical plans with funding from government	No	*SDG Global Database*
17.18.3	Countries with national statistical plans that are fully funded	No	*SDG Global Database*
17.19.2	Countries with birth registration data that are at least 90 percent complete	No	*SDG Global Database*
17.19.2	Countries that have conducted at least one population and housing census in the last 10 years	No	*SDG Global Database*
17.19.2	Countries with death registration data that are at least 75 percent complete	No	*SDG Global Database*

Note: The OECD is the custodian agency for ODA-related measures. Therefore, even when the source is reported to be the *SDG Global Database*, the original data come from the OECD. Indicators in italic are not included in the global indicator framework but are used in this report to tailor the analysis to OECD countries.

Finance

The financing for the sustainable development landscape is multifaceted. It includes public, private, domestic and international resources as recognised by the Addis Ababa Action Agenda (AAAA) to finance the 2030 Agenda for Sustainable Development.

Tax revenue is the main long-term, viable source to fund public expenditure. It is therefore the first target (Target 17.1) in this goal. Tax revenues are the largest source of income to fund public expenditure in most developing countries. As stressed by the OECD (2020[22]), in 2017, countries eligible to receive official development assistance (ODA) collected USD 5.3 trillion in tax revenue, more than twice the amount of external inflows recorded in the same year.[17] Since the early 2000s, tax revenue as a share of GDP has increased in 92 of the 113 ODA-eligible countries considered, but pronounced differences remain across countries with different income levels and across world regions.

However, too many headwinds prevent developing countries from designing tax systems that protect their tax base whilst creating a transparent and predictable investment climate. OECD countries have played an important role in the expansion of international co-operation on tax matters since the 2008 global financial crisis. The OECD has provided a range of new tools and standards to address the challenges of cross-border taxation, including the Automatic Exchange of Information (AEOI) and the Base Erosion and Profit Shifting (BEPS) Actions. In October 2021, 137 members of the OECD/G20 Inclusive Framework on BEPS reached final agreement on a major reform of the international tax system, which will bring the international tax rules into the 21st century and will ensure that multinational enterprises will be subject to a minimum 15% tax rate from 2023 wherever they operate and generate profits. While a global minimum tax agreement does not eliminate tax competition, it puts a multilaterally agreed limit on it. To support developing countries seeking to implement or strengthen their regimes for addressing transfer pricing and other BEPS-related issues, the OECD developed specific programmes such as the Tax and Development Programme and the Tax Inspectors Without Borders initiative, a joint initiative with UNDP that provides hands-on assistance by sending experts to work together with auditors in the host administration on real-time cases.

ODA to support tax systems has increased modestly but remains small. The 2030 Agenda calls for international support to developing countries in their efforts to strengthen the mobilisation of domestic resources (Target 17.1). Twenty DAC members are also members of the Addis Tax Initiative, which committed to collectively double the development assistance to tax between 2015 and 2020. To help track this support, a purpose code for support to Domestic Revenue Mobilisation (DRM) was created in 2015 in the DAC Creditor Reporting System (CRS). This shows that while disbursements of ODA to DRM have increased by 49% between 2015-2019, this still represents just 0.23% of ODA (Table 5.4). A number of countries are also reviewing their policy on the tax treatment of ODA. While historically donors had required development partners to provide tax exemptions on ODA, several providers have responded to the commitment in the AAAA for providers of government-to-government aid to review their policies, especially on VAT and import duties (AAAA para 58). To track the position of ODA providers on ODA taxation, the OECD has established a transparency hub that DAC members can use to voluntarily share their policies and any other relevant information. The hub launched in January 2022 with information on 12 DAC members, covering over 50% of bilateral ODA.

Table 5.4. Official Development Assistance to Domestic Revenue Mobilisation (Target 17.1)

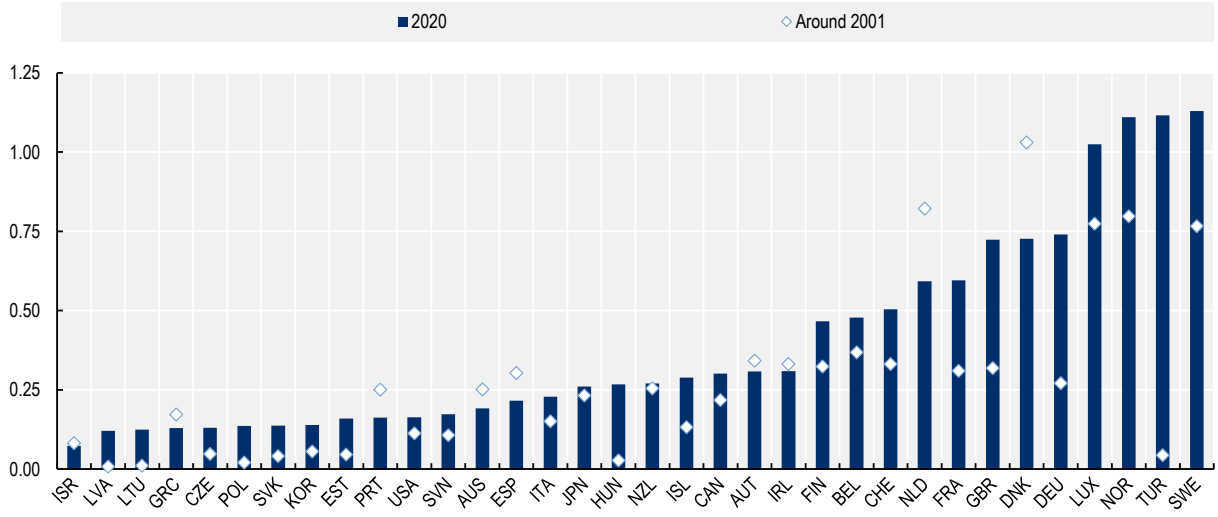
	ODA to DRM disbursements (USD millions - constant prices)	ODA to DRM % of total ODA
2015	178.25	0.16%
2016	341.41	0.28%
2017	202.78	0.17%
2018	254.22	0.22%
2019	265.73	0.23%

Source: (OECD, 2020[23]), "Creditor Reporting System: Aid activities (Edition 2020)", *OECD International Development Statistics* (database), https://doi.org/10.1787/7993c52e-en (accessed on 29 October 2021).

Tax revenues typically fall short of the needs of most developing countries. Therefore, the 2030 Agenda calls for mobilising other sources of external finance, including ODA (Target 17.2), foreign direct investment (FDI) and remittances (Target 17.3), loans (Target 17.4) and other types of foreign investment (Target 17.5). The total external finance received by low-income countries recovered from a sharp drop in 2015 to rise in 2018 to around USD 2 trillion (OECD, 2020[22]). However, these levels remained well below the peak attained in 2013, which was driven mainly by private investment inflows. In contrast to private investment inflows, which are typically volatile over time, the record of inflows of remittances to these countries has steadily increased since 2009 due to rising international migration and improvements in measuring these flows, which since 2016 have exceeded FDI as the largest source of external finance (OECD, 2020[22]). Yet as stressed in the Prosperity chapter, the high cost of sending remittances limits their full potential.

In 2020, total ODA provided by DAC member[18] countries reached 0.32% of GNI, less than half of the 0.7% target. Target 17.2 calls on "developed countries to fully implement their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries". This is the only target of this sub-goal that can be monitored properly. The available data cover most OECD countries, there are clear international benchmarks[19] and changes in the indicator have a clear normative direction (the higher the share of ODA in GNI, the better). In 2020, while only seven OECD countries met the 0.7% of GNI target (Denmark, Germany, Luxembourg, Norway, Sweden and the United Kingdom, as well as Turkey, which is not a DAC member), two additional countries (France and the Netherlands) spent more than 0.54% of their GNI on ODA, and can thus be considered as being close to target level (Figure 5.6). Conversely, 12 OECD countries are considered to be far from target, with ODA amounting to less than 0.22% of GNI. While this includes four OECD countries that are not DAC members (Estonia, Israel, Lithuania, Latvia), it also includes the Czech Republic, Korea, Poland, Portugal, the Slovak Republic, Slovenia and the United States,[20] which are members of DAC. In the long run, most OECD countries have increased the share of their GNI devoted to ODA (23 OECD countries out of the 34 for which data are available). Yet progress is often modest, and, based on recent trends, no additional country is expected to join the "club" of countries that meet or exceed the United Nations' ODA target of 0.7% of GNI by 2030.

Figure 5.6. Official Development Assistance as a share of Gross National Income (Target 17.2)



Note: Around 2001 refers to 2003 for Latvia, Lithuania and Hungary; 2004 for Estonia; 2005 for Slovenia; and 2001 for otherwise. Estonia, Israel and Turkey are not DAC members.
Source: (OECD, 2021[24]), "Net ODA" (indicator), https://doi.org/10.1787/33346549-en (accessed on 29 October 2021).

StatLink https://stat.link/pu4jcx

More generally, while the available data may not be timely enough to portray the current situation, as detailed in Impact of the COVID-19 pandemic on Goal 17, the COVID-19 outbreak has had dramatic consequences on finance in many developing countries. The pandemic and related containment measures led to a historic contraction in global GDP. Just a few months after the outbreak, 90 out of 122 developing countries entered recession as shutdowns hit key sectors like tourism and manufacturing. Millions of jobs were lost, and global trade declined, leaving the world's poorest and most vulnerable countries facing the greatest challenges, due to large informal sectors and a lack of social safety nets. In addition, many developing countries find themselves lacking the tools (such as large monetary and fiscal stimulus packages) deployed by OECD governments.

Technology

Every country needs science, technology and innovation (STI) to meet its own national SDG goals. STI capabilities are unevenly distributed across the globe. Some countries are resource-rich but knowledge-poor, whereas other countries have knowledge that is insufficiently connected to the industrial sector or actual societal needs. Three targets within Goal 17 directly relate to international co-operation on research and innovation. These include:

- Target 17.6, which calls to "enhance North-South, South-South and triangular regional and international co-operation on and access to STI and enhance knowledge-sharing on mutually agreed terms, including through improved co-ordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism";
- Target 17.7, on "promoting the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed"; and
- Target 17.8, which aims at "operationalising the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhancing the use of enabling technology, in particular information and communications technology".

Unfortunately, while targets 17.6 to 17.8 focus on co-operation in STI and technology transfers, the available data do not allow to capture these dimensions of the 2030 Agenda. Target 17.7 is the only one to be supported by an indicator that aims to address the issue through a measure of the "total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies". Yet no data on this indicator are available in the UN database.

Rather than focusing on STI co-operation, Targets 17.6 and 17.8 are monitored through data on Internet access and use. Target 17.6 is measured through an indicator of "fixed Internet broadband subscriptions per 100 inhabitants"[21] (Target 17.6). Beyond access to the Internet, Target 17.8 refers to the actual use of the Internet (whether relying on fixed or mobile broadband networks). Despite the persistent connectivity divides that occur in many OECD countries (see Prosperity chapter), the primary objective of these STI targets is to enhance the contribution of the many stakeholders in development co-operation to extend Internet coverage in poorer countries. Unfortunately, among existing SDG frameworks, no data currently allow to assess the role of international co-operation in general, and of OECD countries in particular, in extending Internet coverage in poorer countries – for further details on digital transformation in low- and middle-income countries see (OECD, 2021[25]).

Capacity-building

Target 17.9 aims at "enhancing international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular co-operation"). It is monitored by an indicator on the "dollar value of financial and technical assistance (including through North-South, South-South and triangular co-operation) committed to developing countries" but is operationalised through data on the total official development assistance for technical co-operation. Yet, as mentioned for other aid-related targets, the best sectoral breakdown of ODA depends on the needs of each recipient and the priorities of each donor (if total ODA is kept constant, an increase in one specific area would imply a reduction in other areas of ODA). Therefore, Target 17.9 is considered as informative, but it is not used in this report to benchmark countries' performance. According to OECD data, total Official Development Assistance for capacity-building and national planning stood at USD 35.9 billion in 2019, a level that has been stable since 2010 and that represents 14% of the aid that could be allocated to different sectors. The main sectors assisted by ODA were energy policy, public administration and the financial sector, which received a total of USD 13.8 billion. Within that total, sub-Saharan Africa received USD 7.1 billion, Latin America and the Caribbean received USD 5.9 billion and Southern Asia USD 4.4 billion.

Trade

Trade and market openness drive GDP growth and economic opportunities worldwide, but also impact economies and societies throughout the global value chain (GVC). On the one hand, foreign trade and GDP growth have historically gone hand-in-hand, with better economic performance in more open countries at all levels of development, creating opportunities for workers, consumers and firms around the globe and helping to lift millions out of poverty (OECD, 2021[26]). Relatively open economies grow faster than relatively closed ones, and salaries and working conditions are generally better in companies that trade than in those that do not (OECD, 2021[26]). More prosperity and opportunity around the world also promote greater stability and security for everyone. In turn, economies that grow through foreign trade also experience higher domestic demand, which rely on local resources that can include produced and natural capital, as well as labour, human and social capital. Because of these links, the use of imported goods and services in one country can affect other countries through job creation or displacement, employment conditions (whether for better or worse than local alternatives), depletion of natural resources, investment in produced capital, and other economic and social impacts (Ino, Murtin and Shinwell, 2021[27]). In addition, while trade helps to reallocate resources, losses can be sharp and concentrated on some sectors and individuals. So as well as ensuring that people are able to take

advantage of opportunities from trade and technology, governments must also find ways to help those facing difficult adjustments (OECD, 2021[26]).

While economies are increasingly interdependent due to GVCs, trade flows can also influence wage inequality. Evidence of this effect is often mixed and inconclusive, with some analyses suggesting relatively small effects in lowering wage inequality for low-skilled segments of the labour force (Lopez Gonzalez, Kowalski and Achard, 2015[28]). The impact of trade openness on the population depends on both domestic institutions and the economy's capacity to take advantage of the opportunities created and to distribute equitably the benefits associated to trade. For example, high reliance on exports of natural resources coupled with weak institutions can result in a "resource curse", leading to poorer outcomes relative to countries at the same level of development but with fewer natural resources (Havro and Santiso, 2008[29]).

Targets 17.10 to 17.12 of the 2030 Agenda aims to promote trade while making sure it benefits everyone:

- Target 17.10 aims at "Promoting a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda";
- Target 17.11 is about "Significantly increasing the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020";
- Target 17.12 focuses on "Realising timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access".

The paucity of data prevents an exhaustive assessment of the Trade segment of Goal 17. Target 17.10 is measured through the "worldwide weighted tariff-average" (available for both most-favoured-nation status and for the preferential status). At global level, evidence suggests that overall tariff rates have remained unchanged in recent years, although some slight reductions have occurred in sectors such as clothing and textile (UN, 2021[30]). Using the OECD distribution of outcomes on average tariffs in 2015, the target level for this indicator has been set at 1.14% for countries benefitting from most-favoured-nation status, and at 0.69% for those with preferential status (i.e. the level observed in EU countries). In 2019, despite a (small) increase, all EU countries as well as Switzerland and Iceland were close to the target level for both measures. At the other end of the spectrum, three OECD countries (Turkey, Colombia and Korea) were still far from the target for both measures (with the worldwide weighted tariff-average ranging from 4.5% to more than 9% for most-favoured-nation countries, and from 2.5% to 5.2% for countries having preferential status).

Target 17.11 is monitored through an indicator on "developing countries' and least developed countries' (LDC) share of global exports". This indicator, however, cannot be used as a measure of performance for individual OECD countries. While valuable and informative, the share of global exports is assessed only at regional level and not for individual countries. The LDCs' share of world merchandise exports has been stagnating (at 1% in 2019) for almost a decade (after significant gains in the previous decade). Therefore, "doubling the share of global LDC exports" by 2020 is already out of reach. The group of the developing countries as a whole also experienced a similar trend, with an increase in the share in world merchandise exports between 2001 to 2012, and stability (at around 45%) thereafter (UN, 2021[30]).

The tariff treatment provided by OECD countries to exports from developing and least developed countries has remained unchanged in recent years. Target 17.12 is monitored by two indicators of the (weighted) average tariffs faced by developing countries,[22] least developed countries and Small Island Developing States: one for those countries that benefit from a preferential status, and the other for those countries having the status of "most favoured nation".[23] As no ideal target can be set, the level to be achieved is defined using the observed OECD distribution of scores in 2015. In 2019, Turkey and New

Zealand were the only countries reporting much higher average tariffs against the two groups of countries than the main bulk of OECD countries (while Australia and Greece reported higher tariffs for only one of the two measures).

Systemic issues

Beyond unlocking the necessary financial resources (see Finance), sharing technologies (see Technology) and supporting the creation of national capacities in developing countries (see Capacity-building and Trade), Goal 17 includes seven targets (from Targets 17.13 to 17.19) on "Systemic Issues". While most of the previous targets focused on the transboundary actions that OECD countries could carry out to support development outcomes elsewhere (Ino, Murtin and Shinwell, 2021[27]), this set of targets also includes domestic actions that each country would need to achieve within its borders. These targets are clustered by the UN into three main areas: Policy and institutional coherence (Targets 17.13 to 17.15), Multi-stakeholder partnerships (Targets 17.16 and 17.17), and Data, monitoring and accountability (Targets 17.18 and 17.19).

Policy and institutional coherence

Implementing the 2030 Agenda calls for co-ordinated policies at all levels of government. Unfortunately, data are still missing to assess the extent to which different national institutions and policies are contributing to the attainment of the goals and targets of the 2030 Agenda in a coherent way. Ensuring coherence across the different ministries and agencies (including coherences across different levels of governments), identifying and managing trade-offs, as well as seeking out and optimising synergies are all essential for making sure that progress on one SDG does not undermine progress on another. The 2030 Agenda includes three targets to track this issue:

- Target 17.13 on "enhancing global macroeconomic stability, including through policy co-ordination and policy coherence";
- Target 17.14 on "enhancing policy coherence for sustainable development"; and
- Target 17.15 on "respecting each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development".

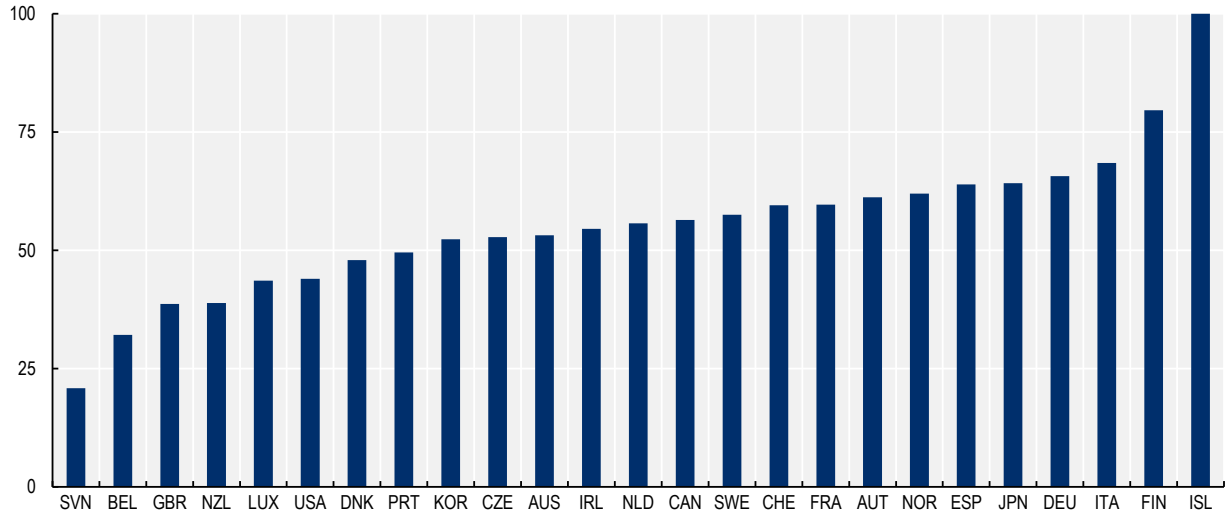
Policy and institutional coherence start with macroeconomic stability, but the *SDG Global Database* lacks relevant data. To monitor Target 17.13 at the global level, the World Bank has developed a Macroeconomic dashboard that includes a range of macroeconomic indicators covering the external, financial, fiscal and non-financial sectors. While the dashboard should build on existing macroeconomic monitoring frameworks developed and used by international and regional agencies, such as the IMF, the WB, the ECB and the OECD, so far, no data have been included in the *SDG Global Database*.

While the degree of policy and institutional coherence deployed by countries in their pursuit of the SDGs may be measured through ad hoc indices, data are very limited to assess the implementation of Target 17.14. In 2020, UNEP launched, in collaboration with the OECD, a global data collection to compute an indicator measuring the extent to which "existing governance structures, processes, systems are conducive to improvements in policy coherence for sustainable development". Unfortunately, so far only 27 countries have responded to the questionnaire, and no data are included in the UN database. The OECD has issued recommendations and tools to support countries in enhancing "policy coherence for sustainable development" (PCSD), and it is developing a methodological framework together with a set of indicators to help countries monitor their progress in this area, in line with the OECD Council Recommendation on PCSD. Indicators are planned to capture institutional mechanisms (process) in line with the global methodology, policy interactions (i.e. linkages between economic, social and environmental values in terms of synergies and trade-offs) and policy impacts (i.e. transboundary impacts). This work will

be supported through data collected by a baseline survey for Adherents to the OECD recommendation, which will be circulated by early 2022.

Target 17.15 emphasises that development interventions by providers of development co-operation from OECD countries need to be coherent with results frameworks owned by partner (recipient) countries. **Yet according to available data, besides Iceland and to a lesser extent Finland, no OECD country is extensively using results frameworks[24] and planning tools owned by partner (recipient) countries.** According to the global indicator framework, Target 17.15 should be assessed through an index informing on the "extent of use of country-owned results frameworks and planning tools by providers of development co-operation".[25] The index assesses the degree to which providers of development co-operation (i.e. development partners) design their interventions by relying on the objectives and indicators that are drawn from country government-owned results frameworks, reflecting the country's development priorities and goals (OECD/UNDP, 2019[31]).[26] By construction, the index ranges from 0 (worst possible score) to 100 (best possible score), which is therefore a natural target for this indicator. Yet to allow for possible measurement error, the target is considered to be attained in this report if the score is greater than 97. In 2018, Iceland and Finland were the only countries with scores above 75 (Figure 5.7). Using this report's methodology to gauge the distance to targets (see Box 1.1), only two OECD countries cannot be considered as far from the target (or having already achieved it). The OECD conducted extensive research to explore ways for OECD countries and partner countries to use the SDGs as a common results framework – thereby progressing towards target 17.15 – and built on this research to provide recommendations for policy makers in November 2021 (OECD, 2021[32]).

Figure 5.7. Extent of use of country-owned results frameworks and planning tools by providers of development co-operation, 2018 (Target 17.15)



Source: (OECD/UNDP, 2019[31]), *Making Development Co-operation More Effective: 2019 Progress Report*, OECD Publishing, Paris, https://doi.org/10.1787/26f2638f-en.

StatLink https://stat.link/68j54g

Multi-stakeholder partnerships

Multilateral co-operation has grown rapidly in the past 70 years and has achieved many outstanding successes, including the eradication of serious diseases, the reversal of the erosion of the ozone layer and the liberalisation of world trade (UN, 2018[33]). In recent years, however, multilateralism has also faced challenges. For instance, it has been argued that countries have been too slow to provide new multilateral

responses to emerging issues, that it has not been effective in ensuring that all parties play by the rules, and that the voices of different parties in multilateral processes have not been consistent with their importance in the global system (OECD, 2018[34]). In particular, current multilateral settings have fallen short of integrating large emerging economies that have been gaining importance in the global economy. Multilateral processes have also been seen as ineffective in ensuring that the benefits of globalisation are widely shared (OECD, 2018[34]). The 2030 Agenda includes two targets reflecting these concerns:

- Target 17.16 on "enhancing the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries"; and
- Target 17.17 on "encouraging and promoting effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships".

Multilateralism can help to shape global flows and promote an open, level and well-governed playing field as well as to improve the management of "global goods" (OECD, 2018[34])**. Unfortunately, relevant data that would allow measuring the actual success of multilateralism on these terms are very limited.** The IAEG-SDGs proposed to support targets 17.16 and 17.17 by one indicator each. The first target (Target 17.16) is to be assessed through a binary measure assessing whether countries are reporting progress in multi-stakeholder development frameworks that support the achievement of the sustainable development goals.[27] This indicator shows that only 16 OECD countries (out of 29 with available data) are reporting progress on such multi-stakeholder development frameworks. The second target (Target 17.17) is monitored by the amount in US dollars committed by countries to support public-private partnerships for developing new infrastructure.[28] Unfortunately, this measure could not be included in this report due to lack of data (data for OECD countries are available only for Colombia, Costa Rica, Mexico and Turkey).

Regarding Target 17.17 on "encouraging and promoting effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships", it is worth noting nonetheless that DAC members marked a historic milestone by adopting the OECD DAC Recommendation on Enabling Civil Society in Development Co-operation and Humanitarian Assistance – the first international standard focused on the actions of donors that is specific to enabling civil society as a partner and contributor to the 2030 Agenda and its pledge to leave no one behind. The Recommendation indicates a strong political commitment to strengthen partnerships with CSOs and civil society more generally to maximise their contribution to the SDGs' achievement, both as independent development actors in their own right and as implementing partners.

Data, monitoring and accountability

The 2030 Agenda is a political commitment from all UN member states, but it is also an unprecedented statistical challenge. Therefore the last two targets under Goal 17 (Targets 17.18 and 17.19) aim to foster the development of more and better data:

- Target 17.18 on "enhancing capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national context" by 2020; and
- Target 17.19 on "developing measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries" building on existing initiatives.

At the global level, the IAEG-SDGs suggested to monitor Target 17.18 with three indicators: a composite measure of statistical capacity (Indicator 17.18.1); a binary measure of the extent to which national statistical legislation complies with the Fundamental Principles of Official Statistics[29] (Indicator 17.18.2); and a set of measures assessing the extent to which national statistical plans are funded and implemented (Indicator 17.18.3).

While comparable measures of statistical capacity are not available for OECD countries, all of them report very high statistical standards. In 2020, all OECD member states reported having national statistical legislation that was compliant with the United Nations Fundamental Principles of Official Statistics.[30] Statistical legislation that complies with the Fundamental Principles of Official Statistics can help NSOs to strengthen the public's trust in official statistics. It provides a legal basis for NSOs' independence and funding security and ensures that the NSO follows strict international standards in transparency, methodology, procedure and ethics. In addition, available data collected by PARIS21 suggests that national statistical plans are fully funded in the vast majority of OECD countries (with the possible exceptions of Luxembourg, Chile, Korea, Iceland and Colombia). Besides Iceland, all OECD countries declared having a national statistical plan under implementation.

Target 17.19 has two main dimensions: the support to statistical capacity (measured through the dollar value of all resources made available to strengthen statistical capacity in developing countries) and statistical capacity in place to go beyond GDP (measured by the extent to which countries have conducted at least one population and housing census in the last 10 years, have achieved 100% birth registration and 80% death registration). Yet, as mentioned already, Target 17.2 on total ODA is the only aid-related target monitored in this report, while the ideal sectoral breakdown of ODA is assumed to depend on the needs of each recipient and the priorities of each donor. Therefore, the first dimension of Target 17.19 cannot be assessed in this report. Still, as noted by PARIS21 (2021[35]), since the adoption of the SDGs, the funding to data and statistics has increased at a slow but steady speed, from USD 591 million in 2015 to USD 693 million in 2018. Despite the progress made, the most recent estimates indicate that funding on support to statistics did not increase in 2019, while the COVID-19-related disruption to the normal funding flow has brought much uncertainty for 2020 and onwards – despite persisting critical needs.

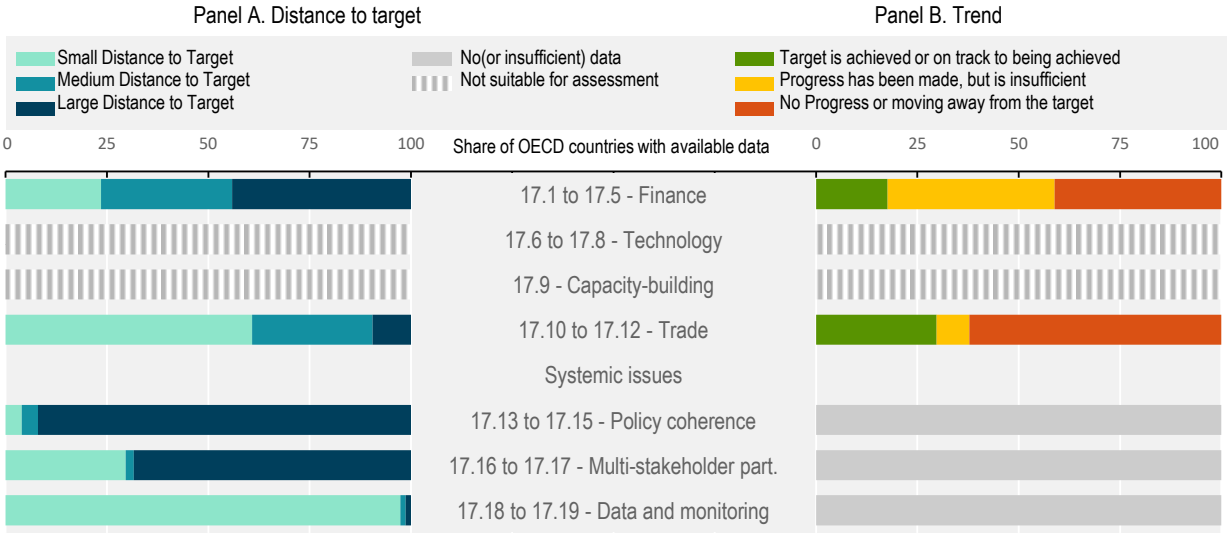
The other dimension of Target 17.19 ("developing measurements of progress on sustainable development that complement gross domestic product") is not a challenge for OECD countries when assessed based on the global indicator framework: all but one (Colombia) have already achieved universal coverage of vital statistics thanks to exhaustive civil registration systems. Yet even though most OECD countries are adopting multidimensional approaches to measure well-being beyond GDP, most of these initiatives are recent, and institutional support remains vital to ensure the durability of these programmes (Exton and Shinwell, 2018[36]).

Summing up

Overall, OECD countries show a very mixed picture when it comes to Goal 17 (Figure 5.8). Using the most recent observations suggests that OECD countries are far from their commitments in many areas. Figure 5.8, panel A, shows that about half of them are far from providing significant financial support to developing countries. In addition, while many of the countries have increased their financial support, only one in six is expected to meet or exceed their commitment by 2030 (Figure 5.8, panel B). Beyond Finance, available data do not allow a proper assessment of whether OECD countries are able to foster development elsewhere through Technology and Capacity-Building. On Trade, the situation is more positive, with only one in 10 OECD countries considered to be far from target. Beyond unlocking the necessary financial resources, sharing technologies and supporting the creation of national capacities in developing countries, Goal 17 includes targets on "Systemic Issues". On this front, though, as detailed above, the paucity of data prevents providing an exhaustive assessment. For instance, while almost all OECD countries are considered to be close to the target on Data and Monitoring, this is also because of the low level of ambition of the indicators supporting this area. The OECD Recommendation on Good

Statistical Practice (OECD, 2019[37]) is the first and only OECD legal instrument concerning statistics. It represents both a key reference for assessing and benchmarking national statistical systems and a detailed blueprint to establish a sound and credible national statistical system. It complements existing international standards, such as the UN Fundamental Principles of Official Statistics and the European Statistics Code of Practice (revised edition 2017), and provides a key reference that reflects the fact that the quality of statistics is fundamental to the quality of the OECD's evidence-based analytical work. Adherence to the Recommendation is open to non-Members. In 2020, the OECD released a report on the implementation of the Recommendation, which concludes that Adherent countries achieved significant progress in implementing the Recommendation since its adoption in 2015.

Figure 5.8. Distance to targets and trends over time in OECD countries, by SDG target, Goal 17



Note: Panel A shows the distribution of OECD countries in terms of the distance that they need to travel to reach each SDG target. Distances are measured in standardised units (s.u.) – see the methodological annex for details. Countries' distances, based on the level of the indicators in the most recent available observation, have been grouped into three clusters: small distances (i.e. less than 0.5 s.u.), shown in light blue; medium distances (from more than 0.5 s.u. to 1.5 s.u.), shown in medium blue; and large distances (i.e. more than 1.5 s.u.), shown in dark blue. Panel B shows the distribution of OECD countries in terms of recent changes in their indicators for each target. Countries' progress, based on changes in the indicators over recent years, are grouped into three clusters: those whose recent pace of progress should be sufficient to meet the target by 2030, shown in green; those whose recent progress should be insufficient to meet the target by 2030, shown in orange; and those whose recent performance has been stagnating or moving further away from the 2030 target, shown in red – see the methodological annex for details. The figure also highlights targets with no data to assess either their current distance or their pace of progress (shown in grey). Time series are considered as missing when there are two or fewer data points for each country; indicators are considered as missing when they are unavailable for 20 OECD countries or more, or for less than three world regions – see methodological annex for details.
Source: All data are taken and adapted from (UNDESA, 2021[2]), *SDG Global Database,* https://unstats.un.org/sdgs/unsdg and (OECD, 2021[3]), *OECD.Stat*, https://stats.oecd.org/ (accessed on 29 October 2021).

StatLink https://stat.link/o3e48x

Impact of the COVID-19 pandemic on Goal 17

Finance

The financing for the sustainable development landscape is facing historic pressures following the outbreak of the COVID-19 pandemic, with a collapse in external private finance that exceeded that experienced after the global financial crisis of 2008-09. All public, private, domestic and international resources have been impacted to varying degrees, confronting developing countries with huge financial challenges as they deploy their emergency responses to the COVID-19 crisis (OECD, 2020[22]). A

combination of domestic and external factors related to the COVID-19 pandemic has put pressure on all sources of financing. Early estimates and projections suggest that inflows of remittances and external private investment to ODA-eligible developing economies could decline by around USD 700 billion in 2020 from the previous year. This would exceed the 2008 drop observed during the global financial crisis by 60% in real terms. Tax revenue could also decline as economies contract and governments introduce tax relief measures in the short and medium term (OECD, 2020[22]).

As the data demonstrates, the COVID-19 crisis has increased the financing gap for the SDGs at a time when ODA alone was already failing to deliver the 2030 Agenda. Consequently, effective mobilisation of the private sector is needed to raise overall financial resources and meet the SDG gap, currently estimated to be USD 3.7 trillion (OECD, 2020[38]). Investment strategies like blended finance, which the OECD Development Assistance Committee (DAC) defines as using development finance to help mobilise additional finance from commercial sources, are critical to leveraging the multifaceted power of the development finance landscape. Policy recommendations to help achieve scale, outlined in a recent OECD report (OECD, 2021[39]), include policy instruments such as debt issuance through Green, Social and Sustainability Bonds, guarantees, and risk transfer mechanisms. Most importantly, implementation of effective impact management should support assurances that policies are tied to a clear development mandate.

Therefore, many middle- and low-income countries may face high debt burdens for years. The fiscal response to COVID-19 was on average seven times smaller in low-income countries than in advanced economies, resulting in the public debt-ratio increasing by 20 to 30 percentage points of GDP (Ahmad and Carey, 2021[40]). Analysing debt vulnerability across 120 low- and middle-income economies to identify which are most at risk, the UNDP classified 72 economies as “vulnerable”, of which 19 are “severely vulnerable”. Based on measures of sustainable debt thresholds and ratios, the report concluded that these countries are likely to be highly vulnerable to debt for years, not returning to pre-pandemic levels before 2024-2025 (UNDP, 2021[41]).

Technology

To date, vaccines have been delivered mainly to high-income countries, many of which have purchased quantities sufficient to immunise their population several times over, while others, particularly those dependent on multilateral initiatives for vaccine access, remain in short supply (OECD, 2021[42]). The pandemic has raised some of the most controversial discussions ever to occur at the World Trade Organisation, concerning a patent waiver on COVID-19 vaccines and treatments during the pandemic. While making patent information, patent pools or compulsory licensing available does not necessarily deliver long-term results because these steps are not usually sufficient to reproduce the technology, this debate raises the question of international technology transfer to developing countries, especially in times of crisis. With just 3.1% of the population in the Least Developed Countries having received at least one dose of a COVID-19 vaccine as of June 2021, stronger international efforts are needed to provide low-income countries with the resources needed to vaccinate their populations for their own and the world’s benefit. This includes vaccine supply and assistance to help overcome domestic logistical hurdles to vaccine deployment (OECD, 2021[43]).

Conversely, the COVID-19 crisis has spurred new practices in scientific communication, as the rapid sharing of data and scientific discoveries worldwide has become essential. Some traditional constraints to technology transfers have been lifted or relaxed during the pandemic to accelerate the publication and dissemination of scientific results relevant to the pandemic. Pre-prints, i.e. academic papers that have not been peer reviewed, have become more common, allowing for faster diffusion of scientific findings, but also raising risks around quality. This in turn raises questions as to the functioning of peer review, its importance and its limitations. More than three-quarters of all COVID-19 publications

are open access, compared to less than one-half in other biomedical fields. These developments could accelerate the transition to a more open science in the longer run (OECD, 2021[44]).

Capacity-building

Target 17.9, which focuses on capacity-building, is to be assessed through data on the level of financial and technical assistance committed to developing countries. According to preliminary data collected by the OECD, ODA reached its highest level ever in 2020 due in part to support for the COVID-19 crisis (OECD, 2021[45]). Many DAC members indicated that they would protect ODA budgets in 2020, and several have indicated they would maintain or increase them in 2021. Yet detailed data for 2020 were not available at the time of preparing this publication, hence the impact of the COVID-19 pandemic on sectoral ODA remains unknown.

Trade

Since the outbreak of the COVID-19 pandemic, most OECD countries have implemented trade and trade-related measures. WTO estimated that, among G20 countries, around two-thirds of these measures had a trade-facilitating nature while one-third could be considered as trade restrictive (WTO, 2021[46]). Several of these measures, originally introduced in immediate response to the pandemic, have been extended in 2021. The reduction or elimination of import tariffs and import taxes make up 60% of the trade-facilitating measures taken. Several G20 economies have reduced their tariffs on a variety of goods, such as Personal Protective Equipment (e.g. face masks), sanitizers, disinfectants, medical equipment and medicine/drugs. Many OECD countries have also temporarily eliminated their import tariffs on COVID-19 vaccines (these include the European Union, Japan, Korea, Mexico, the United Kingdom and the United States). In addition, some countries eliminated, suspended, or waived the payment of other taxes and/or duties or deferred the payment of tariffs and other taxes on all imported products (WTO, 2021[47]).

Systemic issues

The COVID-19 pandemic may not have any direct impact on policy and institutional coherence. On the contrary, planning the recovery requires cross-sectoral actions and mechanisms to manage unavoidable trade-offs between short-term and long-term priorities, and between economic, social and environmental policy goals – which would all enhance institutional coherence. The COVID-19 crisis underlines the need to pay greater attention to the impact that domestic actions have not just on the country in which they occur, but on others who are affected by the policy choices (OECD/EC-JRC, 2021[48]). In short, a policy coherence roadmap is needed to strengthen the mechanisms for ensuring a sustainable recovery from the COVID-19 crisis that does not come at the expense of progress towards the SDGs (OECD, 2020[49]).

Global co-operation and co-ordination remain essential to address the global health crisis and steer the recovery. However, many countries' initial policy responses to the pandemic were not co-ordinated internationally and have exposed weaknesses in current co-operation. While justified to account for different national realities and various stages of the pandemic, differences in approaches may also stem from inadequate consideration for the international environment and result in ineffective policy intervention, delays (and even shortages) in access to essential goods and higher administrative costs (OECD, 2020[50]). At national level, while stimulus-and-recovery plans provide an opportunity to foster growth and employment, policy co-ordination will be key to tackle long-standing challenges in OECD economies such as low GDP growth and stagnating productivity as well as shortcomings in inclusiveness and sustainability.[31]

Setting policies to foster a sustainable and inclusive recovery requires statistical infrastructure that provides timely and disaggregated information. The COVID-19 pandemic has therefore highlighted even further the vital role of official statistics as a tool for governments to design and target

policy responses. The COVID-19 crisis has had a significant impact on the compilation and dissemination of official statistics. Lockdowns in many countries and teleworking have affected the ways surveys and censuses are carried out. The rush to meet new information needs, and the difficulty of data collection in a pandemic, have posed new challenges for data quality. This has placed a premium on the high-quality, high-frequency, large-sample data collections that are typical of some economic indicators, but rare in the case of social, relational and environmental outcomes. Some national statistical offices in the OECD area have responded with significant innovations, ranging from high-frequency household "pulse" surveys to new Internet-based surveys and experimental time-use surveys (OECD, 2021[11]).

Table 5.5. Summary impact of the COVID-19 pandemic on Goal 17 in OECD countries

	Short-term impact of the pandemic	Long-term impact of the pandemic
17.1 to 17.5 – Finance	negative	
17.6 to 17.8 – Technology	positive	positive
17.9 – Capacity-building		
17.10 to 17.12 – Trade	positive	
Systemic issues:		
17.13 to 17.15 – Policy coherence	none	none
17.16 to 17.17 – Multi-stakeholder participation	negative	
17.18 to 17.19 – Data and monitoring	mixed	mixed

Note: * refers to targets with a 2020 deadline. The table summarises the likely impact of the pandemic in the short-run (i.e. one to two years after the pandemic hit) and in the long-run (i.e. by 2030) on SDG targets. The overall impact is characterised through five distinct categories: "positive" if the COVID-19 pandemic has a favourable impact on the target, "negative" if the COVID-19 pandemic has a deleterious impact on the target, "mixed" if the impact on the target is different among countries or among the different dimensions of the target, "none" when it is not expected that the COVID-19 pandemic will have an impact, and the cell is left blank when data are not available or when available studies do not allow firm conclusions. Those findings reflect OECD work on the impact of the pandemic (see https://www.oecd.org/coronavirus) as well as work conducted by other international organisations and academia.

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Notes

[1] The preamble of the 2030 Agenda says that the agenda is "a plan of action for People, Planet and Prosperity [that] also seeks to strengthen universal Peace [with] all countries and all stakeholders, acting in collaborative Partnership". Yet no official mapping between the 5Ps and goals and targets of the 2030 Agenda has been endorsed by the United Nations. The mapping of goals and targets into the five "Ps" used in this report was first proposed by the United Nations (UNESCWA, 2018[51]), but it should not be considered as binding, as the SDGs are integrated and indivisible and some goals might relate to more than one P.

[2] The aggregation of countries' performances at the goal level attributes equal weights to all data series measuring the same SDG indicator as well as equal weights to all the indicators measuring the same target. The OECD average refers to the unweighted average of the performance of Member countries.

[3] In the *SDG Global Database*, 16.1.4 is available up to 2018 and is on average available for two points in time, whereas in OECD databases data are available up to 2020 and for the past 15 years.

[4] In the *SDG Global database*, 16.1.1 is derived from two separate and independent sources at national level: the criminal justice and public health/civil registration systems. While there is (usually) a good level of matching between the sources (UNODC Global Study on Homicide, (2013[52])), this may hamper the comparability over time or between countries. Conversely, using OECD data enables preservation of strict comparability.

[5] Homicide data are produced by two separate and independent sources at national level: the criminal justice and public health/civil registration systems. Data series from the *SDG Global Database* may be relying on both sources. The additional OECD indicators rely only on data on homicides produced by public health authorities and guided by the International classification of diseases (ICD-10), which provides a definition of "Death by assault" that is very close to the definition of intentional homicide of the International Classification of *Crime* for Statistical Purposes (ICCS) and which has been age-adjusted to allow comparison among OECD countries.

[6] When comparing the most recent years available, homicide rates are very close (the average distance between the data series is below 1 cases per 100 000 population), and the cross-country correlation is above 0.95.

[7] The lack of data significantly hampers the assessment. The IAEG-SDGs suggested that the police reporting rate should cover physical assault, sexual assault and robbery. Yet current data are available only for the latter offence and for a few countries only, and they are not up-to-date. Data are available for 22 OECD countries in the case of reporting robbery, and for eight OECD countries (Canada, Denmark, the Czech Republic, Luxembourg, the Netherlands, Poland, Costa Rica and Estonia) for assaults, with the latest year available ranging from 2009 to 2014.

[8] "Sentenced" detainees refers to persons subject to criminal proceedings who have received a decision from a competent authority regarding their conviction or acquittal. For the purposes of computing this indicator, persons who have received a "non-final" decision (such as when a conviction is subject to appeal) are considered to be "sentenced". Therefore, the indicator aims at tracking the overall respect for the principle that persons awaiting trial shall not be detained in custody unnecessarily.

[9] The civil justice index is a composite measure encompassing seven dimensions: 7.1 People can access and afford civil justice; 7.2 Civil justice is free of discrimination; 7.3 Civil justice is free of corruption; 7.4 Civil justice is free of improper government influence; 7.5 Civil justice is not subject to unreasonable delay; 7.6 Civil justice is effectively enforced; and 7.7 Alternative dispute resolution mechanisms are accessible, impartial and effective. Data are sourced from household and expert surveys. For more information, see https://worldjusticeproject.org/our-work/wjp-rule-law-index.

[10] For further details on bribery and corruption, it should be noted that, since 1994, the OECD Working Group on Bribery in International Business Transactions has monitored the implementation and enforcement of the OECD Anti-Bribery Convention (and the 2009 Anti-Bribery Recommendation and related instruments) and publishes country monitoring reports.

[11] Since early 2000, cross-country comparative statistics of institutional trust have become widely and regularly available (González and Smith, 2017[54]). Yet as most surveys have different coverage periodicity and work under different criteria of statistical quality, ongoing work mostly rely on unofficial sources of data such as the Gallup World Poll. The *OECD Guidelines for Measuring Trust* provides an analysis of the accuracy of existing trust measures and develops them further (OECD, 2017[55]). More recently, the OECD Trust survey has been reviewed to ensure its feasibility in different contexts, and a survey questionnaire has been reviewed between May and October 2021 by an advisory group composed of senior public governance specialists in OECD countries, representatives from National Statistical Offices (NSOs) and academics (*Tackling Crises and Long-Term Challenges: A Matter of Trust*).

[12] The pilot index is a composite made up of the following dimensions: 1) the diversity of the workforce; 2) the availability and use of data to track diversity and inclusion; and 3) the use of tools to develop a diverse and inclusive workforce. Each dimension is built from answers to several related questions. The index ranges from 0 (low level of effort to develop a diverse central government workforce) to 1 (high level of effort). Data for this indicator, which are available for all OECD countries except Costa Rica, Chile and Iceland, are sourced from the 2020 Public Service Leadership and Capability survey and the 2020 OECD Survey on the Composition of the Workforce in Central/Federal Governments.

[13] The Paris Principles are the international minimum standards for effective and credible NHRIs. They require that NHRIs have independence in law, membership, operations, policy and control of resources. They also require that NHRIs have a broad mandate, pluralism in membership, broad functions, adequate powers, adequate resources and co-operative methods and that they engage with international bodies.

[14] Social capital refers to the social norms, shared values and institutional arrangements that foster co-operation (OECD, 2020[53]). Targets relating to social capital therefore relate to promoting access to justice (Target 16.3), eradicating illicit financial flows and corruption (Targets 16.4 and 16.5) and promoting transparent and inclusive institutions (Targets 16.6, 16.7 and 16.8).

[15] Given that the OECD is the custodian agency for ODA-related indicators, there is usually a lag between the indicators' publication on the OECD website and on the UN website. For instance, at the time of drafting this report, in the *SDG Global Database* net ODA was available up to 2017, while from OECD databases all data were available up to 2020.

[16] The indicator available in the *SDG Global Database* lists only countries that are making progress in using multi-stakeholder frameworks that support the achievement of the sustainable development goals, while OECD data also include countries for which the assessment was conducted and no progress had been observed.

[17] Traditional external financing for the sustainable development landscape include three broad components: external private investment, remittances and official development finance (ODF).

[18] The Development Assistance Committee has 30 members: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, the European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the United States. Thus, although all DAC members belong to the OECD, not all OECD members currently belong to the DAC.

[19] Despite this global commitment, not all countries adopted the 0.7% target. For instance, the United States has never adopted it, and some European countries that joined the EU most recently are committed at a European level to meet 0.33%, whilst collectively meeting 0.7% in 2030.

[20] While, in absolute terms, the United States is the largest DAC donor (USD 35.5 billion), in relative terms it provides only 0.16% of its GNI.

[21] Fixed wired broadband subscriptions include the total number of subscriptions to the following broadband technologies with download speeds of 256 Kbit/s or greater: DSL, cable modem, fibre-to-the-home and other fixed technologies (such as broadband over power lines and leased lines).

[22] Target 17.10 aims at promoting a "universal, rules-based, open, non-discriminatory and equitable" multilateral trading system under the WTO. The indicator that the IAEG-SDGs suggests for this target is worldwide weighted average tariffs. In addition, Target 17.12 calls for the timely implementation of duty-free, quota-free market access on a lasting basis for all least developed countries (LDCs) in such a way that it contributes to facilitating market access for LDCs' exports. The indicator that the IAEG-SDGs suggests for this target is thus restricted to average tariffs faced by developing countries and LDCs (and Small Island Developing States).

[23] It should be noted that producers from developing countries and LDCs do not necessarily enjoy all the preferences to which they are entitled when accessing the markets of developed countries, due to a combination of stringent rules on origin and non-tariff measures.

[24] Metadata for this indicator mention that "Country-owned results frameworks define a country's approach to results and its associated monitoring and evaluation systems focusing on performance and achievement of development results. Using a minimal definition, these results frameworks include agreed objectives and results indicators (i.e. output, outcome, and/or impact). They also set targets to measure progress in achieving the objectives defined in the government's planning documents."

[25] Metadata for this indicator mention that "the monitoring is a voluntary and country-led process. Country governments lead and coordinate data collection and validation. At country level, data are reported by relevant government entities (e.g. the Ministry of Finance/budget department for national budget information) and by development partners and stakeholders. OECD and UNDP support countries in collecting relevant data through the Global Partnership monitoring exercise, and these organisations lead data aggregation and quality assurance at the global level."

[26] The index relies on three sub-indicators tracking: i) whether objectives are drawn from country-owned results frameworks, plans and strategies, ii) the share of results (outcome) indicators that are drawn from country-owned results frameworks, plans and strategies and the share of results (outcome) indicators that will rely on sources of data provided by existing country-led monitoring systems or national statistical services to track project progress.

[27] As for 17.15, the monitoring is a voluntary and country-led process. While data are reported by relevant government entities and by development partners and stakeholders, the OECD and UNDP support countries in collecting relevant data through the Global Partnership monitoring exercise.

[28] The World Bank (which is the custodian agency for that indicator) defines the Public-Private Partnership (PPP) as "any contractual arrangement between a public entity or authority and a private entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility", while the term infrastructure refers to: i) Energy (electricity generation, transmission and distribution, and natural gas transmission and distribution pipelines); ii) ICT technology (ICT backbone infrastructure); iii) Transport (airports, railways, ports and roads); and iv) water (potable water treatment and distribution, and sewerage collection and treatment).

[29] The Fundamental Principles of Official Statistics provides a legal basis for the independence and funding security of an NSO. It also ensures that the NSO follows strict international standards in transparency, methodology, procedure and ethics.

[30] Data are directly provided by the National Statistical Offices to PARIS21, which is in charge of data collection and validation.

[31] In 2021, the OECD released the COVID-19 recovery dashboard to monitor the progress towards a strong, resilient, green and inclusive recovery from COVID-19.

Annex A. Methodology

With the aim of helping its Member countries to implement the 2030 Agenda, and at their request, the OECD has developed a unique methodology for measuring the distance that OECD countries have to travel to achieve SDG targets. Since 2016, a series of reports has shown OECD average and country-level distances from the SDG targets based on indicators from UN and OECD databases. These reports also presented the current data gaps, identifying areas where statistical development would be critical to assess whether OECD governments are meeting the commitments they made when signing the 2030 Agenda in 2015.

Beyond providing a static snapshot of where countries stand today, this edition develops new tools to assess progress towards the SDGs over time, including a trend assessment (i.e. whether the trend, based on current policies, has been upwards, stable or downwards) and projections relying on stochastics methods to assess the likelihood of meeting the 2030 targets.

Selecting Indicators

The starting point of this report is the global indicator framework,[1] developed by the IAEG-SDGs[2] and adopted by the UN General Assembly. This choice (which also applied to previous editions of this report) was made following consultation with delegates to the OECD Committee on Statistics and Statistical Policy and reflected a number of considerations. First, the role played by the statistical community in monitoring the UN process. Second, the status of the global indicator framework as the *only* framework that has been internationally endorsed for the monitoring of the Sustainable Development Goals. Therefore, the indicators included in that framework are considered by the statistical community as the best choice to monitor SDG targets *across countries,* given the state of available information. Third, adhering as closely as possible to the global indicator framework limits the scope for additional judgements and interpretations of the SDG targets.

While the SDGs and the global indicator framework apply to all countries, as acknowledged by the 2030 Agenda, the targets (and therefore indicators) are aspirational and global and may need to be adapted to national contexts:

> *"Targets are defined as aspirational and global, with each Government setting its own national targets guided by the global level of ambition but taking into account national circumstances. Each Government will also decide how these aspirational and global targets should be incorporated into national planning processes, policies and strategies."*

In this spirit, and while recognising the need for comparability among OECD Member countries, the present report goes beyond the global indicator framework in a few cases, in particular, for:

- Monitoring indicators and targets for which no comparable data are currently available. For example, Target 11.3 on sustainable urbanisation is meant to be monitored by the "ratio of land consumption rate to population growth rate". Yet data series on this indicator are not currently included in the *SDG Global Database*. This report thus relies on OECD series on the average annual change in built area per capita (see Haščič and Mackie (2018[1]) for more detail).

- Tailoring the analysis to the policy challenges confronting OECD countries, as reflected by the different work streams of the Organisation. For instance, focusing on mobile coverage to keep track of Target 9.a on connectivity would be inconsistent with the work carried out by the OECD working party on Communication Infrastructures and Services Policy that recognises the important interaction between fixed and mobile connectivity. Therefore, in this report, the monitoring of Target 9.a is complemented by a measure of fixed broadband subscriptions.

Choosing between different data sources

This report uses data from both the *SDG Global Database* and OECD sources to populate the global indicator framework. Nevertheless, neither of these sources provide an "off the shelf" solution for SDG monitoring in OECD countries. This implies that considerable data processing is needed to support the exercise undertaken in this report.

UN Data

The *SDG Global Database* compiles data provided by the UN System and other agencies (including the OECD) acting as "custodians" of specific indicators.[3] This database primarily aims at feeding the UN Secretary-General's annual report on "Progress towards the Sustainable Development Goals". As of October 2021, OECD countries were covered in this database by 513 unique data series[4] that allow keeping track of progress towards 154 of the 169 SDG targets (for 216 of the 247 indicators proposed by the Inter-Agency and Expert Group on SDG Indicators)[5] over a period that can extend up to 60 years. This database is fully aligned with the global indicator framework, meaning that each data series included in the database is associated with one of the 247 indicators identified by the IAEG-SDGs.

A number of steps were taken to structure the database to support the analysis in this report:

- First, some variables were transformed to make them usable for the analysis, for instance by converting monetary variables into constant PPPs or by attributing specific numerical values to data expressed as ranges (e.g. for most OECD countries, the Proportion of population with primary reliance on clean fuels and technology (Indicator 7.1.2) is ">95", for the purpose of this report, it became 97.5).
- Second, systematic controls and quality checks were run to identify possible inconsistencies in data series.
- Third, all data series were carefully reviewed to discard those that do not directly measure the achievement of SDG Targets.[6]
- Finally, some data series refer to different population groups (e.g. by gender, age or disability status) but also by mode of transport, types of product, etc. The UN database is structured to allow identifying the "main" population, with additional data series being considered as "disaggregations" of the main one. In most cases, the choice of the most suitable series for this report was obvious. For instance, the proportion of fatal occupational injuries per 100 000 employees (indicator 8.8.1) is available by migratory status and gender but also for the total population, which was here selected as the main data series. However, in other cases, it was not possible to consider a specific data series as more representative than others. For example, the number of deaths attributed to non-communicable diseases (3.4.1) is available in the UN database for four different diseases (cardiovascular disease, cancer, diabetes and chronic respiratory disease). For these data series, all the different indicators were considered separately.

Following these adjustments, 658 unique data series from the *SDG Global Database* are used for this report, each of them associated with a specific "SDG Indicator" (730 data series when taking into accounts data series associated to more than one SDG indicator).

OECD Data

In some cases, the degree of harmonisation and quality of the data used in this report was enhanced by using data from OECD sources pertaining to the global indicator framework. This allows tailoring the analysis to the policy challenges confronting OECD countries, as reflected by the different work streams of the Organisation.

The selection of OECD sources rested on an extensive consultation with other OECD directorates and affiliated bodies (such as the OECD Development Centre, the International Energy Agency or the International Transport Forum), which allowed to identify the most relevant and up-to-date sources. There are at least three main justifications for considering additional OECD data in this report:

- First, OECD data often complement the *SDG Global Database*. OECD data generally follow strict standardisation procedures, validated by Member countries, which facilitates cross-country comparison. The rigorous processes used by the OECD to collect and disseminate data allow meeting high statistical standards, thus providing higher quality and consistency than some of the data included in the *SDG Global Database*. For instance, under target 8.2, the indicator for productivity growth agreed by the IAEG-SDGs is "8.2.1 Annual growth rate of real GDP per employed person". While this indicator is available in the *SDG Global Database*, OECD databases also include measures of productivity based on the number of hours worked, which provides a better assessment of the total quantity of labour inputs used in production (OECD, 2001[2]).
- Second, OECD data allow mirroring specific conditions from OECD countries. For instance, while mortality rates included in the OECD and the *SDG Global Database* are both based on the same original source (the *WHO Mortality Database*), the former are age-standardised (by the Secretariat) based on the structure of the OECD population in 2010. This ensures that countries' comparisons are not unduly influenced by differences in the age structure of the population between different countries.
- Third, OECD sources usually provide a wider country coverage of Member countries, longer time series and more up-to-date data, while remaining close to the spirit of the 2030 Agenda. Analysis included in OECD (2019[3]) showed that, the numerical values of indicators based on OECD sources strongly correlate with those from the *SDG Global Database*.

The consultation conducted with other OECD Directorates allowed identifying 88 OECD data series that complement the 730 data series from the *SDG Global Database.* These OECD data cover 77 targets and span all 17 goals.

Restrictions

Together, UN and OECD sources comprise 818 data series, but not all of them are included in the analysis. While these data are deemed by the statistical community to be accurate, i.e. "they address the purposes for which they are sought" (OECD, 2011[4]) and relevant, i.e. they "correctly describe the quantities or characteristics they are designed to measure" (OECD, 2011[4]), in order to support a comparative benchmarking exercise, data also need to be broadly available among OECD countries and over time.

Minimum country coverage

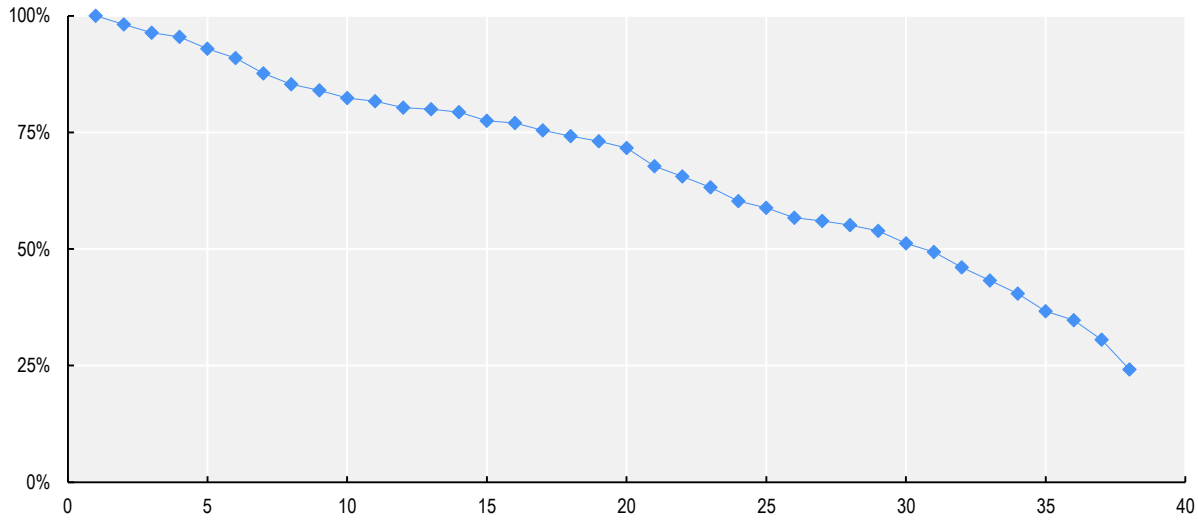
Data series need to cover a minimum set of countries. Including indicators with a limited country coverage would weaken the robustness of the analysis. As the methodology underpinning this report uses a comparative approach to gauge a country's performance on SDGs, a limited distribution of data across countries is likely to affect the results. Both the normalisation method used in this report – which uses the standard deviation measured among countries' performances at a given point in time – and (part of) the

target-setting – with some end-values based on the best performance(s) observed across OECD countries – are comparative in nature and can thus be affected by a limited country coverage.

Yet as country coverage grows, target coverage falls. Figure A A.1 shows that there is a clear trade-off between the minimum number of countries included in the analysis and the number of available data series. While partial country coverage undermines the robustness of the analysis, a partial coverage of an indicator limits its comprehensiveness. Setting a high minimum threshold for country coverage would prevent a comprehensive assessment of Member countries' performance on the 2030 Agenda, as for some targets no indicators may be available to support our analysis.

Half of the data series feeding this report cover 30 OECD countries or more (Figure A A.1). However, in practice, some of the data series are available for only a much smaller number of OECD countries. For instance, around one in ten data series cover six OECD countries or fewer. Conversely, less than one in four data series cover all 38 OECD Member countries. This report arbitrarily sets the minimal threshold for country coverage at 20, as using a higher threshold would drastically reduce the number of data series considered in this report.

Figure A A.1. Distribution of data series by minimum number of OECD countries covered



Beyond minimal country coverage, an additional criterion for data selection is that the series should ensure a sufficient global coverage. The OECD has 38 Member countries spanning the globe, from North and South and from four world regions (America, Europe, Asia and Oceania). Therefore, an additional requirement for inclusion in this report is that a data series should cover at least three of these world regions.

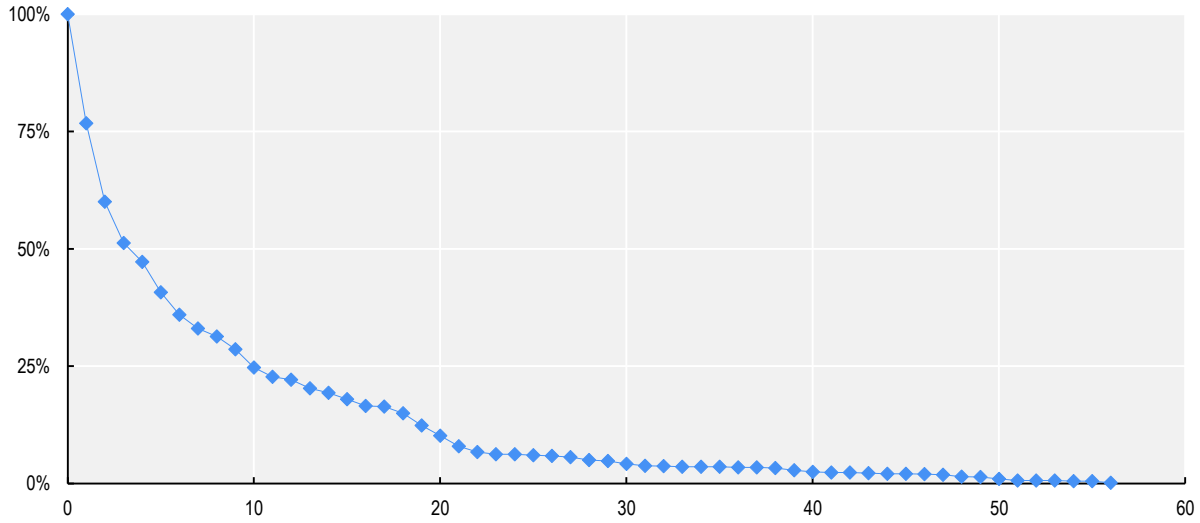
Minimum length of time series

A dynamic assessment of countries' performances on SDGs raises additional data challenges, related to the availability of robust time-series information. Two different concepts allow gauging the "length" of the available time series: the time-span (i.e. the number of years between the first and last available data points) and the number of observations within that time-span. When estimates are produced annually, the time-span equals the number of observations, but this is not the case when observations are available at irregular intervals. As a threshold, the methodology used in this report requires at least three

observations (see the section Measuring countries' performances over time). Yet the more observations (and the longer the time-span), the better is the assessment of the dynamics of the data series.

As shown in Figure A A.2**, the number of available data series falls sharply when the average number of observations increases**. For instance, while some data series may have 50 data points or more, only 25% of the series used in this report have more than 10 data points. Wherever possible, data series are tracked for the last two decades. However, in practice, to accommodate the fact that some of the available time series are much shorter, the minimum requirement for inclusion in this analysis is that at least three observations should be available over a five-year period.

Figure A A.2. Distribution of data series by average number of observations



Note: Estimates of the average number of observations include countries with no data (number of observations had been set at 0).Therefore the average length of observation may be below 1.

StatLink https://stat.link/rt501q

Additional limitations

This study applies a standardised methodology to measure the distance between OECD countries' current performances and where they should be in 2030. As detailed in the section Setting Target, the methodology rests on three elements: i) selecting indicators and data; ii) setting end-values for the indicators; and iii) normalising the values to a common basis, in order to allow assessing distances across different fields.

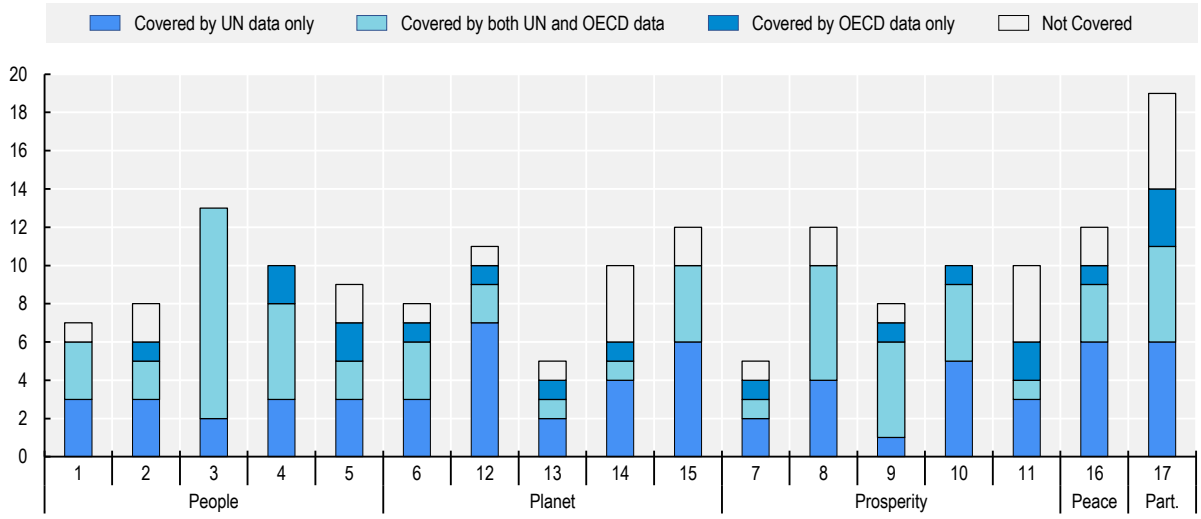
Therefore, while some data are available and meet the selection criteria mentioned above, they may not support the analysis in this report. For instance, end-values could not be set for a subset of these indicators, which are useful only to contextualise or complement other indicators. These indicators, while still included in this report when informative of the context of a specific issue, typically lack a clear normative direction (i.e. to judge what is good performance and what is bad). While no end-value is specified by the target for the recycling rate (indicator 12.5.1), there is a clear normative direction (the more, the better). Therefore, even when there is no clear target to be reached, it is possible to benchmark outcomes to top-performing countries. Conversely, forest area as a share of total land (indicator 15.1.1) in countries with a desert climate will never be as high as in countries such as Finland or Japan, where more than two-thirds of total land is covered by forest. In these cases, structural differences and circumstances will never allow matching the achievement of the best performers.

In addition, indicators that can take only a binary (yes or no) form, such as indicator 16.10.2 (assessing whether "countries adopted and implemented constitutional, statutory and/or policy guarantees for public access to information") are considered only for assessing current performance, but not for progress over time.

The dataset supporting this report

In total, this report relies on data for 183 of the 247 indicators listed in the *global indicator framework* (or for close proxies of these indicators), covering enough OECD countries to support a comparative assessment.[7] These indicators cover 134 of the 169 SDG targets. Target coverage is uneven across the 17 goals. For instance, Figure A A.3 shows that all the targets pertaining to the goals on Good health and well-being (Goal 3) and Quality education (Goal 4) are covered by at least one indicator. Conversely, other goals have significant data gaps. For instance, 1 in 5 targets under the goals on Gender equality (Goal 5), Climate action (Goal 13) and Affordable and clean energy (Goal 7) is not covered by our dataset, and the same applies to 2 in 5 targets under the goals on Sustainable cities (Goal 11), Life below water (Goal 14) and Partnerships for the goals (Goal 17).

Figure A A.3. Share of the 2030 Agenda's targets covered in this report by at least one indicator, by goal and primary source

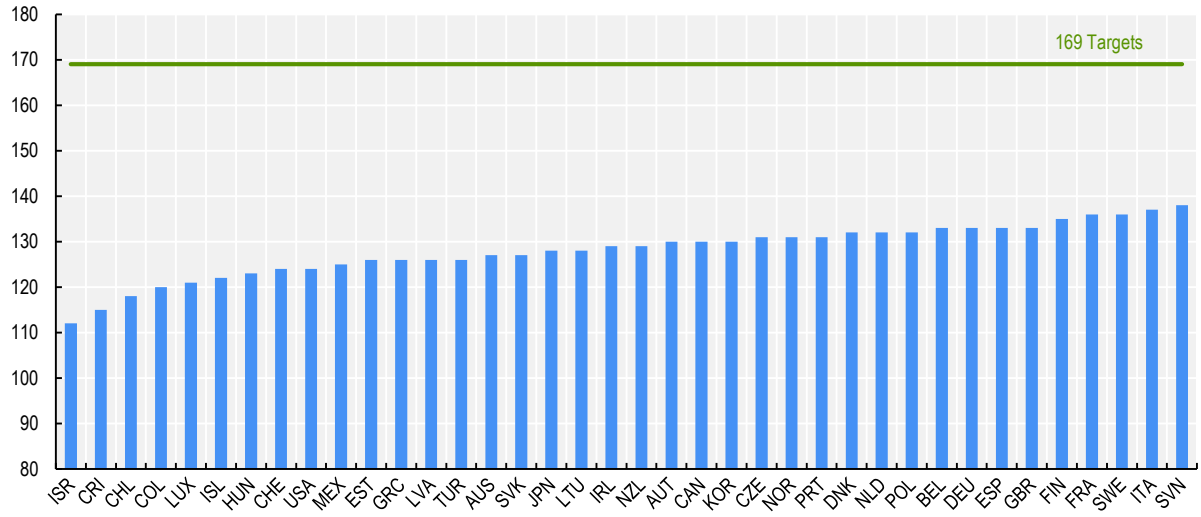


Note: Numbers from 1 to 17 stand for the goals: 1 No poverty, 2 Zero hunger, 3 Good health and well-being, 4 Quality education, 5 Gender equality, 6 Clean water and sanitation, 7 Affordable and clean energy, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, 10 Reduced inequality, 11 Sustainable cities and communities, 12 Responsible consumption and production, 13 Climate action, 14 Life below water, 15 Life on land, 16 Peace, justice and strong institutions and 17 Partnerships for the goals. These goals are grouped under five broad themes (the "5Ps"): People, Planet, Prosperity, Peace and Partnership.

StatLink https://stat.link/ouzdlh

Target coverage varies widely among OECD countries. Figure A A.4 shows that it ranges from 70% or less (i.e. 120 of 169 Targets) in Colombia, Iceland, Luxembourg, Chile, Costa Rica and Israel to 80% (i.e. 135 of 169) in Slovenia and Italy. Although this is an improvement in coverage relative to both previous editions of this report and to other SDG-related measurement initiatives, significant data gaps for all OECD countries clearly remain. In addition, it should be noted that these coverage rates reflect the OECD focus of the report, with indicator coverage being lower for countries that joined the OECD in more recently.

Figure A A.4. Indicator coverage across OECD countries

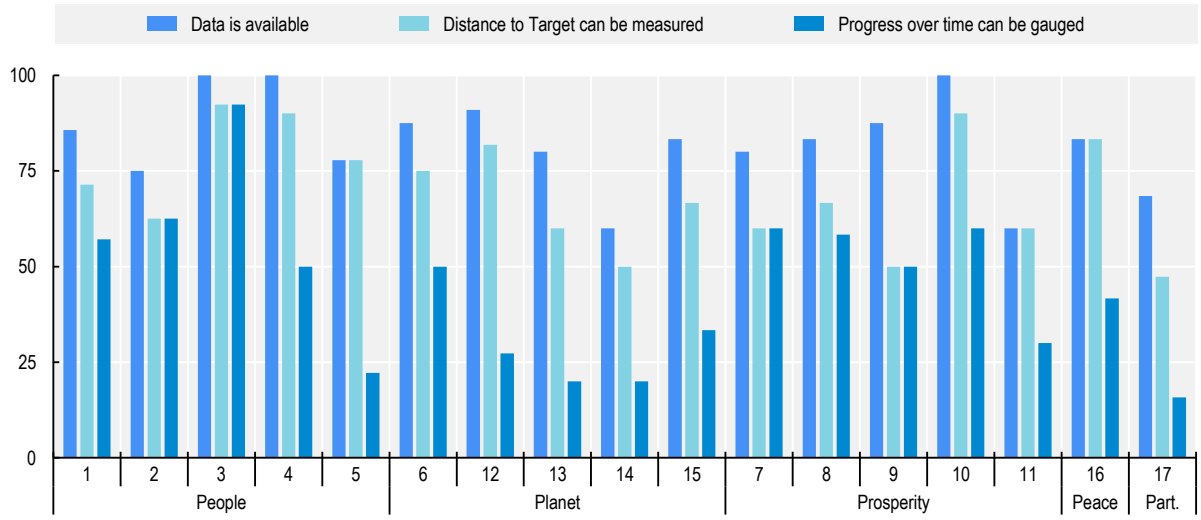


StatLink https://stat.link/joe8af

While the data used for this report allow covering 134 SDG Targets, a distance to target could be assessed for only 112 of them (i.e. 22 SDG targets are supported only by data that lack a clear normative direction). Figure A A.5 shows that, when limiting the analysis to indicators that allow assessing distances to targets, target coverage is also quite uneven across the 17 goals. While distance to target can be estimated for more than three in four targets for 8 of the 17 Sustainable Development Goals, none of them has all targets covered. Conversely, three goals (14 on Life below water, 9 on Industry, innovation and infrastructure and 17 on Partnerships for the goals) have less than half their targets covered by data that allow estimating distances from target levels.

Data gaps become starker when looking at data series that allow measuring the distance to target. Good health and well-being (Goal 3) and Quality education (Goal 4) are the only goals for which the data series included in this report allow monitoring more than 9 in 10 targets, while for the goals on Life below water (Goal 14), Industry, innovation and infrastructure (Goal 9) and Partnerships for the goals (Goal 17), less than half of the indicators for the targets are available to support the analysis. A dynamic assessment of countries' performances on the SDGs raises additional data challenges, related to the availability of robust time-series information. Figure A A.5 shows that, for nine goals (Goal 5 on Gender equality, Goal 11 on Sustainable cities, Goal 16 on Peace, justice and strong institutions and Goal 17 on Partnerships for the goals as well as all of the Planet Goals besides Goal 6 on Clean water and sanitation), our database lacks the data needed to gauge progress over time for more than half of the targets.

Figure A A.5. Target coverage, by type of assessment, OECD average



Note: Numbers from 1 to 17 stand for the goals: 1 No poverty, 2 Zero hunger, 3 Good health and well-being, 4 Quality education, 5 Gender equality, 6 Clean water and sanitation, 7 Affordable and clean energy, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, 10 Reduced inequality, 11 Sustainable cities and communities, 12 Responsible consumption and production, 13 Climate action, 14 Life below water, 15 Life on land, 16 Peace, justice and strong institutions and 17 Partnerships for the goals. These goals are grouped under five broad themes (the "5Ps"): People, Planet, Prosperity, Peace and Partnership.

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Setting target levels and normalisation

This report applies a standardised methodology to measure the distance between OECD countries' current performances and where they should be in 2030.

Once data series are selected, an appropriate end-value (target level) is set for each of them in order to measure the distance between the current position and the target level to be achieved. The 2030 Agenda does not always specify the end-value to be attained. Therefore, this report relies on a four-step process for setting end-values:

- Wherever possible, the target levels specified in the 2030 Agenda were used. This is typically a fixed value identified in the wording of the target (e.g. for Target 3.1, maternal mortality ratio below 70 for every 100 000 live births) or, in a small number of cases, it is expressed as a relative improvement from current levels (e.g. for Target 1.2, reduce by at least half the proportion of people living in poverty). These are classified here as "type-A" targets.
- When no target value is identified by the text of the 2030 Agenda, target levels were drawn from existing international agreements (e.g. reduce $PM_{2.5}$ pollution to less than 10 micrograms per cubic metre, according to the WHO) or based on OECD expert judgment (e.g. water stress is considered to be low if total freshwater abstraction is below 10% of total internal renewable resources (OECD, 2020[5]). These are classified as "type-B" targets.
- When no target value could be identified from either the 2030 Agenda or expert assessments, the target level is based on the "best performance" among OECD countries observed in the most recent available observation. This is defined in this report as the average level attained by the top 10% of OECD countries (e.g. in the case of the recycling rate of municipal waste). These are classified as "type-C" targets.

- Finally, for indicators which are useful only to contextualise structural differences and circumstances or to complement other indicators – typically indicators lacking a clear normative direction such as forest area as a proportion of total land area – no target level is set and therefore no "distance from target" is measured in this report.

Finally, in order to compare performance across different targets, indicator values were normalised using a modified version of the z-score (i.e. the distance from target levels is expressed as the number of OECD standard deviations observed across countries in the most recent year). This approach is described in this report as the "standardised difference" between the country's current position and the target end-value. The greater the distance, the further the country will need to travel to achieve its target. A zero distance means the country has already achieved the 2030 target. Negative scores mean the country already exceeds the target and, in this report, are reported as zero (i.e. countries are not rewarded for going beyond the target). The distance to target is then defined as the average distance of data series that support the target (with equal weights between indicators as listed in the global indicator framework).

Measuring countries' performances over time

Previous editions of this report, including OECD (2019[3]), mainly focused on countries' current positions vis-à-vis the SDG targets (see the Setting target section for methodological details), rather than on the direction or pace of improvement. This static assessment does not capture the underlying path of countries' performances. For instance, when a country is already at (or near) its 2030 target, it may slip behind if recent developments point to a worsening of its performance . Conversely, a country that is still far from its 2030 target might still be expected to reach it by maintaining the rapid progress that it has achieved in the recent past. Examining OECD countries' recent historical performances provides a key complement to the assessment of their current positions and is therefore essential to inform priority setting.

Conceptual framework

Assessing trends is a challenging exercise. It is even more challenging in the context of the SDGs, as the 2030 Agenda includes a wide range of different indicators whose developments are to be assessed over a long period of time. In addition, while the 2030 Agenda does not apply equally to all countries, a comparative assessment needs to be based on a single procedure. Inter alia, this means that the same method should ideally be applied to different countries (irrespectively of their political, economic, social and environmental circumstances) and indicators (irrespectively of their nature).

Developing "dynamic baselines" requires both identifying past trends – which is difficult, especially when time series are short or lacunar – and predicting the future evolution of the different indicators – which requires making assumptions about the underlying drivers of change. Depending on the purpose of the exercise, different types of dynamic analysis could be carried out. These range from a simple detection of the recent trend to more sophisticated forecasting methods. Furthermore, some basic factors such as the length of the time series (i.e. the number of observations and the time-span covered) or the type of data (e.g. ordinal or cardinal) considered are likely to influence the method used. While a wide range of tools could be used, two broad types of approaches can be distinguished (Hyndman, 2011[6]):

- *Explanatory models* – i.e. models combining data analysis and expert judgement. In this case, models assume that the variable to be projected is linked through an explanatory relationship to one or more other variables. For instance, the OECD uses short-term economic indicators such as business sentiment, consumer surveys, industrial production, retail sales, house prices, etc., to predict near-term quarterly movements in GDP. The purpose of the explanatory model is to describe the form of the relationship between the variable of interest and its driving factors and to use it to forecast future values of that variable. While this type of analysis can provide highly reliable results, it could not be applied to forecast SDG indicators: first, it needs to be supported by in-depth

evaluation both of the factors driving each data series and of contextual factors; second, it may not be appropriate to long-term time horizon projections.

- *Time Series* (or exploratory) *models* – i.e. models for which the analysis is based on observed data only and which make no attempt to uncover the factors driving the behaviour of the target variables. Within this class of models, the estimation can be parametric (e.g. linear, polynomial or exponential estimations) or non-parametric (Spearman's rho tests, modified Mann-Kendall test, Sen's slope estimators, etc.) These models provide transparent results and can be easily adapted to different contexts; they are therefore preferred to assess trends in this report.[8]

All these reasons have also led most authors and international organisations to adopt rather simple exploratory models for assessing the direction and pace of recent changes. Most of the time, trends are assessed by comparing the observed change of a given variable and that required to reach the target by 2030. Some models assume *linear growth* (Sachs, 2020[7]), while others rely on *geometric growth* (Eurostat, 2021[8]; UNESCAP, 2020[9]; UNSD, 2020[10]) – for a more comprehensive review, see Gennari and D'Orazio (2020[11]). In practice, the estimations of both linear and geometric models rely on linear regressions between different observations of the same variable (e.g. the compound growth rate corresponds to drawing a line between the log-transformed values of the original variable).[9] This report also adopts such a rather simple model for assessing the likely value of the different indicators by 2030. Yet, instead of making direct estimates of the value of the indicator by 2030, it models the likelihood of achieving a specific level, as detailed in Box A A.1.

Exploratory models use the inertia of the variable to estimate the value they could reach in 2030. They are quite flexible and can provide results even with short time series. However, as all models, they rely on specific assumptions. When the distribution of some indicators is unknown, when it violates some underlying assumptions or it includes outliers, the results from exploratory analysis will be less reliable. These issues are particularly important in times of great uncertainties.

Box A A.1. Using Monte Carlo simulations to estimate the likelihood of meeting a target at some future date

Monte Carlo methods encompass a broad class of computational algorithms that rely on repeated random sampling to obtain numerical results. The underlying concept is to use "randomness" to solve problems. In this specific case, by construction, the simulation will approximate the minimum mean square error forecast following a simple geometric growth model. Monte Carlo algorithms allow going beyond the average outcome by modelling a complete *distribution* of future events. Therefore, the share of simulations that reach or exceed the target level by 2030 allow estimating the likelihood of reaching this SDG target.

More concretely, a deterministic model would estimate a growth rate and use it to project the time series. Formally, if S_t is the level of achievement in time *t, n* is the final year and *r* is the estimated growth rate, this relationship could be expressed as:

$$S_n = S_0(1 + r)^n \quad (1)$$

In order to introduce a degree of uncertainty, Monte Carlo simulations allow for random variations of the growth rate. This allows projecting different plausible trajectories. Formally, if *r* is a random variable that can take different values at any point in time, defined as:

$$r = \frac{S_{t+1} - S_t}{S_t} \quad (2)$$

we can assume that r follows a normal distribution $N(\mu,\sigma)$[1] and denote as X the random variable following a standard normal distribution:

$$\frac{S_{t+1} - S_t}{S_t} = \mu + \sigma X \quad (3)$$

This equation can also be written as:

$$S_{t+1} - S_t = \mu S_t + \sigma S_t X$$

$$S_{t+1} = (1 + \mu)S_t + \sigma S_t X \quad (4)$$

which allows to estimate a possible value of $(S_t)_t$ at any point in time. In order to reduce the computation time, this report estimates the value of S in time *n* as:

$$S_n = S_0 \exp\left(\left(\mu - \frac{1}{2}\sigma^2\right)n + \sigma\sqrt{t}X\right)$$

Finally, S_n is estimated 10 000 times with different values for X. The likelihood of reaching the target is then defined as the shares of projected values that met the target level.

Note:
1. While most deterministic approaches used to estimate progress towards the SDG target do not account for the volatility of the past growth rate, using a random model allows modelling the uncertainty relating to past volatility.

In addition, instead of making explicit assumptions on the distribution of each variable, this report looks for the presence of a monotonic trend (i.e. whether the variable consistently increases, or decreases, through time). As detailed in OECD (2019[3]), trends are summarised by computing the Spearman (rank) correlation coefficient between the observed values of each data series (in their original units of measurement) and

time (expressed in years). Thus, a significant positive correlation (approaching 1.0) indicated a positive overall trend of the data series over time, while a significant negative correlation (approaching -1.0) indicated a negative overall trend. Non-significant correlations (around 0) indicated that no consistent trend could be determined over the time period assessed.[10] This rank-based approach has the advantage of being simple to implement. It also avoids making assumptions on the distribution of data (skewness, presence of outliers, etc.) or on the type of growth (linear or geometric) exhibited by each variable. However, the results obtained through trend detection methods need to be interpreted carefully, as the direction of the trend does not say anything about whether the pace achieved by a country would be sufficient to meet the target level by 2030.

To overcome the issues relating to both methodologies, this report combines both approaches to understand the dynamics behind the 2030 Agenda. Both methods are run independently (for instance, the coefficient correlation is not used to constrain the Monte Carlo simulation).

Details of the methodology used in the report

Combining the trend assessment with an estimation of the likelihood of reaching the target allows some flexibility. In short, rather than providing forecasts, this method allows to understand the underlying dynamics of the different indicators. Concretely, a trend can be "upwards" (i.e. improving over time), "stable" or "downwards" (i.e. deteriorating over time), while a target can be considered as "on track" (i.e. the current pace of improvement, when extended to 2030, should allow a country to reach its target value by the end of the period) or "off track" (in the opposite case). Therefore, there are six different situations, each of which is associated with one of the three cases listed below:

- "No progress or moving away from the SDG target", when the likelihood to reach the target is below 75%, and when the recent trend cannot be classified as "progress towards the target", i.e. the correlation coefficient[11] between the indicator and the year is below 0.20 (or the coefficient is not statistically significant at the 10% level);
- "Progress is being made but is insufficient to meet the target", when the likelihood to reach the target is below 75%, and the correlation coefficient between the indicator and the year is above 0.20 and significant at the 10% level;[12]
- "Target is on track to being achieved", when the likelihood to reach the target is above 75%.

When more than one data series is available for measuring a given SDG indicator, the indicator is classified according to where most of the underlying data series stand. While these simplifications might overlook some specific situations, they provide a meaningful overall picture.

No progress or moving away from the SDG target

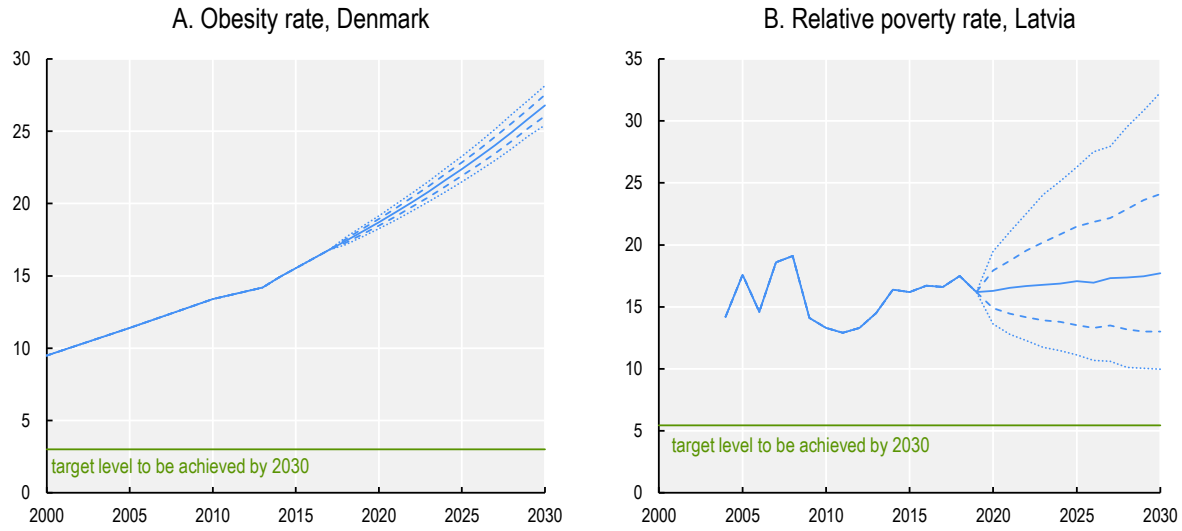
As mentioned above, an indicator is classified as "No progress or moving away from the SDG target" when the likelihood to reach the target by 2030 is below 75% and when the trend cannot be classified as "progress towards the target". Concretely, there are two possible cases:

- The indicator is on a downward trend, and it is not likely that the target would be achieved by 2030. As shown in Figure A A.6, panel A, this is the case, for example, of the obesity rate in Denmark, where the share of population considered as obese has been increasing constantly over the past 20 years. In the absence of a significant change in the recent dynamic, Denmark is likely to be even further away from the target by 2030 than it is now.

The indicator does not show any specific trend and is not likely that the target would be achieved by 2030. As shown in Figure A A.6, panel B, relative poverty in Latvia has been hovering around 15% for the past 15 years. Therefore, in the absence of a significant change in this trend, Latvia is likely to stagnate around the same value, yet, given the relative volatility observed over the past 15 years, the model allows for wide

variations around this average scenario. In any case, though, the relative poverty rate in Latvia is not likely to reach the target level by 2030.

Figure A A.6. Example of data series classified as "No progress or moving away from the SDG target"



Note: The horizontal line stands for the 2030 target value to be reached. Dotted lines reflect the 10th and 90th percentiles of the projected data series; dashed lines reflect the 25th and 75th percentiles of the projected data series; the continuous lines reflects the 50th percentile of the projected data series.

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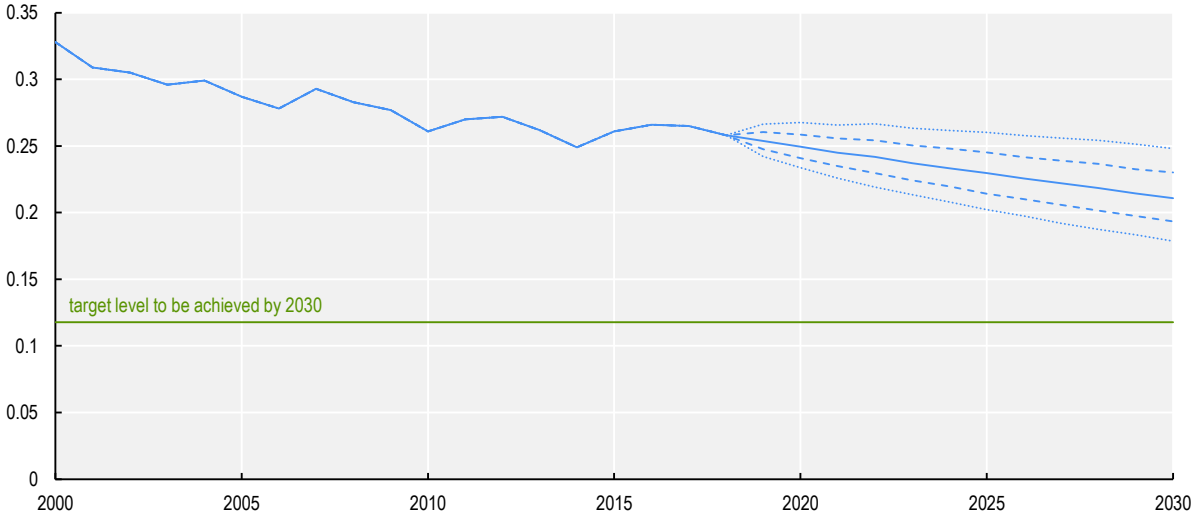
Progress has been made, but is insufficient to meet the target

An indicator is classified as "Progress has been made but is insufficient to meet the target" when the likelihood to reach the target is below 75%, and the correlation coefficient between the indicator and the year is above 0.20 and significant at the 10% level. Concretely, there is only one scenario in this case:

the trend is upwards but few (or none) of the projected values will meet the target. An example is provided by Figure A A.7 on greenhouse gas emissions per unit of GDP in Chile. In 20 years, greenhouse gas emissions fell from 0.33 tonnes of CO_2 equivalent per USD in early 2000 to 0.26 tonnes in 2018. While progress is being made, unless the pace increases, it will not be enough to reach the target by 2030.

Figure A A.7. Example of data series classified as "Progress has been made, but is insufficient to meet the target"

Greenhouse gas emissions, intensities per unit of GDP, Chile



Note: The horizontal line stands for the agreed 2030 desired value to be reached. Dotted lines reflect the 10th and 90th percentiles of the projected data series; dashed lines reflect the 25th and 75th percentiles of the projected data series; the continuous plain lines reflects the 50th percentile of the projected data series.

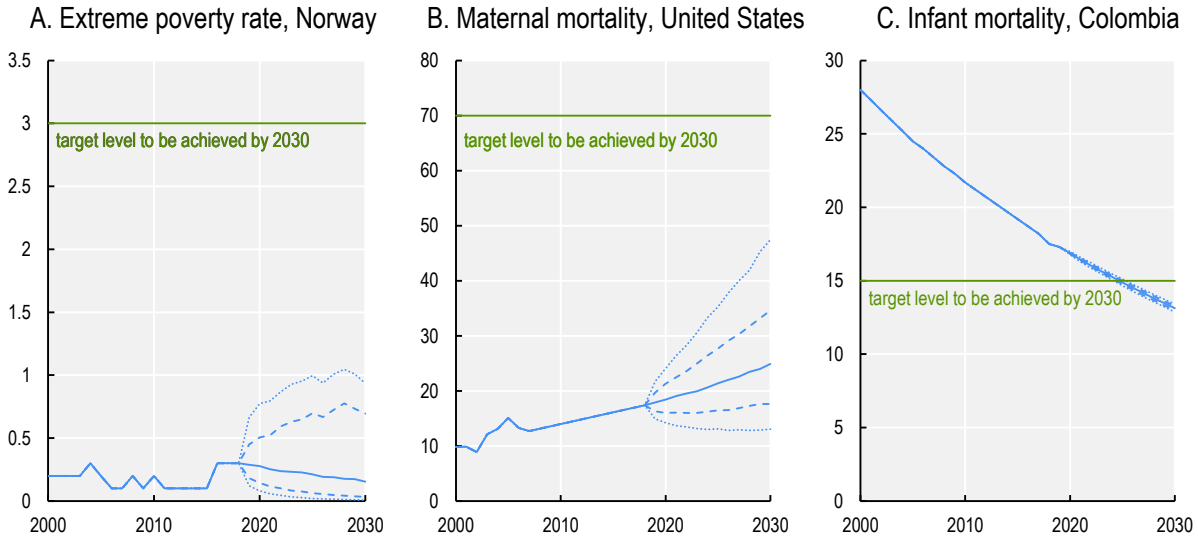
StatLink https://stat.link/qlg369

The target is achieved or on track to being achieved

An indicator is classified as "being achieved or on track to being achieved" when it has a high likelihood to meet the target by 2030. In this case again, there are three different possible scenarios:

- The trend is stable and the indicator is classified as on track, as more than 75% of projected series meet the target. For instance, Figure A A.7, panel A, shows that, in Norway, the extreme poverty rate has been stable between 0 and 0.5% for the past 20 years (i.e. below the target level set at 3%); therefore, it is likely that Norway will remain below the target level by 2030 unless significant changes occur.
- The trend is worsening, but the indicator is still likely to meet the target level by 2030. Figure A A.8, panel B, shows that, in the United States (Figure A A.8, panel B), although maternal mortality has been on an upward trend, it is still significantly below the target level. Hence, even though the maternal mortality ratio may keep going up, it is quite unlikely that the United States will not meet the target by 2030.
- The trend is improving at such a rate that the indicator is likely to meet the target level by 2030. Figure A A.8, panel C, shows the dramatic improvement of infant mortality in Colombia. While Colombia is not (yet) at target level, it is on a trajectory that would allow meeting the target by 2030.

Figure A A.8. Example of data series classified as "Target is achieved or likely to being achieved"



Note: The horizontal line stands for the 2030 target value to be reached. Dotted lines reflect the 10th and 90th percentiles of the projected data series; dashed lines reflect the 25th and 75th percentiles of the projected data series; the continuous lines reflects the 50th percentile of the projected data series.

StatLink https://stat.link/pf6qkg

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Notes

[1] According to the Resolution adopted by the UN General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development, the indicator framework is to be refined annually and reviewed comprehensively by the UN Statistical Commission every five years (i.e. in 2020 and in 2025). For instance, in 2020, the IAEG-SDGs proposed 36 major changes to the framework in the

form of replacements, revisions, additions and deletions as part of the 2020 Comprehensive Review; these recommendations were approved by the UN Statistical Commission in March 2020.

[2] The Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs), composed of representatives of selected national statistical offices and including regional and international agencies as observers, was created in 2015 at the forty-sixth session of the UN Statistical Commission with the goal to develop and implement a global indicator framework for the goals and targets of the 2030 Agenda. Since then, the global indicator framework developed by the IAEG-SDGs had been endorsed by the UN Statistical Commission and adopted by the UN General Assembly.

[3] Custodian agencies are UN bodies and other international organisations responsible for compiling and verifying country data and metadata and for submitting the data, along with regional and global aggregates, to the UN Statistics Division (UNSD). These agencies are also responsible for developing international standards and recommending methodologies for monitoring. Another responsibility of the custodian agencies is to strengthen national monitoring and reporting capacity. When country data are missing or collected using a different methodology or inconsistently reported by different sources, custodian agencies may need to produce estimates or adjust the data for specific countries (with all final data that are submitted to the UNSD then being validated and approved by the respective country).

[4] However, some data series are repeated under two or three different targets. Therefore, the total number of data series in the *SDG Global Database* is 565.

[5] While the *SDG Global Database* compiles all SDGs following the global indicator framework, these indicators may be at different stages of development, with some indicators already well developed and regularly collected and others at early stages of conceptual development and data collection. These global indicators are classified into three tiers based on their methodological development and data availability (see https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/ for further details).

[6] In particular, some data series in the *SDG Global Database* only provide additional detail to the "main" indicator. For instance, indicator 5.5.1 on gender representation in parliaments includes the total number of seats in national parliament, the number of seats held by women as well as the proportion of seats held by women. Only the latter is included in the OECD framework underpinning this report.

[7] UN and OECD sources include 537 data series. This means that, on average, each indicator in the global indicator framework is supported by more than one data series. For instance, 44 different data series support the assessment of SDG indicator 4.5.1: "parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated". All the series pertaining to this indicator included in this report compare the achievement of the OECD adult population in the fields of math or reading by socio-economic status, gender, place of living, migrant status and different levels of education (pre-primary school, primary school, lower secondary, upper secondary as well as training of youths and adults). In such cases, the distance is defined as the unweighted average over all available data series that support the indicator as listed in the global indicator framework.

[8] Yet it is important to stress that this approach assesses only a country's long-term trajectory in a "business as usual" scenario. As such, no policy variable is considered in the assessment. Yet, their impact may be implicitly taken into account to the extent that they influenced the recent trend.

[9] While these approaches are suitable in the presence of relatively short time series, Gennari and D'Orazio (2020[11]) suggest that, even in these cases, it would be preferable to estimate the slope of the regression

line fitted across all the available data points (the original values of each variable vs. time in the linear case; and log-transformed values vs. time, in the case of geometric growth).

[10] Data series are considered as “constant” when the relative standard variation (i.e. standard deviation divided by the mean) is below 1%.

[11] The sign of the coefficient correlation is corrected for the normative direction so that a positive correlation is always interpreted as progress towards the target, while a negative correlation is always interpreted as a decline.

[12] For obvious methodological reasons, when a target is set at 0 it is statistically impossible to reach it. In most cases, the target was set slightly above the null threshold. In the few remaining cases, the target is considered to be reached when the standardised distance to the target is lower than 0.10.

The Short and Winding Road to 2030

MEASURING DISTANCE TO THE SDG TARGETS

The 2030 Agenda for Sustainable Development has an unprecedented ambition, but also confronts countries with an enormous challenge given the complex and integrated nature of the Agenda with its 17 Goals, underpinned by 169 Targets. To assist national governments with their implementation, the OECD has developed a unique methodology allowing comparison of progress across SDG goals and targets, and also over time. Based on the Global indicator framework for the Sustainable Development Goals and leveraging UN and OECD data, this report provides a high-level assessment of OECD Member countries' performance across the Goals and Targets of the 2030 Agenda. The report evaluates the distance that OECD countries need to travel to meet SDG targets for which data is currently available, but it goes one step further and deepens the analysis by identifying long-term trends, considering also how these trends may be impacted by the COVID-19 pandemic. By providing a high-level overview of countries' strengths and weaknesses in performance across the SDGs, it aims to support Member countries in navigating the SDGs and in setting their own priorities for action within the broad 2030 Agenda.

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