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BETTER POLICIES FOR BETTER LIVES

LAUNCH VERSION

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On 25 January 2022, the OECD Council decided to open accession discussions with Romania as well as five other countries (Argentina, Brazil, Bulgaria, Croatia and Peru). On 10 June 2022, the Council at Ministerial Level adopted the Roadmap for the Accession Process of Romania [C/MIN(2022)22/FINAL], setting out the terms, conditions and process for the accession of Romania. In accordance with this Roadmap, 26 OECD technical committees, composed of expert policy-makers from each of the 38 OECD Members, will conduct an in-depth assessment of Romania's legislation, policies and practices against OECD legal instruments and OECD best policies and practices covering multiple areas of government policy, including economic policy but also labour market and social policy, education, and health.

The overarching objective of the OECD accession process is to promote Romania's convergence with OECD standards, best policies and best practices, resulting in better outcomes for OECD Members as well as for Romania and its citizens. Throughout the accession process, the OECD will work closely with Romania to support the adoption of long-lasting reforms for this purpose.

The Economic Survey of Romania was discussed at a meeting of the Economic and Development Review Committee (EDRC) on 16 January 2024 and is published on the responsibility of the Secretary-General of the OECD. The cut-off date for data used in the Survey is 5 March 2024. The previous Survey of Romania was issued in January 2022. Information on other Surveys and how they are prepared is available at www.oecd.org/economy/surveys/.

Publication of this document, and the analysis and recommendations contained therein, do not prejudge in any way the results of the review of Romania by the Economic and Development Review Committee as part of its process of accession to the OECD.

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BASIC STATISTICS OF ROMANIA, 2022[1]

(Numbers in parentheses refer to the OECD average)[2]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	19.0		Population density per km²	82.4	(39.0)
Under 15 (%)	15.9	(17.2)	Life expectancy at birth (years, 2021)	73.0	(78.7)
Over 65 (%)	18.6	(18.0)	Men (2021)	69.4	(75.9)
International migrant stock (% of population, 2019)	2.4	(13.2)	Women (2021)	76.7	(81.7)
Latest 5-year average growth (%)	-0.7	(0.4)	Latest general election	December-2020	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	301.2		Agriculture, forestry and fishing	4.9	(2.8)
In current prices (billion RON)	1 409.8		Industry including construction	31.8	(28.3)
Latest 5-year average real growth (%)	3.2	(1.7)	Services	63.3	(68.8)
Per capita (thousand USD PPP)	43.4	(60.0)			
GENERAL GOVERNMENT Per cent of GDP					
Expenditure	40.0	(42.9)	Gross financial debt (OECD: 2021)	51.7	(106.6)
Revenue	33.7	(39.7)	Net financial debt (OECD: 2021)	27.6	(67.8)
EXTERNAL ACCOUNTS					
Exchange rate (RON per USD)	4.68		Main exports (% of total merchandise exports, 2021)		
PPP exchange rate (USA = 1)	1.71		Machinery and transport equipment	44.6	
In per cent of GDP			Manufactured goods	17.9	
Exports of goods and services	43.0	(33.4)	Miscellaneous manufactured articles	13.2	
Imports of goods and services	49.8	(34.8)	Main imports (% of total merchandise imports, 2021)		
Current account balance	-9.1	(-0.9)	Machinery and transport equipment	35.0	
Net international investment position	-40.4		Manufactured goods	19.0	
			Chemicals and related products, n.e.s.	15.1	
LABOUR MARKET, SKILLS, AND INNOVATION					
Employment rate (aged 15 and over, %)	48.9	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	5.6	(5.0)
Men	58.3	(65.4)	Youth (aged 15-24, %)	22.8	(10.9)
Women	40.2	(50.1)	Long-term unemployed (1 year and over, %)	2.2	(1.2)
Participation rate (aged 15 and over, %)	51.8	(60.9)	Tertiary educational attainment (aged 25-64, %)	19.7	(40.7)
Average hours worked per year	1 808	(1 752)	Gross domestic expenditure on R&D (% of GDP, 2020)	0.5	(2.9)
ENVIRONMENT					
Total primary energy supply per capita (toe, 2021, OECD: 2022)	1.8	(3.8)	CO_2 emissions from fuel combustion per capita (tonnes, 2021, OECD: 2022)	3.7	(7.8)
Renewables (%, 2021, OECD: 2022)	18.7	(12.0)	Renewable internal freshwater resources per capita (1 000 m³, 2020)	2.2	
Exposure to air pollution (more than 10 µg/m³ of PM 2.5, % of population, 2019)	98.0	(61.7)	Municipal waste per capita (tonnes, 2021, OECD: 2020)	0.3	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2021, OECD: latest available)	0.317	(0.316)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2021, OECD: 2019)	16.2	(11.8)	Reading	428	(476)
Median disposable household income (thousand USD PPP, 2021, OECD: 2019)	15.9	(26.6)	Mathematics	428	(472)
Public and private spending (% of GDP)			Science	428	(485)
Health care (2021, OECD: 2022)	6.5	(9.2)	Share of women in parliament (%)	19.1	(32.5)
Pensions (2021, OECD: 2019)	8.2	(9.5)	Net official development assistance (% of GNI, 2017)	0.1	(0.4)
Education (% of GNI, 2021)	3.4	(4.4)			

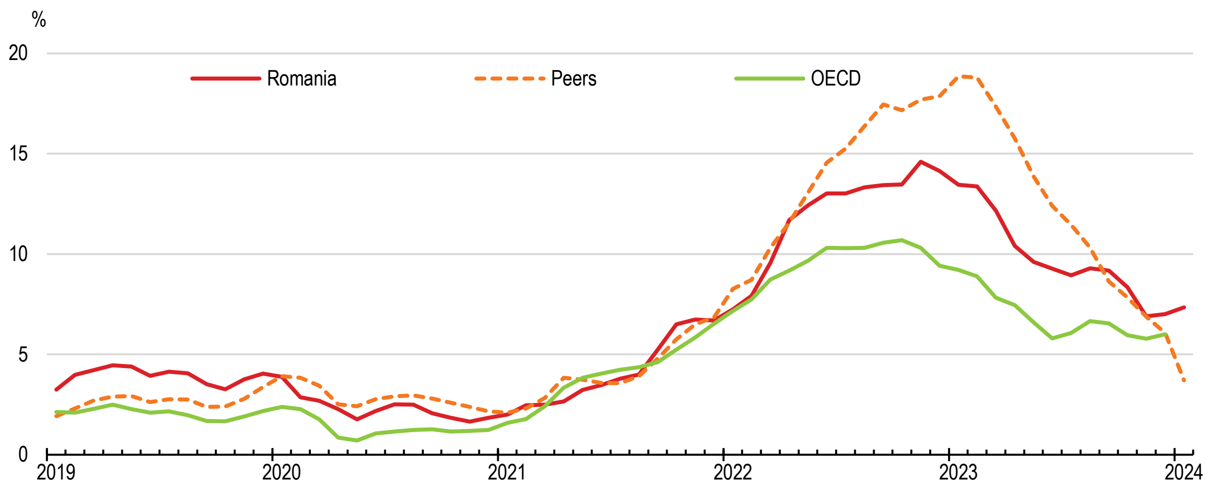
1. The year is indicated in parentheses if it deviates from the year in the main title of this table.
2. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.
Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank.

Executive Summary

Demand has eased but inflation remains high

Solid growth in activity continued in the wake of the energy crisis. But tighter monetary policy and weak economic conditions in Europe are now helping to cool demand. Tensions in the labour market have started to ease. Yet wages are growing rapidly. This is making it hard to tamp down inflation, which is still well above target (Figure 1)

Figure 1. Inflation remains high



Note: 'Peers' is the unweighted average of Bulgaria, Czechia, Hungary, and Poland.
Source: OECD Price Statistics database and Eurostat.

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EU-funded investments are supporting activity. With private demand subdued in the face of high interest rates, cost pressures and policy uncertainty before elections in 2024, large infrastructure projects are providing a backstop to growth in Romania's economy.

Real GDP is projected to grow by 3.1% in 2024 and 3.3% in 2025, slightly below potential. Still-recovering foreign demand will limit near-term export gains. Pension increases will support household incomes, but higher taxes will weigh on private consumption. Unemployment will remain above pre-pandemic rates. Domestic cost pressures will diminish and import price growth will continue to slow. By 2025, headline consumer price inflation will fall to 3.7%, close to the top of the target band (Table 1).

There are important risks to the outlook. Strong core inflation could prove harder to tame than the projections assume. A prolonged period of high interest rates could cause an economic downturn and significant job destruction. Escalation in regional geopolitical tensions could further weigh on demand. In contrast, fast and effective deployment of the significant EU funds at Romania's disposal would buoy activity now and lift future productivity and living standards.

Table 1. Investment is supporting growth

	2022	2023	2024	2025
Gross domestic product	4.6	2.0	3.1	3.3
Private consumption	6.9	2.4	3.0	3.1
Gross fixed capital formation	5.6	12.2	5.6	4.7
Exports	9.6	-0.2	2.5	3.2
Imports	9.9	-2.0	3.0	3.4
Unemployment rate	5.6	5.6	5.5	5.4
Inflation (CPI)	13.8	10.4	5.0	3.7
Current account balance (% of GDP)	-9.1	-6.3	-6.2	-5.8
General government budget balance (% of GDP)	-6.3	-6.0	-5.8	-5.8

Source: OECD Economic Outlook No. 114 database and updated projections.

Macroeconomic policies must continue to cool demand

With inflation well above target, the National Bank of Romania kept interest rates high in 2023. Romania's fiscal deficit remains wide. Budget consolidation must continue to better align the stances of fiscal and monetary policy and put the public finances on a sustainable long-run track.

Monetary policy should remain tight. Strong recent growth in services prices suggests the policy rate will have to be kept high in 2024. Tighter management of liquidity may also be needed if high core inflation proves hard to subdue.

Recent strong growth in euro-denominated borrowing has moderated. Banking sector indicators are healthy. Large interest-rate differentials with the euro area and a relatively stable exchange rate encouraged firms to take on more euro-denominated debt from mid-2022. Borrowing based in foreign currencies has since moderated following ECB rate rises in 2023. But authorities are rightly monitoring FX-related risks to financial stability.

Prudent fiscal policy is needed to rein in demand and ensure public debt sustainability. Near-term limits on government expenditure aim to reduce current budget imbalances. Yet defence commitments, and rising outlays on pensions, education, health and social protection will increase spending pressure in the years ahead. The challenge for policymakers is to put the public finances on a sustainable track without derailing income growth or exacerbating inequality.

Efforts to contain growth in public spending should continue. Attempts to curb public workers' remuneration in 2023 triggered widespread protests, prompting the government to backtrack. Containing growth in the state payroll remains important but should not compromise public administration. Spending reviews can help identify efficiencies while preserving service capacity.

Public pension reform is continuing. Population ageing will accelerate in the next decade, increasing the number of retirees as the pool of pension contributors shrinks. A planned recalculation of public pensions will increase near-term fiscal costs. But parallel reforms to lift pension ages will improve the system's long-term financial sustainability. Keeping the pension system viable will also require Romanians to contribute more to their own retirement incomes, including recipients of special occupational pensions.

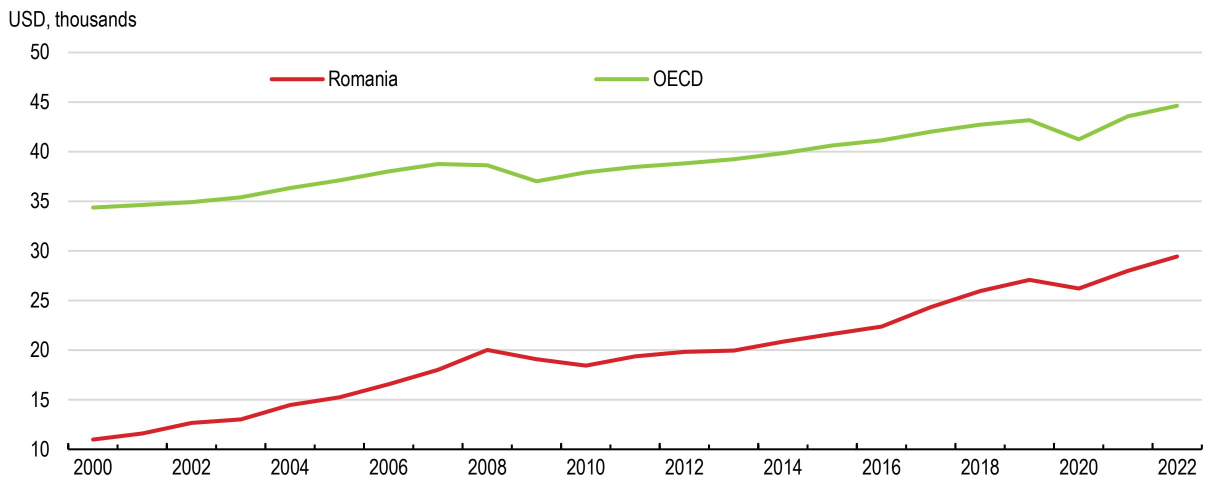
Romania must raise more tax revenue with less distortion to economic activity. Much of government revenue comes from distortive taxes on wages. High social contribution rates deter low-skilled workers from formal employment in a country with a large grey economy and widespread tax evasion. Tax concessions benefiting workers in IT, construction and agriculture further narrow the income tax base while a low-rate microenterprise tax gives small firms a way out of Romania's corporate income tax system. New measures aim to shrink tax loopholes and strengthen enforcement. But more must be done to improve the tax system's fairness and efficiency.

Structural reform would improve the business environment

Ongoing regulatory reforms will support investment. But more can be done to remove barriers to efficient reallocation of resources.

Figure 2. Average incomes have risen quickly

GDP per capita, 2015 prices and PPPs



Source: OECD National Accounts database.

StatLink https://stat.link/yhf397

Corruption and weak competition in some sectors hinder efficient resource reallocation. Romania is making progress simplifying business registration and licencing, reducing firms' costs. Continuing governance reforms would further improve the business environment, including by strengthening management and oversight of state-owned enterprises, which distort competition in industries they dominate. Improving market efficiency and stimulating investment also depends on continuing to combat corruption.

Greater financial inclusion could boost investment and living standards (Figure 2). In much of Romania access to credit is poor, limiting firms' growth potential. Excessive court involvement in foreclosure proceedings discourages asset-backed lending. For firms unable to get bank loans, regulators could do more to open avenues to non-standard financing, including through the warehouse receipt system. Improving financial literacy could expand economic opportunities in Romania.

Policies must do more to address inequality and encourage participation

Disparities in socio-economic outcomes remain wide. Gaps in social protection left many people vulnerable when inflation surged. More can be done to encourage formal employment, including among women.

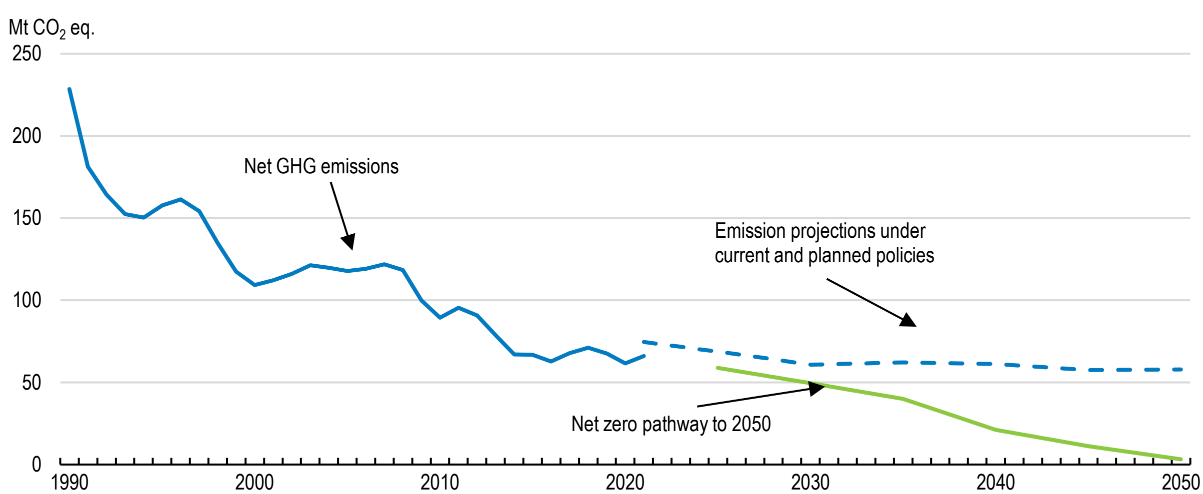
To be ready for future crises, Romania must strengthen the social protection system. Social assistance should be improved over time and access to health care expanded. Better education is the surest way to boost opportunity and reduce poverty. Tackling disadvantage in rural and Roma communities demands better basic infrastructure and improved access to social services.

Too many working-age women are outside the labour market. Policy settings contribute to low workforce participation by women and older Romanians. Generous parental leave encourages mothers to step back from work to care for children. Childcare shortages make it harder for young families to keep up two jobs. Later in life, low pension ages encourage women to retire early, reinforcing expectations for many that their time in work will be short. Reforms are needed to support female employment, and to better utilise Romania's human capital potential.

Emission abatement must accelerate

Romania is not yet on track to reach its target of eliminating net greenhouse gas emissions by 2050. Structural change in the past three decades saw big emission reductions. But progress has stalled recently (Figure 3). Without faster abatement, emissions will increase with economic growth.

Figure 3. Romania is not on track for net zero



Source: OECD Environment Statistics database and OECD calculations based on Ministry of Environment projections.

StatLink https://stat.link/vw8o72

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Fossil fuel dependence, an old car fleet and poorly insulated buildings increase emissions. Fuel subsidies and price caps mute incentives to save energy. To accelerate abatement, and limit impacts on living standards and vulnerable communities, efficient and fair policies are needed, backed with good governance. In addition to green investment, and effective regulations, Romania should make more use of market-based mitigation measures, including carbon pricing.

Decarbonising Romania's economy depends on cleaner power, and more of it. A good share of electricity comes from renewables and nuclear (60% in 2022). But from a strong head-start, low-carbon additions to Romania's power supply have stalled. Barriers to renewable energy investment are multiple, from price uncertainty, to clunky permitting, and unclear rules on land use. The biggest supply-side problem is the power grid itself. These barriers must be addressed if Romania is to replace coal power, and fossil fuels for transport and heating, with clean electricity.

Building and transport emissions are rising. Progress improving building energy performance and switching to cleaner heating fuels has been slow. An expanding fleet of old cars has lifted road transport emissions. Electrifying heating and vehicles will help curb emissions from homes and transport. For the building stock, large investments are underway to improve energy efficiency. Better targeting of state support would help reduce the fiscal burden. Transport policies remain too accommodative of cars. Price signals and better planning can encourage walking, cycling and more use of public transport.

Romania is vulnerable to climate change. Planned investments will strengthen resilience to natural disasters, such as floods. But better prevention is also needed, including to limit building in high-risk areas and to enforce strict construction standards.

MAIN FINDINGS	KEY RECOMMENDATIONS
Ensuring macroeconomic stability and rebuilding fiscal buffers	
Inflation remains above the National Bank of Romania's target. Demand has cooled but core price pressures are elevated.	Maintain a tight monetary policy stance until inflation is clearly on track to meet the central bank target.
Fiscal support helped households through cost-of-living pressures. But Romania's rising public debt burden will make it harder to respond to future shocks. Fiscal consolidation is needed to help rein in demand, rebuild buffers, and put the public debt on a sustainable long-run track. New fiscal measures curb waste in public spending. Some cuts, such as cancelling civil service job vacancies, could impede capacity. Laws require that cost benefit analysis be carried out for major government-run projects financed from public funds.	Reduce the budget deficit to ensure fiscal policy complements contractionary monetary policy. Establish a credible medium-term fiscal consolidation plan to ensure the sustainability of public finances. Proceed with planned use of spending reviews to systematically identify efficiencies and improve government effectiveness. Separately, ensure consistent use of cost benefit analysis, in line with existing laws, for major public investments.
Completing pension and tax system reforms	
Population ageing will make it harder to fund public pensions without reforms to encourage Romanians to work longer.	Proceed with reforms to narrow early retirement options over time and increase pension ages with gains in life expectancy, in line with new laws.
Tax revenues are too low to fund ongoing government spending. Overuse of low rates erodes the VAT base. Romania's income taxes are distortive and exempt many workers. Faster progress modernising the tax administration would lift compliance.	Strengthen tax enforcement to reduce tax fraud and evasion. Broaden the value added tax base through more uniform application of the standard rate. End sectoral income tax exemptions.
Improving the business environment	
New laws strengthen the corporate governance framework for state-owned enterprises. Compliance with previous rules was poor and oversight inadequate, risking mismanagement of public resources.	Ensure reinforced SOE corporate governance rules are properly implemented and monitored.
Frequent policy changes, often via circumscribed legislative procedures, add risks to investment. Despite progress reducing their total number, emergency decrees continue to be used for major policy changes.	Continue to curtail use of emergency decrees and follow through on commitments to systematise policy impact assessments.
A new Investment and Development Bank will supply credit to small firms unable to access bank loans. State credit schemes have a mixed record internationally.	Consolidate current small business credit schemes before the Investment and Development Bank begins operating. Ensure the Bank is backed by good governance and regularly evaluated.
Though progress has been made in combatting it, corruption in the legislature remains an issue. Resources for investigating and prosecuting corruption have been increased but are not yet sufficient.	Continue to fill gaps in policy to stamp out corruption, including through rules on lobbying Members of Parliament, and by strengthening the National Anticorruption Directorate by resolving staff shortages.
Addressing inequality in socio-economic outcomes	
EU funds are helping upgrade educational facilities and address risks of early school leaving, particularly in disadvantaged areas and Roma communities.	Continue to channel resources to teacher training, support for disadvantaged schools, and investments in IT equipment for classrooms.
Short supply of subsidised childcare leaves many parents either caring for young children themselves or using informal childcare. Better access to quality affordable childcare would support female employment.	Expand access to quality formal early childhood education and care.
Decarbonising the economy	
Institutional capacity for climate policy making and implementation is weak. Monitoring of progress in climate action is insufficient. Absorption of EU funds for low-carbon investment has been poor.	Build administrative capacity for designing, implementing and monitoring climate policy measures and investments.
Excise duties generate low implied carbon prices which differ across fuels, providing uneven abatement incentives. Various tax exemptions and other subsidies reduce the cost of fossil fuels.	Improve carbon pricing by increasing energy tax rates in sectors outside the EU Emission Trading System and by gradually removing fossil fuel subsidies. Channel part of the proceeds to vulnerable households and affected businesses.
Romania's power grids cannot support a large expansion of renewable generation. Progress expanding and upgrading grids has been slow.	Accelerate expansion, upgrading and digitalisation of electricity grids and investment in electricity storage.
Public transport use in cities has declined, while car driving has grown, increasing emissions. Cities lack integrated public transport systems.	Invest in integrated, smart urban mobility systems centred on public transport and incorporating walking, cycling and shared mobility.
Homes are energy-intensive due to their age, bad insulation, and inefficient heating. Current retrofitting support is costly.	Ensure support for renovations is adequately targeted.
Climate change will increase Romania's vulnerability to natural disasters such as floods. Capacity for disaster risk management has improved, but preventive measures are not yet mainstreamed in land use and planning.	Incorporate climate-related risks and adaptation considerations into spatial planning and sectoral investment strategies. Better enforce building regulations to prevent building in risk-prone areas.

1 Sustaining income convergence

Growth in Romania's economy slowed over the past two years but remained solid, helping to close ground on living standards in higher-income countries. Output continued to increase even as Russia's invasion of Ukraine, and ensuing shocks to energy and agricultural commodity markets, threatened to cut short a recovery from the COVID-19 pandemic. Major supply disruptions have since eased. So too have the high energy prices that sparked a surge in inflation which tight monetary policy is still trying to tame. Higher borrowing costs and weak global growth are now combining to slow activity in the economy.

Achieving rapid income gains in the years ahead will not be easy. Recent developments have exposed the limits of a growth formula reliant on a cheap supply of labour and low taxes. Firms' costs are rising as real wages increase faster than productivity. A pressing challenge is that Romania does not raise enough tax to fund ongoing public spending, which is set to rise. New consumption and income tax measures go part way towards addressing persistent revenue shortfalls. But without more ambitious reform, fiscal imbalances will deteriorate as population ageing strains future budgets. Higher debt servicing costs or lower potential growth would further complicate the task of fiscal consolidation.

Romania confronts its macroeconomic policy challenges from a reasonable starting position. Public debt, while rising, is for now still at manageable levels. With the steadying influence of EU institutions, Romania is benefiting from a period of relative financial stability as it seeks to stabilise public finances. External support from EU funds will keep infrastructure investments on track, provided available grants and loans can be absorbed quickly and effectively over the next few years. There is also ample room to efficiently expand Romania's narrow revenue bases and momentum in reforms to remove barriers to higher economic potential (Box 1.1 and Box 1.2).

Strong productivity growth would quickly lift living standards but needs a strong investment climate and continued structural reform if it is to last (Figure 1.1). Regulations are improving but heavy bureaucracy still adds to firms' costs. Underperforming state-owned businesses distort competition, while limited credit access constrains business growth and impedes resource reallocation. Romania's past institutional reforms are still paying off. But predictable policymaking is needed to shore up business conditions.

Socio-economic disparities remain wide. Poverty risk is high (Figure 1.2), particularly in rural areas and Roma communities. Cost-of-living pressures in the past two years have been a reminder of the need to improve social protection as public resources expand. Policies can also do more to encourage formal employment, including among women and older Romanians. Better health care and schools would expand opportunities and give young people strong reasons to stay in Romania rather than emigrating.

Box 1.1. Quantifying the GDP impact of structural reforms

The following table presents estimates of the GDP impact of selected structural reforms. Estimates are based in part on empirical relationships between past policies and macroeconomic outcomes, in some cases drawing on evidence for countries other than Romania. The estimates are illustrative only.

Table 1.1. Illustrative GDP impact of selected structural reforms

Reform	Long-run effect
Supply-side reforms boost credit to small firms by 1%	+0.1%
Lower regulatory barriers (PMR) to close half the gap to the OECD average	+2%
Raise the female retirement age to match that of men	+0.5 to +0.8%
Education-sector investments lift schooling outcomes to match the OECD average	+0.5 to +1%
Higher fuel excise duties[1]	0%

1. The scenario is adapted from the 2023 World Bank review of Romania's tax system conducted for the *Recovery and Resilience Plan*. Excise duties are assumed to increase to account for all climate and non-climate related externalities. Negative effects on GDP of higher fuel prices are offset either by returning additional revenues to low-income households or by reducing distortive taxes on labour income.
Source: OECD (2022[1]), OECD calculations based on Long-term model estimates and World Bank Report on the Tax System in Romania (2023).

In support of global climate action, Romania has committed to eliminate its net greenhouse gas emissions by 2050. Achieving that goal will be challenging. Fossil fuel dependence and old cars and buildings increase carbon emissions from economic activity (Figure 1.3). Romania needs cleaner power, more green investment, and stronger price incentives for energy saving. To limit costs from abatement action, mitigation policies must be efficient. To shield vulnerable people from harm, climate policies must also be fair.

Against this background, the four key messages of this Economic Survey are:

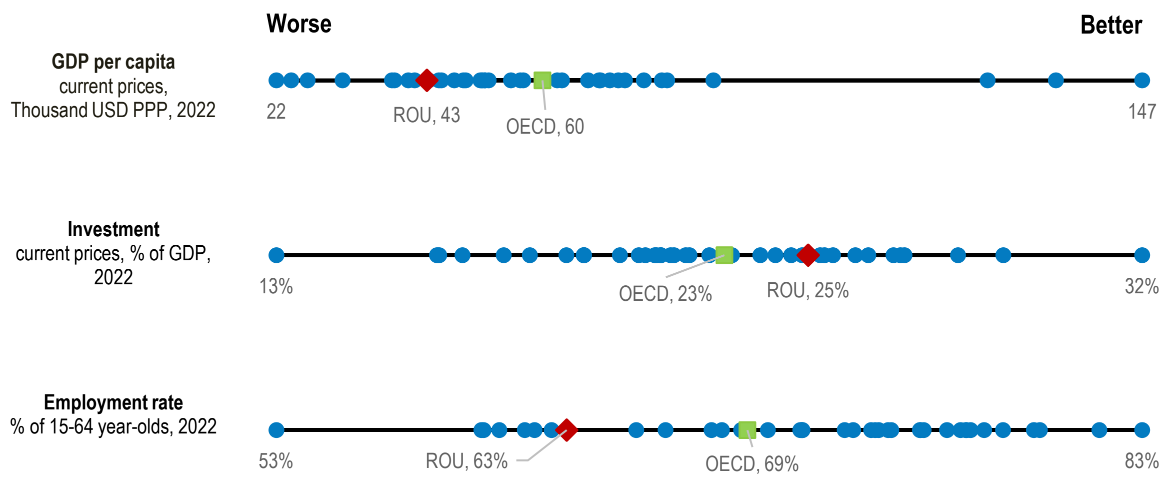
- Monetary policy should remain tight until inflation is clearly on course to meet the central bank's target. Fiscal policy must support monetary tightening in cooling demand. Near-term efforts to contain government spending must be matched with implementation of new pension reforms to mitigate long-term fiscal pressures from population ageing. Tax reform is needed to lift revenue collections and keep fiscal consolidation on track while limiting drags on economic activity.

- Removing obstacles to efficient resource reallocation would support productivity growth. Continued governance reforms would complement ongoing efforts to reduce firms' costs of complying with Romania's regulations. Improving access to finance would remove barriers to growth for small firms and help strengthen the business environment. Continued efforts to combat corruption are needed to enhance market efficiency and encourage investment.

- Labour force participation is weaker than in many OECD countries, and particularly low among older Romanians, women, and in rural areas. Childcare shortages, low pension ages and scarce supply of part-time jobs discourage many women from paid formal work. Changing this would support greater gender equality in employment. Romania would also be better placed to meet demographic challenges threatening to slow future growth and strain budgets.

- Romania must do more to get on a sure path to net zero emissions by 2050. Large investments are planned or underway to reduce greenhouse gas emissions from power generation, buildings and transport. Yet a comprehensive policy package is needed to accelerate emission reductions in an efficient and equitable manner, with strong price signals for abatement, stricter regulations, good governance and more public support for green investment. Policy support can help displaced workers back into the labour market and shield vulnerable households from higher costs. Romania also needs to build resilience to the impacts of a changing climate.

Figure 1.1. Living standards are lower than in most OECD countries



Source: OECD Economic Outlook database; OECD Labour Force Statistics database; and OECD calculations.

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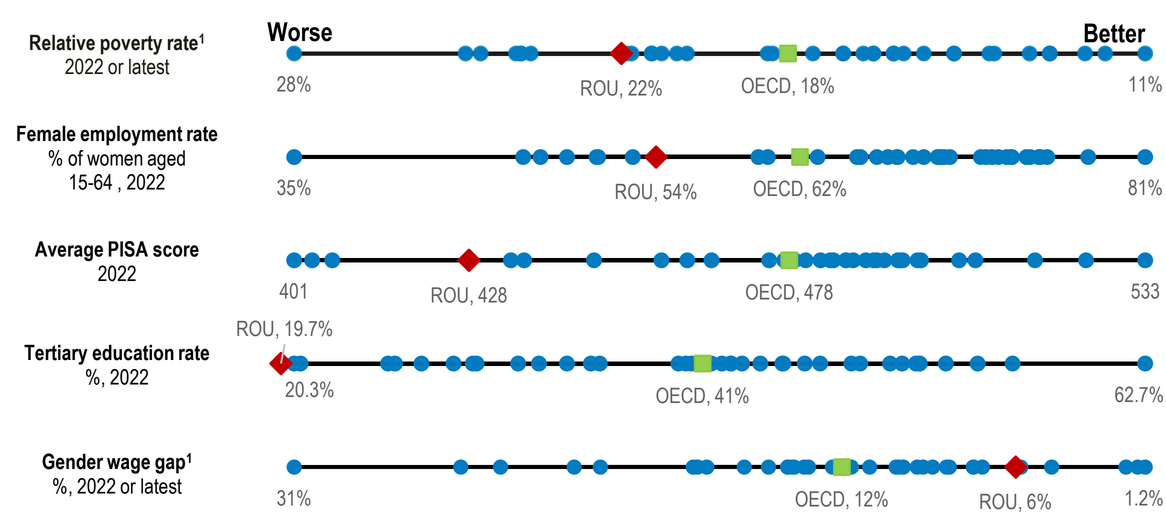
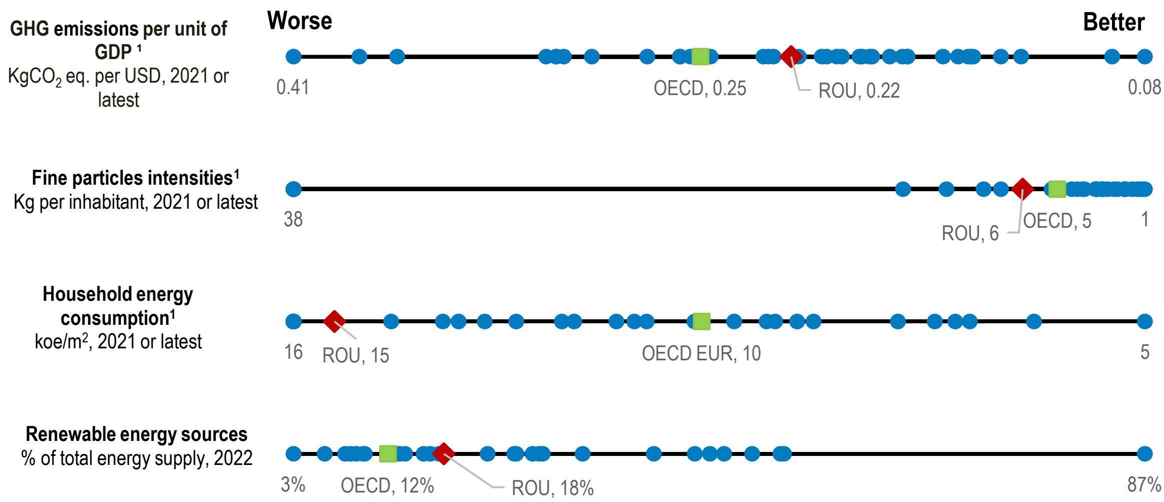
Figure 1.2. Poverty risk is high



1. Indicator reversed so that the right side of the scale corresponds to better outcomes.
Note: Relative poverty rate is determined after taxes and transfers based on a poverty line at 60% of median household income. Average PISA score is the average scores in mathematics, science and reading. Gender wage gaps are defined as the unadjusted difference between median wages of men and women relative to the median wages of men.
Source: OECD Income Distribution database; OECD Labour Force Statistics database; OECD PISA database; OECD Education at a Glance database; OECD Earnings and Wages database; and OECD calculations.

StatLink https://stat.link/ba4p1s

Figure 1.3. Household energy consumption is elevated



1. Indicator reversed so that the right side of the scale corresponds to better outcomes.
Note: Greenhouse gas (GHG) emissions exclude land use, land-use change and forestry (LULUCF). The indicator is expressed in GHG emissions per unit of GDP, measured in 2015 PPP USD, and represents the GHG intensity of economic activity. "Fine particles intensities" shows PM2.5 particulate emission per inhabitant. For this indicator, the OECD unweighted average excludes Australia, Colombia, Costa Rica, Israel, Japan, Mexico, and New Zealand. "Household energy consumption" is the energy consumption per square metre of households for space heating scaled to the EU average climate. OECD EUR is the unweighted average of OECD European countries.
Source: OECD Green Growth Indicators database; Odyssee-Mure; IEA World Energy Balances database; and OECD calculations.

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Box 1.2. Recent and upcoming reforms in Romania

Reform momentum has picked up in Romania, spurred on by the country's *Recovery and Resilience Plan* (RRP). This box details selected structural reforms that have been completed since the previous Survey or are planned for the coming years.

- **Public pensions** are being reformed. New legislation provides for automatic indexation of pension entitlements to price and wage inflation. Recalculation of entitlements in 2024, based on a consistent points-based formula, will address inequities in the pension system but increase near-term fiscal pressure. Other reforms will improve the system's long-term financial sustainability. The statutory retirement age for women is gradually increasing to match the male retirement age. New laws also provide for indexation of pension ages to gains in life expectancy.
- **Tax policy** changes have curtailed firms' access to Romania's generous turnover-based microenterprise tax regime. The government is also taking small steps to expand the value added tax base and starting to unwind sectoral income tax breaks. A review of Romania's tax system has been completed, but most of its recommendations are yet to be addressed.
- **Judicial reforms** have strengthened the independence of Romania's magistrates. In 2023 the European Commission formally closed the "Cooperation and Verification Mechanism" which had been tracking court reform and progress fighting corruption.
- **Government capacity** upgrades will revamp IT and data systems, reform public wage determination and recruitment, and improve project management. Investments in the tax administration aim to encourage compliance and make it easier to trace and punish evasion.
- EU-funded **infrastructure** investments are expanding road and rail transport, retrofitting dwellings to save energy, upgrading schools and health facilities, improving and expanding infrastructure for early childhood education and care, and boosting renewable energy generation. Projects are underway to improve social and health services in rural areas, including through greater access to online services.
- Simplified **licensing procedures** from 2024 will make it easier for manufacturing firms to start operating. Entrepreneurs can also now register and incorporate businesses online. The goal is to reduce paperwork and set-up costs for firms. New measures also aim to simplify licensing procedures for renewable energy projects.
- A new **minimum wage mechanism** is due to start in 2024. The new system will set wage increases based on objective criteria, including to limit risks of job destruction or lost competitivity. Past determinations proceeded without governments benefiting from formal advice. Large wage increases awarded for social aims at times exacerbated macroeconomic imbalances.
- **Coal power** and coal mining will be phased out by 2032, a measure critical to decarbonisation of Romania's energy supply. Most mines and coal-fired power capacity are scheduled to shut down by the end of 2025 as part of a step-wise phase-out legislated in 2022.

2 Stabilising the economy and staying the course on fiscal reform

Ben Conigrave, OECD

Romania's economy proved resilient to external shocks following Russia's invasion of Ukraine and the ensuing energy crisis. The immediate task for macroeconomic policy is to tame inflation, which is well above target. Fiscal consolidation would complement tighter monetary policy in cooling demand. However, increased government spending commitments – including on defence, pension reform and public sector wages – could impede fiscal repair unless important reforms are also made to raise Romania's low tax revenues. Efficient tax system reform is needed to put the public debt on a sustainable track without derailing the rapid economic growth required for income convergence.

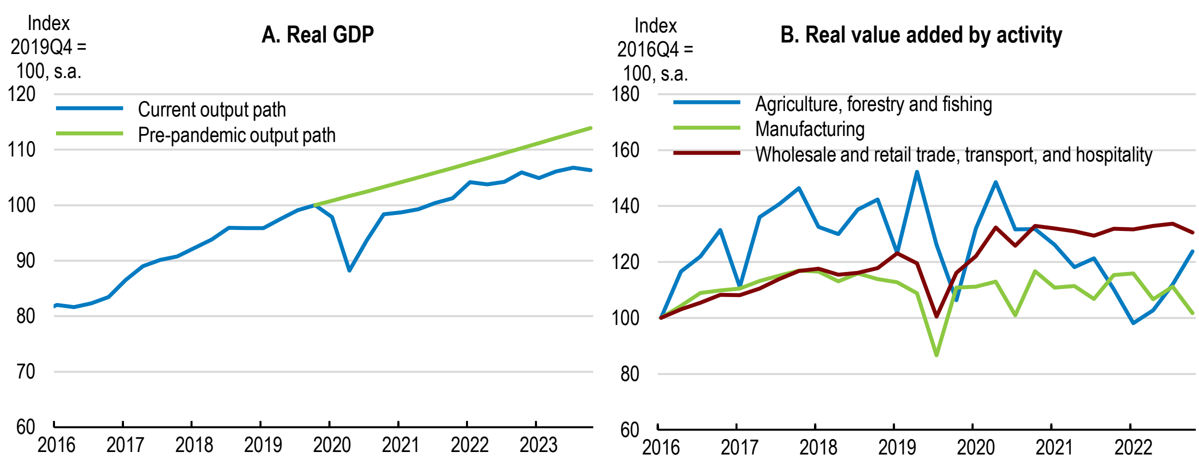
2.1. Demand has eased but inflation remains high

Romania's economy proved resilient to large shocks following Russia's invasion of Ukraine and the ensuing energy crisis and surge in inflation. But while still solid compared with results in many advanced economies, output growth slowed in 2023 from fast rates recorded the previous year. Tighter monetary policy is helping to cool domestic demand while weak economic conditions in Romania's trading partners weigh on the country's exports. Economic growth is expected to remain below potential in the near term even with significant support from EU-funded investments. A period of moderate output growth (Figure 2.1) should help to reduce wage and core price inflation, which remain elevated.

Strong price growth has outlived the supply shocks that caused inflation to accelerate in 2022. Growth in the headline consumer price index (CPI) moderated in 2023 with lower energy prices and weaker food price inflation. Government schemes capping food product mark-ups and prices of electricity and natural gas are further mitigating volatility in inflation. But despite easing growth in import prices, and softer private demand, underlying price pressures are strong. In the year to January 2024, harmonised core inflation (excluding food and energy prices) was high at 10.2%, above headline inflation of 7.3%. Price growth remains elevated across a range of services, even as inflation in goods prices has moderated. In a tight labour market, large wage increases threaten to erode international competitiveness. Unit labour costs have been rising at rapid rates.

Slow fiscal consolidation has left more of the burden of stabilising macroeconomic conditions on Romania's central bank. Significant monetary policy tightening saw the National Bank of Romania (NBR) raise its policy interest rate from 1.25% in late 2021 to 7% by January 2023, the highest level since the Global Financial Crisis. The effects of an extended period of tight monetary policy continue to propagate through asset markets and the real economy.

Figure 2.1. GDP growth has slowed



Note: Panel A: The pre-crisis output path is based on a linear extrapolation of estimated trend growth in 2019.
Source: OECD Economic Outlook database; OECD Quarterly National Accounts database; and OECD calculations.

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Investment is supporting activity amid slower growth in consumption and exports

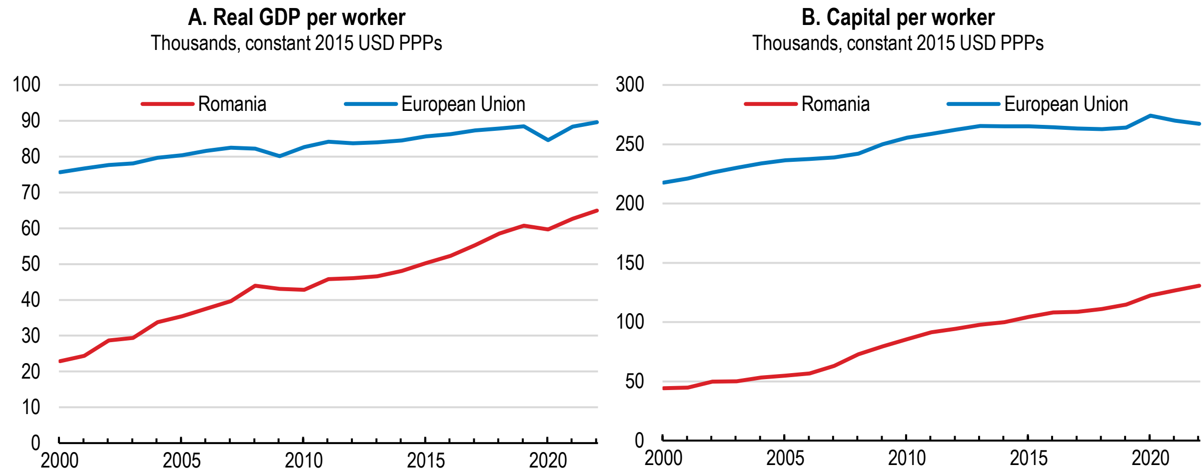
Growth in private spending has moderated. Housing market activity is subdued, with high borrowing costs reducing home loan demand and depressing sales (BNR, 2023[1]). Modest growth in housing prices has weighed on the real value of household net worth. Negative wealth effects, slow hiring, and elevated uncertainty about future labour market conditions are dragging on consumer spending. Refugee inflows following Russia's invasion of Ukraine have likely contributed to broader variation in private consumption growth, which spiked in the war's first year (8.3% in the year to the fourth quarter of 2022) and subsequently declined. Data reported by the UN Refugee Agency (UNHCR) indicate that as of January 2024 over 3.8 million people (equivalent to 20% of Romania's population in 2021) had crossed the border from Ukraine to Romania since the war's outbreak. A further 1.5 million border crossings from Moldova occurred in the same period. Most of those entering Romania transited on to third countries. Roughly 86 000 refugees were recorded as being in Romania at the end of 2023. On top of other integration support, the Romanian government provided subsidies for refugees' housing costs in 2023. Aid was retargeted in May to assist those working, studying or caring for young children (Dopomoha, 2024[2]).

Business conditions are challenging in some sectors. Higher credit costs and frequent fiscal policy corrections are complicating firms' investment decisions (Chapter 3). Reduced credit growth appears consistent with reported moderation in firms' capital expenditure plans. In manufacturing, a cyclical pullback in sales is exacerbating longer-running structural challenges in European car making. Industrial output in Romania is below levels seen in 2018.

Export volume growth has slowed. External demand is subdued amid weak conditions in Romania's trading partners. Rapid unit labour cost growth in Romania's regional peers helped contain damage to Romania's own cost competitiveness in the past year. However, recent data show real wage increases outstripping productivity gains, putting downward pressure on profits. Reduced export growth could limit further improvement in external balances. Romania's trade deficit narrowed recently due to slower growth in imports. The import intensity of economic activity has returned to pre-pandemic levels as tighter macroeconomic policies cool demand. The current account deficit remains large but narrowed in the past year, the relative contribution from net inflows of direct investment increasing over the same period.

EU-funded infrastructure investments are supporting activity. With the newly modified programme's total cost for 2022-2026 estimated at EUR 28.5 billion (10% of GDP in 2022), spending tied to Romania's *Recovery and Resilience Plan* (RRP) is helping offset growth drags from softer household consumption. Construction activity has increased on the back of major energy-efficiency and transport projects and is contributing to lift the economy's capital intensity (Figure 2.2). Maximising potential gains to Romania's productive capacity and living standards will depend on rapid and effective absorption of available EU funds (Chapter 3).

Figure 2.2. Capital intensity is low but increasing



Note: Panel B shows real net capital stock per person employed.
Source: OECD National Accounts Statistics database; European Commission, DG ECFIN AMECO Online Dashboard.

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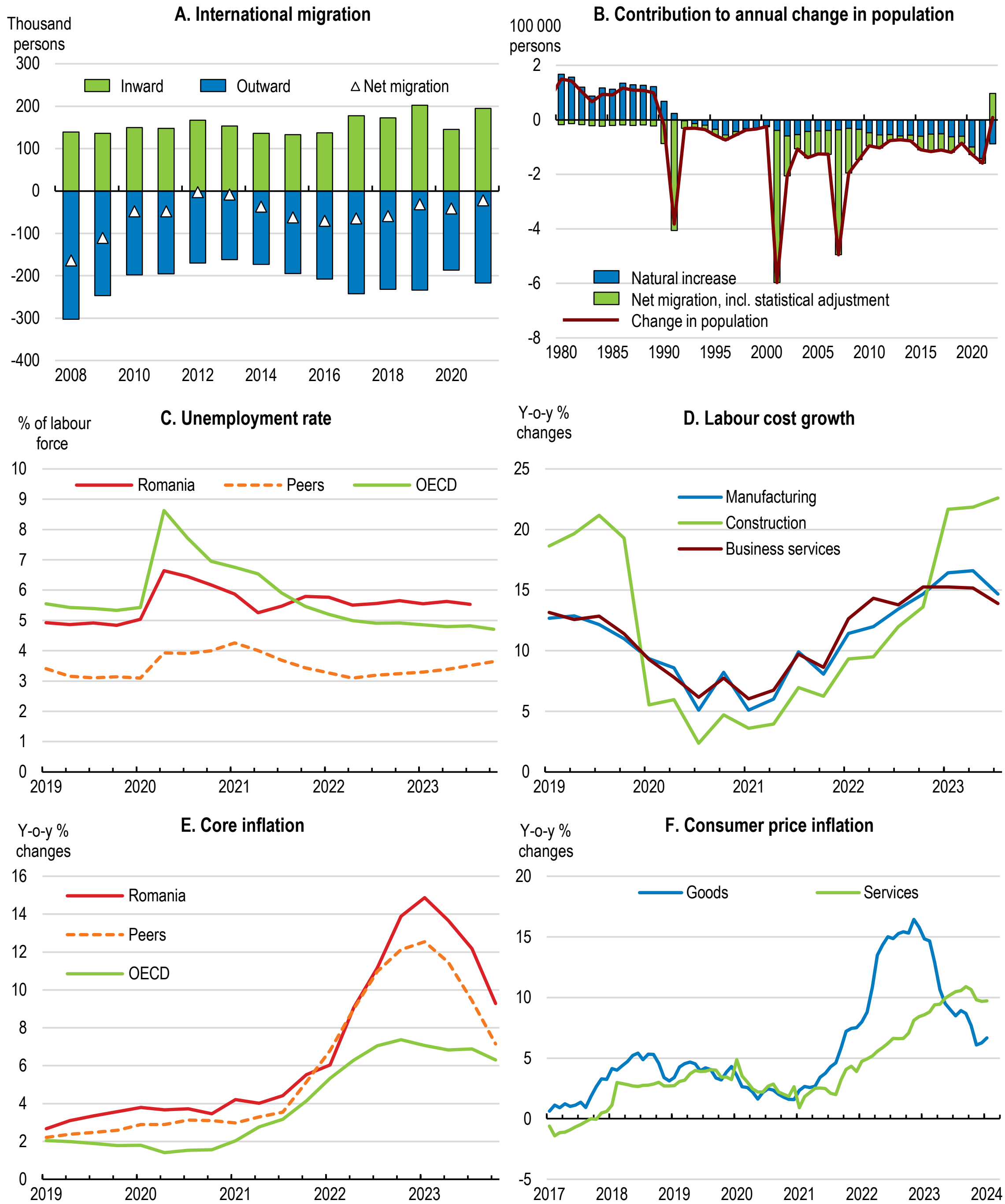
The labour market is tight but hiring has eased

Employment has plateaued. While Romania's job market remains tight, hiring has begun to slow amid reduced growth in production and rising labour costs. Worker inflows from abroad are helping fill vacancies. Skill shortages have been acute in construction, among other sectors, risking delays and higher costs in implementing EU-funded infrastructure projects. With significant worker intakes from central Asia and inflows of Ukrainian refugees, net international migration to Romania turned positive in 2022 (+85 480) for the first time since 1975 (Figure 2.3 Panel A and B). Unemployment is relatively low (5.7% of the labour force in January 2024) (Figure 2.3 Panel C). However, large numbers of working-age Romanians in rural areas are outside the formal labour market. Participation by older workers and women is also low in international comparison (see Chapter 4).

Following declines in real terms in 2022, wages are now increasing at a faster rate than consumer prices (Figure 2.3 Panel D-F). In manufacturing, construction and business services, wage inflation has returned to double digit levels last seen in 2019, when pro-cyclical fiscal policy was causing the economy to overheat. Industrial activity defeated a government attempt to curb public-sector remuneration in 2023, resulting in bigger-than-planned pay increases (see below). Large minimum wage awards – the most recent of which a 10% increase in October – have been compensating low-paid workers for past price inflation but will contribute to broader cost pressures in the economy. From 2024, Romania is due to adopt a new minimum wage setting regime, with aims of better linking determinations to objective criteria, including labour market conditions (Chapter 4).

Figure 2.3. Immigration is helping fill job vacancies but wage pressures are strong



Note: Panel C and Panel E: 'Peers' refers to the unweighted average of Bulgaria, Czechia, Hungary, and Poland. Panel D: The labour cost index covers total wages and salaries. Panel E and Panel F: Data are based on harmonised consumer price indices.
Source: Eurostat; OECD Labour Force Statistics database; OECD Economic Outlook database.

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Output growth will strengthen but remain below potential

Real GDP growth is projected to pick up to 3.1% in 2024 and 3.3% in 2025, remaining slightly below potential (Table 2.1). Pension increases and reduced cost pressures will support real household incomes. But high interest rates, tax increases and slow growth in employment will keep near-term growth in private consumption moderate compared with recent historical averages. Investment will remain elevated, supported by EU-funded infrastructure projects. Exports will gradually recover with improving economic conditions in Europe. Below trend output growth will limit job creation over the next two years, keeping unemployment above pre-pandemic rates as wage growth moderates. Temporary price pressure from VAT increases in 2024 will be overwhelmed in the medium term by lower import price growth and negative demand effects from higher income taxes. By 2025, growth in the headline consumer price index will slow to 3.7%, near the top of the central bank's target band.

Risks to the outlook are significant (Table 2.2). Sustained cost pressure could keep inflation higher for longer than assumed in the projections. In the near term, value added tax increases (see below) could make it harder to subdue high price growth. Slow progress correcting fiscal imbalances could contribute to wider current account deficits and more rapid expansion in Romania's public debt. At a time of higher interest rates this could increase risks of destabilising capital outflows. There are also upside risks to the outlook. Strong translation of EU funds to investment would boost GDP growth and lift Romania's future productive capacity.

Table 2.1. Macroeconomic indicators and projections

Annual percentage change, volume (2020 prices)

	2021	2022	2023	2024	2025
Gross domestic product (GDP)	**1,189.1**	**4.6**	**2.0**	**3.1**	**3.3**
Private consumption	731.0	6.9	2.4	3.0	3.1
Government consumption	212.6	3.1	2.4	0.7	1.7
Gross fixed capital formation	288.4	5.6	12.2	5.6	4.7
Final domestic demand	1,232.0	6.0	4.9	3.3	3.3
Stockbuilding[1]	24.5	-0.8	-3.9	0.0	0.0
Total domestic demand	1,256.5	5.1	1.3	3.3	3.4
Exports of goods and services	482.7	9.6	-0.2	2.5	3.2
Imports of goods and services	550.1	9.9	-2.0	3.0	3.4
Net exports[1]	-67.4	-0.7	0.9	-0.3	-0.2
Other indicators (growth rates, unless specified)					
Potential GDP		3.3	3.5	3.5	3.5
Output gap[2]		1.8	0.5	0.1	0.0
Employment		0.7	-1.4	-0.5	-0.1
Unemployment rate		5.6	5.6	5.5	5.4
Consumer price index		13.8	10.4	5.0	3.7
Core consumer price index		10.1	12.4	5.4	3.7
Current account balance[3]		-9.1	-6.3	-6.2	-5.8
General government fiscal balance[3]		-6.3	-6.0	-5.8	-5.8
Underlying general government fiscal balance[2]		-7.4	-6.8	-6.3	-6.2
Underlying government primary fiscal balance[2]		-6.0	-5.3	-4.5	-4.1
General government gross debt (Maastricht)[3]		47.2	49.9	53.4	56.8
General government net debt[3]		27.6	30.3	33.8	37.2
Three-month money market rate, average		6.0	6.5	6.2	5.8
Ten-year government bond yield, average		7.5	6.7	6.6	6.2

Note: 2021 figures are in RON billion, current prices. 1. Contribution to real GDP growth; 2. Percentage of potential GDP; 3. Percentage of GDP.
Source: OECD Economic Outlook: Statistics and Projections No. 114 (database) and updated projections.

Table 2.2. Events that could entail major changes to the outlook

Shock	Likely impact	Policy response options
High wage and price inflation becomes entrenched	Inflation expectations fail to re-anchor. Rising costs undermine competitiveness. Sagging labour demand and heightened uncertainty could provoke a downturn.	Consider further monetary tightening. Reduce spending and eliminate distortive tax concessions to cool demand. Avoid big public sector pay rises.
Escalation of fighting in Ukraine with fresh surges in food prices	Potential disruption of Romanian transport corridors. Pressure on food prices strains household budgets, forcing many to rein in spending, prompting broader falls in economic activity.	Work with the European Commission and regional partners to ensure trade routes for Ukrainian farm exports. Consider leaving in place targeted support to low-income households while the acute shock endures.
Geopolitical tension in the Middle East causes further spikes in oil prices	High fuel prices threaten to push households into financial distress and drive up firms' input costs, especially in energy-intensive industries. Businesses postpone investments due to downward pressure on profits and heightened economic uncertainty.	Consider leaving in place temporary and targeted support to low-income households. Avoid extending broad-based debt moratoria and proceed with plans to phase out market-distorting energy price caps.
Severe tightening of credit conditions in foreign financial markets	Heightened volatility weakens investor appetite for emerging economy debt, prompting capital outflows. High borrowing costs and tough credit standards deter investment and increase debt servicing burdens for households. Rising sovereign bond yields and deposit withdrawals force exposed banks to realise asset losses, impairing their capacity to meet financial obligations.	If needed, recalibrate monetary policy and macroprudential rules to thaw credit markets while defending financial stability. Tailor responses compatible with policies in regional markets. In the long run, remove obstacles to financial market development.
Natural disasters: earthquakes, floods, drought	Catastrophic events disrupt economic activity, threaten lives and livelihoods, and erode wealth through damage to buildings and natural assets. Low quality homes in Romania expose vulnerable households to greater risk of harm. Poor growing conditions exacerbate existing structural challenges in Romanian agriculture.	Support building upgrades in line with strengthened standards. Rehabilitate irrigation systems. Adapt land use planning to limit concentration of assets in disaster-prone areas. Improve emergency warning and response mechanisms. Combine state support to affected areas with efficient insurance instruments for distributing risk.

2.2. Monetary policy will have to remain tight to return inflation to target

Monetary policy should remain contractionary in the near term. The National Bank of Romania will likely have to keep its policy interest rate high in 2024 to bring price inflation to target (Box 2.1). Additional rate rises may be needed if wage growth fails to slow or if medium-term inflation expectations drift above the top of the target band, where they have been in recent months. Liquidity in the interbank market will also influence market interest rates and may require tighter management if inflationary pressure mounts. The NBR allowed a liquidity surplus to accumulate in early 2023 following Treasury operations in foreign currency (BNR, 2023[3]) and in a context where carry trade was generating appreciation pressure on the local currency (IMF, 2023[4]). Excess liquidity caused interbank lending rates to decline towards the bottom of the corridor bounded by the NBR's loan (8%) and deposit facility rates (6%). While still well above levels in late 2021, rates on new household deposits declined in early 2023. Larger rate falls were recorded for leu-denominated business loans, partly offsetting the effect of past policy rate increases.

Box 2.1. Policy objectives of Romania's central bank

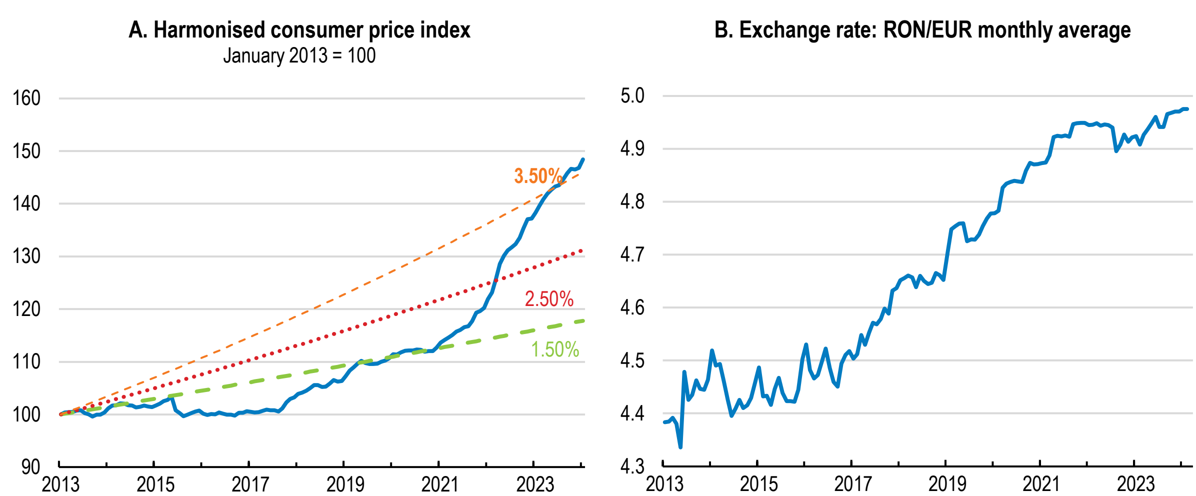
The primary objective of the National Bank of Romania is to ensure and maintain price stability. In pursuit of this goal, the central bank formulates and implements monetary policy in the context of a direct inflation targeting strategy adopted in 2005. The inflation target is set as a midpoint within a variation band of ±1 percentage point. After a period of successively decreasing inflation targets, the target became stationary at the end of 2013, and is set at 2.5% ±1 percentage point. Open market operations, the NBR's most important monetary policy instrument, are used to steer interest rates, manage liquidity in the money market and signal the monetary policy stance. The inflation targeting strategy coexists with a managed float exchange rate regime, aimed at allowing a flexible policy response to economic shocks.

Source: National Bank of Romania

The NBR is maintaining its "managed float" exchange rate policy (Figure 2.4). Central bank interventions contributed to keep the leu in a narrow value band around the euro through depreciation pressure after Russia's invasion of Ukraine. In avoiding higher import prices this supported the objective of lowering inflation. On the other hand, increased euro-denominated borrowing by firms from mid-2022 (see below) threatened to weaken transmission of monetary policy to the economy. FX-based borrowing has since slowed as interest rate differentials with the euro area narrowed through 2023 and exchange rate volatility increased. As a share of debt held by non-financial corporations (46% in December), loans denominated in foreign currencies remain below levels seen after the Financial Crisis (a peak of 62% was reached in 2012).

Maintaining good progress in improving the transparency of central bank communications could support monetary policy transmission. The NBR has followed global trends towards increased transparency (Dincer, Eichengreen and Geraatsc, 2022[5]). Like other central banks, the NBR explains its policy goals, publishes relevant economic data and releases the inflation forecasts informing its decisions. In press releases, quarterly Inflation Reports and minutes of board meetings, the Bank articulates the economic context to its policy actions. While market sensitivities prevent regular disclosure of exchange rate policy aims, the NBR routinely notes obstacles to the achievement of its main goal of low and stable inflation. To build on good past progress, official communications could also note relevant macroeconomic indicators the Bank will be evaluating in future interest rate decisions – for instance, developments in inflation expectations, the state of the labour market, supply tensions, and the evolution of foreign demand. In periodically updating its communications, the Bank might draw on the example of its counterpart in Czechia, which is among the world's most transparent central banks (Dincer, Eichengreen and Geraatsc, 2022[5]). Continuing to aim for best practice could support monetary policy transmission and enhance the NBR's already strong credibility.

Figure 2.4. The exchange rate is stable but inflation remains high



Note: Panel A compares the level of the harmonised consumer price index to thresholds implied by the upper and lower bounds of the NBR's target band (2.5% ±1 percentage point), which was introduced in 2013.
Source: OECD Analytical Database and National Bank of Romania.

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2.3. Financial conditions have tightened

Banks tightened lending standards in 2023 as credit risk in the economy increased (BNR, 2023[6]). Prudential lending caps are helping limit loan delinquencies amid higher borrowing costs. Broader financial risks are mitigated by Romania's relatively small private sector liabilities. At the same time, pockets of vulnerability remain and must be monitored as authorities recalibrate prudential instruments.

Firms' foreign currency-denominated borrowing increased financial stability risks

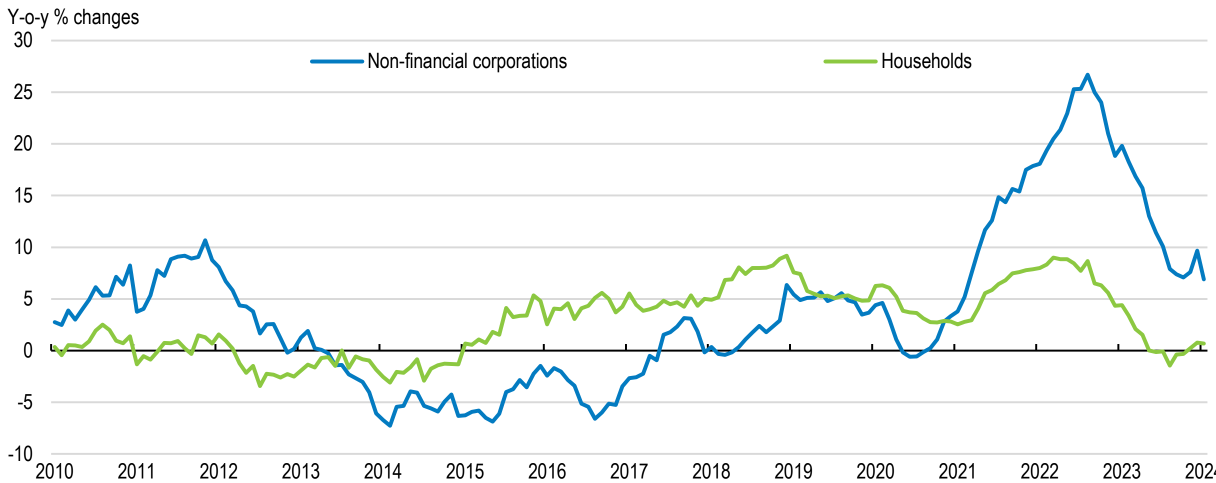
Robust demand has until recently allowed businesses to defend operating surpluses in the face of rising costs. Electricity and gas price caps limited damage to profits in the acute phase of Europe's energy crisis (BNR, 2023[7]). A period of soft private demand and higher labour costs could reduce profits and test firms' ability to service their debts. The central bank continues to monitor pressures in interest-rate sensitive sectors, including manufacturing (BNR, 2023[7]). For the time being, however, non-performing loans have fallen as a share of credit extended to non-financial businesses (4% in September 2023) and in the overall economy (BNR, 2023[1]).

Past government moratoria on loan repayments bought distressed borrowers time to consolidate finances at a difficult stage of the energy crisis. The last debt holiday, which expired in 2022, was short in duration and targeted at solvent borrowers facing temporary business setbacks. This narrowed the scheme's scope compared with more expansive measures in other East European countries, such as Poland, likely limiting impacts on the financial system (ECB, 2023[8]).

Increased foreign currency-based debt posed risks to financial stability in the past year. Large differences in interest rates on loans denominated in lei and euros enticed firms to take on more foreign currency debt from mid-2022 as total credit growth eased (Figure 2.5 and Figure 2.6) (BNR, 2023[7]). Similar to developments in other economies in the region, euro-based debt rose and by mid-2023 comprised 45% of total loans to non-financial corporations, above levels before the pandemic. Growth in FX-denominated loans subsequently slowed following ECB rate rises that narrowed interest rate differentials with the euro area. Past financial sector assessments have found that up to a quarter of Romanian firms do not take steps to mitigate their currency risks (BNR, 2023[7]). In part likely reflecting an illiquid local derivatives market (OECD, 2022[9]), a significant share of foreign-currency loans in Romania are unhedged (IMF, 2018[10]). Should it resume, rapid expansion in euro-denominated debt would increase risks to the financial system from potential future falls in the value of the leu. Local currency depreciation would increase businesses' debt servicing costs. The leu value of firms' liabilities would rise relative to their incomes – particularly for non-exporting businesses with output priced in lei – forcing more firms into financial distress.

Close monitoring of currency-related risks should continue. Managing risks from firms' foreign currency debts is important, and difficult, in a country with a managed exchange rate and a financial system dominated by foreign banks. Romania already has in place borrower-based measures curbing foreign-exchange exposures, with lower ceilings applied to foreign currency loan-to-value ratios and debt servicing costs (EMF, 2023[11]). Risks from foreign currency-denominated borrowing can also be managed by adjusting risk weights on banks' capital requirements, or through use of the systemic risk buffer. The recent slowdown in growth of foreign currency-denominated loans suggests there is no immediate cause for tightening such regulations. However, the authorities should continue to closely monitor FX-based borrowing and stand ready to adjust macroprudential instruments should FX exposures increase further. Regulation and monitoring of non-bank financial intermediaries (NBFIs) will remain important. NBFIs engage in significant FX lending to firms whose main business is domestic and thus lack export incomes that might offset borrowing cost rises from a currency depreciation (BNR, 2023[7]).

Figure 2.5. Credit growth has slowed



Note: Households include non-private institutions serving households.
Source: ECB.

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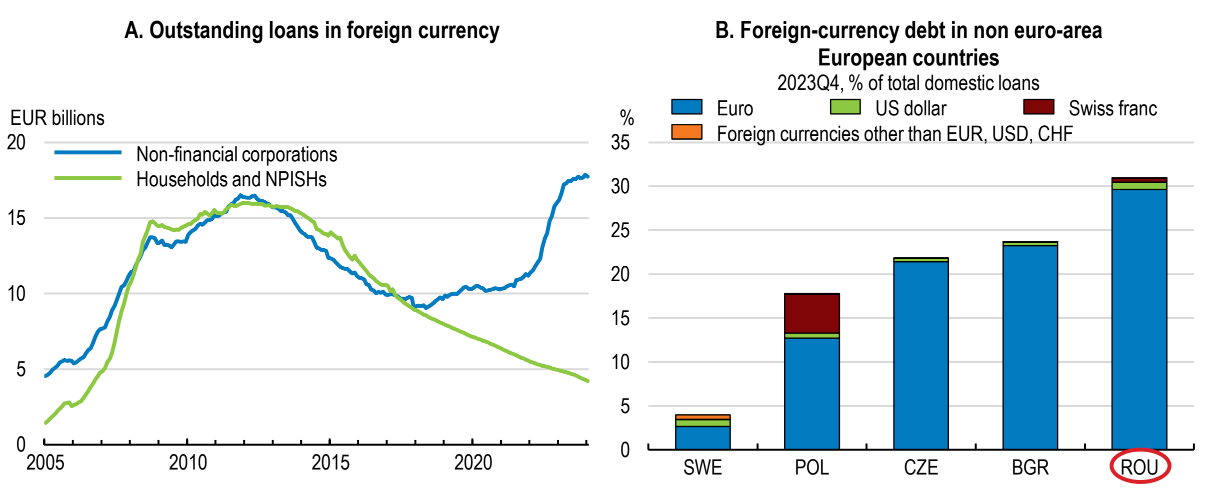
Figure 2.6. Euro-denominated loans to businesses increased in the past year



Note: Romania restricted access to foreign-currency mortgages after the financial crisis. New regulations in 2019 introduced a lower debt service-to-income ratio for foreign currency loans (20%) compared with local currency loans (40%), further restricting access to foreign currency home loans (EMF, 2023[11]). In panel A, "NPISHs" stands for non-private institutions serving households.
Source: ECB.

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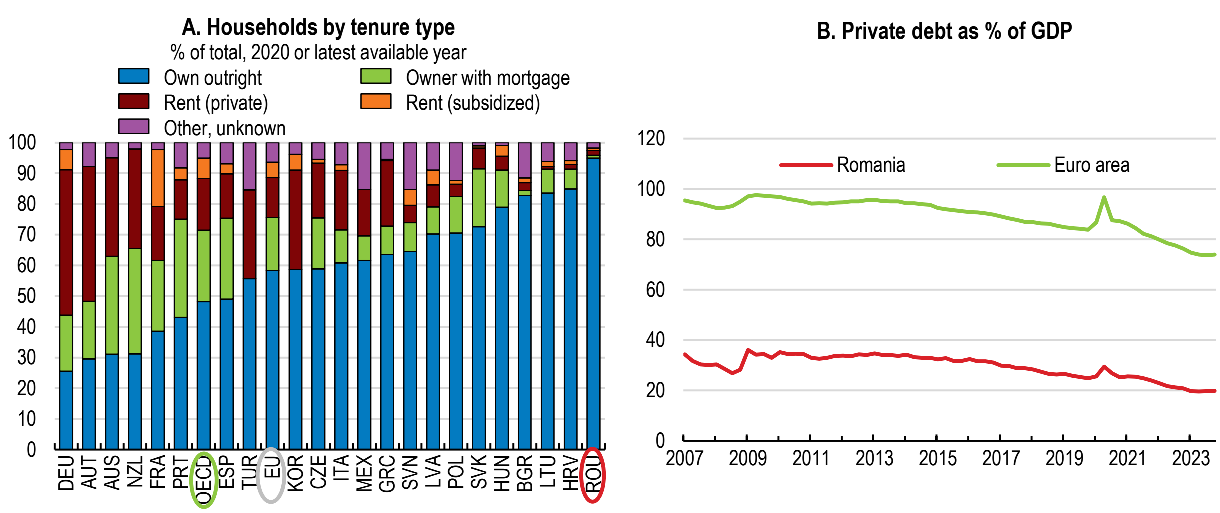
Household balance sheets are strong but vulnerable borrowers are under pressure

Tight monetary policy has increased pressure on households with mortgages. Whereas consumer debt in Romania is typically issued at fixed rates – reducing delinquency risks from higher borrowing costs – home loans are mostly offered at variable rates. Households that took out mortgages before large rate rises in 2022 now face higher debt servicing costs. The central bank's June 2023 Financial Stability Report noted that loans granted from the first quarter of 2021 to the second quarter of 2022 – when borrowing costs were low – comprise 27% of the total housing loan portfolio (BNR, 2023[7]). The total stock of mortgage debt is, however, small compared with most OECD countries. Due partly to property distribution at the end of communism, the share of Romanians owning homes outright is large. Even in the lowest income quintile, most Romanian households own homes without a mortgage (Figure 2.7). Reforms restricting lending to households with high loan-to-value ratios (85% is the benchmark for leu-denominated mortgages) and elevated debt service costs (40% of income is the standard threshold for leu-denominated credit) further reduce the potential pool of financially-distressed borrowers (BNR, 2023[7]). Moreover, roughly a third of outstanding mortgages are government-guaranteed under Romania's *New House* (*Nova Casa*) programme (EMF, 2023[11]). This mitigates immediate risks in the household sector. Still, authorities should keep tracking mortgage defaults, which could increase if employment falls.

Figure 2.7. Private debt is low and almost all households own homes outright



Note: Panel B shows the outstanding amount of banks' loans to businesses, households, and non-profit institutions as a percentage of GDP.
Source: OECD Affordable Housing database; OECD calculations based on ECB and Eurostat data.

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Banking sector indicators are healthy

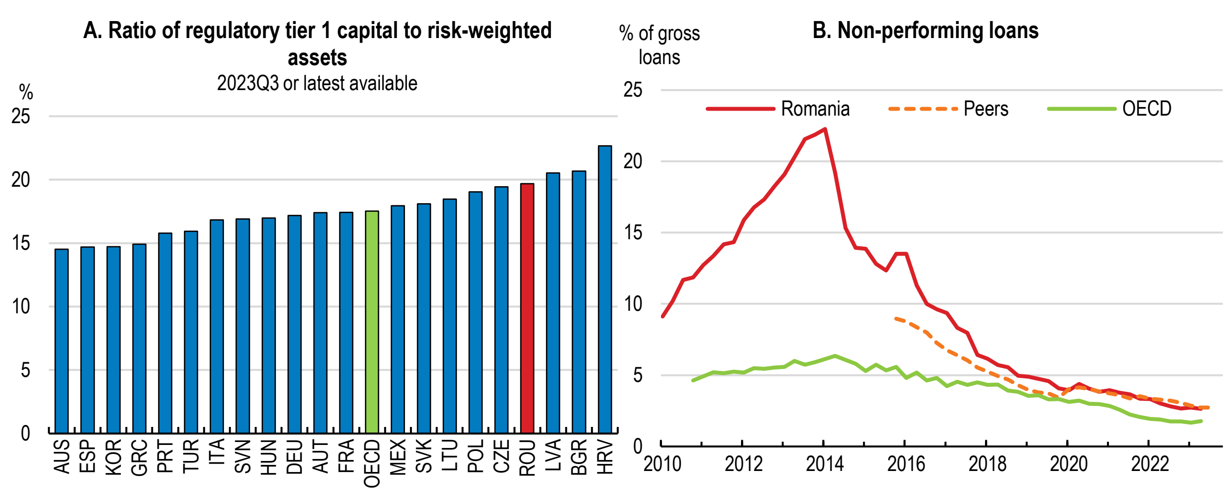
Banks' profits are strong and there is excess liquidity in the system (BNR, 2023[1]). While still exposed to international credit conditions, confidence in Romanian banks held up through ructions in foreign financial markets in 2023. Lenders have not faced large calls on funds that might test their capacity to meet ongoing obligations. Rather, deposits have grown in a high interest rate environment (BNR, 2023[7]).

Capital ratios are above minimum thresholds, leaving banks some room to absorb shocks (Figure 2.8). Authorities lifted the countercyclical capital buffer rate from 0.5 to 1% from October 2023. This decision recognised risks from Romania's still-large fiscal and external deficits (BNR, 2023[7]). Weak spots in loan portfolios may yet emerge, including as borrowers previously covered by debt holidays confront higher debt servicing costs.

A new 2% turnover tax, taking effect from 2024, is expected to reduce financial institutions' after-tax profits. From 2026 the new turnover tax rate is programmed to decrease to 1%. Hungary, Italy and Czechia, among other European countries, recently introduced windfall taxes on banks. Governments run a gamble with such measures, particularly if they are left in place for an extended period. At a time of stronger profits, excess liquidity and adequate capital in the banking sector, the risk of throttling credit creation may be small, at least in the near term. There is a risk, however, that banks pass on higher operating costs to clients. Moreover, for lenders with lower profits, the new tax could reduce resilience to shocks and constrain banks' capacity to lend. This reflects the levy's design as a tax on turnover as opposed to profits. The measure's surprise introduction also added uncertainty to an investment climate already complicated by frequent changes in tax policy in recent years. From a budgetary perspective, the new turnover tax is no substitute for proper corporate tax reform, which will be important for long-run fiscal sustainability (discussed below).

Sovereign risk exposure has increased. Bank holdings of government securities and loans (together 23% of assets) are large in international comparison (BNR, 2023[1]). Past IMF-World Bank financial sector reviews assessed that by loading banks with its own securities, the Romanian government may have at times crowded out other lending (IMF, 2018[10]). For now, broader risks to financial stability are mitigated by Romania's still relatively small stock of public debt. Further expansion of the public debt relative to Romania's GDP would increase risks borne by banks and other major holders of Romanian government bonds, such as private pension funds (10% of government debt issued as at September 2022) (BNR, 2023[7]). Lenders could be forced to realise large losses if, for instance, fiscal deficit deterioration were to drive sovereign yields higher and reduce confidence in banks' balance sheets. The need to keep such risks contained strengthens the case for pursuing fiscal repair (see below).

Figure 2.8. Banking sector indicators are healthy



Note: OECD is the unweighted average of OECD countries. In Panel B, 'Peers' refers to the unweighted average of Bulgaria, Czechia, Hungary and Poland.
Source: IMF, Financial Soundness Indicators database.

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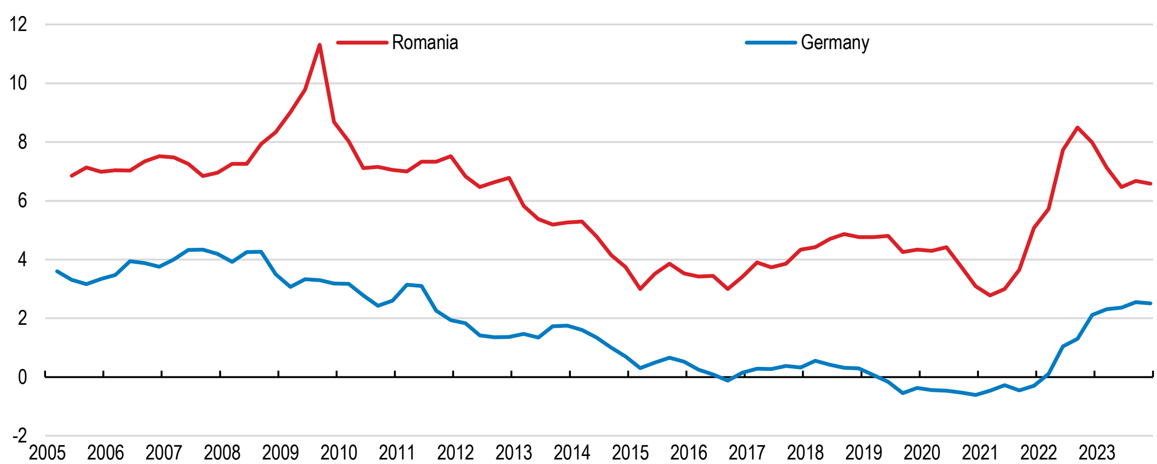
2.4. Fiscal prudence is needed to cool demand and support public debt sustainability

Fiscal consolidation has slowed. OECD forecasts show a general government fiscal deficit of 6% of GDP in 2023, a modest improvement on the budget position in 2022 (6.3% of GDP) (Table 2.1). In 2024, the budget deficit is projected to narrow further to 5.8% of GDP. New spending commitments, notably tied to pension reforms (see below), should contribute to keep budget deficits wide over the next few years, exceeding thresholds compatible with stabilising the public debt burden. This will prevent Romania from exiting the EU Excessive Deficit Procedure in 2024 as previously expected. Indeed, fiscal projections published in the annual budget in December suggest Romania's EDP exit – requiring a deficit below 3% of GDP – will not occur until 2027 (Romanian Government, 2023[12]). Fiscal consolidation could be slower still if government spending exceeds targets or if tax receipts undershoot budget projections, as occurred in the past year. New tax measures (discussed below) are expected to raise additional revenues of around 1% of GDP in 2024 (Romanian Fiscal Council, 2023[13]). The government is also relying on a revenue boost from measures to strengthen tax enforcement and collection efficiency, the near-term results of which are difficult to predict.

Fiscal consolidation must continue. Romania's access to EU funds under the *Recovery and Resilience Plan* could be reduced if the country continues to miss budget deficit targets agreed with the European Commission. There are other important reasons for correcting budget imbalances. Reducing fiscal deficits would support central bank efforts to slow activity; Romania's fiscal stance remains too accommodative (Figure 2.10). Smaller deficits would also assist further improvement in the current account, stabilise the public debt burden and help build fiscal buffers for future adverse shocks. A credible medium-term plan is needed to consolidate fiscal balances and ensure the sustainability of Romania's public finances.

Figure 2.9. The country risk premium is elevated

10-year government bond yield, %



Source: OECD Economic Outlook database.

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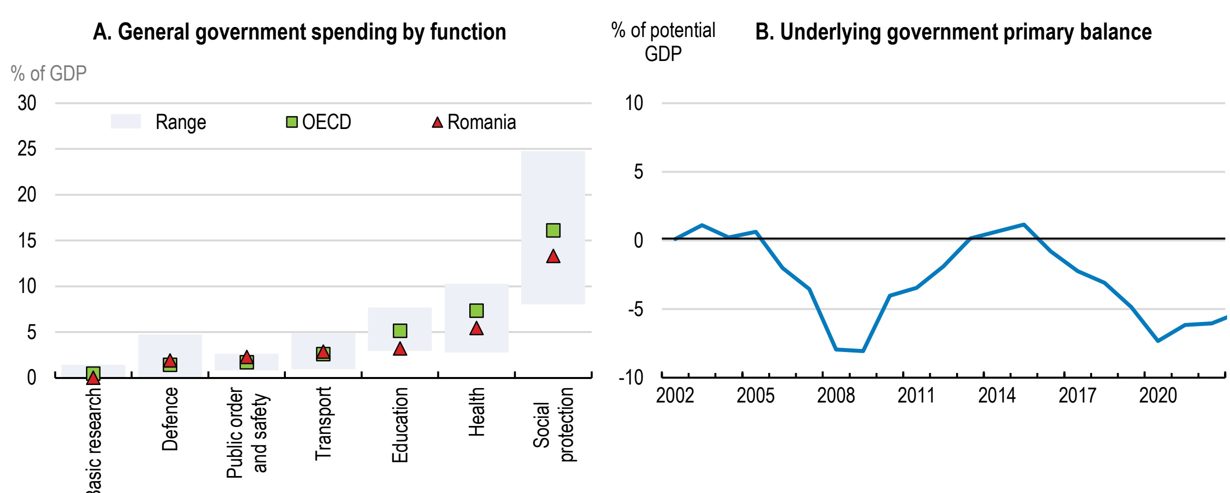
Spending restraint and tax reforms should be pursued in tandem to correct budget imbalances. In addition to new pension reforms, larger outlays on defence (2.5% of GDP in 2023), higher borrowing costs (Figure 2.9), and commitments to improve health care and education add to Romania's medium-term fiscal challenge. Extraordinary living-cost support should continue to be stepped back. Efforts to curb waste in public expenditure must also continue. But with state outlays modest to begin with (Figure 2.10), scope for deep spending cuts seems limited. Indeed, viewed against peers in Europe, Romania's weak budget position is less a reflection of excessive spending than of the country's small tax revenues (27% of GDP in 2021, below the OECD average of 34%). In this context, the priority should be to contain growth in government consumption while stepping up efforts to eliminate distortive tax expenditures and modernise the tax administration. This section of the chapter considers measures relevant to limiting fiscal pressure and improving the medium-term fiscal strategy, including spending reviews, reforms to public wage setting, and pension reforms. Subsequent sections of the chapter examine Romania's debt sustainability challenge (section 2.5) and tax reforms needed to correct structural budget imbalances (section 2.6).

Towards more efficient government spending

A new fiscal package announced in late 2023 curbs excesses in spending by public agencies and state-owned businesses. The new measures liquidate redundant special commissions, ban purchases by officials of expensive cars and mobile phones, and tighten rules on procurement. Further efforts to weed out waste in government should be pursued through spending reviews. Amendments to Romania's Public Finance Law integrated spending reviews in the budget process. However, until now, such reviews have been conducted only occasionally. As part of the national *Spending Review Strategy 2023-2030*, Romania has appropriately committed to making systematic use of spending reviews going forward. Ongoing one-off evaluations of the health and education portfolios will yield lessons for future spending assessments. Romania can also draw on the experiences of peers in the region. In Czechia, capacity constraints and limited performance data impeded efforts to scale up spending reviews (OECD, 2023[14]). RRP measures to improve data management in government might mitigate such challenges in Romania, particularly if skilled reviewers can access useful performance information. Good governance, clear objectives, and effective collaboration with line ministries improve the odds of success in spending reviews. Best practice in OECD countries suggests integrating reviews in medium-term budget planning and publishing review findings for transparency (Tryggvadottir, 2022[15]). Beyond cutting budgets, spending reviews should help policymakers allocate resources effectively as priorities change. Among other things, spending reviews could identify efficiency gains in staffing. This would help avoid costs to service delivery from indiscriminate cuts to staff headcounts and job vacancies, such as the government ordered in 2023. Outside spending reviews, laws require that cost benefit analysis be carried out for major government-run projects. This is done as part of a feasibility study for publicly-funded projects with total minimum value above RON 100 million. Consistent use of cost benefit analysis in line with the existing laws is important to prioritise cost-effective public investments.

Figure 2.10. The fiscal stance is tightening but remains too accommodative, despite low spending



Note: Panel A: "Range" shows the difference between OECD countries with the highest and lowest government expenditure relative to GDP. Panel B: Underlying government primary balance is the difference between government revenues and expenditure, excluding interest payments, corrected for effects attributable to the cycle and one-off factors.
Source: OECD National Accounts database; OECD Economic Outlook database.

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There is a need for predictable and fair public wage determination

Prudence in public-sector wage setting remains important. Compensation of employees has a large weight in government consumption in Romania (28% in 2021 compared with the EU average of 20%). Following successful protests in 2023, the government awarded larger-than-planned pay increases to teachers, health-sector workers and other public sector employees. Further large public wage awards could widen budget deficits while fanning higher inflation in private-sector wages. A reform priority is to make public wage determination fiscally prudent, fairer and more predictable. Romania's RRP rightly identifies competitive recruitment, merit-based promotion, and performance-based pay as benchmarks for effective civil service management. Fiscal costs will also have to be considered in designing a forthcoming reform to public-sector wage setting.

Box 2.2. Fiscal policy effects

The following estimates roughly quantify potential long-run fiscal impacts of selected reforms. The estimates are illustrative only. Impacts with a negative sign (-) represent net costs to the budget. Positive figures (+) represent net savings.

Table 2.3. Illustrative fiscal impact of selected reforms

Reform	Long-run effect on budget balance % of GDP
Expand ECEC budget to match the OECD average (as % of GDP)[1]	-0.4%
Increase public investment to support decarbonisation[2]	-1.2%
Raise pension ages in line with life expectancy[3]	+0.75% to +1.25%
Efficiency gains pursued through spending reviews[4]	+0.1%
Introduce a refundable earned income tax credit (EITC) and a progressive personal income tax rate schedule[5]	-0.4%
Modernise the tax administration to curb tax evasion	Not estimated
VAT base broadening[6]	+0.75% to +1.5%
Better align the effective tax treatment of small and larger businesses' profits	+0.25% to +0.5%
Lift immovable property taxes to match OECD average receipts % of GDP	+0.6%
End sectoral personal income tax exemptions	+0.4% to +0.6%
Higher fuel excise duties[7]	+1.3%

1. Does not include offsetting boosts to tax receipts from expected higher labour force participation by parents.
2. Indicative national contribution to energy, buildings and transport sector investments required this decade to stay on track to eliminate net greenhouse gas emissions by 2050. The scenario is adapted from estimates in World Bank (2023[16]).
3. Impact by 2050. The range draws on estimates from the OECD long-term model and the European Commission's 2021 Ageing Report.
4. Savings from spending reviews depend on a review's nature and objectives, which may be broader than cost reductions.
5. The estimate is adapted from scenarios released in the 2023 World Bank review of Romania's tax system (World Bank, 2023[17]). The PIT schedule incorporates rates of 6% (for income up to RON 80 000), 12% (for income between RON 80 001 and RON 189 000) and 18% (above RON 189 000). The scenario assumes deductibility of social security contributions is removed.
6. Assumes most products shift to the standard VAT rate of 19%, excluding some food items, medicines and social housing.
7. The scenario is adapted from the 2023 World Bank review of Romania's tax system conducted for the *Recovery and Resilience Plan*. Excise duties are assumed to increase to account for all climate and non-climate related externalities. The estimated impact is for 2030.
Source: OECD Social Expenditure Database; Eurostat; Romanian Government Budget 2023; EC Ageing Report 2021; World Bank Tax System Review of Romania 2023 and OECD calculations based on Long-term model simulations.

New pension reforms add near-term fiscal pressure but should improve the public pension system's long-run sustainability

Population ageing will make it harder to fund Romania's public pensions in the years ahead. The retirement of a large cohort of people a decade from now will accelerate changes in the age structure of Romania's population. As in many OECD countries, lower fertility will contribute to this process. Particularly wide gaps between Romania's current and past fertility rates are in part a legacy of extreme pro-natalist policies pursued under the country's former communist regime. At a time when access to contraceptives was limited, a strictly enforced ban on abortion contributed to a spike in births from the late 1960s. Subsequent falls in fertility, together with improved life expectancy and ongoing emigration of prime-age workers will drive up Romania's old age "dependency ratio" – the ratio of retirees to working-age people (Figure 2.11). OECD estimates suggest this ratio could increase by 13 points from 32% in 2022 to 45% in 2040. As pension beneficiaries increase in number relative to active contributors, current imbalances in the pension system will grow. Estimates from the OECD's Long-term model suggest that, based on current policies, the fiscal cost of public pensions could rise by 4.5 percentage points of GDP between now and 2050 (Figure 2.11 panel C). Continuing to meet obligations to retirees could, without ongoing reform, require greater calls on revenues outside the system, weakening the budget position.

Box 2.3. Main features of Romania's pension system

Romania's pension system comprises:

- A **points-based public scheme**. Benefits are calculated with reference to a person's earnings over their career. A minimum pension ensures a basic standard of living in retirement for low-paid workers. New legislation requires that pension points, which determine benefits in the public scheme, be automatically indexed to a weighted average of price and wage inflation from 2024. Past pension point adjustments often departed from indexation rules, with large discretionary benefit increases. In 2024, the contribution rate to public pensions from gross wages is 20.25%.
- **Mandatory private pensions**. Romania's defined-contribution private pension system started in 2007 and is mandatory for workers under 35. The contribution rate to Romania's private pension schemes will be 4.75% in 2024.
- **Voluntary private pensions** complement the mandatory private scheme. Capped tax-deductible contributions encourage additional saving for retirement.

Source: OECD (2023[18])

Box 2.4. Reforms to public pensions in Romania

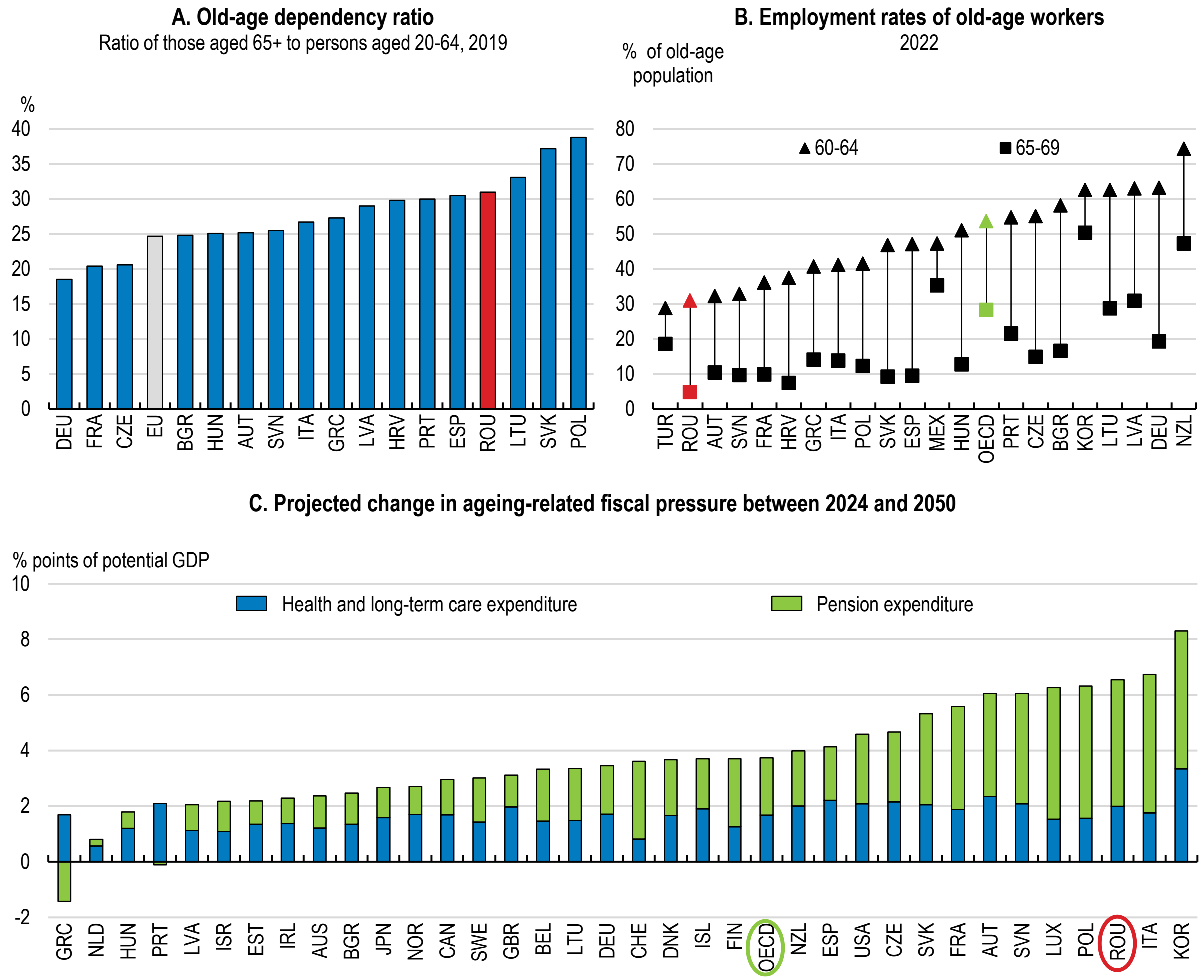
A new law on public pensions was approved in November 2023. The law corrects inequities in the public pension system and encourages Romanians to have longer working lives. Provisions in the law:

- require **automatic annual indexation** of pensions with inflation in prices and wages. The measure will safeguard retirement income adequacy while improving predictability for pensioners.
- **recalculate entitlements** using a formula that awards points based on income earned during one's time in work. The measure will strengthen links between benefits and contributions to the pension system. It will address inequities in the existing system, notably the disparate treatment of people with similar past earnings and contribution periods depending on the year they retire.
- **increase the female pension age** to match the male standard retirement age of 65 by 2035. The measure will encourage women to spend longer in work. However, the law will allow mothers to retire early, lower pension ages applying to those with more children.
- **Index pension age adjustments to gains in life expectancy** to improve the financial sustainability of the public pension system.
- **allow older workers to work beyond retirement age** with the consent of their employer.

Newly legislated public pension reforms will add near-term fiscal pressure. The government has committed to automatically index pension entitlements to price and wage inflation from 2024 (Box 2.4 and Box 2.5). Keeping this commitment would improve pension system predictability by putting an end to the discretionary entitlement adjustments of recent years; large ad hoc benefit increases improved pension adequacy (Figure 2.12 panel B) but raised the system's cost. The new pension law also provides for recalculation of public pensions from 2024. This measure aims to improve consistency of treatment of pensioners through a points-based formula linking entitlements to earnings over a person's working life. The reform would correct pension system inequities. It should proceed provided the government is able to implement viable offsetting measures, notably tax reforms (see below), to keep fiscal consolidation on track. Costs associated with the recalculation of public pensions are expected to increase after a first-year impact of roughly 0.6% of GDP in 2024.

Other reforms outlined in the new pension legislation will improve the system's long-run financial sustainability. The low female statutory retirement age (currently 62) is gradually being increased to match the male pension age of 65 by 2035. Full contribution periods for women and men will also gradually be aligned. The new legislation will continue to allow mothers to retire early based on how many children they have and raise. Such provisions should eventually be removed. The new law does, however, appropriately require that future adjustments to the standard statutory retirement age be indexed to gains in life expectancy, with adjustments every three years. In encouraging higher participation by older Romanians, these welcome changes will help offset mismatches between system contributors and benefit recipients and help fund future public pension obligations (Box 2.2). The reforms should also mitigate risk of poverty in old age, which is declining towards EU average rates but remains high (Figure 2.12 panel A).

Figure 2.11. Population ageing will erode the labour supply and add fiscal pressure



Note: Panel C shows OECD Long-term model estimates of changes in government expenditure linked to population ageing. OECD unweighted average excludes Chile, Colombia, Costa Rica, Mexico and Türkiye.
Source: European Commission, Ageing Report 2021; OECD Labour Force Statistics database; Guillemette, Y. and J. Château (2023), "Long-Term Scenarios Update: Incorporating the Energy Transition", OECD Economic Policy Papers, No. 33, OECD Publishing, Paris, forthcoming; and OECD calculations.

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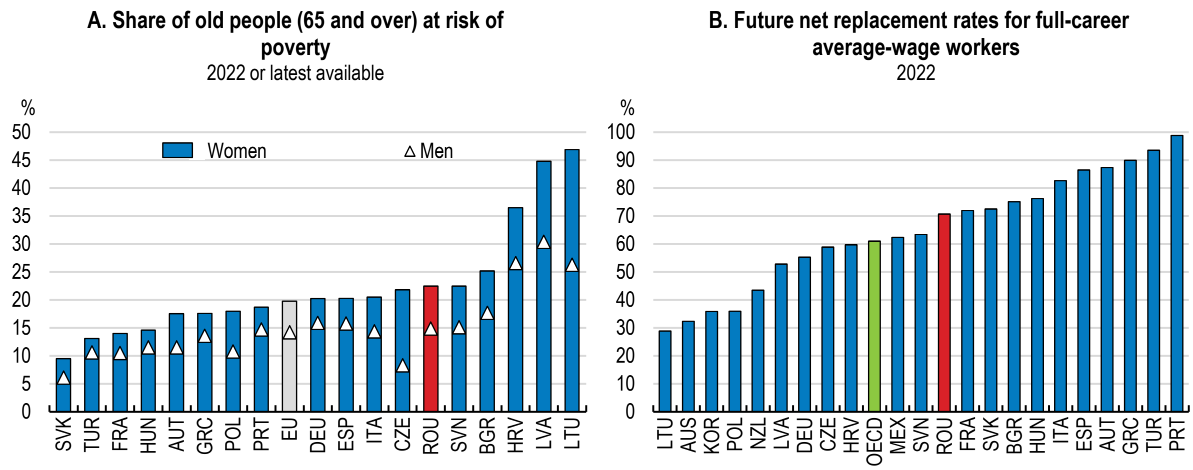
Gateways to early retirement should be narrowed over time. Current rules allow those eligible for the old-age pension to work beyond the standard retirement age with their employer's agreement, up to age 70. Recent reforms have also tightened eligibility conditions for Romania's early retirement pensions (*pensie anticipate*). Early pensions are accessible five years before the statutory pension age for those completing long contribution periods (five years more than a full contribution period). New stricter contribution requirements exclude non-contributory periods, such as time spent on paid child-raising leave or in full-time university study. This will reduce the number of people eligible for early pensions. In practice, the effective age of retirement (63.8 years in 2022) is already not far below Romania's male statutory pension age of 65 and roughly aligns with the average effective retirement age for men in OECD countries (OECD, 2021[19]). Still, as rising life expectancy extends average time in retirement, paths to early labour market exits should continue to be narrowed. This would complement incentives for longer careers and improve the fiscal sustainability of public pensions.

Figure 2.12. Old-age poverty risk is nearing EU averages but remains high



Note: Panel A: The cut-off point for poverty risk is 60% of median equivalised income after social transfers. Panel B: Pension entitlements are based on current legislation. The values of pension system parameters reflect the situation in 2022 onwards. The calculations show the pension benefits of a worker who enters the system that year at age 22 and retires after a full career. Baseline results are shown for single individuals.

Source: Eurostat; OECD Pensions at a Glance 2023.

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Romania's special occupational pensions remain overly generous and unfair. Comprising 11% of pension spending in 2018, "special pensions" for the military, police, diplomats and judges contribute to system imbalances (Urse, 2020[20]). Policy changes in 2023 started to curtail opportunities for early retirement, ensure pensions do not exceed incomes earned while working, and rein in excesses including the possibility to obtain multiple pensions at once. For some recipients, including magistrates, new indexation rules tying benefits to price growth, as opposed to wage inflation, will help reduce outlays (World Bank, 2023[21]). Other perks remain, including formulas linking pension benefits to peak earnings near the end of a worker's career. This results in high wage replacement rates and exacerbates disconnects between contributions and benefits – parameters better aligned in the normal points-based system. Including more workers in the normal public pension system would ensure comparability of benefits earned through employment in the civil service and the private sector. Pension system transparency would also improve and the government could avoid costs associated with administering different schemes for different categories of public sector employees (OECD, 2016[22]).

Policies to grow private pension schemes could strengthen incentives to save for retirement. Having been introduced only in 2007, and with low mandatory contribution rates, funded private pension plans remain small in Romania. In 2021, private pension assets were worth roughly 8% of GDP, below the OECD average of 105% (OECD, 2023[23]). Contribution rates to private pensions are set to rise by 1 percentage point to 4.75% in 2024. Public pension contribution rates will decline at the same time, reinforcing the need to move quickly to address public pension system imbalances (see above), which could otherwise expand. Exemptions from mandatory private pension contributions should be terminated. Growth in Romania's funded retirement income schemes has been undermined by policies exempting workers in favoured industries (IT, construction and agriculture) from mandatory contributions (discussed under tax policy below). While employees in the affected industries can still opt to participate in the pillar II system, workers in other sectors face obligatory private pension contribution requirements. Such exemptions push back the goal of a large and stable funded private pension system. Closely linking participants' contributions and benefits, the private scheme could play a bigger role in supporting pension-system sustainability in Romania, particularly once reforms ensure that the public system can fund itself.

Box 2.5. Indexation: managing trade-offs between pension adequacy and fiscal sustainability

Pursuant to new laws, Romania is due to apply automatic indexation of pension benefits from 2024. Under the rules, pension point increases are pegged to a weighted average of price and wage inflation. Specifically, the value of the pension point will increase each year in January with the rate of price inflation plus half the real increase in the average gross salary. This mechanism applies to benefits after retirement ("indexation") and to revaluation of entitlements up until retirement ("valorisation"). During their careers, contributors will be rewarded with part of the returns to incomes from productivity gains. Other pension systems instead often uprate past earnings based on wage growth (fully rewarding contributors for productivity gains and treating in an equivalent way entitlements accrued at different stages of a career) while indexing pensions in payment to prices (defending purchasing power in retirement). Compared with such systems – for instance, those in Canada and the Slovak Republic – Romania's new indexation system will be less generous during a pension's contribution phase and more generous after retirement. An advantage of regular indexation is that it will help workers plan for retirement.

Table 2.4. Valorisation and indexation rates in earnings-related pensions

	Valorisation rate Revalues past earnings between the time rights are accrued and when they are claimed	**Indexation rate** Adjusts pensions in payment after a worker retires
Austria	Wages	Discretionary
Canada	Wages	Prices
Czechia	Wages	50% Prices 50% Wages
Hungary	Wages	Prices
Netherlands	Prices	Prices
Romania (2021)	Discretionary (via waivers to indexation rules)	Discretionary (via waivers to indexation rules)
Romania (2024)[1]	**50% Prices 50% Wages**	**50% Prices 50% Wages**
Slovak Republic	Wages	Prices
Spain	Prices	Prices

Note: The table shows future parameters of selected countries' earnings-related pensions based on legislation in 2021. Parameters are those applicable to a full-career worker starting work at 22 in 2020. Some countries allow discretionary adjustments, for financial sustainability. 1: Formally, pension points are indexed to price inflation plus half the real increase in the average gross salary.
Source: OECD (2021[19])

Table 2.5. Past OECD recommendations on fiscal consolidation and pension reform

Recommendations in previous Survey	Action taken since previous Survey (Jan 2022)
Establish a credible medium-term consolidation plan and gradually reduce the fiscal deficit.	Estimates suggest the deficit will shrink in 2024, but not by enough to exit the Excessive Deficit Procedure. Significant revenue shortfalls remain.
Strengthen incentives to work longer by raising the female pension age to match that of men.	The female statutory pension age is set to increase to 65, the male pension age, by 2035.
Revise the benefit formula to ensure the financial sustainability of the pension system.	A new formula is due to be introduced from 2024. Benefits will continue to be linked to points accumulated over a worker's career and tied to incomes.

2.5. Keeping Romania's public debt manageable

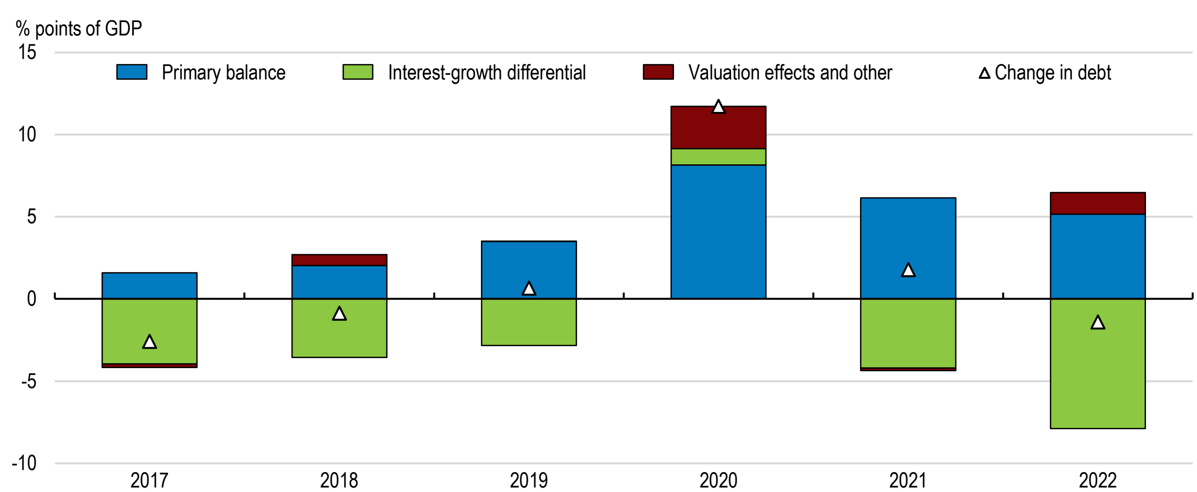
As in many other countries, Romania's public debt swelled with major financial and economic crises of the past 15 years – the Financial Crisis, the euro zone crisis, the COVID-19 pandemic. As a share of GDP, general government gross debt (Maastricht definition) increased from 11.9% in 2007 to 47.2% in 2022. Persistent revenue shortfalls have required significant borrowing to sustain even low levels of public spending (discussed above). Strains on Romania's public finances will increase with accelerated population ageing in the next decade. Demographic change will drive up public spending on pensions, health and long-term care just as employment falls weigh on income tax receipts. In such circumstances, the country's public debt could quickly become unmanageable based on current policies. A particular concern is that Romania might not be able to rely on the low interest rates and rapid GDP growth that provided a stabilising force for the public debt in recent years. Left unchecked, ballooning government financial liabilities could disturb the macroeconomic stability needed to sustain growth in living standards, or require painful fiscal corrections.

OECD long-term projections highlight the risks Romania runs if it fails to correct current fiscal imbalances. Scenarios estimated with the long-term model recognise that as Romania's productivity approaches outcomes in higher-income countries, output growth will slow. Model estimates also factor in higher interest rates than in the recent past. Specifically, borrowing costs are assumed to adjust over time to eliminate interest rate-growth differentials that in past years helped stabilise Romania's debt burden (Figure 2.13). Without major fiscal reforms to shrink the deficit from current levels (Figure 2.14: "Baseline" scenario), slowing growth and higher interest rates would see government financial liabilities quickly get out of hand.

Fiscal reform can avoid adverse debt scenarios materialising (Table 2.3). Legislated reforms to public pensions should encourage stronger labour market attachment and reduce long-term ageing-related fiscal costs (see above). In the "Spending reform" scenario shown in Figure 2.14, policies linking statutory pension ages to improvements in life expectancy reduce the fiscal deficit by 1 percentage point of GDP in the long run. Additional reforms to broaden VAT and income tax bases ("Tax and spending reforms" scenario) could reduce budget deficits further, to 2% of GDP. Under the scenarios' assumptions of higher interest rates and lower growth, this budget position is compatible with stabilising Romania's gross public debt at 48% of GDP, close to the 2022 level. Romania has more room than many OECD countries to expand tax bases and lift revenue collections, which are low relative to national income (discussed below).

Figure 2.13. Rapid nominal GDP growth reduced the debt burden in 2022

Contributions to change in general government gross debt (Maastricht definition)



Note: "Valuation effects and other" includes debt changes due, among other factors, to shifts in exchange rates.
Source: OECD calculations based on data from OECD Analytical database.

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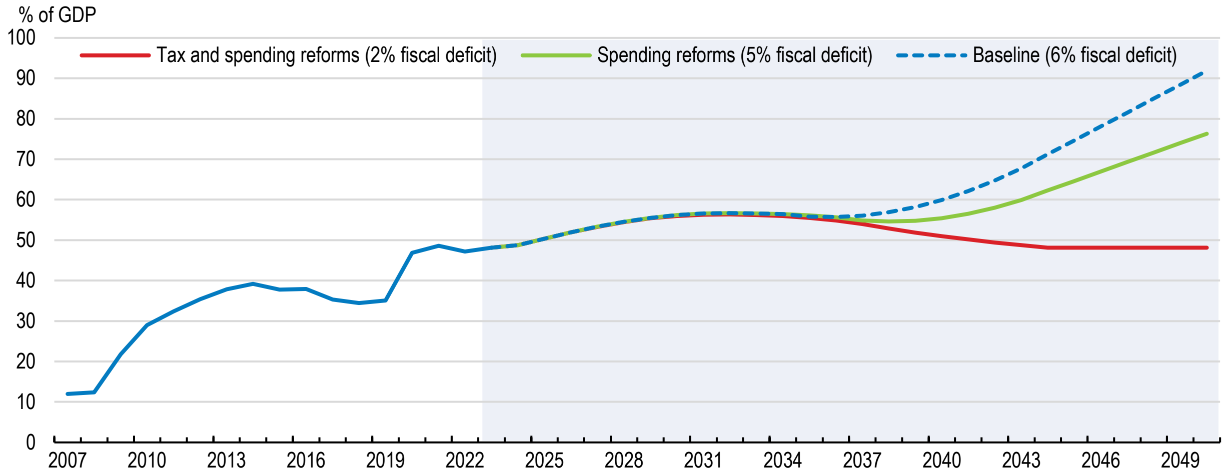
Figure 2.14. Scenarios for general government gross debt (Maastricht definition)



Note: GDP growth is assumed to slow over time and interest rates are assumed to evolve to eliminate interest rate-growth differentials. Price growth is assumed to converge on the central bank's 2.5% target. In the "Baseline" scenario, fiscal policies keep the budget deficit near its 2022 level of around 6% of GDP in the long run. In the "Spending reforms" scenario, policies to link statutory pension ages to improving life expectancy reduce the budget deficit to 5% of GDP. In the "Tax and spending reforms" scenario, additional reforms to broaden consumption and income tax bases and raise revenue from taxing immovable property improve the deficit to 2% of GDP, stabilising the public debt burden.
Source: Guillemette and Turner (2021[24]), European Commission (2021[25]), and OECD estimates.

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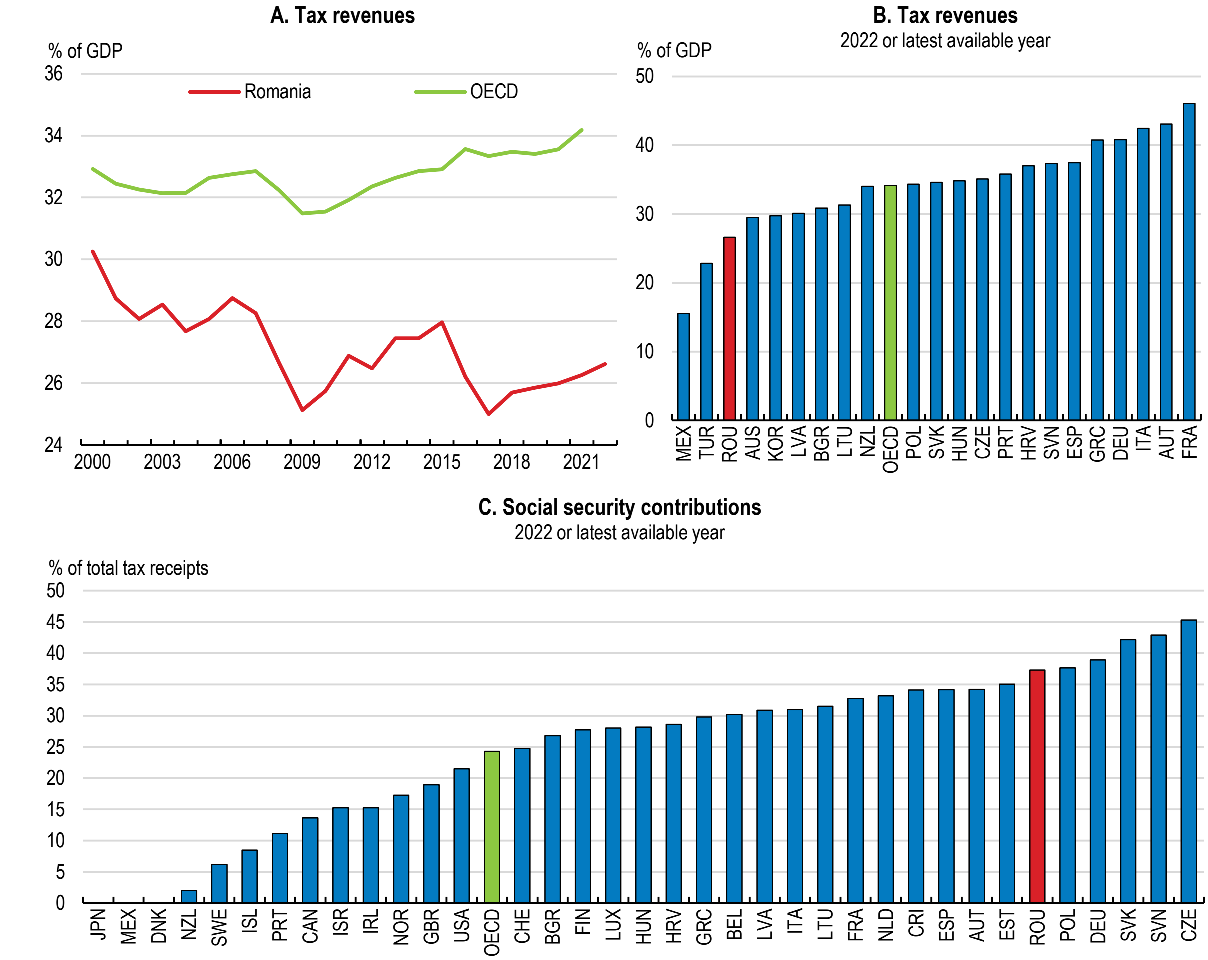
2.6. Tax system reform can boost revenues and eliminate unfair distortions

Romania needs to raise more tax revenue, and more efficiently than in the past. With narrow tax bases, undercut by evasion, tax revenues in Romania are low in international comparison (Figure 2.15). Higher taxes are needed to fund emerging spending priorities while keeping public debt manageable (discussed above). To limit the toll on growth from higher taxes, distortions must be eliminated from Romania's current tax system. To encourage employment, large tax burdens on low-skilled workers must also be reduced. Between goals of lifting receipts, supporting growth and reducing income inequality, trade-offs must be struck. Policymakers must also consider interactions between tax system changes and Romania's transfer system. With these ends in mind, this section identifies priority reforms to the taxation of consumption, income and property which can correct current fiscal imbalances. A recently announced package of tax measures – with base broadening reforms to VAT, and business and personal income tax (discussed below) – goes only part way to resolving Romania's structural revenue shortfalls. Chapter 5 evaluates the role of tax policy in a cost-effective strategy to mitigate greenhouse gas emissions.

Figure 2.15. Tax revenues are low and depend heavily on social contributions



Note: Panel C shows the share in total tax receipts of employers' and households' compulsory actual social contributions.
Source: OECD Revenue Statistics database, OECD National Accounts database, and OECD calculations.

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Improving tax collections by modernising the tax administration

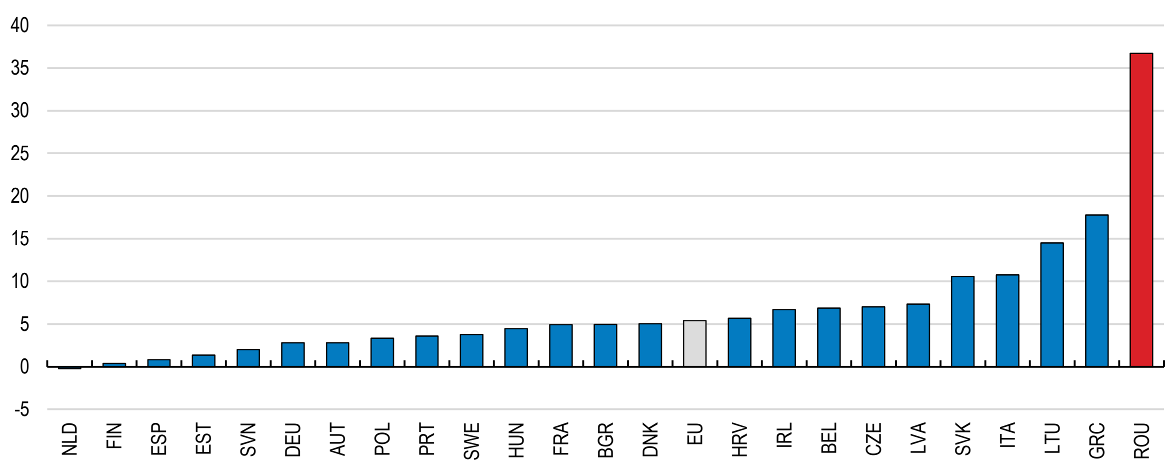
Low rates of tax compliance impair Romania's capacity to raise revenue. Recent estimates suggest the country's informal economy remains large (29% of GDP in 2022) (Schneider and Asllani, 2022[26]). Widespread non-compliance reduces the size of major income and consumption tax bases. In the case of value added tax (VAT), high rates of fraud and evasion are reflected in a large and persistent gap between VAT collections and the revenue VAT could generate based on full compliance (Figure 2.16). New reforms, many of which pursued under Romania's RRP, aim to reduce tax evasion with measures to digitalise taxpayer interactions; limit cash transactions; enforce mandatory electronic invoicing for firms; upgrade government IT networks, and tighten tax risk management. Completing these investments will reduce costs associated with identifying irregularities in tax declarations and penalising non-compliance. Stronger enforcement would also better ensure that higher tax rates – on consumption, income, or property – translate to stronger government revenues. The government projects that planned tax administration reforms could increase the ratio of tax collections to GDP by 2.5 percentage points (European Commission, 2021[27]). While the long-term gains from better compliance are undoubtedly large, the immediate revenue impact of the new enforcement measures is highly uncertain. Failure to properly factor that uncertainty into fiscal planning increases risks to budget deficit projections, which proved optimistic in 2023 (see above).

Broadening the value added tax base

Widespread evasion and excessive use of low rates reduces the revenue-raising potential of Romania's value added tax. Consumption taxes contribute 24% of tax receipts in Romania. The 19% standard rate of value added tax (VAT) is in line with the OECD average. As is the case in many other countries, VAT exemptions apply to the banking and finance sector, as well as to medical and education services. Reduced rates (either 5 or 9%) apply to essential items (including housing, medicines and food) but also discretionary spending (for instance, hotels, restaurants, and amusement parks). Excessive use of low VAT rates distorts consumer behaviour, with benefits accruing disproportionately to those with higher incomes, particularly when low rates apply to non-essentials. The tax revenue foregone as a result of exemptions and beneficial rates is also significant, estimated at 1.4% of GDP in 2022 (Finance Ministry, 2023[28]). Reforms since 2016 expanded the categories of products subject to reduced rates and lowered the standard VAT rate. Authorities meanwhile were unable to materially reduce a large VAT compliance gap (Figure 2.16). Accordingly, receipts decreased relative to nominal consumption. Peers in Romania's region, such as Hungary, have in contrast managed to improve the revenue raising capacity of their value added taxes in recent years. While Romania stepped up action to combat fraud in the previous decade, it has only recently (since 2022) followed the example of other Eastern European countries, such as Hungary and Latvia, in requiring VAT payers to report their transactional data (European Commission, 2023[29]). Slow progress digitising the tax administration also impeded past efforts at improving compliance.

Figure 2.16. The value added tax gap is large

Value added tax compliance gap, 2021, % of estimated total VAT liability



Note: The VAT gap measures the difference between the VAT revenue that would be collected if there were full compliance and actual VAT receipts. The VAT gap covers revenues lost due to fraud and evasion but also insolvencies, administrative errors and legal tax optimisation.
Source: European Commission (2023), Directorate-General for Taxation and Customs Union, VAT gap in the EU- 2023 report; Eurostat and OECD calculations.

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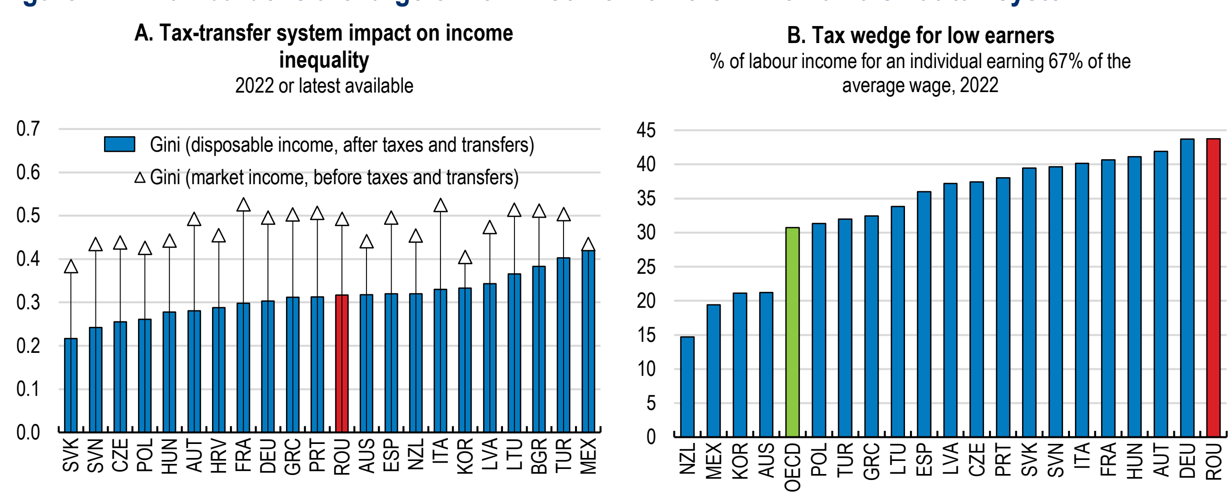
More goods and services should be shifted onto the standard VAT rate over time. Romania's new fiscal package moves alcohol-free beer and sugary foods onto the standard rate of 19%. Items including delivery of high-priced food, solar panels and heat pumps moved from the bottom rate of 5% to the higher rate of 9%. These adjustments, while modest, are appropriate in the current economic climate, where broader VAT increases could make it harder to tame high inflation. As price growth slows, the goal should be to levy the standard rate on more goods and services, starting with non-essential spending. This would reduce policy distortions to consumer behaviour while limiting potential hardship for low-income households from higher-cost essential items. Down the track, an expanded transfer system could top-up poor households' disposable incomes, compensating for a more uniform application of the standard VAT rate. For instance, monthly cash transfers might compensate those on low incomes for VAT paid on an average consumption bundle. Provided the country's tax administration is able to effectively identify poor people, this could be a more effective way to support those on low incomes and avoid potential regressive effects from excessive use of discount rates. The standard rate itself might need to be raised if other fiscal reforms fail to free up sufficient resources to stabilise Romania's public finances.

Preparing a move to progressive taxation of wages

Romania's taxes on personal income do little to reduce income inequality. Compulsory social security contributions (SSC) make up a large share of government revenue (37.3% of tax receipts in 2022). Romania applies a flat 10% tax to personal income from wages and most sources of capital income. While the country's personal income tax (PIT) rate is low, total employee contribution rates, covering health insurance (10%) and pensions (25%), are higher than in most OECD countries. Levied without concessions on low incomes, high employee contribution rates significantly reduce low-skilled workers' take-home pay, despite Romania's relatively low employer SSC rates (Figure 2.17). The phase out of a basic PIT deduction causes average effective tax rates to plateau at modest income levels (roughly two-thirds of average earnings) (World Bank, 2023[17]).

Reforms should aim to lower tax burdens on low-wage employees' incomes over time. Introducing an earned income tax credit (EITC) could encourage stronger formal labour market attachment by low-skilled workers. Such a measure might be feasible with further progress closing income tax loopholes (see below). In the long run, it might alternatively be possible to reduce employee social contribution rates. This could require greater calls on general taxation to fund social security, particularly while public pension system imbalances persist (see above). For higher income earners, PIT rates on salaries should be increased, while heeding risks of arbitrage of Romania's business and personal income taxes (Box 2.6). Romania should begin plotting a gradual transition to progressive wage taxation, which would complement transfer reforms aimed at reducing income inequality (Chapter 4).

Figure 2.17. Tax burdens are large on low-income workers in Romania's flat-tax system



Note: Panel A: The Gini coefficient shown is a measure of income inequality. A coefficient value of 0 represents perfect equality. A coefficient value of 1 represents maximum inequality. Panel B: The chart shows the tax wedge for an individual with no children.
Source: OECD Income and Wealth Distribution database; OECD Taxing wages database; and OECD calculations.

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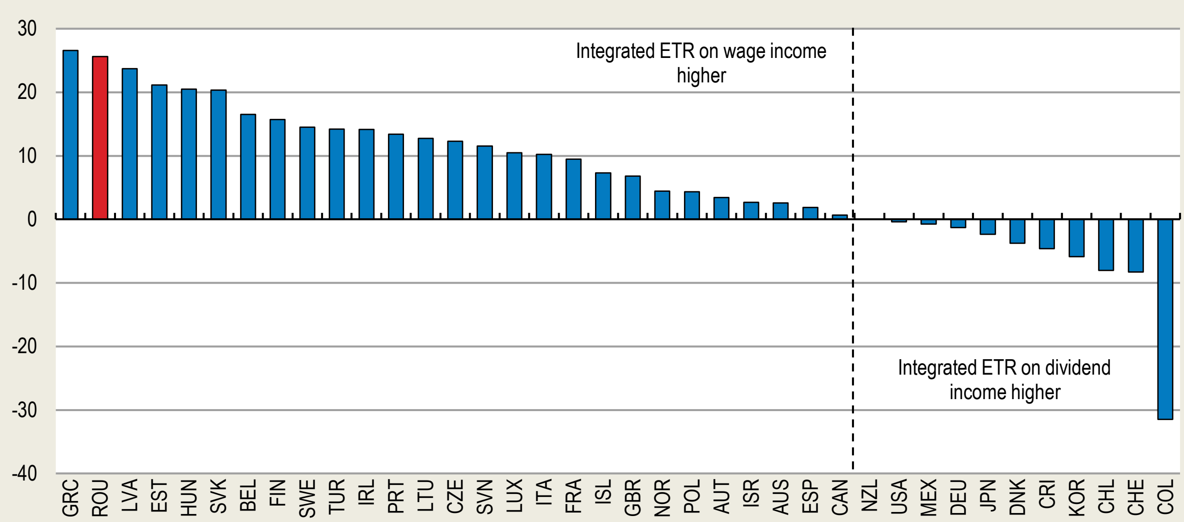
There is scope to broaden the personal income tax base to help offset future reduced taxation of low wages. The first priority should be to end distortive sectoral tax breaks. Employees in construction (10% of employment), IT (3%) and agriculture (11%) are exempt from PIT and part of their mandatory social contributions. Since this includes contributions to funded private schemes (discussed above), the measures reduce workers' future benefits and savings for retirement. Finance Ministry estimates suggest revenues worth RON 9.2 billion (2% of tax receipts) were lost to such tax breaks in 2023 (World Bank, 2023[30]). New fiscal measures curtail, but do not eliminate, sector-specific concessions for higher-income employees. Removing these distortive tax privileges could push some workers and firms back into the informal economy – particularly in construction and agriculture. Tax administration upgrades could mitigate such risks in future. Going forward, the government should avoid using taxes to support favoured industries, focusing instead on improving the regulatory environment for businesses (Chapter 3). There is also scope to curb tax concessions benefiting self-employed workers. As in other countries, independent workers face lighter social contribution obligations than employees. Reforms to more closely align contribution rules for self-employed workers and employees would reduce tax incentives favouring one type of work arrangement over another.

Box 2.6. Effective tax rates on wages and capital income in Romania

In reforming the personal income tax system, care is needed in calibrating effective tax rates on top earners. High taxation of wages can encourage well-off people to incorporate in order to reduce their tax bill. This is a greater risk if, as in Romania, taxes on company profits and dividends are low. Countries often tax capital income at lower rates than salaries; common goals are to entice investment, or to avoid over-penalising savings. But the gap in effective taxation of labour and capital income is larger in Romania than in most OECD countries, including for those earning big incomes. Figure 2.18 below illustrates this by comparing the tax treatment of distributed company profits and wages in Romania and other countries in 2021. For individuals with incomes five times average earnings or higher, effective tax rates on wages are much higher than those on dividend income. Reforms to reduce the large gap in taxation of labour and capital income could limit arbitrage of Romania's systems for taxing personal and business income.

Figure 2.18. Wages are taxed much more heavily than capital income in Romania

Gap between integrated average effective tax rates on labour and distributed dividend income, 2021, % points



Note: The graph shows the gap between integrated average effective tax rates on labour and distributed dividend income. ETRs are calculated for an individual without children earning an income worth five times the average wage. The modelled tax parameters are from 2021; for Romania they include the personal income tax (PIT) rates applied to wages and dividends, the basic PIT allowance available to low-income earners, employer and employee mandatory social security contributions, and corporate income tax (CIT). In 2023, Romania increased the personal income tax rate payable on dividends from 5% to 8%. This change slightly reduced the gap in effective taxation of wages and dividend income compared with that shown in the graph.
Source: Hourani et al (2023[30]) and OECD calculations.

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Removing distortions in corporate income tax

More businesses should be shifted from distortionary turnover-based taxes to Romania's corporate income tax regime. Direct taxes on corporate income contributed 14% of Romania's tax revenues in 2021. Whereas bigger businesses pay Romania's 16% corporate income tax on profits, small firms instead participate in a micro-enterprise tax regime, where depending on their size they pay as little as 1% tax on their turnover. This section in turn considers priority reforms to the taxation of small, medium and big businesses in Romania.

More small businesses should pay corporate income tax. Recognising the administrative burden of complying with more complicated profit-based CIT, OECD countries often have simplified tax regimes for small businesses. Eligibility requirements for Romania's micro-enterprise tax regime have tightened in recent years. The revenue ceiling for entry was lowered to EUR 500 000 in January 2023 (previously EUR 1 million). As part of efforts to mitigate risks of high earners gaming the system, rule changes last year required that firms have at least one employee (ie, a two-person operation). New fiscal measures split the micro-enterprise regime in two. The former 1% rate applies below a turnover threshold of EUR 60 000; a 3% rate applies to firms with revenues up to EUR 500 000. The upper eligibility threshold for the microenterprise scheme remains very high in international comparison (Wen, 2023[31]). The regime should be reserved for firms with lower turnover. In terms of implied taxation of profits, the current minimum microenterprise tax rate of 1% is low compared with Romania's CIT (IMF, 2022[32]). Implied tax rates on distributed dividends are in consequence very low for small firms. This can encourage businesses to decapitalise, potentially making it harder for many to access external finance to support investment (Chapter 3). Raising the micro-enterprise tax rate could help address this issue and reduce the gap in effective tax rates with the corporate income tax system. This would address distortions that likely discourage some high-performing firms from growing, or give high-income individuals tax reasons for incorporating. Set against this objective is the reality of small firms' often poor access to debt finance (costs of which are deductible under CIT) and greater risks of non-compliance, especially while Romania's tax administration is still improving. In enhancing the design of the micro-enterprise tax over time, Romania should draw on OECD best practices. These suggest that simplified tax regimes should be built to limit tax compliance costs, and encourage formalisation of businesses, while not deterring firms' migration to the standard tax system (Mas-Montserrat et al., 2023[33]).

For medium-sized and big businesses (those with incomes above EUR 50 million), Romania has brought in a minimum tax on turnover to lift revenues (OECD, 2022[9]). Firms with corporate income tax liability below a threshold equivalent to 1% of turnover will have their tax bills raised to that amount. Levying the new tax on a simple base (turnover as opposed to profits) will facilitate enforcement. While the near-term budget position will benefit, the measure should not distract from the main task of corporate income tax reform, which international commitments make more pressing (discussed below). Because turnover taxes do not allow cost deductions, they penalise input-intensive firms and risk distorting business structures, favouring vertical integration (Xing, Bilicka and Hou, 2022[34]). Taxing turnover could also compound firms' financial troubles at a time of elevated cost pressures. Such risks are mitigated by the low rate at which the tax is being levied. Still, the new turnover tax should be rolled back as soon as possible. Compliance-based arguments for turnover taxes will lose relevance as authorities grow better equipped to clamp down on fraud and evasion.

For large multinational enterprises (MNEs), new international commitments set a floor under effective taxation of profits. Romania is set to adopt the global minimum tax introduced by the Global Base Anti-Erosion Rules (GloBE) (OECD, 2021[35]). The new rules subject large MNEs to a 15% effective minimum tax rate on their profits. Affecting MNEs with worldwide turnover above EUR 750 million, the global minimum tax requires in-scope businesses to pay a top-up tax, bringing total tax on the group's excess profits in low-tax jurisdictions up to the 15% minimum rate. The likely impact on tax revenues in Romania is uncertain and will depend on how companies respond to the global minimum tax. Those currently using

Romania's valuable tax concessions – such as those aimed at IT investments (Box 2.7) – may currently be paying less than the new minimum effective tax rate. In this case, a national top-up tax on profits may need to be introduced to lift effective corporate tax rates of the businesses concerned to 15%. Introducing a top-up tax would avoid revenues shifting to other countries, notably those home to parent companies of firms operating in Romania.

Box 2.7. Overview of IT-related corporate income tax deductions in Romania

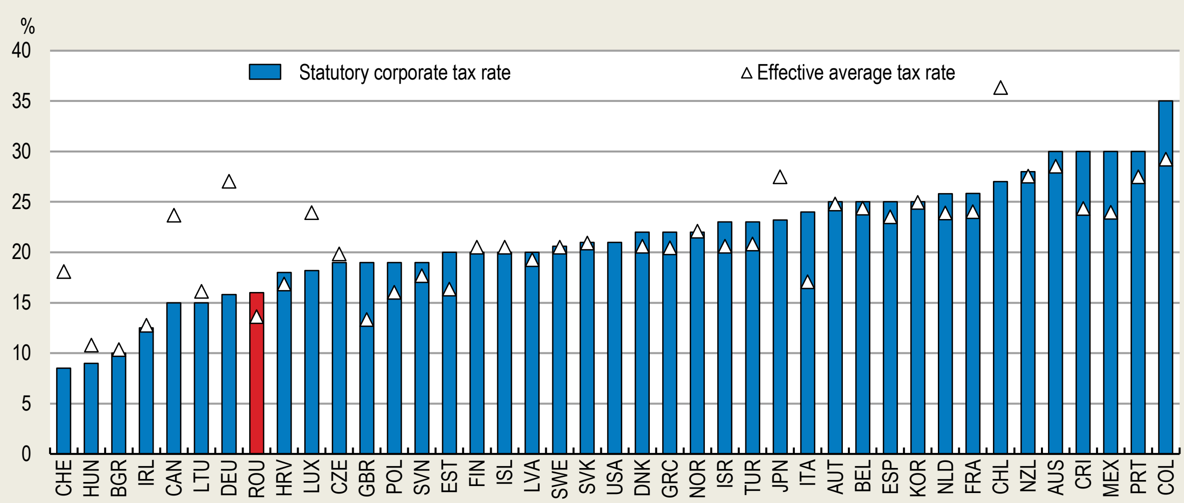
In addition to PIT exemptions for IT workers (up to gross monthly wages of RON 10 000), Romania's CIT system offers tax incentives aimed at boosting investment in IT and research and development. These include:

- 50% deduction of R&D-based expenses
- Accelerated depreciation treatment of equipment used in R&D activities
- CIT exemption for earnings reinvested in IT equipment
- 10-year CIT exemption for firms involved in scientific research and technology

While many OECD countries use expenditure-based exemptions to encourage investment, long tax breaks – such as Romania's 10-year exemption for new R&D firms – are rare outside developing and emerging economies. Tax holidays can benefit high-profit firms, many with large budgets for investment already. Such provisions also encourage firms to channel incomes through entities eligible for the tax incentive (OECD, 2022[36]).

Figure 2.19. Romania's effective corporate income tax rate is low

2022



Note: The effective average tax rate (EATR) reflects the average tax contribution a firm makes on an investment project earning above-zero economic profits. Economic profits are defined as the difference between revenue and economic costs, including costs involved in the production of goods and services and opportunity costs; for example, revenue foregone by using company-owned buildings or self-employment resources. It is calculated as the net present value (NPV) over all cash flows associated with the investment project. The EATR is defined as the difference in pre-tax and post-tax economic profits relative to the NPV of pre-tax income net of real economic depreciation.
Source: OECD Corporate Tax Statistics database.

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Raising revenue efficiently through taxes on immovable property

Romania raises little revenue from recurrent taxes on immovable property (4% of tax receipts in 2021). As in many countries, tax rates differ for residential and non-residential properties, but also for buildings and land. Building tax rates depend additionally on whether the owner is a natural person or a company, a feature that could influence decisions on incorporation. Methods used in Romania to assess properties' taxable value are problematic. Whereas non-residential buildings are assessed on their market value, the taxable value of dwellings and land is based on a property's area. Adjustments are made for location and characteristics including a property's use, building type, and age of structures, but these fail to adequately capture the market value of homes and land (World Bank, 2023[17]).

Recurrent property taxation in Romania can be improved. While arguments exist for taxing land and buildings at different rates (OECD, 2021[37]), valuation tends to be simpler when both are assessed together (OECD, 2021[38]). Tax liability should be determined based on a property's market value. Moving away from area-based valuation, as required in Romania's RRP, would address inequities in an assessment system which rewards owners when their properties are undervalued. Model-based valuation can complement sales-based estimates, particularly in regions where property market activity is limited. Such approaches are used in Norway (OECD, 2022[39]). Allowing owners to override tax-agency estimates with self-reported valuations could mitigate risks of overtaxing homeowners when model assessments miss the mark. Abuse of such a system might be curtailed through selective auditing.

Raising proportionally more revenue from property taxes could reduce the tax system's total drag on economic activity. The chief advantage of taxing property is that – unlike labour and capital – land cannot move to escape taxation. This reduces behavioural distortions from taxation. Building on RRP commitments, the central government should progressively raise a lower limit on locally-set property tax rates. To enable owners to plan ahead, and to avoid big market corrections, changes in property tax should be gradual. Property taxes could be means-tested, with lower rates levied on those less well-off, or part of a property's value might be excluded from taxation, at least for single-property owners. This could avoid financial hardship for Romania's large number of low-income owner-occupiers. Effective reform of property taxation also depends on completing the national land cadastre (Chapter 3).

Table 2.6. Past OECD recommendations on tax system reform

Recommendations in previous Survey	Actions taken since previous Survey (Jan 2022)
Modernise the tax administration to improve compliance and boost collections	Ongoing investments are expanding digital taxpayer services, requiring electronic invoicing for business transactions, and expanding use of data to tackle non-compliance.
Eliminate inefficient tax concessions and consider increasing recurrent taxes on immovable property	A new fiscal package curtails, but leaves in place, sectoral tax breaks. Eligibility criteria for the microenterprise regime have been tightened. A tax system review recommended property tax reforms. The reforms are yet to be actioned.
Extend carbon taxation to sectors not covered by the EU Emissions Trading System	A tax system review recommended carbon taxation. The recommendation is yet to be actioned.

Table 2.7. Recommendations on monetary and fiscal policies

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Ensuring macroeconomic stability and rebuilding fiscal buffers	
Inflation remains above the National Bank of Romania's target. Demand has cooled but core price pressures are elevated.	**Maintain a tight monetary policy stance until inflation is clearly on track to meet the central bank target.**
High borrowing costs encouraged a build-up in euro-denominated loans to firms from mid-2022, increasing risks to financial stability. Narrowing interest rate differentials with the euro area have since coincided with a moderation in foreign currency-based borrowing.	Continue to closely monitor risks tied to firms' foreign currency-denominated borrowing. Stand ready to recalibrate foreign-exchange prudential tools, including borrower-based limits on big loans and high debt servicing costs, if financial stability risks increase.
Fiscal support helped households through cost-of-living pressures. But Romania's rising public debt burden will make it harder to respond to future shocks. Fiscal consolidation is needed to help rein in demand, rebuild buffers, and put the public finances on a sustainable long-run track.	**Reduce the budget deficit to ensure fiscal policy complements contractionary monetary policy.** **Establish a credible medium-term fiscal consolidation plan to ensure the sustainability of public finances.**
Public sector wage awards have a significant impact on overall government spending. Large discretionary pay increases risk fueling broader wage pressures. Wage setting and promotion determinations in the public sector have been criticised as opaque.	Follow through on promised reforms to ensure competitive public service hiring, merit-based promotion, and performance-based pay.
New fiscal measures curb waste in public spending. Some cuts, such as cancelling civil service job vacancies, could impede capacity. Laws require that cost benefit analysis be carried out for major government-run projects financed from public funds.	**Proceed with planned use of spending reviews to systematically identify efficiencies and improve government effectiveness. Separately, ensure consistent use of cost benefit analysis, in line with existing laws, for major public investments.**
Completing pension and tax system reforms	
Population ageing will make it harder to fund public pensions in the years ahead. New pension legislation should encourage Romanians to work longer with measures to step up pension ages over time. However, reforms to tighten links between contributions and benefits are not yet complete. Low female pension ages encourage women to retire earlier than men. Expectations of a relatively short period in the labour market can influence education choices.	**Proceed with reforms to narrow early retirement options over time and increase pension ages with gains in life expectancy, in line with new laws.** Complete reforms to still overly generous special occupational pensions. Continue raising the female pension age to match that of men in line with the new pension law.
While new tax measures are narrowing loopholes, workers in IT, construction and agriculture are still exempt from mandatory private pension contributions. Such exemptions reduce workers' retirement incomes and increase old-age poverty risk. A further consequence is to slow growth in private pensions, which complement public pensions and diversify the income sources funding retirement incomes.	End sectoral exemptions to private pension contributions. Lift relative contribution rates to private pensions, as planned, as reforms reduce imbalances in the public system.
Tax revenues are too low to fund ongoing government spending. Overuse of low rates erodes the VAT base. Romania's income taxes are distortive, exempting many workers, discouraging work by low earners, encouraging self-employment, and excluding many firms from corporate tax. Faster progress modernising the tax administration would lift compliance.	**Strengthen tax enforcement to reduce tax fraud and evasion.** **Broaden the value added tax base through more uniform application of the standard rate.** **End sectoral income tax exemptions.** Consider a gradual transition to progressive wage taxation, with reduced effective tax rates on low earners. More closely align contribution rates on employees and the self-employed. Restrict eligibility and improve the design of the microenterprise tax regime, roll back new turnover taxes, and consolidate corporate income tax concessions. Raise more revenue from recurrent taxes on immovable property, levied on properties' market value.

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3 Improving the business environment

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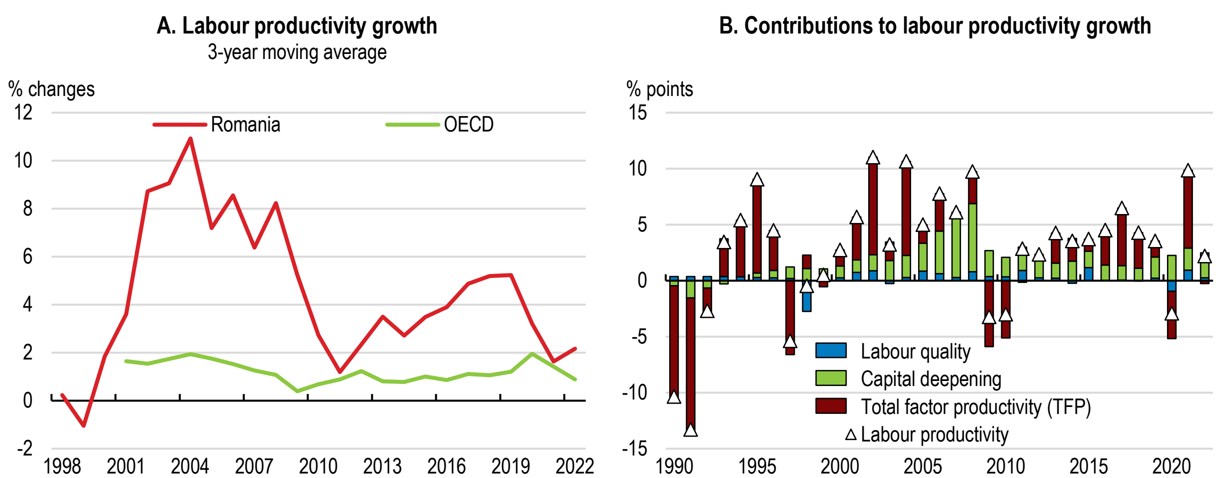
Achieving high rates of private investment and productivity growth requires policy changes to improve the environment for business. Structural reform momentum from the *Recovery and Resilience Plan* should, if sustained, help to improve regulations, strengthen competition, and upgrade Romania's infrastructure and institutions. An ongoing challenge is to improve predictability in law making. Policy instability continues to discourage investment and risks increasing with elections expected in 2024. Efforts to improve financial inclusion and combat corruption would aid efficient resource reallocation, supporting higher productivity.

Romania continues to post stronger productivity growth than more advanced economies (Figure 3.1 panel A). But the pace of improvement has slowed compared with the country's own past performance, and with it Romania's rate of income convergence on more advanced economies. This matters because the technological frontier is still some distance away (Chapter 2). EU-funded infrastructure spending is spurring capital accumulation, Romania's most reliable productivity driver (Figure 3.1 panel B). But the climate for private investment is challenging. On top of increased capital costs, slow trade, and regional instability, firms have had to navigate shifting fiscal policies (Chapter 2).

For Romania to stay attractive as a business destination, structural reform momentum must continue. Regulatory changes now underway will reduce firms' costs of operating in Romania, boosting investment. But more can be done to remove market and policy barriers impeding the efficient movement of resources to highly productive firms. The first section of this chapter reviews Romania's progress improving the regulatory and institutional environment for business since the previous *Survey*. Measures considered in this section include reforms to ease burdensome regulations, strengthen competition, build better institutions, lift absorption of EU funds, and improve policy predictability. Subsequent sections look in more detail at reforms to address barriers to credit access, and continue fighting corruption – both of which would support investment and facilitate efficient resource reallocation in Romania's economy.

Figure 3.1. Productivity growth has slowed from pre-pandemic rates



Note: Labour productivity is measured as real gross domestic product per hour worked. Panel B: "Labour quality" is an estimate of the return to labour productivity growth from human capital improvements, proxied by years of schooling.
Source: OECD Productivity database; The Conference Board, Total Economy Database.

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3.1. Sustaining reform momentum: recent progress improving the business environment

Easing burdensome regulations

Recent investments are making it easier to create businesses in Romania, an issue examined in the previous *Survey*. Digital registration procedures aim to cut the time and cost involved in starting firms. Continued efforts to reduce paperwork, and move transactions online, will lower firms' administrative costs of operating in Romania.

Manufacturing firms stand to benefit from simpler routes to licences. From mid 2025, an electronic "One Stop Shop" will provide access to multiple industrial certifications. Needless bureaucratic hurdles are being removed, including redundant permit renewals. Building on these efforts, a new government initiative will simplify licensing in commercial and service sector activities. By removing red tape, the licensing reforms aim to strengthen Romania's competitiveness, encouraging investment and job creation.

Strengthening governance of state-owned enterprises

The previous *Survey* underscored Romania's need for a strong governance framework to address underperformance by state-owned enterprises (SOEs). SOEs accounted for around 8.1% of gross value added in the economy in 2021 (Fiscal Council, 2023[1]). A recent review by Romania's Fiscal Council found that SOEs' economic and financial performance improved in the economic recovery from the COVID-19 pandemic. But SOE performance indicators such as net profit remained worse than in 2017. The deterioration in outcomes coincided with decreased commitment to core SOE governance principles from 2018 (Fiscal Council, 2023[1]). A 2023 OECD review found that existing rules designed to monitor performance, professionalise boards, and shield governing bodies from political influence were rarely observed in practice (OECD, 2023[2]). Requirements to disclose financial statements and audit reports have in the past been frequently disregarded, consistent with inadequate oversight. The OECD review found that sanction powers vested in the Ministry of Finance were often used but appeared to be too soft to deter rule breaking.

New legislation tightens SOE governance. Legislative changes in 2023 strengthen the separation of regulatory and ownership functions within public authorities. The new laws clarify responsibilities for reporting of state-owned firms' audited financial information, outline transparent procedures for the appointment and remuneration of directors, and set term limits on temporary appointments to boards. The rules bar officials including senators, lawmakers, members of government and mayors from appointment as SOE directors or administrators. As well as tightening provisions aimed at levelling competition between private and state-owned businesses, the legislation establishes a new agency for monitoring SOE performance. Coordinated through the General Secretariat of the Government, the new agency is tasked with monitoring and evaluating compliance and sanctioning deviations from SOE corporate governance rules. If properly implemented, the reinforced governance framework could help address past concerns around SOE mismanagement. Bringing corporate governance in line with OECD standards – both in laws and in practice – would ensure better use of public funds and could improve efficient resource allocations in the economy, strengthening productivity.

Building better institutions

Romania's institutions continue to improve. The previous *Survey* noted efforts to safeguard judicial independence. Romania's progress strengthening the rule of law, a precondition for a functioning market economy, saw the European Commission close the Cooperation and Verification Mechanism (CVM) which had been overseeing judicial reforms.

Improving court system efficiency remains a priority. Plans to digitise judicial processes should reduce costs for firms using Romania's courts. Pressure on court resources could be relieved by expanding access to non-judicial procedures in commercial matters. Excessive court involvement in insolvency proceedings can delay the resolution of financially distressed firms. While magistrates, or court-appointed officers, are still needed to uphold parties' rights, shifting some stages of insolvency processes out of court could reduce costs and free up judges for other matters. The previous *Survey* identified scope to improve the efficiency of Romania's insolvency mechanisms, which could have broader payoffs to productivity (Adalet McGowan and Andrews, 2018[3]). Recent analysis by the National Bank of Romania suggests insolvency procedures tend to be long, typically lasting over twelve months. More than half of insolvent firms had been in the procedure for over four years (BNR, 2023[4]). Greater use is being made of preventive proceedings, but these could be more effective (BNR, 2023[4]).

Improving investment management to lift absorption of EU funds

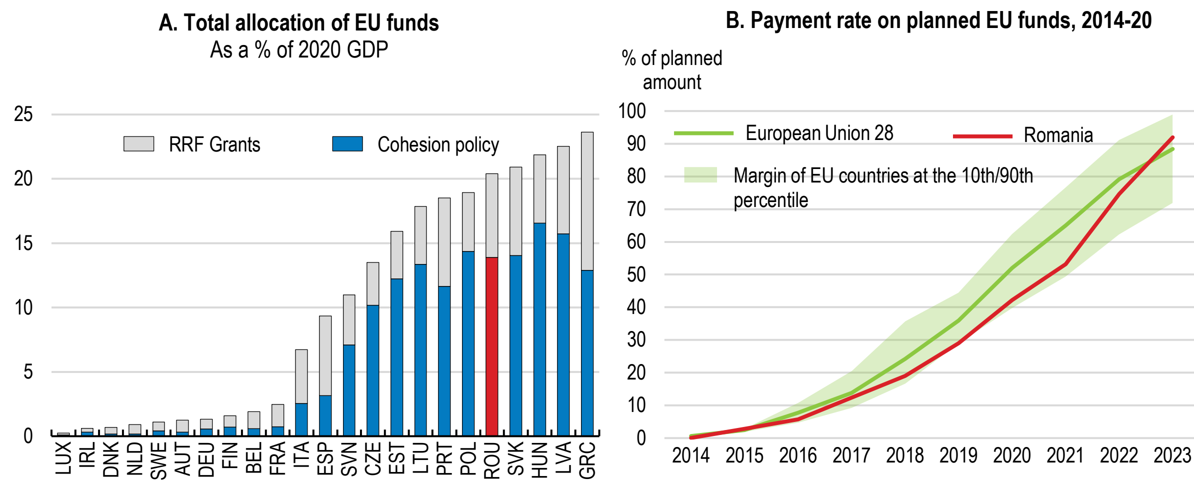
Rapid and effective absorption of EU funds would boost business investment and future productivity. Grants and loans available to Romania through the EU *Recovery and Resilience Facility* (EUR 28.5 billion, 10% of 2022 GDP) support private as well as public investment. Beyond direct effects on private activity during construction, major infrastructure projects, once completed, will benefit firms as well as households, including by driving down costs. Accessing funds for RRP investments requires that the government push through important and sometimes unpopular reforms agreed with the European Commission. Difficulties completing reforms to special occupational pensions (Chapter 2) and the process of altering the *Recovery and Resilience Plan* itself delayed the preparation of Romania's request for a third tranche of RRF funds, which was submitted in December 2023 following RRP amendments. Like other EU countries, the Romanian authorities have renegotiated parts of the initial plan with the European Commission. This was done in part to accommodate a downward revision (by EUR 2.1 billion) of the total grants available to Romania. In November 2023 the European Commission approved revisions modifying some RRP measures and including a new *REPowerEU* chapter aimed at strengthening Romania's energy security and decarbonising the country's energy mix (Chapter 5).

Limits on government administrative capacity – a problem highlighted in the previous *Survey* – pose constraints on absorption of EU funds (OECD, 2022[5]). Implementation progress for the recent 2014-20 programming period accelerated recently but absorption in the initial years was below the EU average (Figure 3.2). Better planning and investment management would support implementation of RRP and Social Policy fund projects. This will require upgrading administrative capacity in government, itself a focus of RRP investments. Measures are underway to improve the efficiency of public procurement. In addition to investments in electronic forms, invoicing and payment systems, Romania's RRP includes measures to roll out procurement training to civil servants and contracting staff and establish centralised procurement bodies for local authorities. Complementary reforms aim to improve coordination in government, enhance data collection and IT systems, and strengthen programme evaluation. These changes should have benefits beyond current EU programmes. For instance, better digital infrastructure and data management should improve government services and reduce firms' costs of interacting with public authorities. Such measures should accompany support for local government capacity, including in under-resourced regions where EU-funded investments can close gaps in infrastructure and service provision.

Setting a stable policy foundation for investment

As underscored in the previous *Survey*, predictable policymaking would improve investment conditions in Romania. The total number of emergency ordinances adopted in 2023 was lower than in previous years. But emergency decrees continue to be used for major legislative changes, contributing to policy uncertainty. New tax measures were rushed into force in January 2024 after expedited legislative procedures bypassing Romania's Parliament. With little warning, businesses had three months to prepare for significant policy changes aimed at reducing the budget deficit. Some of the announced provisions unwound tax concessions implemented only nine months earlier. Fiscal policy adjustments are normal, including to respond to changing priorities and economic conditions. But rapid-fire policymaking, often without proper consultation or impact assessment, can discourage investment and erode confidence in government. Fulfilling RRP commitments to curtail use of emergency decrees, and systematise impact assessments, would build trust in democratic institutions and reduce policy risks to business in Romania. The legal and methodological framework for impact assessments was revised in 2022. A methodology for drafting evaluation reports has been adopted and an independent board – the Consultative Council for the Impact Assessment of Normative Acts – established to scrutinise impact studies of government legislative priorities. New rules also require ex post review of emergency ordinances two years after a decree's adoption.

Figure 3.2. Large volumes of EU funds will test Romania's absorption capacity



Note: Panel A: "Cohesion Policy" refers to the European Social Fund, European Regional Development Fund, Cohesion Fund, and support for the European Territorial Co-operation". The graph shows the total allocation over the period 2021-27 in current prices. "RRF Grants" refers to the maximum grant allocations from the *Recovery and Resilience Facility* over the period 2021-26.
Source: OECD calculations based on data released by the European Commission as of 8 December 2023.

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Table 3.1. Past OECD recommendations on improving the business environment

Recommendations in previous Survey	Actions taken since previous Survey (Jan 2022)
Simplify the licence and permit system, enhancing the use of online services.	Licensing procedures have been simplified for manufacturing firms. From mid 2025 an electronic "One Stop Shop" will provide access to multiple industrial certifications.
Reform SOE corporate governance rules in line with OECD guidelines.	Reforms have improved procedures for appointing and determining pay for directors of transport and energy-sector SOEs.
Clarify the mandate of the new National Development Bank (renamed the Investment and Development Bank).	Newly passed laws provide that the Investment and Development Bank (IDB) will be established as a credit institution under the supervision of the National Bank of Romania. Focusing support on small and medium enterprises, the bank's general mission includes promoting investments and facilitating access to finance in sectors with financing gaps. The IDB will start operating in 2025.
Reduce unnecessary court involvement in insolvency proceedings.	No action.
Limit use of emergency decrees and conduct proper impact assessment for new laws.	A new methodology outlines when emergency ordinances can be used and associated impact assessment requirements. In practice, emergency decrees are still used often.

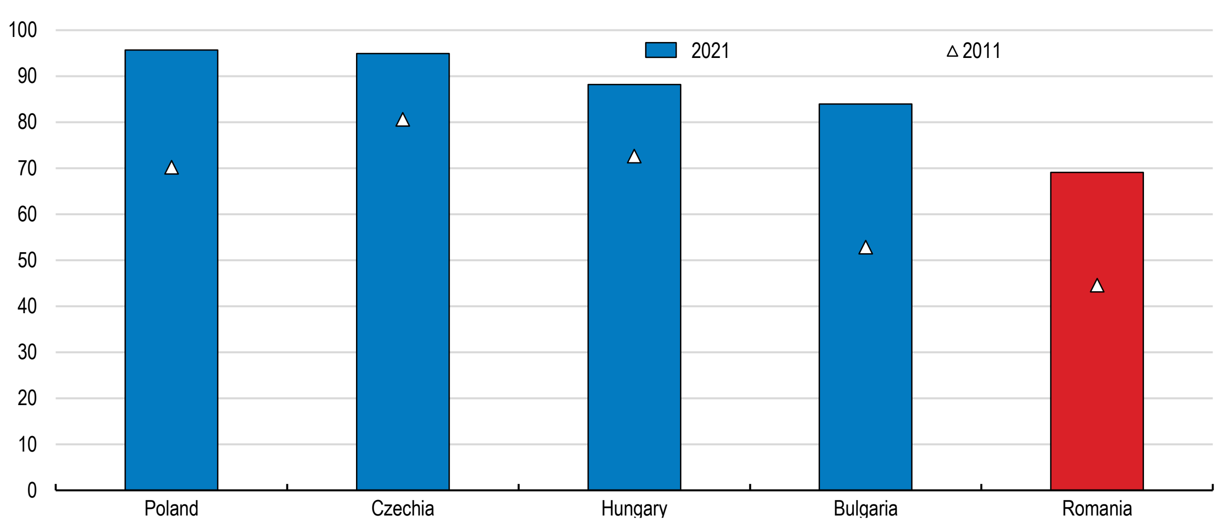
3.2. Special focus: Improving access to finance

Barriers to finance can impede resource reallocations important for productivity growth. Romania's financial markets are shallow compared with those of its peers and OECD countries. Banks dominate a financial system in which capital markets are still maturing (OECD, 2022[6]) (see below). Total private sector deposits and loans are small relative to Romania's GDP (Chapter 2). This reflects the large share of Romanian households that own homes outright and foreign-owned firms' ability to source internal finance from parent companies. Access to loans is reportedly also limited in a country where financial inclusion is low (BNR, 2023[7]). Past reviews have found that credit access is bad in Romania's cities but especially weak in rural areas (World Bank, 2020[8]). Isolated from large markets by poor transport infrastructure, many areas lack the physical branches needed for in-person banking (World Bank, 2023[9]). This can be important when a firm's growth prospects are costly to assess without local knowledge. As in other countries, small and young businesses – a special focus of this chapter – typically find it hard to obtain external finance. Financing options are often limited for unincorporated enterprises, particularly small services-sector firms with limited credit histories, no collateral, and no access to trade finance. Such firms instead typically fund operations through reinvested earnings (BNR, 2023[7]).

Reflecting patchy access to finance, a large informal economy, and large numbers of undercapitalised firms (BNR, 2023[4]), demand for credit is on the whole weak. Policy instability and low implied taxation of small firms' distributed dividends (see Chapter 2) may influence levels of investment and borrowing. High rates of financial illiteracy among some segments of the population also appears to reduce total credit demand. Low rates of bank account ownership are symptomatic of underused credit markets and inefficiently deployed resources (Figure 3.3). Low-income individuals (57%) and adults outside the labour force (54%) are among those least likely to have a bank account. Even among higher earners, World Bank Global Findex data suggest an unusually large share of people eschew banks. For adults in the top three income quintiles, bank account ownership in Romania (77%) is below rates in Bulgaria (91%), Hungary (93%) and Poland (97%). Directed through financial intermediaries to private sector borrowers, available funds could make individuals better off and expand young firms' growth opportunities. This section of the chapter examines policies that can remove barriers to finance, strengthen trust in the financial system, and support capital market development.

Figure 3.3. Low rates of bank account ownership point to underuse of Romania's financial system

% of population aged 15 and over with a bank account



Note: The graph shows the percentage of survey respondents who report having an account, by themselves or together with someone else, at a bank or other financial institution or report personally using a mobile money service in the past year.
Source: World Bank, The Global Findex Database 2021.

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More can be done to remove supply-side constraints on financial development

Time-consuming collateral enforcement procedures discourage asset-backed lending to firms. Romania's laws adequately balance lender and borrower rights in the event of foreclosure. But past reviews have found that extensive court involvement slows foreclosure proceedings (EBRD, 2015[10]). A 2020 World Bank study found that while Romanian legislation allows loans to be secured by movable assets, banks tend in practice to be reluctant to accept assets other than land as collateral (World Bank, 2020[8]). Multiple opportunities for borrowers to appeal court decisions draw out resolution processes. International evidence suggests protracted and overly formal procedures can increase lenders' costs when borrowers default on loans secured by collateral (for instance, property or equipment) (van Hoenselaar et al., 2021[11]). This could make lenders more cautious when it comes to extending asset-based finance to small businesses, limiting options for those unable to obtain unsecured credit or state-subsidised finance. Access to non-judicial foreclosure mechanisms, typically involving a notice period and opportunity to pay arrears, can reduce the time and cost involved in enforcing mortgages (van Hoenselaar et al., 2021[11]). Romania's existing processes should be reviewed with the aim of condensing the time needed to enforce security – in this, the country could draw on practices applied in OECD countries (Box 3.1). As long as courts remain involved, reforms to improve judicial efficiency should lower the cost of debt recovery. This would reduce risks to banks from asset-based financing, encouraging lending to SMEs (OECD, 2015[12]).

Box 3.1. Court involvement in foreclosure procedures in selected OECD jurisdictions

Many common law OECD jurisdictions have nonjudicial foreclosure processes. This includes the United Kingdom, certain provinces of Canada and certain states of Australia and the United States. Many, but not all, civil law European countries apply judicial enforcement procedures, as are used in Romania (van Hoenselaar et al., 2021[11]) (IMF, 2013[13]). An exception is the Netherlands. There, enforcement proceedings can start relatively soon after a missed loan repayment. Lenders have access to summary foreclosure procedures, allowing forced sale of a mortgaged property. Parties can agree at the outset that courts must determine a default has occurred before security is enforced. Alternatively, borrowers are able to go to court to prevent a forced sale if, in their view, conditions for enforcement have not been met (DLA Piper, 2020[14]). A recent OECD comparison of arrangements in high-income countries found that out-of-court foreclosure proceedings are often faster and less costly than in-court procedures (van Hoenselaar et al., 2021[11]).

Some types of non-standard lending appear underutilised by Romanian firms. Laws enable factoring, leasing and warehouse receipt-based financing – all of which forms of lending that can be useful to small businesses. Leasing is the most common form of finance supplied to firms by non-bank lenders in Romania (BNR, 2023[15]). In contrast, little use is made of factoring or warehouse receipts. Such instruments can benefit firms lacking credit histories or standard forms of collateral – this includes agricultural producers (in the case of warehouse receipts) and higher-risk SMEs (factoring) (Table 3.2). As in many other countries, unfavourable value added tax treatment may discourage use of factoring in Romania (OECD, 2015[16]). Whereas banking and insurance services are VAT exempt, other financial services, including factoring, are subject to the standard VAT rate of 19%, consistent with EU directives. Past reviews have found that Romania's warehouse receipt system is poorly supervised, with lenders inadequately protected against fraud (World Bank, 2020[8]). Better oversight of the system could strengthen lenders' confidence in warehouse receipts and improve access to finance for rural SMEs.

Table 3.2. Non-standard lending instruments for small businesses

	What is it?	Which firms benefit?	Enabling conditions	Status in Romania
Leasing	A means of financing use or purchase of equipment and real estate. The lessor provides the lessee with the right to use an asset in exchange for a series of payments. Ownership may or may not be transferred at the contract's expiry.	New firms needing equipment but unable to buy it SMEs unable to borrow from banks for lack of collateral, weak credit history, or elevated risk Firms regularly changing capital assets	National asset register Rules governing leasing businesses Tax treatment of lease payments	Common
Factoring	Short-term finance for suppliers. A "factor" buys the right to collect a seller's invoices from customers. The factor pays the seller the face value of invoices and receives interest. When the factor receives cash for the invoices, a reserve account is repaid to the seller.	High-risk firms Firms with opaque credit history but large customers Firms with investments in intangibles (which cannot secure bank loans) Services firms lacking collateral for security	Laws allowing parties to sell or assign accounts receivable and enforce underlying contracts Tax deductibility of interest Information infrastructure	Little used
Warehouse receipts	Asset-based financing where loans are secured by commodities deposited in certified warehouses. Receipts issued to the depositor are used as collateral for a loan, which is a fraction of the commodities' value. A lien stops goods from being sold until the loan is repaid. The borrower pays interest, tax and storage fees.	Producers of storable agricultural commodities, especially those lacking the credit history or collateral needed for standard loans Small producers able to pool commodities to reduce storage fees borne by individual firms	Laws that protect rights of depositors and lenders, facilitate receipt transfer, and define procedures for warehouse operator bankruptcy. Licencing framework, control and oversight of warehouses.	Little used

Source: OECD (2015[16]), BNR (2023[15]), World Bank (2020[8]), BNR (2023[7])

Addressing information barriers to lending: completing title registration in rural areas

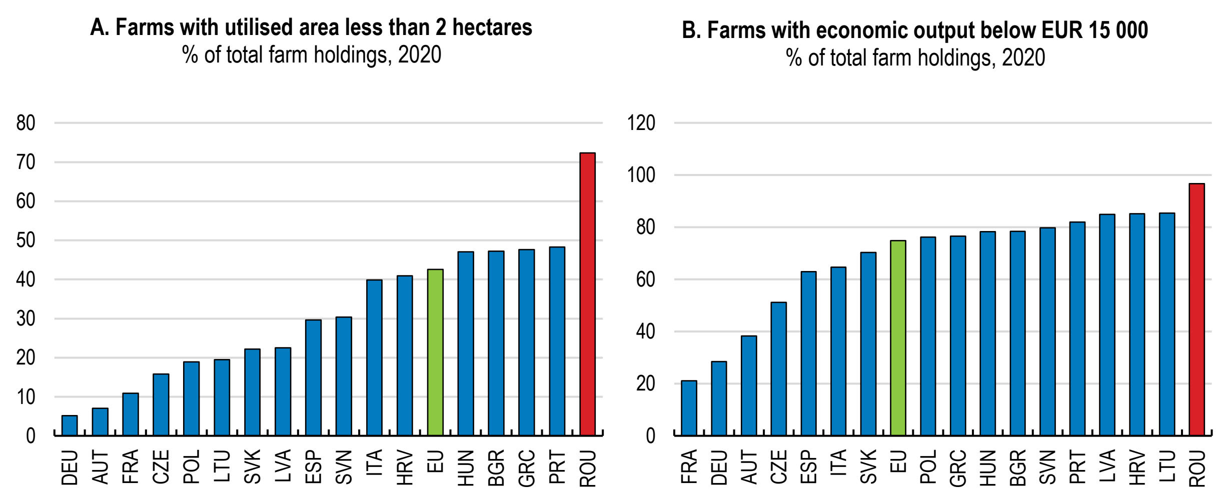
Laws and institutions are in place already to improve lenders' information on would-be clients, facilitating credit decisions. Services offered by Romania's public credit-reporting agency (CCR), a banking-sector credit bureau (BdC), and private credit reporting agencies reduce lenders' potential costs of assessing customers' creditworthiness. EU accounting, auditing and financial reporting rules – all of which are transposed into Romanian laws – improve access to standardised information, further shrinking a possible barrier to finance.

Informal firms would usually lack information needed to support loan requests. Information critical to lender appraisals, such as clients' credit histories and financial accounts, is opaque for those operating in the grey economy. Getting more businesses into the formal economy – including with reforms to lower costs of complying with Romania's taxes and regulations (Chapter 2) – should indirectly expand access to credit as more firms build up paper trails needed to support credit applications. Stronger tax enforcement (Chapter 2) might also help rein in informal lending, reducing distortions in financial intermediation.

Patchy land title registration creates challenges for asset-based finance in parts of the country. The national cadastre on land ownership is relatively complete for urban areas. But gaps in the cadastre are larger for rural areas (IMF, 2022[17]), where low market turnover slows the rate of point-of-sale registration. Difficulty establishing land ownership, whether by registered title or other means, adds hurdles to asset-based finance for small farm owners, of which there are many in Romania's fragmented agricultural industry (Figure 3.4). Past reviews have found that loan rejection rates for Romanian farmers are above EU averages, leading many turning to friends and relatives for finance (Fi-compass, 2020[18]). A 2022 IMF study reported estimates that it might take 10 years to reach full title coverage in the national register (IMF, 2022[17]). Keeping up the government's programme for systematic title registration will help close gaps in the cadastre. A related priority is to resolve remaining legal disputes over land title, a relic of the restitution process at the end of the communist era.

Land market frictions may add to difficulties accessing market credit and slow development in rural areas. Limited property market activity would create challenges for lenders seeking to assess the value of clients' land in parts of Romania. For loans secured by mortgages over land classed as "agricultural", difficulties selling properties subject to foreclosure could discourage financing of small firms. Processes for selling farms in Romania are administratively burdensome, being subject to a complicated system of pre-emptive purchaser rights and protracted sale notice periods (Vranken, Tabeau and Roebeling, 2021[19]). There may be scope to moderate land market rules without compromising strategic objectives, notably food security.

Figure 3.4. Romania's agriculture industry is fragmented, with large numbers of subsistence farms



Note: Panel A: The graph shows the share of farm holdings with utilised agricultural area smaller than two hectares in 2020. Panel B: Farm output is influenced by local growing conditions. Romania has experienced episodes of severe drought in recent years.
Source: Eurostat; OECD calculations.

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Ensuring state finance programmes complement private supply of credit

Government and EU-funded programmes expand credit access in Romania. State support aims to extend finance to creditworthy firms underserved by market lenders – for instance, due to the difficulty of evaluating a young firm's growth potential.

A new state-owned credit institution, the Investment and Development Bank (IDB), will from 2026 provide a source of financing to small businesses. The IDB will be supervised by Romania's central bank and have a share capital of RON 3 billion (EUR 600 million) – equivalent to roughly 1.6% of total loans to non-financial corporations. Like similar institutions in other countries, interventions by the development bank would set out to boost firms' productivity, including through innovation and export opportunities. It is not yet clear how IDB support, modest on its own, would interact with subsidised credit already offered to Romanian firms through other schemes. A small but not insignificant share of firms access loans from the government (3%), the European Union (3%), or credit guarantee funds (4%) (BNR, 2023[7]).

Designing cost-effective state finance programmes is not easy (OECD, 2018[20]). Programmes often fail to expand credit access in a commercial manner. Inadequate screening of undercapitalised loan applicants can increase default risk. In such instances, non-performing loans are transferred to the state, increasing budget deficits and public debt. Good governance and administration will be needed to contain costs of support provided through Romania's new development bank, ensure the programme performs as intended, and avoid its manipulation for political goals. Regular evaluation will be important to keep the bank on track and avoid crowding out market lending (Box 3.2). Above all else, roll out of the programme should not distract the government from its main role in improving institutions needed for an effective financial system.

Box 3.2. Best practice in evaluating state financing programmes

Romania can learn from approaches in OECD countries to collect data and evaluate the performance of state-backed financing programmes. It is important to regularly assess whether programmes expand access to debt finance (known as "additionality"), either by lowering credit costs or making financing available to more businesses. Regular reviews should assess impacts on beneficiaries' performance (investments, productivity, default risk) but also broader economic effects (for instance, job creation). The latter requires analysis of scenarios that might have eventuated without government intervention. Even if state financing programmes boost activity, they still distort resource allocations in the economy, including possibly by propping up non-viable businesses. While unintentional, schemes can also penalise firms ineligible for support, disrupt capital market development or reduce demand for unsubsidised credit. Routine evaluations should assess a programme's costs and financial sustainability, including with respect to credit under-pricing, operational expenses and defaults.

Source: OECD (2018[20])

Building knowledge and trust in the financial system

Lifting financial literacy could encourage use of financial services by businesses and build trust in the financial system. The state of financial knowledge in Romania reflects both general gaps in education and the relatively short history of private financial markets in the country since the early 1990s. Studies suggest individuals' knowledge of concepts such as interest rates, inflation and risk diversification is lower in Romania than in other Eastern European countries (for example, see Beckmann and Kiesl-Reiter (2023[21])). In general, across countries, financial illiteracy tends to be higher among the young and old than in middle-age groups; women and those with less schooling also tend to have less financial knowledge, as do those outside employment (Lusardi and Mitchell, 2011[22]). Among firms, financial knowledge is typically lower among managers of small businesses compared with those heading big firms (OECD, 2023[23]). A recent OECD study returned mixed findings on the financial literacy of SME owners and managers in Romania (OECD, 2023[23]). Relatively few respondents (45%) understood the difference between dividends and loan repayments. A sizable share demonstrated uncommercial behaviours around financial management. Only half (48%) kept separate household and business financial accounts. Many of these findings corroborate recent survey evidence collected by Romania's central bank (BNR, 2023[7]).

Financial education initiatives should continue. The National Bank of Romania and the Ministry of Education, together with other public agencies, convene events aimed at improving financial literacy, which is also part of the national curriculum. These activities are carried out within the National Financial

Education Strategy. Cost-effective financial inclusion initiatives should continue, backed by assessment of where gaps in financial literacy are largest, and which people and firms would benefit most from support. Current initiatives rightly focus on improving awareness of financial services, including among young people and firms. Such efforts could over time encourage greater uptake of banking services and insurance (Chapter 5), among other products, particularly if financial educators make progress in rural areas, with small firms, and among people with less education. As well as expanding growth opportunities for small businesses and reducing firms' exposure to financial risk – for instance, linked to foreign-currency borrowing (Chapter 2) – better financial literacy could also encourage people to save for retirement. Regular evaluation will be important to ensure financial education initiatives achieve their goals. In assessing the cost and effectiveness of financial literacy interventions, Romania can draw on approaches used in OECD countries. A recent review showed that countries often rely on a mix of qualitative evaluations and quantitative information, including through literacy surveys (OECD, 2022[24]). Parallel efforts aimed at avoiding overly burdensome procedures for credit applications could further support use of financial services.

Box 3.3. Romania's *TOP Entrepreneurship* project

Romania's National Financial Education Strategy was revised and relaunched in 2023. A new *TOP Entrepreneurship* project, coordinated by the National Bank of Romania, aims to develop entrepreneurs' financial knowledge. In addition to improving financial behaviour, a series of conferences, seminars and workshops hope to expand firms' use of financial products and services. From 2024 a new online portal will also offer firms free data and information, including on financial discipline, financing solutions offered by banks and non-bank lenders, tools for digitalising financial activities, and information on cyber security related to banking and financial activity.

Source: National Bank of Romania, *Press release: Launch of the TOP Entrepreneurship project*, 11 October 2023.

Removing obstacles to capital market development

As in other Eastern European countries, domestic capital markets are small in Romania. The value of corporate bond issuances in the ten years to 2019 was worth 0.01% of GDP, lower than in Hungary (0.3%) and Poland (0.5%) (OECD, 2022[6]). Listings in Romania's public equity markets picked up in the past decade but are small in number compared with peers Czechia and Poland (but higher than in Hungary) (OECD, 2022[6]).

Capital markets should deepen with economic development. Greater use of bond financing could expand the supply of long-term credit to business-sector borrowers, and at lower cost than bank lending. The share market will continue to mainly benefit large firms. Private equity (including venture capital) can, however, play a role in funding promising start-ups, including those deploying new technologies. Unlike bank lending, equity market investors accept higher risks with compensation of larger returns when businesses succeed. Such markets can provide more efficient mechanisms for managing risks than bank lending (Mehrotra and Schanz, 2020[25]).

A 2022 OECD Capital Market Review of Romania identified barriers impeding bond listing and issuing new equity through the share market (OECD, 2022[6]). The Review advised reducing the time required to list bonds. It questioned the need for an extraordinary general meeting to issue a bond and suggested that additional capacity at the Financial Supervisory Authority could reduce delays approving prospectuses. The report also recommended reviewing capital raising procedures to improve conditions for stock market listing. It identified scope to increase secondary stock market liquidity and recommended improving collateral management to support securities lending and derivatives market operations.

3.3. Special focus: Continuing the fight against corruption

Corruption can also discourage investment and impede efficient resource reallocation. Romania continues to make progress in combatting corruption, but much remains to be done. World Bank indicators show advances in the control of corruption (Figure 3.5). Eurostat's Eurobarometer survey results also indicate positive developments. In 2019, only 7% of respondents said that corruption had declined over the previous three years; in 2022, the share was 19% (European Commission, 2022[26]). However, Romania continues to rank poorly in Transparency International's indicator of perceived corruption (Figure 3.5). Also, the Eurobarometer survey still indicates widespread acceptance of corrupt behaviours. In the 2022 questionnaire 54% of Romania's respondents thought it acceptable to give a gift in order to get something from the public administration or a public service; the equivalent figure across the EU-27 is 28%.

Corruption in Romania is wide ranging. It extends from high-profile cases involving politicians and senior government and company executives, for instance peddling favours or taking bribes, to corrupt practices involving lower levels of public officials, local government, professionals and the general public. Areas particularly vulnerable to corruption include public procurement, activities of state-owned enterprises, and in the healthcare and education sectors (Table 3.3). Tackling corruption requires policy action on multiple fronts. Measures targeting the conduct of the legislature and the judicial system are important, along with specific policies for vulnerable sectors. Structural reforms outside dedicated anti-corruption policy can contribute. For instance, digitalisation of public services and tax collection (see discussion of taxation elsewhere in this Survey) is thought to help combat corruption by lowering the costs of complying with regulations and taxes (Fanea-Ivanovici et al., 2019[27]).

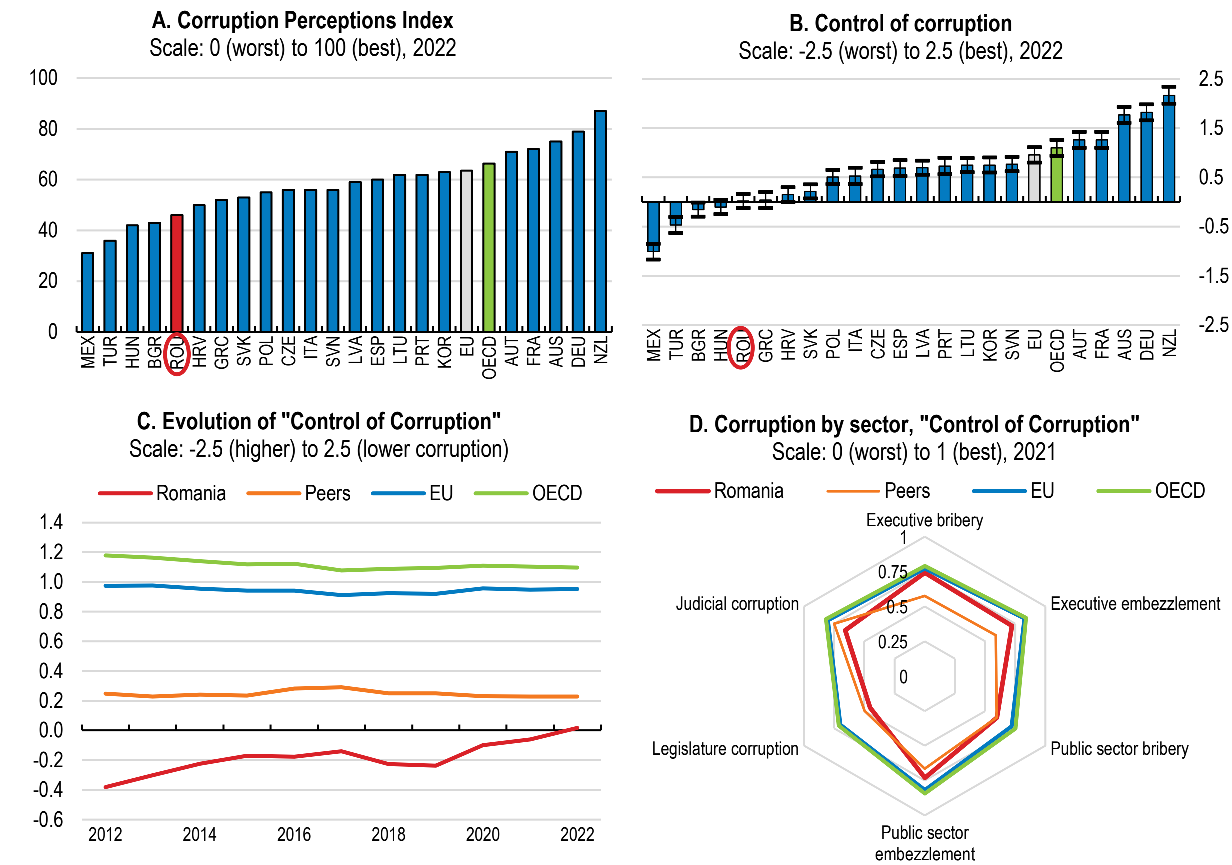
As elsewhere, corruption in Romania is undoubtedly damaging the economy and society. Corruption distorts markets, makes the business environment less predictable, hinders the functioning of institutions, and imposes social costs. Evidence linking corruption and socio-economic outcomes has been around for some time (for instance (Mauro, 1995[28])). Corruption is likely exacerbating many of Romania's socio-economic challenges. For instance, recent research underscores that corruption is among the factors driving emigration, including in Romania (Crisan, Crisan-Mitra and Dragos, 2018[29]) and discourages labour-market migration within the country (Cooray and Dzhumashev, 2018[30]).

Table 3.3. Forms of corruption across selected sectors, institutions and activities

Activity	Common forms for corruption
Public procurement	-bribery or conflicts of interests associated with tailored terms of references or unfair evaluation of tenders; -using emergency procurement to limit the competition, without proper cause; -collusion between bidders (often without the involvement of the contracting authority); -collusion and bribery at delivery (of goods, services or works), even if the awarding process for the contract was not corrupt.
State-owned enterprise	-the peddling of favours by the legislature in relation to SOEs (members of parliament, government ministers) -and the taking of bribes, abuse of office and money laundering by executive managers.
Healthcare	-widespread informal payments for healthcare services. -poor transparency in the appointment of senior staff and in budgeting.
Education	-bribery, nepotism and favouritism in school admissions, teacher appointments, and licensing of education facilities; -bid-rigging in the procurement of textbooks and school supplies; -diversion of funds and equipment.

Sources: Transparency International (2023), *Policy paper on boosting integrity in Romanian Public procurement,* OECD (2023) *Strengthening Romania's Integrity and Anti-corruption Measures.*

Figure 3.5. Corruption is still perceived as high



Note: 'Peers' is the unweighted average of Bulgaria, Czechia, Hungary, and Poland. Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.
Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v12.

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Continuing to improve Romania's anti-corruption system

Romania's anti-corruption system is improving. A recent OECD report (OECD, 2023[31]) commends the latest National Anti-corruption Strategy, which covers the period 2021-25, for its risks-based approach that aims to better concentrate policy where the corruption risks are greatest. In November 2022, the European Commission determined that Romania had made sufficient progress to terminate the Cooperation and Verification Mechanism (CVM), which the EU created for Romania and Bulgaria to monitor and address shortfalls in the fields of judicial reform and corruption when they joined the EU in 2007. Furthermore, policy progress on combatting corruption and strengthening institutions is being made via the Resilience and Recovery Plan. Commission oversight of anti-corruption efforts continues through its annual "Rule of Law" reports, which are conducted for all member countries. Romania's participation in the OECD's Anti-Bribery Convention is spurring efforts to address the problem of bribery of foreign public officials. Romania ratified the OECD Anti-Bribery Convention in July 2023. In October 2023 the Working Group on Bribery in International Business Transactions completed its Phase 1 evaluation, which assesses the legislative framework against the Convention's standards. The Phase 2 evaluation will examine how Romania's legislative framework is implemented in practice.

Despite advances, the National Anti-Corruption Directorate (DNA) could still be more effective. A staffing target detailed in the *Recovery and Resilience Plan* has been achieved (a key Recommendation in the 2022 *Survey*, see Table 3.4). Also, the administration of prosecutor hiring has reverted back to the Directorate. However, an stringent seniority hiring criteria for prosecutors remains in place that has been criticised for excessively limiting the potential intake. Justice Law reforms in 2019 included an increase in the seniority requirement for DNA prosecutors from six to ten years. Though the EU Commission found that this created issues for maintaining DNA staff levels, a 2021 Constitutional Court decision upheld the requirement on the grounds that the DNA, as a specialised structure within the Public Prosecutions Office attached to the High Court of Cassation and Justice, should have the same seniority requirements as that Office (OECD, 2023[32]). There is a shortage of police officers specialized in working with the judiciary on corruption issues.

Progress in developing mechanisms that dissuade corruption (integrity systems, in effect preventative measures) is slow. This issue was underscored in the 2022 *Survey* and, encouragingly, is prominent in Romania's National Anti-corruption Strategy 2021-25. The Strategy outlines measures to strengthen dissemination of integrity agendas (mechanisms for aligning individual and organizational priorities), monitor implementation, identify and report integrity incidents and raise awareness of corruption. Despite this strategic emphasis, it appears there are shortfalls in effective on-the-ground progress to improve conduct in office. A recent OECD assessment (OECD, 2023[31]) included surveys of ethics counsellors in public administration and found that many have limited capacities to bring about concrete change; integrity plans have increasingly become overly formalised box ticking exercises.

Table 3.4. Past OECD recommendations on tackling corruption

Recommendations	Actions taken since the 2022 Survey
Provide the National Anti-Corruption Directorate necessary resources, authorised power and independence to conduct investigations.	There has been progress addressing the NDA's operational challenges, including recruitment of prosecutors (European Commission, 2023[33]).
Provide guidance for the identification and management of conflicts of interest for members of Parliament.	A new legislative framework on conflict of interests is in the pipeline.
Strengthen the enforcement of public integrity standards, notably by consolidating procedures.	Some progress. Emphasis of the National Anti-Corruption Strategy 2021-25 on a risk-based approach suggests procedures will be consolidated. In June 2022 the EU Whistleblowing Directive was transposed into national law, requiring companies with 50 or more employees to design internal reporting methods and channels for whistleblowers.
Introduce a code of conduct for the engagement of members of Parliament with lobbyists.	No progress, as underscored in the European Commission's 2023 Rule of Law Report (European Commission, 2023[33]).

Reforms aimed at the legislature and courts would support broader anti-corruption efforts

Shortfalls also remain in anti-corruption measures aimed at the legislature. Recent progress has included a new legislative framework on conflicts of interests. However there has been little advance in strengthening the oversight of lobbying (a recommendation in the 2022 *Survey*, see Table 3.4). A registry for recording meetings was extended to local-government officials. However, making entries to the registry remains voluntary, including for members of the government, and there is no verification process for the accuracy of the records (European Commission, 2023[34]). Furthermore, there are still no rules on lobbying for Members of Parliament. Notably absent are rules on the engagement of Members with lobbyists, and clear restrictions on gifts, hospitality, favours and other benefits.

Judicial reform still has some way to go. A 2022 revision of the Justice Laws has reinforced safeguards for judicial independence, including through reforms to the disciplinary regime for magistrates (European Commission, 2023[34]). In addition, a reform of Romania's Codes of Criminal Law and Criminal Procedure has been adopted that includes amendments to legislation covering the crime of abuse of office. However, issues remain to be resolved, including addressing a shortage of magistrates (European Commission, 2023[34]). A specific problem of delays and inappropriate annulments of corruption court cases has emerged. A Government Emergency Ordinance was adopted in 2022 to clarify the statute of limitations on corruption cases, but a delayed legislative response has led to the closing of corruption cases and the annulment of convictions (European Commission, 2023[34]) (Box 3.4).

Box 3.4. European Union court ruling criticises the timing-out of corruption cases in Romania

In July 2023 the European Union Court of Justice ruled that the Romanian judiciary should disregard decisions by the top national court which have led to thousands of corruption cases being closed since 2022. A ruling by Romania's Constitutional Court in 2018 eliminated exceptions to a statute of limitations for various crimes, including fraud. After the government failed to replace the previous rules with new legislation for four years, the Constitutional Court ruled in 2022 that cases could be closed retroactively.

Source: Reuters

Corrupt practices in certain sectors remain widespread. A recent OECD report (OECD, 2023[31]) attributes continuing problems in health care to weak integrity management. Similarly, in the education sector it finds the several mechanisms in place to combat corruption are poorly co-ordinated and that some are not effective. Challenges among state-owned enterprises include weaknesses in ownership arrangements and inadequate implementation of risk-management and internal control mechanisms.

Table 3.5. Recommendations on improving the business environment

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Improving the business environment	
Regulatory and process improvements are making it easier to start firms. Manufacturers will benefit from quicker routes to licenses. Further progress will reduce costs of doing business in Romania.	Continue easing regulatory burdens on firms through streamlined licensing procedures.
New laws strengthen the corporate governance framework for state-owned enterprises and establish a new government agency for monitoring compliance. Compliance with previous SOE corporate governance rules was poor and oversight inadequate. SOE mismanagement wastes public resources and can weaken competition.	**Ensure reinforced SOE corporate governance rules are properly implemented and monitored.**
Frequent policy changes, often via circumscribed legislative procedures, add risks to investment and erode trust in government. The total number of adopted emergency decrees has declined, and impact assessment methods and oversight have been revamped, but major legislative changes continue to be made by emergency decrees.	**Continue to curtail use of emergency decrees and follow through on commitments to systematise policy impact assessments.**
Measures are planned or underway to reform public procurement, including through investment in electronic systems, specialised training and establishing centralised procurement bodies for local authorities.	Continue reforms to improve the efficiency of public procurement to ensure cost-effective use of public resources.
Improving access to finance	
Extensive court involvement in mortgage enforcement may discourage asset-based financing, a useful source of credit for small businesses.	Identify opportunities to make more use of out-of-court procedures in mortgage enforcement.
Non-standard finance could expand SMEs' credit access. Poor supervision discourages use of Romania's warehouse receipt system.	Strengthen oversight of the warehouse receipt system.
Incomplete land title registration adds hurdles to secured borrowing for farm owners. A programme is underway to close gaps in the land cadastre.	Keep up work to complete the national land cadastre with systematic property registration.
A new Investment and Development Bank will supply credit to small firms unable to access bank loans. State credit schemes have a mixed record internationally. Designed poorly, they can slow financial development, and direct public resources to bankable firms.	**Consolidate current small business credit schemes before the Investment and Development Bank begins operating. Ensure the Bank is backed by good governance and regularly evaluated.**
Better financial literacy would help SMEs take advantage of opportunities through the financial system.	Continue cost-effective measures to support financial inclusion through the National Financial Education Strategy.
Continued growth in Romania's capital markets will expand firms' financing options. Reducing the time required to list corporate bonds could encourage use of bond financing.	Streamline listing processes for corporate bonds. Reassess the need for an extraordinary general meeting to issue a bond.
Keeping up the fight against corruption	
More action is needed to streamline corruption cases and reduce delays, including in preliminary hearings.	Review the system of preliminary hearings for corruption cases. Address magistrate shortages.
Preventative mechanisms to combat corruption are in place across government and the wider public sector but are not always well resourced or strongly supported by management.	Fully implement integrity systems with support from leadership, stronger integrity plans and more powers and resources for ethics counsellors in areas vulnerable to corruption (for instance, procurement, health, education, SOEs).
Though progress has been made in combatting it, corruption in the legislature remains an issue. Resources for investigating and prosecuting corruption have been increased but are not yet sufficient.	**Continue to fill gaps in policy to stamp out corruption, including through rules on lobbying Members of Parliament, and by strengthening the National Anticorruption Directorate by resolving staff shortages**.

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4 Lifting socio-economic outcomes

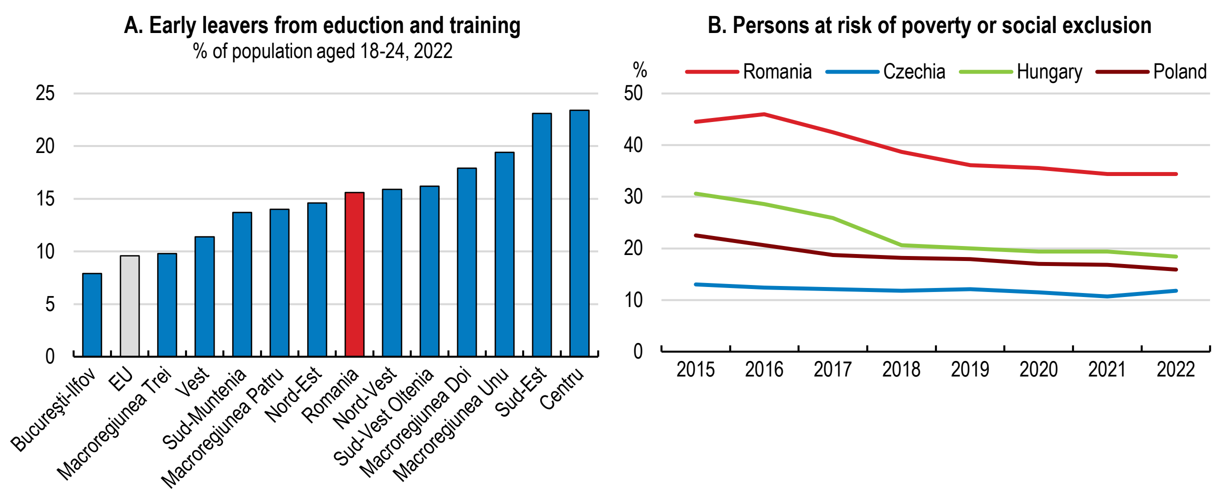
Ben Conigrave, OECD

Strong economic growth over a number of years has helped lift average living standards closer to outcomes in more advanced economies. Yet socio-economic disparity within Romania remains wide. Poverty risk is particularly high in rural areas and in Roma communities. Ongoing cost-of-living pressures should focus attention on the need to improve social protection. Better health care and schools would enhance opportunities across the country and encourage young people to stay in Romania rather than emigrating. Policies can also do more to encourage formal employment, including among women and older Romanians.

Disparities in socio-economic outcomes across Romania remain wide (Figure 4.1). Big cities such as Bucharest are prospering, with low unemployment and per capita real incomes above EU average levels. Yet in other parts of the country living standards are lower, and economic opportunities more limited. Poverty rates are particularly high in rural areas and Roma communities, many living in substandard housing in areas lacking basic infrastructure or access to social and health services. The government stepped in to help households cope with high price growth during the energy crisis. Among the most vulnerable were families with low incomes earned outside the formal economy. The energy crisis provided a new reminder of the need to improve social protection. Social policies aimed at clearing paths to employment would complement reforms to ease tax burdens on low-skilled workers (Chapter 2). Too many working-age Romanians are outside the labour market (33% in 2022; 43% of women). Lifting high-school finishing rates and uptake of tertiary education would expand young people's job prospects and reduce poverty risk in old age. In improving opportunities and living standards, better health care and schools could remove reasons for workers to emigrate, encouraging young families to stay in Romania.

The first section of this chapter assesses progress improving labour market and social outcomes since the previous *Survey*. The chapter then looks in more detail at policies to lift female employment. The Survey's social policy recommendations would increase government expenditure. They should be viewed alongside suggested reforms to increase revenues and improve spending efficiency (Chapter 2).

Figure 4.1. Greater equity in education would help reduce poverty



Note: Panel A: Data for the Bucaresti-Ilfov region are for 2021. Panel B: A person "at risk of poverty or social exclusion" either has a disposable income below 60% of the national median after social transfers, or is severely materially and socially deprived, or lives in a household with a low work intensity, where working-age members had a working time at or below 20% of their total work-time potential in the previous year.
Source: Eurostat

StatLink https://stat.link/3sepiw

4.1. Reducing inequalities: recent progress improving socio-economic outcomes

Strengthening social protection

Social assistance in Romania is low in value and hard to access. The previous *Survey* underscored that at current levels, support is too limited to keep vulnerable individuals and families from deep poverty (OECD, 2022[1]). Implementation of a delayed reform to increase the coverage and adequacy of social assistance benefits is due to start in 2024, complementing spending on public services in disadvantaged areas. Responding to past EU recommendations, the Minimum Inclusion Income reform is due to be completed in mid 2025. In the meantime, a welcome decision to index social assistance and unemployment benefits to inflation will avoid price growth eroding the real value of support.

Unemployment benefits are low. While the maximum duration of unemployment insurance in Romania (12 months) is within ranges common of many OECD countries (OECD, 2023[2]), benefit levels are low. In 2023, eligible jobseekers with the minimum contribution period received between EUR 105 and EUR 120 per month in unemployment benefits (as little as 28% of the after-tax minimum wage). At such levels, implied wage replacement rates for low earners are below ranges typical of income protection in OECD countries (50 to 80%) (OECD, 2023[3]). Small unemployment benefits encourage a quick return to work but can cause workers to cut short job hunts. Individual jobseekers' future earnings may be reduced as a result. There is also a risk of misallocating skills in the labour market. Revenue-raising reforms (see Chapter 2) could create fiscal room for Romania to eventually increase the level of unemployment benefits and ease currently strict eligibility rules. With bigger benefits, it would be important to preserve strong job search incentives. This might be achieved by reducing wage replacement rates as time out of work lengthens (OECD, 2023[3]).

Building a high-quality health system and improving long-term care

The previous *Survey* highlighted major weaknesses in Romania's health system exposed by the COVID-19 pandemic. Estimated rates of preventable mortality in 2021 were high in Romania compared with OECD countries. Unhealthy behaviours such as smoking and drinking are widespread. Too few patients with chronic conditions receive recommended preventive care (OECD, 2023[4]). Financial barriers are larger for the one in seven Romanians without health insurance; people on the lowest incomes are ten times more likely than those with the highest incomes to delay treatment or not seek the health care they need (OECD, 2023[4]). This is an extra reason for reforming taxes to encourage formal employment (see Chapter 2). RRP reforms promise to upgrade health infrastructure and improve management of health care spending. Investments will expand access to primary medical care and screening services in rural areas. More funds for primary care would support prevention, ease strains on hospitals, and start addressing unequal access to treatment. Recent reports of abuse in aged care facilities call for strong quality controls to complement ongoing investments in new facilities and training for informal caregivers. A new national strategy on long-term care appropriately aims to improve the management and financing of long-term care services and address worker shortages in the sector. As part of a transition to a patient-centred health system, a further goal is to empower patients by ensuring their participation in decisions concerning their own health. Achieving the strategy's objectives could improve access to quality services now and head off potentially bigger future problems as population ageing accelerates (Chapter 2). By reducing reliance on informal support, investment in the long-term care system could also support stronger labour market attachment among people currently caring for relatives at home. The previous *Survey* identified Romania's underdeveloped long-term care services as one of many drags on female participation (see below).

An additional challenge is to retain badly needed doctors and nurses. Many health professionals move abroad. Keeping them in Romania may be harder at a time when the government is looking to contain growth in public wages (see Chapter 2). Doctor shortages have in the past contributed to unsustainable workloads for physicians working in Romania (OECD, 2020[5]). The COVID-19 pandemic pushed the health workforce to its limits (OECD, 2023[6]). Staffing challenges make it harder to improve access to primary health care services, particularly in rural areas. EU funding for training will directly boost numbers of health professionals, provided newly trained doctors and nurses remain in the country. Working conditions could also improve with upgraded and better-managed facilities, another objective of EU-funded investments. The previous *Survey* also identified potential efficiencies in increasing the share of routine tasks done by nurses, for whom training is quicker.

Reducing school dropout rates

The previous *Survey* noted that large numbers of young people drop out of school early, particularly in rural areas. EU funding is helping to renovate educational facilities, bring IT equipment into schools, including in disadvantaged areas, and develop early-warning tools to lower drop-out rates. Early childhood care is another focus of current investments (discussed below). Better education is the surest path to improving young Romanians' job prospects and reducing poverty. Quality schools would strengthen incentives for young families to stay in the country. In turn, a larger skilled workforce would boost Romania's economic potential. The government can also play a role supporting vocational training with better forecasting of skill needs, including as Romania transitions to net-zero emissions (Chapter 5). Skills forecasting can also support planned investments in regional campuses for dual education, providing routes to tertiary qualifications.

Improving outcomes in Roma communities

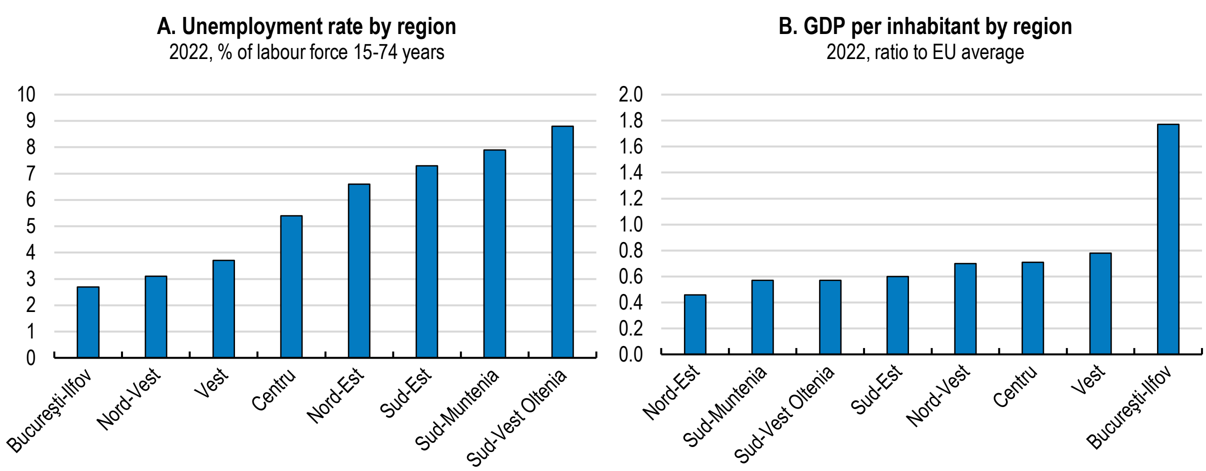
Data released since the previous *Survey* show little improvement in Roma living standards (FRA, 2023[7]). Roma outcomes in education, health, and employment remain well below those of the general population. In 2021, the share of Roma in "paid work" – defined to include full and part-time employment, self-employment, occasional work and ad hoc jobs – was 41% (down from 45% in 2016). A large share of young people are outside employment and the education system (59% in 2021). Poverty risk increased in recent years (78% in 2021). Housing remains a particular concern. Two in three Roma were living in unsatisfactory conditions in 2021, many in overcrowded dwellings or homes without tap water (FRA, 2023[7]). As in other countries with large Roma populations, such as the Slovak Republic (OECD, 2024[8]), lack of land title increases housing insecurity in informal settlements. Non-recognition of legal property ownership or occupation can make it harder to connect homes to utilities and may further limit vulnerable people's access to state support in remote areas.

Greater policy focus is needed to improve outcomes in Roma communities. The previous *Survey* underscored the challenge of lifting living standards in areas with concentrated poverty and poor public services. EU funds are being allocated to close gaps in basic infrastructure. RRP measures targeting Roma communities and other marginalised areas include spending on integrated social and health services, mobile medical screening, family medical centres, day centres for disadvantaged children, digital training centres, and support for disadvantaged schools. To support direct investments in housing construction and rehabilitation, action is needed to formalise property rights and connect permanent homes to roads, water, and electricity. National efforts to expand and upgrade Romania's small stock of social housing should aim to improve Roma access to affordable dwellings, while also mitigating segregation. Technical support from the central government could help relieve capacity constraints in local authorities responsible for administering social housing. Effective resource allocation, and proper local planning, will depend on better information on where needs are greatest (Ministry of Development, 2022[9]). Needs mapping is a focus of the RRP and the national housing strategy. Policy continuity will also be important to ensure current measures contribute to lasting improvements in socio-economic outcomes for Roma people. OECD assessments of policy priorities for disadvantaged communities in other countries, such as Canada's indigenous communities (OECD, 2023[10]), emphasise the importance of self-determination. Involving Roma themselves in policy development would give interventions greater chance of success.

Removing obstacles to regional mobility

The previous *Survey* underscored the problem of Romania's low internal labour mobility. High rates of home ownership (Chapter 2) and small official rental markets likely weigh on internal migration (OECD, 2021[11]). Tenancy rules and practices should be reviewed with the aim of encouraging formalisation of unofficial rentals, which are reported to be common, while ensuring adequate and proportionate protection of landlords and tenants' interests. As the national housing strategy acknowledges, a further priority is to expand and upgrade Romania's small social housing stock (2.5% of the housing supply), most of which was built before 1990 (Turcu, 2017[12]). Rent subsidies, an alternative form of support, exist but are reportedly hard to access (Includ-EU, 2023[13]). In addition to addressing local government capacity constraints (see Chapter 3) and resource needs for allowances and housing development – for which local authorities are responsible – the central government could be more involved in setting social housing eligibility rules. Ensuring eligibility is transferrable across Romania's cities and regions would make it easier for those less well-off to move for work. In addition to improving people's job options within Romania, eliminating barriers to regional mobility could reduce unemployment (Figure 4.2), including following macroeconomic shocks with uneven regional impacts.

Figure 4.2. Labour market outcomes and living standards differ across regions



Note: In panel B, GDP data are adjusted for price level differences using Eurostat's purchasing power standard (PPS).
Source: Eurostat.

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Reforming minimum wage setting

Romania is changing the way minimum wages are set. A new mechanism is planned to begin operating from 2024. The new system is expected to ensure more objective and systematic procedures for determining minimum wage levels, in consultation with social partners. This welcome development would mark a break with recent history. Past government determinations were made without the benefit of formal independent advice. Until now, consultation has been facilitated through the National Tripartite Council for Social Dialogue – a body that includes trade union and employer representatives. Yet the Council's role in minimum wage setting has been limited. Decisions have instead proceeded arbitrarily, governments at times pursuing social objectives without proper regard for macroeconomic stability, competitiveness or labour market effects.

How the new mechanism will operate remains to be determined. Trade-offs will have to be navigated – between encouraging labour force participation while avoiding job destruction; and defending decent pay without contributing to high inflation.

Approaches to setting minimum wages vary across OECD countries. Best practice calls for regular adjustments based on objective criteria, particularly if indexation to prices is not automatic (OECD, 2022[14]). In many countries – for instance, Germany, Ireland and Spain – an annual minimum wage determination by the government follows formal consultation with social partners or an independent commission (OECD, 2022[14]). In Australia, minimum wages are set each year by the country's independent Fair Work Commission. A formal review process draws on submissions by interested parties including government agencies and bodies representing employers and workers. In reaching a decision, the Commission considers the performance and competitiveness of the national economy, effects on workforce participation, and living standards of low-paid workers. Romania could draw on such approaches. Minimum wage determinations should be sensitive to impacts on the economy and labour market while over time aiming to compensate workers for productivity gains and preserving their purchasing power.

In setting minimum wages, decision makers should also consider the structure of Romania's economy, and the effect on minimum wages of taxes and transfers. Large numbers of workers receive pay close to the minimum wage (13% in 2022). This makes it more likely that large pay increases transmit through the labour market. In the long run, better social protection and targeted transfers could do more in times of high price growth to support households while limiting inflationary effects. Reforms to reduce effective tax rates on low-paid workers could lift take-home pay for those earning the minimum wage (see Chapter 2).

Table 4.1. Past OECD recommendations on improving social and labour market outcomes

Recommendations in in previous Survey	Actions taken since previous Survey (Jan 2022)
Dedicate more resources to reach jobseekers in marginalised communities.	Planned digital investments will enable online access to National Employment Agency services, including beneficiary registration, advice, training and skills assessment.
Provide quality, affordable early childhood education and long-term care services.	Investments over the next two years will build creches, establish supporting services for disadvantaged children, and train staff in childcare facilities. Reforms are underway to improve the quality of long-term care services for older people.
Accelerate measures to support students at risk of dropping out of school.	EU funding is helping renovate facilities, bring IT equipment to schools, including in disadvantaged areas, and implement early-warning tools and school-based interventions to lower drop-out rates as part of the National Programme to Reduce School Drop-Out.
Create a national minimum wage commission to set wage levels based on objective criteria.	A new mechanism will start operating in 2024. Minimum wages will be set based on objective criteria, consistent with job creation and competitiveness.
Improve access to healthcare services in underserved areas.	Investments are underway to improve access to basic health care, including prevention and screening services in rural disadvantaged areas.

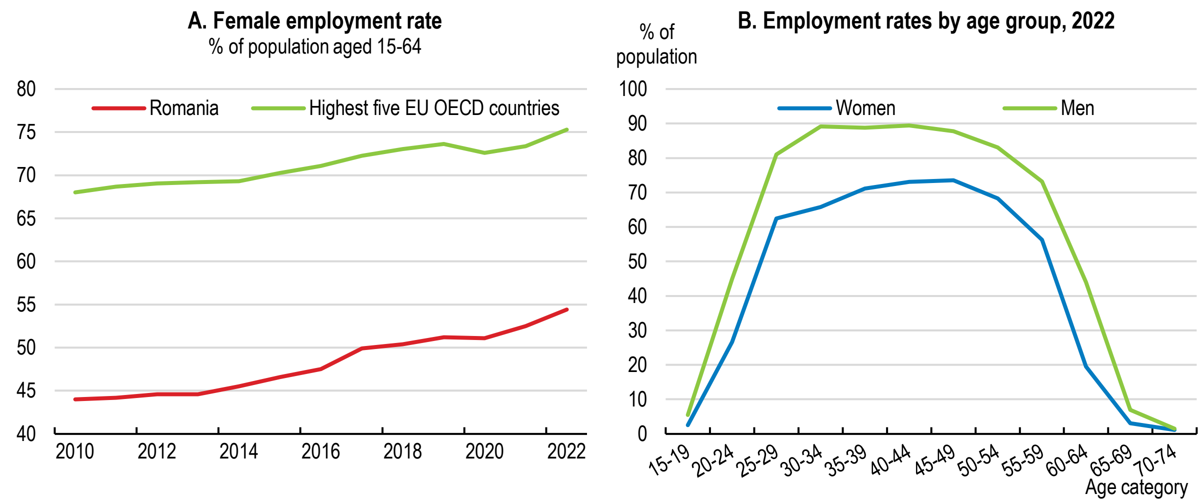
4.2. Special focus: Policies to support female employment

A trend rise in Romania's employment rate has stalled. At 63% in 2022, the employed share of the working-age population is below the OECD average of 69%. Low rates of formal employment by women contribute to this result. Female employment is low compared with outcomes in higher-income countries and compared with male employment in Romania (Figure 4.3).

Romania's large gender gap in employment widened in recent years. Despite better high-school finishing rates, reasonably strong participation in tertiary STEM courses (science, technology, engineering and maths) and overrepresentation at university, past time use surveys suggest Romanian women on average spend more time each week on housework and other unpaid activities and fewer hours in paid employment than men (Eurostat, 2019[15]). While full-time work is the norm for people in formal employment, women are underrepresented among those in management positions and on average have shorter working lives than men (Eurostat, 2023[16]). Gender employment gaps affect people without children as well as parents. As in other countries, it is more often mothers than fathers that stop work to care for young children. Gender wage gaps in Romania are small in international comparison but in large part reflect pay differences emerging around the time of childbirth (Ciminelli, Schwellnus and Stadler, 2021[17]). Labour market outcomes are particularly poor in rural areas (Box 4.1).

Policies affect employment incentives at key decision points in life. This chapter considers the role of parental leave, childcare, labour laws, and Romania's tax and pension systems in influencing female paid work decisions. As well as expanding economic opportunities for Romanian women, and reducing poverty risks, reforms to lift female participation would increase Romania's economic potential and mitigate fiscal challenges. The policy changes recommended in this chapter would also complement broader efforts to lift participation by older workers (Chapter 2).

Figure 4.3. Gender employment gaps peak in childbearing years



Note: Panel A: "Highest five EU OECD countries" is an unweighted average of results for the five EU countries that are also members of the OECD that have the highest female employment rates in 2022.
Source: Eurostat and OECD Labour Force Statistics database.

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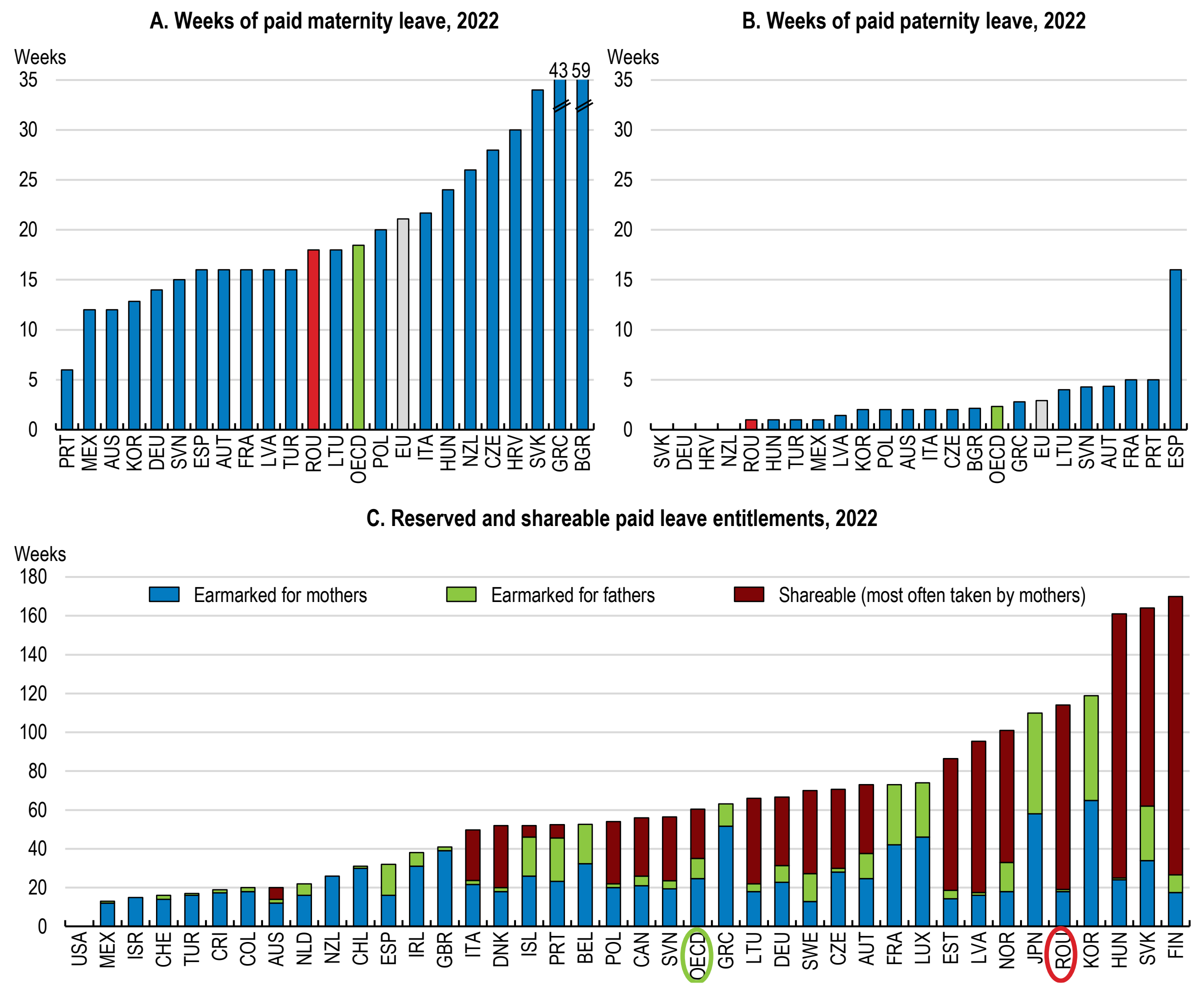
Box 4.1. Measures to improve employment outcomes in rural areas

Employment rates are low in Romania's rural areas (43% for working-age women in 2022, 68% for men of working age). The previous Survey underscored the overlapping challenges of bad infrastructure, few formal jobs, old populations, and poor social services that impede better socio-economic outcomes outside cities (OECD, 2022[1]). Infrastructure spending, public service upgrades and support for schools in Romania's *Recovery and Resilience Plan* aims to lift living standards in rural areas and marginalised communities, including those home to much of Romania's Roma population (discussed above). Such investments are needed to remove basic impediments to child development, education and better health, and would raise the payoff to the structural reforms proposed in this chapter. The previous Survey also noted Romania's relatively low internal labour mobility, which is likely influenced by high rates of homeownership and small official rental markets (see above).

Support for parents with young children: parental leave

Generous leave entitlements allow mothers to take long breaks from work after having children. Significantly more parental leave is reserved for mothers ("maternity leave") than fathers ("paternity leave") (Box 4.2) (Figure 4.4 Panel A and B). As in other countries, mothers also tend to be the main recipients of shared "child-raising leave". Paid child-raising leave in Romania is long in international comparison (Figure 4.4 Panel C), allowing either parent to stop work until a child turns two. Evidence of the effect of parental leave policies on female employment is mixed (Olivetti and Petrongolo, 2017[18]). Yet problems can arise when, as in Romania, incentives for returning to paid work are weak, even after accounting for return-to-work bonuses and the possibility of earning small amounts of money while on leave (Box 4.2). For those taking long pauses from jobs, skill decay and slower advancement can reduce lifetime earnings. Lower earners are more likely to stay out of the labour market for good, particularly when affordable childcare is hard to access (see below).

Figure 4.4. Relatively little leave is reserved for fathers



Note: Panel C: The graph shows paid birth-related leave entitlements to care for young children in place as of April 2022. Periods "earmarked" for mothers and fathers refer to individual non-transferable entitlements for paid employment-protected leave of absence for employed parents. This includes maternity and paternity leave (shown also in Panel A and Panel B), but also home care and parental leave, "mummy and daddy quotas" or periods of an overall leave entitlement that can be used only by one parent and cannot be transferred to the other. Weeks of "shareable" leave refer to parental and home care leave entitlements that can be freely shared between mothers and fathers. In Romania, paid child-raising leave is available to either parent but more often taken by mothers. Recent policy changes doubled the child-raising leave reserved for the non-claiming parent, typically fathers, to two months.
Source: OECD Family Database.

StatLink https://stat.link/4d7ujz

Box 4.2. Main features of parental leave policies in Romania

Maternity leave for working mothers in Romania (126 days) is close to the OECD average and well paid (85% of income). Mothers enjoy some flexibility in the portions of leave used before and after childbirth. Leave reserved for fathers is better remunerated (100% of income) but much shorter: 10 days, with 5 additional days if the man attends a course on caring for babies. For a first child, the duration of **paternity leave** amounts at most to 12% of the leave reserved for mothers. For subsequent children, fathers have 8% the leave entitlement exclusively for mothers.

Extra **child-raising leave**, paid at 85% of earnings, is available to either parent. As with maternity and paternity leave, jobs are protected during child-raising leave. To encourage fathers to help raise children, part of the two-year child-raising leave entitlement is non-transferrable and must be used by the non-claiming parent. In September 2023, the non-transferrable leave quota was doubled from one to two months. Official data on child-raising leave uptake are not disaggregated by gender. Yet reports indicate that, as in other countries, mothers more often than fathers are the primary child-raising leave claimants (Figure 4.5 provides an illustration). In 2022, monthly child-raising leave benefits were capped at RON 8 500 (2.3 times average after-tax earnings) and there was a minimum allowance of RON 1 314 (36% of average earnings) (Popescu and Radogna, 2022[19]). Wage replacement rates are thus higher for low-income recipients.

Figure 4.5. Illustrative example of parental leave use by working parents with a baby

Note: The figure shows an illustrative breakdown of parental leave taken by working parents around the time of a child's birth. Shared "child-raising leave" can be taken by either parent. Reports suggest mothers are the primary recipients of child-raising leave in Romania. Secondary recipients, more often fathers, were until recently required to take one month of child-raising leave. Leave durations shown in the graph reflect policies in 2022. In line with EU directives, paternity leave increased from five to ten days in 2023. From September 2023, two months of child-raising leave is assigned to the secondary recipient.
Source: Underlying information taken from the OECD Family Database.

Laws allow parents to earn a small amount of money while on child-raising leave. In 2023 the maximum annual amount is being increased to RON 11 968, roughly EUR 2 400 per year. Separately, government-sponsored **reinsertion bonuses** partly mitigate disincentives to returning to work early. These fixed value return-to-work bonuses are not taxed and are untied to a beneficiary's income. As such they are worth proportionally more to low-income earners. In 2022, a parent received monthly bonuses of RON 1 500 (41% of average earnings) if they returned to work before their child was six months old. Afterwards, and up until the child turns two (when child-raising leave ends), parents received RON 650 (18% of average earnings) each month. For those unable to access subsidised childcare, and without relatives to care for children at home, insertion bonuses might be fully absorbed on the cost of paying for a nanny. Indeed, childcare costs could substantially eat into an average wage. A parent with a six-month old child, paying a nanny the minimum wage, would in effect lose half their after-tax earnings and all of their reinsertion bonus on childcare costs. Disincentives to re-joining the workforce can thus be substantial, particularly for second earners with lower potential future earnings.

Proportionally more leave should be reserved for fathers. Continuing to reduce the large gap in leave quotas reserved for mothers and fathers could over time encourage more even division of care responsibilities between parents. This has started to occur in northern European countries including Sweden, where periods of leave reserved for fathers have increased over time (Duvander and Cedstrand, 2022[20]). Romania is taking welcome steps in this direction. From September 2023, two months of the full two-year child-raising leave entitlement are reserved for the secondary recipient. This doubled the previous one-month period of non-transferrable child-raising leave primarily aimed at fathers. More fathers taking time off work could shift employer expectations about the relative cost of hiring young men and women, complementing anti-discrimination laws. On current policy settings, a move to shrink the total period of paid leave available to working parents could cause some to quit jobs to care for young children. Such risks could diminish over time with expanded access to quality formal childcare (discussed below). As childcare access improves, Romania should aim to reduce the duration of paid child-raising leave. Aside from potential influences on work choices, shorter leave periods reduce the fiscal cost of paid leave policies.

Transitioning back to work: childcare

Romania has a shortage of places in public creches and kindergartens. Children are legally entitled to a place in a public kindergarten from age two. In principle this eliminates any gap between the end of child-raising leave (two years from birth) and the start of formal ECEC (Box 4.3). In practice, a shortage of places means parents are not assured a place for their child in creches or kindergartens. Just over 12% of children under age three attend ECEC. Attendance rates are higher for older children (age 3 to 7), but still below the EU average (68% compared with 87%). Use of formal childcare is particularly low among Roma children and in rural areas, where capacity is limited (European Commission, 2022[21]).

Many families fall back on informal childcare, typically help from relatives, to keep parents working. Subsidised private childcare centres expand the supply of preschool places. But the private market is small, accounting for around 5 in 100 institutions (World Bank, 2019[22]). Most children under three are looked after by parents. Many other families instead rely extensively on unpaid care during the week. Typically provided by grandparents or other relatives, informal care supports roughly half (51%) of Romanian children under the age of two, above the OECD average (24% in 2019). To help their working offspring – or care for their own elderly parents – grandparents may seek to reduce work hours, or if that is not possible, retire early (long-term care is discussed above). Some international evidence suggests becoming a grandparent brings forward retirement, particularly for women (Van Bavel and De Winter, 2013[23]). Romania’s lower female pension age reduces financial penalties to early retirement for grandmothers compared with grandfathers.

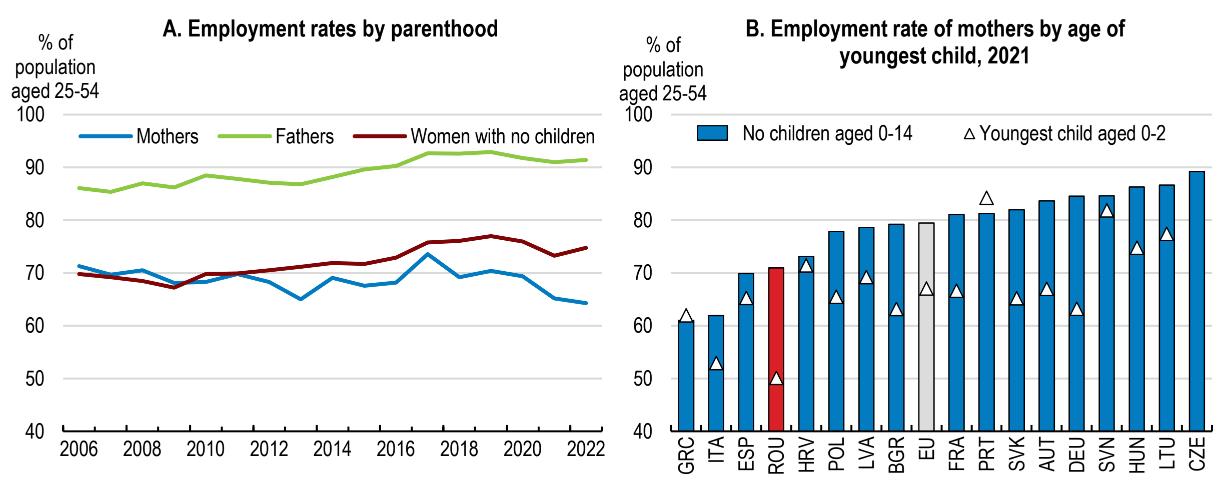
Box 4.3. Compulsory starting ages for early childhood care are moving towards OECD norms

Early childhood education runs from birth to age six in Romania. As of September 2023 children must attend preschool from age four. In 2030 the starting age will fall to three, matching requirements in many OECD countries. Early education and care is free, as is all education in Romania, a principle enshrined in Romania's constitution. Apart from a small amount for meals for kids attending full-time (up to EUR 4 per day) no fees are payable for children in public ECEC. With places limited, admission to “ante-preschool” (age 0 to 3) is on a first-come first-served basis. For preschool, priority admission goes to children in precarious situations, including orphans and children with disabilities.

Benefits from quality formal childcare are hard to replicate in informal settings. Reflecting differences in standards of care at home, young children from poor families typically reap ECEC’s biggest rewards from stronger cognitive, social and emotional skills. Carry-over benefits continue through school and the labour market (OECD, 2020[24]). Government involvement helps standardise the quality of care and education in creches and kindergartens in a way that is not possible in unregulated settings. Spending on ECEC supports equity and capitalises on positive spill-overs to society from improved child development. In contrast to other parental policies, where evidence is less clear-cut, empirical studies confirm that government spending on ECEC lifts mothers’ employment outcomes (Olivetti and Petrongolo, 2017[18]).

Continuing to invest in ECEC would support child development and higher employment rates among mothers (Figure 4.6). At 0.4% of GDP, public spending on ECEC in Romania is roughly half the OECD average (Figure 4.7). Over 90% is directed at pre-school education (for children 3 to 6). Romania’s RRP and the “Educated Romania” project rightly focus resources on increasing childcare places. With a goal of boosting participation of 0 to 3 year olds to 22% by 2027 under the *Protected Children, Safe Romania* strategy, the country will build new creches and invest in staff training. Governance arrangements will be important to uphold a high standard of care (OECD, 2020[25]). Expanding ECEC access, and improving the quality of early care, would encourage parents to return to work sooner after having children, reducing need for return-to-work bonuses.

Figure 4.6. Maternal employment rates are low



Note: Panel A shows employment rates for women without children and mothers and fathers with one child under 6 years of age.
Source: Eurostat; OECD Family database.

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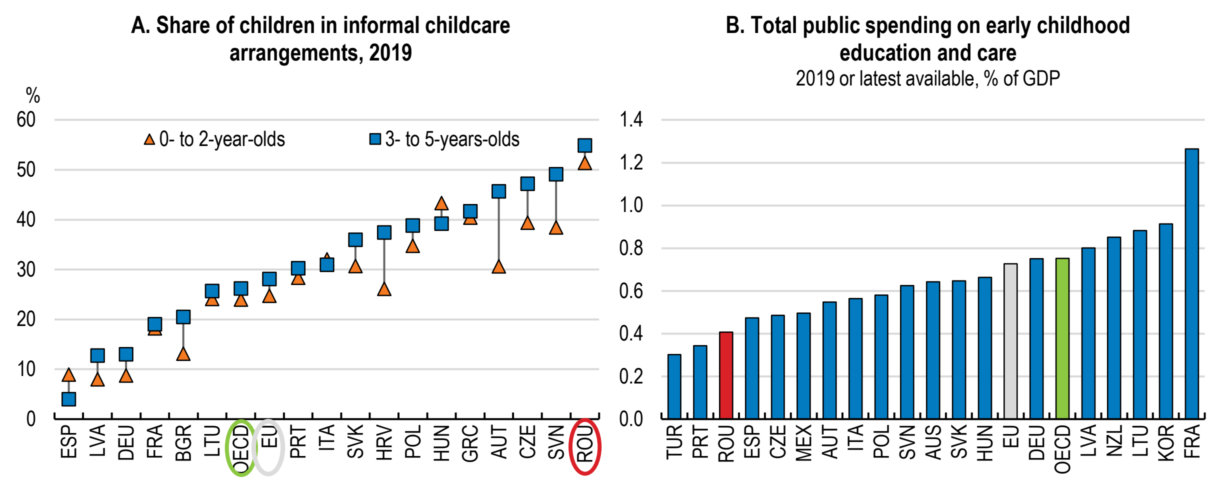
Figure 4.7. With limited state support for childcare, informal arrangements are common



Note: Panel A shows the proportion of children in informal care during a typical week in 2019. 'Informal' childcare refers to unpaid care, often by a grandparent or other relatives. Panel B: Data for Romania are not adjusted for differences in the entry age for primary schooling and cover all public expenditure on childcare and pre-primary education regardless of the age of those enrolled.
Source: OECD Family database.

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Career and family: removing obstacles to flexible work hours

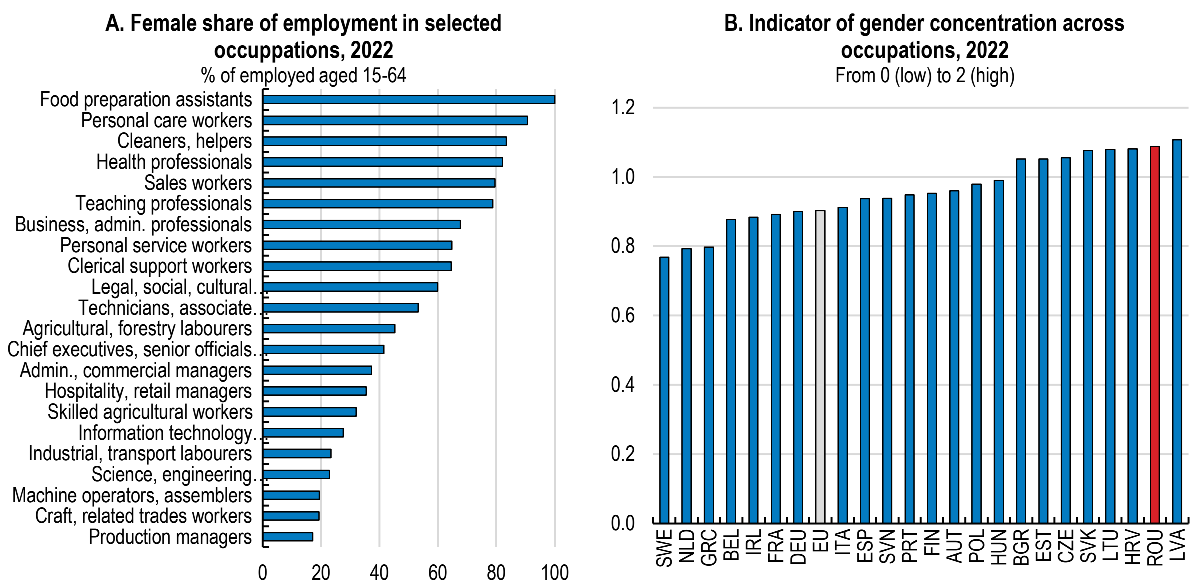
Flexible working arrangements can help close gender employment gaps. With more control of their work hours, parents can manage daily chores – creche drop-off and pick-up, dinner and homework – with less impact on career. In contrast, in economies where most firms reward workers for fixed hours every day, and long hours, gender employment gaps will likely remain, based on current attitudes to mothers' roles at home and work (Goldin, 2014[26]). OECD research suggests just under half of Romania's gender wage gap (Figure 4.9) can be attributed to male and female choices regarding industry and occupation (Ciminelli, Schwellnus and Stadler, 2021[17]). High rates of gender pooling across occupations likely have more than one cause, but may in part reflect Romanian women choosing jobs with less rigid working arrangements (Figure 4.8). In some circumstances, high taxes and inflexible formal jobs might make informal work more appealing (Box 4.4).

Box 4.4. Informal work

Imperfect capture of informal work could cause official statistics to understate employment among low-skilled men and women. Some international evidence suggests women may be overrepresented in informal work (ILO, 2023[27]). In Romania, agriculture (21% of employment in 2021) supplies large numbers of unregulated jobs through small family farms, which are typically owned and managed by men. Side-stepping taxes and high mandatory social contributions, informal employment leaves workers with inadequate health coverage. With small pensions, households dependent on informal work can also find themselves with inadequate savings for retirement, increasing risk of poverty in old age, which is higher among women than men (Chapter 2). The previous *Survey* identified heavy bureaucracy and low trust in government as factors contributing to widespread informality in Romania. In rural areas in particular, formal job opportunities are often limited (OECD, 2022[1])

As in other East European countries, formal part-time work is scarce in Romania. Romania's high rate of full-time work (97% in 2022) contrasts with situations in richer countries where growth in part-time jobs coincided with higher female employment. For low-skilled workers, large tax burdens significantly reduce take-home pay from formal part-time employment, creating incentives for informal employment. For firms, rigidities in the regulation of work hours (Box 4.5) – a reflection of efforts to stamp out tax evasion – can make it harder to reap potential gains from flexible workforces. Hiring part-time workers can also be relatively expensive in Romania. Amendments to the Fiscal Code in 2022 put a floor under part-time employees' mandatory pension contributions (OECD, 2023[28]). The new minimum is set to equal the contribution payable by a full-time employee earning the minimum wage. For part-time workers making less than that amount, the statutory floor is higher than the contribution an employee would pay based on his or her own earnings. Employers are required to cover the difference, increasing the cost of hiring part-time employees for low-paid work.

Figure 4.8. There is considerable gender concentration in some occupations



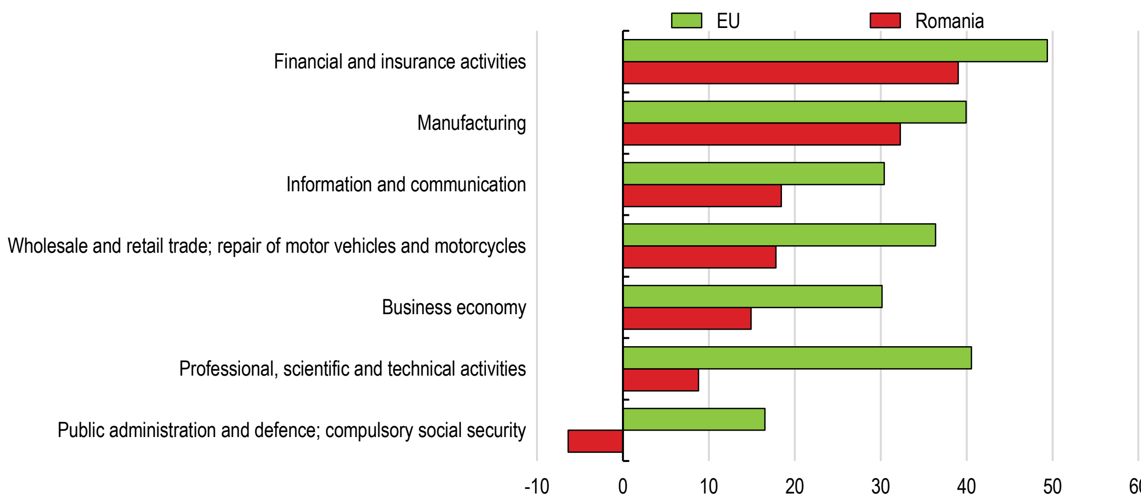
Note: Panel B: The indicator is constructed by summing the absolute differences in the distribution of female and male employment across occupations. It ranges from 0 to 2, with higher scores indicating that male or female workers are more concentrated by gender in particular occupations. Estimates are constructed based on ISCO-08 data at the two-digit level.
Source: OECD calculations based on Eurostat data.

StatLink https://stat.link/3kcihg

Romania should continue to relax rigid regulations on working hours while safeguarding worker protections. Historical reasons for restrictive work hour regulation – notably reducing scope for tax evasion – may diminish in importance with a stronger tax administration (see Chapter 2). A combination of good childcare and more flexible jobs could help working mothers and fathers balance the demands of work and parenthood (Albanesi and Kim, 2021[29]). Over time, this could help lift maternal employment rates – even if the share of those working less than full-time hours in formal jobs would also increase. Greater supply of part-time jobs would also benefit students, as well as older people keen to postpone retirement but scale back hours at work. For low-skilled workers, options to work flexibly in formal employment could reduce the advantages of informal jobs, complementing efforts to reduce tax burdens on low earners (discussed below). Labour laws now allow for individualised work programmes, established with the employer's agreement, offering flexibility in a worker's daily start and end times. For those in rural areas, with few local employers, teleworking could expand job options, particularly given Romania's generally good broadband access. Amendments to restrictive laws on teleworking began only recently (Box 4.5). Macroeconomic payoffs could come from further reform to labour laws. With more flexible rules, employers could better accommodate shifting business conditions by adjusting their employees' hours. This could reduce firms' losses during short-lived downturns, or limit job destruction.

Figure 4.9. Men earn more than women in the business economy

Gender earnings gap, % of average female hourly pay, 2018



Note: The graph shows the gap in gross mean hourly earnings for workers with 10 to 14 years of service, for firms with 10 or more employees. A positive figure indicates that men earn more than women.
Source: Eurostat; and OECD calculations.

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Box 4.5. Romanian regulation of work hours has eased over time but is still quite restrictive

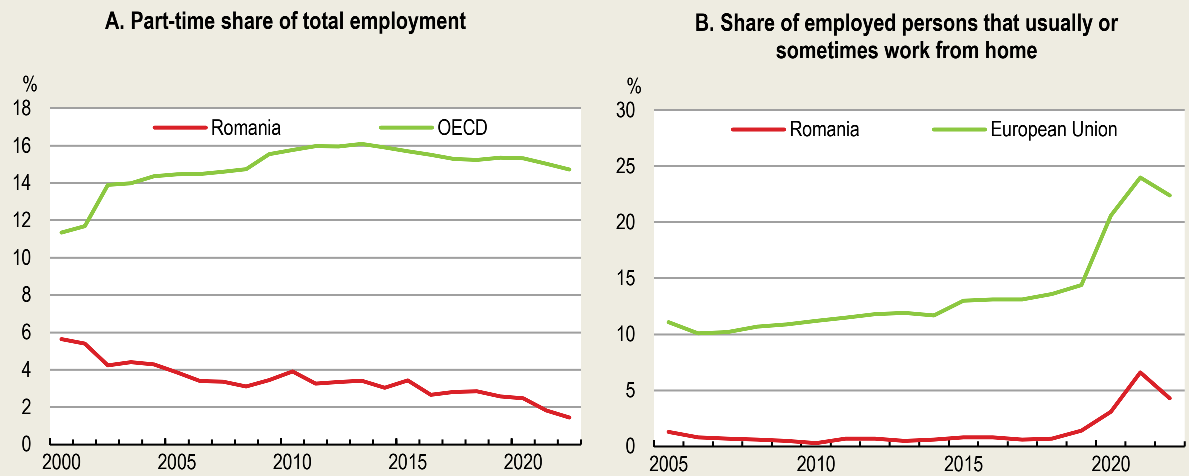
Labour laws in Romania have been relaxed in recent years. Yet regulation of part-time, temporary and atypical forms of work is still quite restrictive (ILO, 2021[30]) and part-time jobs remain rare (Figure 4.10 Panel A).

Reflecting past abuses of such provisions by employers, overtime is prohibited for part-time workers. Indeed, it is considered undeclared work and subject to harsh fines (ILO, 2021[30]) unless parties to an employment contract formally agree to a variation in part-time work hours. In contrast, many OECD countries allow part-time employees to work beyond their normal hours, often at higher pay. This is possible, for instance, in Australia, the United Kingdom and France (French Government, 2023[31]).

Teleworking is also more tightly controlled in Romania than in many OECD countries (OECD, 2021[32]). Recent steps have been taken to expand teleworking opportunities for civil servants, who can now work remotely up to five days per month. Parents with young children are now entitled to telework a maximum of four days each month without the need to secure their employer's agreement. In other circumstances, teleworking requires mutually agreed changes to employment contracts. Legislative changes have removed a previous requirement that employment agreements specify the place where work is to be carried out. Yet employers and their workers must still formally modify employment contracts to specify the days when an employee will work remotely.

In practice, relatively few employed persons routinely work from home in Romania (Figure 4.10 Panel B). Similarly, as in some other East European countries, the share of firms offering "flexible working arrangements" – proxied by a worker's ability to vary daily start and end times and accumulate time off after working long hours – has historically been low (36% in 2013 compared with an OECD average of 53%).

Figure 4.10. Part-time work is uncommon



Note: Data are for persons aged 15 to 64 years.
Source: OECD Labour Force Statistics database; and Eurostat.

StatLink https://stat.link/wunghc

Incentives for formal work and longer careers: taxes and pensions

Tax reform can strengthen incentives for low-skilled workers to participate in the formal labour market. The main priority is to shrink large tax burdens discouraging those with low-earning potential – men and women – from formal work (see Chapter 2). Introducing an earned income tax credit, as recommended in Chapter 2, would reduce effective tax rates on low-paid workers' salaries. Such reforms could encourage non-working partners to strengthen their attachment to the labour force. Beyond tax policy changes and stronger enforcement (Chapter 2), institutional reforms to improve trust in government, and reducing the administrative cost of doing business in Romania, could encourage greater supply of formal jobs.

New pension reforms should encourage Romanian women to plan for more time in the labour market. As underscored in Chapter 2, planned increases in Romania's low statutory female pension age between now and 2035 should help lift employment rates for older women (37% in 2019 among those aged 55 to 64). Policy changes to better match mothers' and fathers' leave entitlements (discussed above) could complement pension system reforms. Pursued in parallel, the reforms suggested in this chapter would encourage women to have longer careers with shorter interruptions. Young women expecting to spend more time in the labour market would have stronger incentives to finish school or go to university, expanding their options later on, including after having children (Goldin, Katz and Kuziemko, 2006[33]). This would leave fewer women in vulnerable circumstances in old age. While well down on past rates, 41% of Romanian women over 65 were at risk of poverty in 2022, compared with 32% of men (Chapter 2).

Table 4.2. Recommendations to improve socio-economic outcomes

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Addressing unequal socio-economic outcomes	
New indexation of social assistance will avoid erosion in real benefits from inflation. Benefits remain hard to access and too low in value to keep vulnerable people from poverty.	Maintain the generosity of social assistance in the near term and eventually, as public resources grow, expand social assistance. Expand access and increase the level of unemployment benefits while preserving strong work incentives.
Romania is directing funds to improve health system management, infrastructure and services, including in underserved areas and Roma communities.	Maintain efforts to improve health spending efficiency and investments aimed at improving access to primary care and screening services.
EU funds are helping upgrade educational facilities and address risks of early school leaving, particularly in disadvantaged areas and Roma communities.	**Continue to channel resources to teacher training, support for disadvantaged schools, and investments in IT equipment for classrooms.**
High homeownership rates, small official rental markets, and short supply of social housing likely discourage internal labour migration.	Invest in upgrading and expanding the stock of social rental housing. Review tenancy rules and practices to encourage formalisation of unofficial rental housing.
Past minimum wage decisions have proceeded without proper advice, risking poor trade-offs between economic and social objectives. A new minimum wage mechanism starts in 2024.	Ensure minimum wages are adjusted regularly based on objective criteria with consideration of potential impacts on labour demand and supply, as well as macroeconomic stability and competitiveness.
Encouraging female labour force participation	
Leave reserved for fathers is much shorter than mothers' leave entitlements around childbirth. Long and generous shared child-raising leave is typically used by mothers, though two months are now reserved for the non-primary claimant, usually fathers. Gains from returning to work are small for low-wage women.	Build on past efforts to reserve more parental leave for fathers. As supply of affordable childcare improves, consider reducing the duration of paid child-raising leave, and encourage a more equal sharing among parents.
Short supply of subsidised childcare leaves many parents either caring for young children themselves or using informal childcare. Improving early childhood care would encourage female employment and support child development.	**Expand access to quality formal early childhood education and care.**
Underdeveloped long-term care services can further weigh on female employment.	Follow through on planned investments to improve the supply and quality of long-term care services.

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5 Decarbonising Romania's economy

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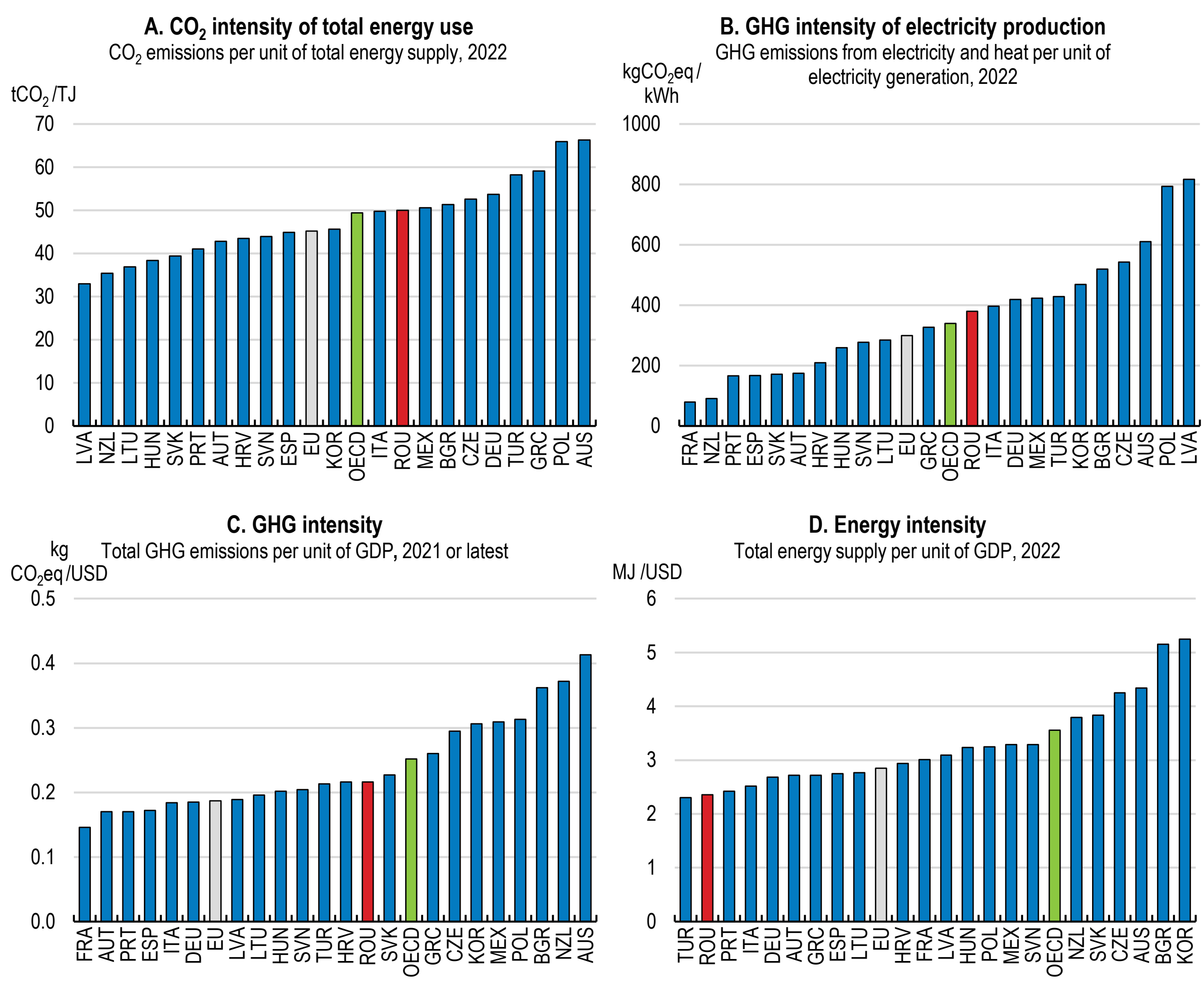
Romania's clean energy transition needs to accelerate for the country to decarbonise its economy by mid-century. Following an impressive decline from the early 1990s, emissions of greenhouse gases have stopped falling in recent years. Fossil fuel dependence, an increasing and ageing vehicle fleet and poorly insulated buildings increase energy use and carbon intensity. Moving away from fossil fuels in Romania calls primarily for more renewables; shifting to electricity in transport and buildings; substantial energy savings; and improved transport systems. This chapter identifies policies that would help bring about these changes cost effectively, while minimising the socio-economic impact of the transition and contributing to improving people's quality of life. The policy package should include institutional reforms and public investment, regulatory changes, financial support and consistent price signals to encourage private abatement actions. Measures to alleviate the impact of the net-zero transition on vulnerable communities and to adapt to climate change are also required.

5.1. Romania's climate policy challenge

Romania faces the challenge to continue to catch up to income levels in more developed economies, while reducing its greenhouse gases (GHG) emissions and preparing for climate change impacts. Mitigation action must accelerate for Romania to meet its commitment to net-zero GHG emissions by mid-century, in line with the Paris Agreement and the European Climate Law. This will also contribute to strengthen energy security, a policy priority for the country. After an impressive decline in the last three decades, emissions have stopped falling since the mid-2010s. Fossil fuel dependence, high reliance on road transport and poorly insulated buildings increase the emission intensity of energy use (Figure 5.1, Panel A). Despite substantial use of renewables, the electricity mix is still carbon intensive and based on the country's large resources of coal and natural gas (Figure 5.1, Panel B). In turn, the GHG emission intensity of the Romanian economy is higher than that of many other European countries (Figure 5.1, Panel C), despite relatively low energy use per unit of GDP (Figure 5.1, Panel D).

Figure 5.1. Carbon-intensive energy drives the GHG emission intensity of Romania's economy



Note: Panel A: CO2 emissions from fuel combustion. Panel B: GHG emissions from fuel combustion. Panel C: Greenhouse gas (GHG) emissions excluding land use, land-use change and forestry (LULUCF). In Panel C and Panel D, GDP is measured in 2015 PPP USD.
Source: IEA CO2 Emissions from Fuel Combustion Statistics: Greenhouse Gas Emissions from Energy database; OECD Environment Statistics database; IEA World Energy Balances database.

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Accelerating the clean energy transition will be key to decarbonise the economy. Weaning off fossil fuels calls for more renewables to replace power production from coal and natural gas. This will enable Romania to shift to electricity in transport, buildings and industry. The country must also tackle wasteful energy consumption, especially from buildings and old vehicles, and improve transport systems to curb growing dependence on private cars. These changes carry significant economic and social implications, varying across regions, but remain imperative to avert the substantially greater consequences associated with failing to meet global climate mitigation goals (IPCC, 2023[1]). To limit the costs of the transition, efficient and fair mitigation policies are needed. Stepping up emission abatement efforts will also bring life quality improvements. These include better housing conditions and lower energy bills arising from energy renovations of buildings, as well as less congested and polluted cities thanks to lower reliance on private cars and the shift to electric mobility.

Alongside efforts to mitigate GHG emissions, Romania needs to build resilience to the impacts of rising temperatures and more frequent extreme weather events. The country's climate has already changed. The period between 2012 and 2022 was Romania's warmest decade on record. Climate change exacerbates the country's high vulnerability to natural disasters such as floods. Its impacts are expected to increase in the coming years, affecting human lives, ecosystems and the economy. More investment in risk management and climate resilience of physical and natural assets would help prevent and mitigate loss and damage from future extreme weather events.

This chapter identifies a mix of policies that would help Romania achieve a cost-effective and fair transition to net-zero. The first section of this chapter discusses progress towards national climate targets. The second part examines gaps in climate governance in Romania, and the need for consistent pricing of carbon emissions while ensuring energy affordability. Subsequent sections focus on policies to decarbonise power generation, transport and buildings. After brief insights on policy options to reduce emissions from industry, agriculture and waste, the chapter discusses measures to alleviate the consequences of the net-zero transition on vulnerable workers. It concludes by examining Romania's challenges to adapt to climate-related impacts.

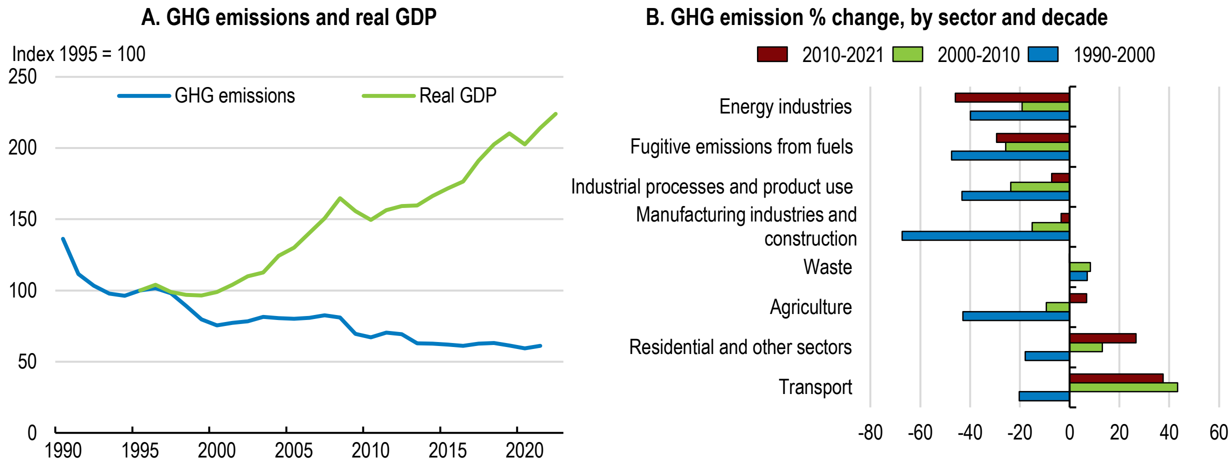
5.2. Progress towards net zero

Progress in emission reduction has lost pace

Romania's GHG emissions decoupled markedly from economic growth in the last three decades (Figure 5.2, Panel A). Much of the emission reduction occurred in the 1990s and was associated with massive restructuring of the economy. Total emissions continued to decline with the progressive shift from heavy industry to services, as well as from coal and oil towards natural gas and renewable energy. Overall, in 2021, GHG emissions (excluding land use, land-use change and forestry, or LULUCF) were 55% below their 1990 level.

However, emission reductions have almost stalled in the last eight years (except for a drop in 2020 linked to the COVID-19 pandemic) (Figure 5.2, Panel A). Emissions from transport, services, households and, to a lesser extent, agriculture have risen since 2010 (Figure 5.2, Panel B). On the other hand, emissions from power generation and energy-intensive industrial production have continued to decrease (Figure 5.2, Panel B). Despite its declining use, coal remains the dominant source of GHG emissions from the country's electricity and heat generation sector (Figure 5.3, panel C). High reliance on fossil fuels across all sectors means that two-thirds of the country's GHG emissions are energy-related (Figure 5.3, panels A and B). This includes emissions from burning fossil fuels for power and heat generation (energy industries), and direct fossil fuel use in transport and buildings – both major energy consumers and GHG sources (Figure 5.3, panels B and D).

Figure 5.2. Romania's progress in reducing GHG emissions has slowed down in recent years



Note: GHG emissions excludes emissions and removals from land use, land-use change and forestry (LULUCF). Panel B: Residential and other sectors include GHG emissions from energy used in the commercial and institutional sectors and in agriculture, forestry and fishing.
Source: OECD Environment Statistics database; and OECD Economic Outlook database.

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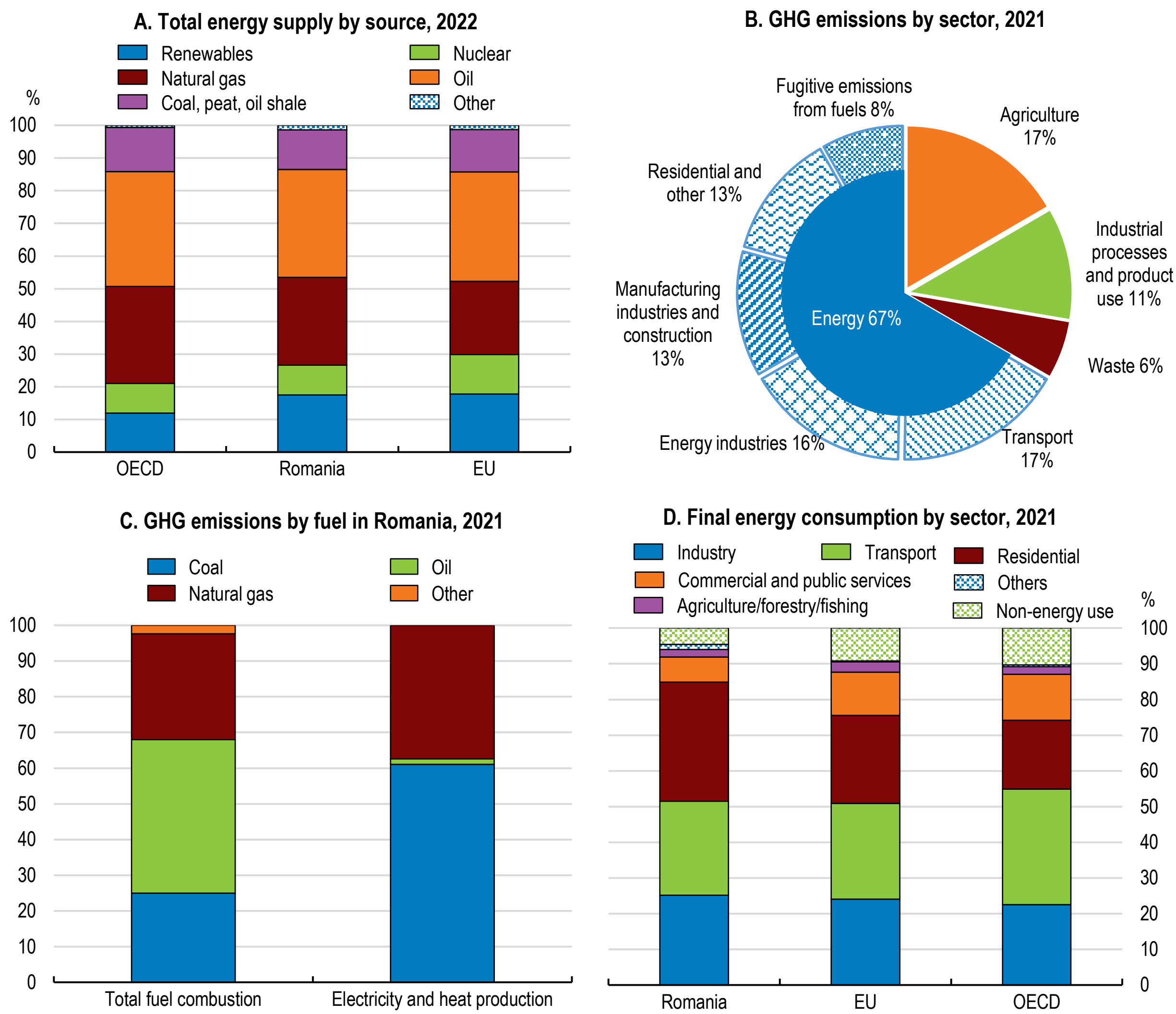
Deep emissions reductions are required for Romania to reach net zero

Romania must step up mitigation efforts to achieve its mid- and long-term targets. The country's Long-term Strategy for reducing GHG emissions envisages to achieve nearly net zero by 2050, by cutting emissions (net of removals) by 99% compared to 1990 levels (Government of Romania, 2023[2]). In the shorter term, Romania faces a binding target for 2030 under EU legislation. This target covers 70% of the country's emissions, those from sectors not covered by the EU Emissions Trading System or ETS (transport, buildings, small manufacturing facilities, construction, agriculture and waste management). By 2030, the emissions outside the ETS (or non-ETS emissions) will have to be 12.7% below their level in 2005. This binding target is far more ambitious than the 2020 objective, which the country met easily. The remaining 30% of the country's emissions – mostly from energy generation and energy-intensive industry – are traded within the EU ETS. As such, they are subject to an EU-wide emission cap and are excluded from the national target.

Romania is not on track to achieve its 2030 target for non-ETS emissions and the net-zero goal by mid-century (Figure 5.4). In 2030, non-ETS emissions are projected to exceed their 2005 level by more than 4%, even with full and timely implementation of reforms and investments outlined in the National Energy and Climate Plan, the Recovery and Resilience Plan and the EU Cohesion Policy 2021-27 programmes (see next section). Meeting the non-ETS emission reduction target requires annual emission cuts of 1.2% from 2020 and 2030, while the previous decade saw annual average emission growth of 1.3% (Figure 5.4). According to the Long-term Strategy, Romania would need to reduce net GHG emissions (i.e. including LULUCF) by 25% between 2021 and 2030 to be on the net-zero trajectory. This implies more than tripling the rate of emission reduction compared to forecasts based on existing and planned additional measures. Emission removals from Romania's large old-growth forests and the land-use sector will be essential to meet the 2030 target and 2050 net-zero goal (Figure 5.4).

Figure 5.3. Romania's energy mix relies on fossil fuels and generates most GHG emissions



Note: Percentages may not total 100% due to rounding. Panel A: The breakdown of total energy supply excludes heat and electricity trade. Panel B: GHG emissions excluding LULUCF.
Source: IEA World Energy Balances database; IEA CO2 Emissions from Fuel Combustion Statistics: Greenhouse Gas Emissions from Energy database; and OECD Environment Statistics database.

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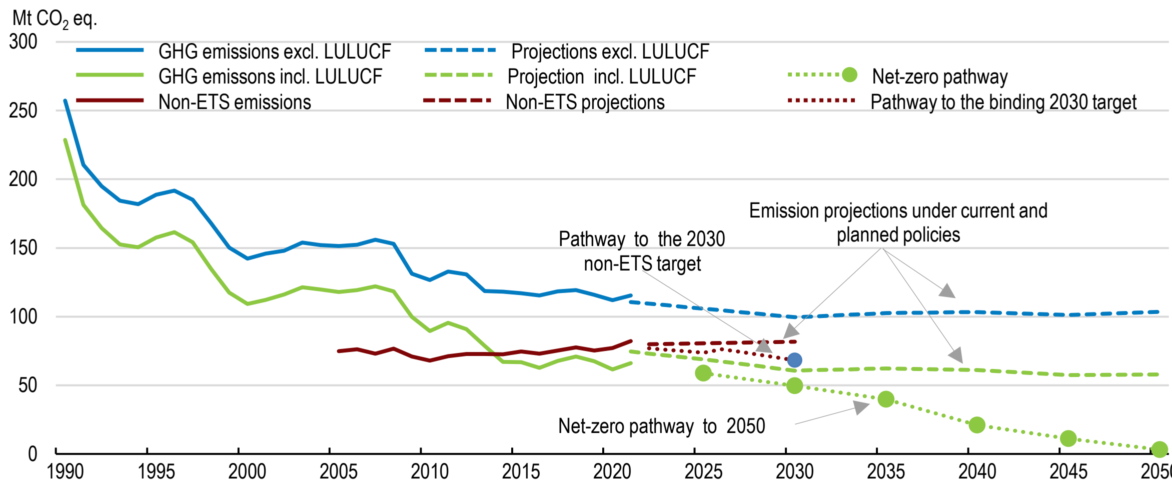
A full and cost-effective policy package is needed to bring down GHG emissions in line with targets. The policy package should include institutional reforms, public investments, stronger regulatory enforcement, financial support for private abatement and the establishment of consistent price signals, including through the elimination of distortive fossil fuel subsidies. The authorities should also alleviate the impact of climate policies on low-income households and displaced workers.

Figure 5.4. Romania is not on track to achieve its 2030 and 2050 climate mitigation goals

Historic and projected GHG emissions, and pathway to the 2030 non-ETS target and net zero by 2050



Note: 'non-ETS' refers to GHG emissions outside the EU Emissions Trading System, i.e. emissions from transport, buildings, small manufacturing facilities, construction, agriculture and waste management. 'LULUCF' stands for land use, land-use change and forestry. The solid lines show historical GHG emissions. The marker lines show the indicative pathways of emissions reductions required to meet the 2030 target for non-ETS emissions – as per the EU Effort Sharing Regulation (EU 2023/857) – and the 2050 net-zero goal, as described by Romania's Long-term Strategy. The dashed lines show emission projections with current and planned additional measures foreseen by the National Energy and Climate Plan, the Recovery and Resilience Plan and the investment programmes funded by the EU Cohesion Policy 2021-27.
Source: OECD calculations based on EEA Greenhouse gas emissions under the Effort Sharing Legislation 2005-2022 dataset; (Government of Romania, 2023[2]); (Ministry of Environment, Water and Forests, 2023[3]); and OECD Environment Statistics database.

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5.3. Enhancing climate governance and the climate policy framework

Romania's climate governance has improved but implementation gaps persist

Romania's climate policy is largely shaped at the European Union's level. The country is committed to participating in the EU's joint effort to reduce emissions by at least 55% by 2030, compared to 1990 levels, and achieve net-zero by 2050 (Figure 5.1). In late 2023, the government submitted its draft updated National Energy and Climate Plan to the European Commission, which outlines measures to achieve EU-agreed targets on GHG emissions, renewable energy and energy efficiency by 2030. The draft plan broadly aligns the 2030 climate and energy targets and policies with the trajectory to climate neutrality identified in Romania's Long-term Strategy. However, not all the policy measures needed to reach the 2030 climate and energy targets are well defined. The expected emission reductions are the estimated results of both firmly planned policies and potential abatement from hypothetical measures or objectives (Figure 5.4).

Romania needs to strengthen governance, administrative capacity and the policy framework for climate change mitigation and adaptation. The country has often been late in implementing key EU climate-related policies and legislation. This is partly due to fragmented administrative capacity and gaps in expertise in line ministries and local governments. For example, the government has no internal capacity for developing its own GHG emission projections or assessing the effectiveness of climate policies, both of which are essential for evidence-based policy making. Initiatives to strengthen the Centre of Government's climate leadership and enhance cross-sectoral policy coherence, notably through the establishment of the Inter-ministerial Committee on Climate Change in 2022, are welcome (OECD, 2024[4]).

Table 5.1. Key climate mitigation and clean energy transition targets and milestones

Targets and milestones on GHG emissions, renewables and energy efficiency to 2030

	Romania[a]	EU wide
Total GHG emission reduction (incl. LULUCF)	-78% from 1990 level	-55% from 1990 level
GHG emissions outside the EU ETS	-12.7% from 2005 level	-40% from 2005 level
GHG emissions under the EU ETS	n.a.	-62% from 2005 level
Share of renewables in gross final energy consumption	36.2%	40%
Primary energy consumption (% change compared to 2030 reference scenario projections)	31.4 Mtoe (-46%)	993 Mtoe (-11.7%)
Final energy consumption (% change compared to 2030 reference scenario projections)	23.1 Mtoe (-45%)	763 Mtoe (-11.7%)
LULUCF removals	25 665 kt CO_2eq	310 000 kt CO_2eq

Note: (a) as set by the draft updated National Energy and Climate Plan (3 November 2023); the targets for GHG emissions outside the EU ETS and for LULUCF removals are legally binding targets as set by the EU Effort Sharing Regulation (EU 2023/857) and the LULUCF Regulation (EU 2023/839). LULUCF indicates land use, land-use change and forestry.
Source: (European Council, 2023[5]); and (Government of Romania, 2023[6]).

Contrary to many other countries in Europe, Romania has not set its economy-wide GHG emission reduction targets in legislation. Legally binding targets can clarify policy intentions and reduce uncertainty for businesses and households (Ciminelli and D'Arcangelo, forthcoming[7]). The experience of other countries shows that climate laws promote evidence-based policy making, stimulate public debate, maintain focus on long-term climate goals and, in turn, help enhance accountability across governments. Climate laws typically establish mechanisms for defining and reviewing interim targets, allocating ministerial responsibilities and ensuring accountability. Additionally, these laws often create independent advisory bodies to support policymaking and monitor implementation and progress (Box 5.1).

Adopting a climate framework law, as mentioned in the programme of government, could help Romania raise its ambition and commitment to climate mitigation policy, take ownership of EU's climate policy framework and better implement it. So far, climate mitigation has been a relatively low priority for Romanian governments. This has partly been because emissions have declined with the transition to a market economy (Figure 5.2), allowing the country to meet its international commitments without substantial additional policy effort. With the easily attainable gains already reaped, Romania needs to undertake more determined and targeted action, which could encounter political and social opposition. Ensuring climate policy momentum requires raising awareness and involving affected communities and economic sectors in policy decisions. The initiation of "partnerships for energy transition" as a platform for systematic dialogue between the government and representatives of various economic sectors is a positive step forward.

Improving the efficiency of public low-carbon investment is paramount

Achieving the 2030 energy and emission targets (Figure 5.1) and, in the longer term, carbon neutrality will require considerable investment in infrastructure, equipment and technology. Investments needed to decarbonise electricity, transport and buildings are estimated at 4.7% of GDP in 2023-30 (World Bank, 2023[8]), with national public financing amounting to 1.2% of GDP (Box 2.2). A large portion of Romania's planned mitigation and adaptation efforts relies on EU-funded investment in energy and transport infrastructure, building renovations and risk prevention (Figure 5.5; Box 5.2). Over 2021-27, about EUR 34 billion or nearly 45% of the financial allocations to the country from the Recovery and Resilience Facility and EU Cohesion Policy funds target investment for transitioning to a net-zero, circular and resilient economy (Box 5.2). This allocation is nearly 2.5 times higher than the outlays for the green transition in the previous EU seven-year programming period (EC, 2023[9]), which the country did not manage to entirely spend.

Box 5.1. Examples of climate framework laws

Greece's National Climate Law (2022) sets targets to reduce national GHG emissions by 55% by 2030, by 80% by 2040 and to reach net zero by 2050. It defines key mitigation measures, including the phase out of lignite-fired power generation by 2028. The law adopts the five-year sectoral carbon budget approach. It foresees the establishment of a National Observatory for Climate Change Adaptation and the mandatory insurance of housing in highly vulnerable areas from 2025 onwards.

Ireland's Climate Action and Low Carbon Development (Amendment) Act (2021) commits the country to reach net zero by 2050. It requires the adoption of five-year carbon budgets, annual revisions of the Climate Action Plan and the development of a national long-term climate action strategy every ten years. The Act strengthens the role of the Climate Change Advisory Council in reviewing progress towards targets. Ministers must report to Parliament. The Act also incorporates the principles of climate justice and a just transition.

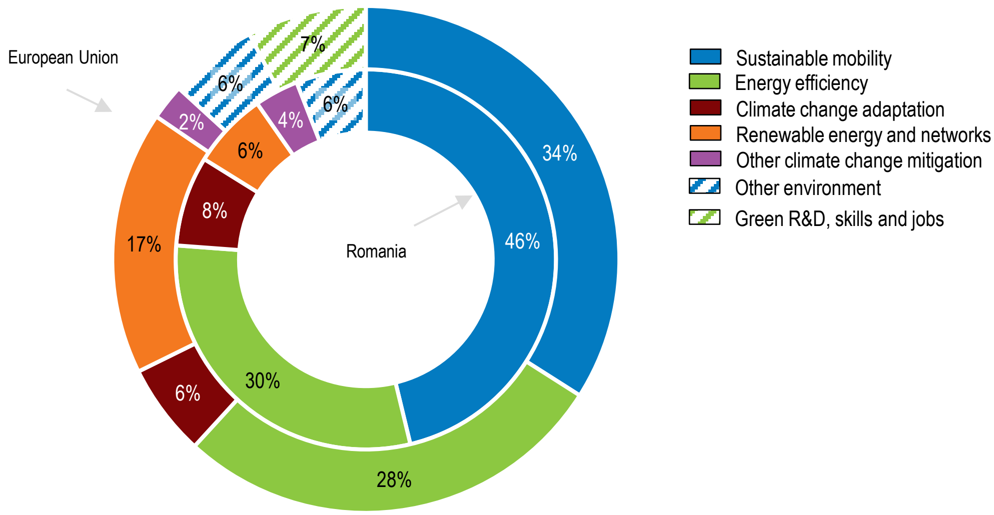
New Zealand's Climate Change Response (Zero Carbon) Amendment Act (2019) enshrines the goal of carbon neutrality by 2050 and sets targets on biogenic methane emissions. The Act sets the obligation of five-year rolling carbon budgets and mandatory consultation of indigenous communities. It establishes a Climate Change Commission, which provides independent expert advice to the government and reviews progress towards emissions reduction and adaptation goals. The government must adopt national adaptation plans based on periodic national climate risk assessments.

In 2019, the **UK** amended its longstanding **Climate Change Act** (2008) to align it with its net-zero ambition. The law requires the government to set binding five-year carbon budgets. While there are limited penalties for non-compliance, the Act sets out a transparent process and an accountability framework, which includes the Climate Change Committee – an independent expert body reporting to parliament. The Committee's mandate extends beyond parliamentary elections, which has helped ensure focus on long-term goals. Additionally, the Act mandates a climate risk assessment and a national adaptation programme every five years.

Source: (Grantham Research Institute at the London School of Economics and Climate Policy Radar, 2023[10]); (IEA, 2023[11]); (OECD, 2021[12]); and (OECD, 2022[13]).

Figure 5.5. Romania's Recovery and Resilience Plan focuses on decarbonising transport and improving energy efficiency

Climate-related expenditure planned in the Recovery and Resilience Plan by policy area, percentage, 2021-26



Note: The percentage relates to the share of each expenditure category in the planned expenditure targeting climate-related objectives. The category "Other environment" includes expenditures on circular economy, biodiversity, water and marine resources, and pollution prevention and control. Data as of 20 November 2023.
Source: European Commission (2023), Recovery and resilience scoreboard.

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Box 5.2. The Recovery and Resilience Plan and EU Cohesion Policy are set to help decarbonise Romania's economy

Romania directed 44% of its Recovery and Resilience Plan (RRP) grant and loan allocations (or nearly EUR 12.5 billion) to climate mitigation and adaptation objectives, well above the EU requirement of 37%. Within the RRP, the government committed to meeting 34% of its energy needs from renewables by 2030; phase out coal mining and coal-fired power generation by 2032; accelerate the decarbonisation of transport; massively renovate the building stock; and develop a hydrogen strategy. The RRP's climate-related investments mostly focus on transport and energy efficiency and, to a lesser extent, renewable energy generation (Figure 5.5). The new *REPowerEU* chapter, added to the RRP in November 2023, speeds up the implementation of measures aimed at facilitating investment in renewables and energy renovations of buildings, while also increasing the financing for green skill training. The RRP reforms and investments are expected to bolster energy security and decarbonise energy generation and use, marking a significant stride towards achieving climate neutrality by 2050.

Romania is set to invest EUR 21.7 billion in the green transition as part of the EU Cohesion Policy in 2021-27. This corresponds to 47% of total planned climate investments of EUR 46.6 billion, including EU funds for EUR 31 billion and national co-financing. These allocations include investment in climate change mitigation and adaptation, risk prevention, sustainable urban mobility and the circular economy.

Source: (EC, 2023[14]).

The government should enhance the management and appraisal of investment projects, use available financing sources more efficiently and improve absorption of EU funds (IMF, 2022[15]) (OECD, 2022[16]). Implementation and spending of EU funds allocated to the country in 2014-20 accelerated recently, but absorption in the initial years was below the EU average (Chapter 3). Investment cycles were long, due to the low quality of project preparation and political interference (OECD, 2022[16]). Performance was particularly poor for funds allocated to the low-carbon economy (mainly support to renewables and energy efficiency), with only 46% of the allocated funds spent until September 2023. As a result, many of the expected outcomes were not achieved, such as targets on smart grid users, building renovations and upgrades to urban transport systems (EC, 2024[17]). Enhancing administrative capacity, for instance through tailor-made capacity building roadmaps, and effectively prioritising projects will be key to improve the efficiency and quality of public spending (OECD, 2022[16]) (Chapters 2 and 3). Consistently incorporating a shadow carbon price into cost-benefit analyses would help guide public investment decisions and align them with climate goals.

5.4. A broader, more cost-effective and fairer policy mix is needed

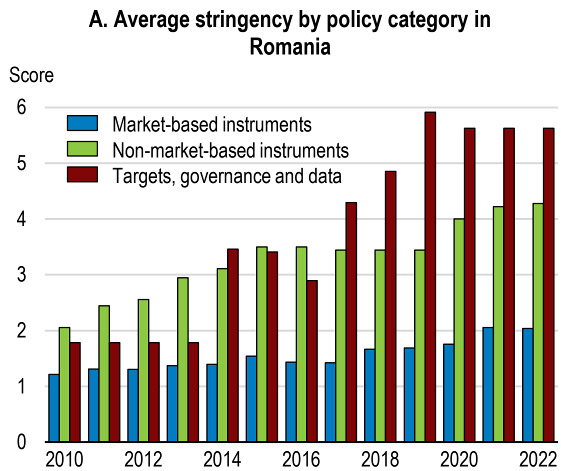
Various climate mitigation measures are in place in Romania. These include regulatory instruments such as energy efficiency standards for buildings and equipment, and CO_2 emission standards for vehicles. Romania also provides financial support for energy efficiency, renewables and electric vehicles. While no explicit carbon tax applies in the country, energy-related GHG emissions are priced through the EU Emissions Trading System (ETS) (Box 5.3) and taxes on energy products in line with the EU Energy Taxation Directive (see next section).

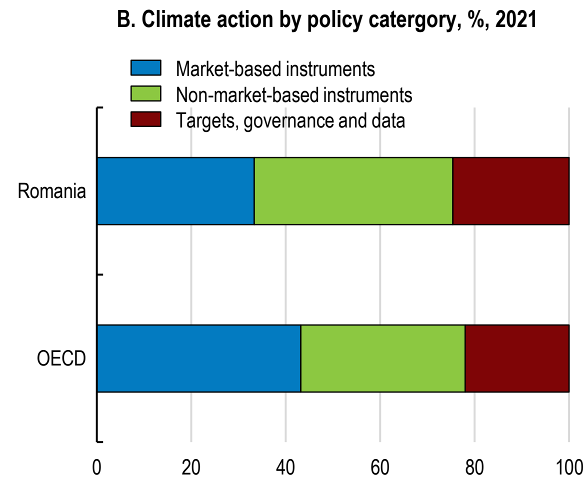
The stringency of Romania's climate action has progressively increased with the implementation of EU policies, especially the EU ETS (Figure 5.6, panel A). However, the stringency and scope of pricing instruments such as energy and vehicles taxes remains modest – a feature common to other Central and Eastern European countries (D'Arcangelo, Kruse and Pisu, 2023[18]). As in the average OECD country, non-market-based and governance-type instruments have played the main role in strengthening national climate policy (Figure 5.6, panel B).

Box 5.3. Romania's participation in the EU ETS

Since its introduction in 2005, the EU Emissions Trading System (ETS) has stimulated a switch from coal to natural gas in the Romanian electricity market, with a consequent reduction in CO_2 emissions. However, free allowance allocations have reduced the effectiveness of the system (Dechezleprêtre, Nachtigall and Venmans, 2023[19]). As in all countries participating in the ETS, most of Romania's energy-intensive industrial facilities (e.g. aluminium, cement, fertilisers and steel) have received part of their allowances for free to prevent carbon leakage. In addition, Romania is one of only three countries (with Bulgaria and Hungary, out of 10 eligible countries) that opted to continue to provide free allowances to the power generation sector in the 2021-30 ETS phase, contrary to the general auctioning rule. The free allocation is a low share of available allowances for the energy sector. However, it effectively represents a subsidy to fossil fuel-based power generation, weakens abatement incentives and could contribute to delay the country's phase out of coal power. Results from the previous ETS phase (2013-20) show that free allocations did not contribute to modernise power sectors in countries, including Romania, that made use of them (ECA, 2020[20]).

Figure 5.6. Climate policy has become more stringent but could better embrace market-based mitigation approaches





Note: The OECD Climate Actions and Policies Measurement Framework defines policy stringency as the degree to which policies incentivise emission reductions. The stringency score ranges between 0 (not stringent) and 10 (very stringent) for each policy variable based on the in-sample distribution across all countries and years of the policy variables' level (e.g. tax rate, emission limit value, government expenditure). As policy stringency is based on a relative measurement, high stringency values in a particular country indicate that the policy in this country and year was more stringent compared to all other countries and years. Hence, high policy stringency does not necessarily suggest that the policy is stringent enough to meet mitigation goals.
Source: (Nachtigall et al., 2022[21]).

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Meeting Romania's emission targets will need a more consistent use of pricing measures, as part of a broader policy mix. OECD analysis indicates that a diverse set of policy instruments can best harness synergies and amplify the effectiveness of the mitigation strategy (D'Arcangelo, Kruse and Pisu, 2023[18]). The government should give priority to removing support to fossil fuels, which weakens incentives for energy savings or fuel switching (see below). It should also extend carbon pricing to sectors outside the EU ETS. OECD simulations suggest that broad-based carbon pricing is effective in reducing emissions in most sectors and can accelerate coal phase-out (D'Arcangelo et al., 2022[22]). In addition to encouraging production and consumption choices that reduce GHG emissions in a cost-effective way, carbon pricing can generate government revenues, at least until higher prices achieve their goal of substantially lowering emissions.

Introducing carbon pricing and removing subsidies generally face political challenges, due to concerns about economic competitiveness, potential job losses, and the impact of higher energy prices on consumers. Part of the additional revenue from carbon pricing and subsidy removal should be used to ease impacts of the transition on vulnerable households, workers and businesses (see below and section 5.9). Designing the subsidy removal and carbon taxation reforms as a package of taxation and spending measures that yields multiple benefits (such as lower GHG emissions, reduced inequality, better air quality) could help increase public acceptance (Dechezleprêtre et al., 2022[23]) (World Bank, 2023[24]). Popular support for climate policy is weak in Romania compared to more advanced European economies. A 2023 opinion survey found that only 54% of the country's respondents considered climate change to be a very serious problem, compared to more than three-quarters of EU respondents (EC, 2023[25]).

There is scope to increase and harmonise carbon prices outside the ETS

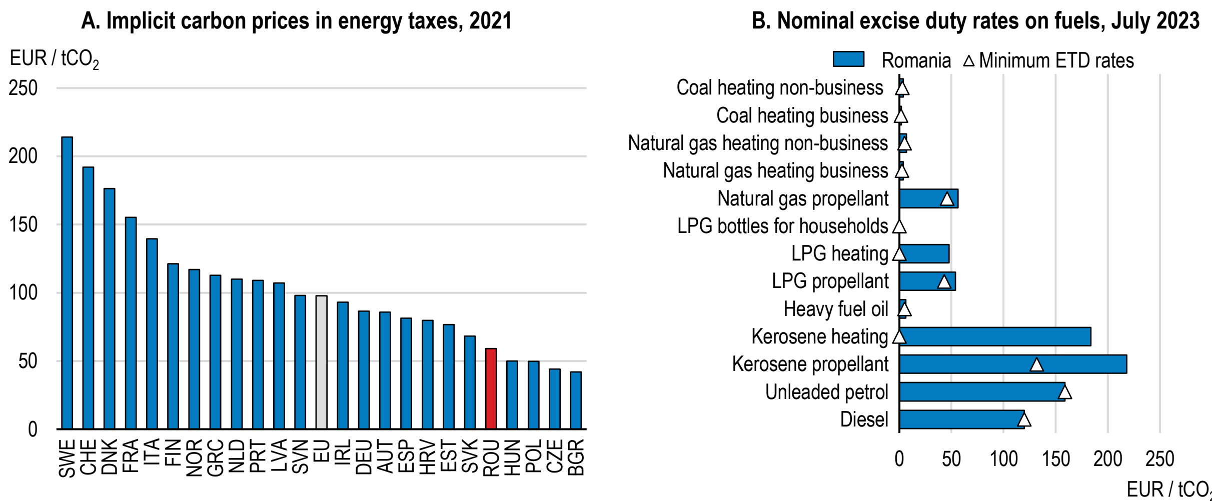
Increasing the price of GHG emissions across fuels and sectors by adjusting effective energy tax rates would provide more consistent price signals to businesses and households. Excluding the EU ETS price, and assuming energy taxes aim to internalise GHG emission costs, the energy tax rates applied in Romania yield an average implicit carbon tax of about EUR 59 per tonne of CO_2. This is among the lowest rates in the European Union (Figure 5.7, panel A). It is also below the benchmarks of EUR 60/tCO_2 and EUR 120t/CO_2, which are the low-end and mid-range estimates, respectively, of the carbon prices that would be needed by 2030 for consistency with net-zero emission targets (OECD, 2023[26]). Romania's low economy-wide implicit carbon tax is linked to two main factors. First, excise duties on diesel and petrol, the largest source of energy tax revenue, are set at the minimum levels prescribed by the EU Energy Taxation Directive, while most EU countries apply higher rates. Second, uses of natural gas and coal – which together make up 55% of CO_2 emissions from fuel combustion (Figure 5.3, panel C) – are taxed at very low rates (Figure 5.7, panel B).

As in all countries, the price of CO_2 emissions varies widely across fuels and users, leading to inconsistent abatement incentives (Figure 5.7, panel B). Tax rates are based on volume and not on the carbon content of fuels or other environmental externalities such as air pollution. In all countries, tax rates on transport fuels are higher than on other fuels, because taxes on petrol and diesel have traditionally been levied for revenue raising purposes. Higher tax rates on transport fuels may be justified to reflect other externalities of road transport (air pollution, noise, accidents and congestion) in addition to GHG emissions (OECD, 2023[26]). As in most OECD countries, petrol faces a higher implicit carbon tax than diesel (OECD, 2022[27]). This preferential tax treatment for diesel is unjustified on environmental grounds as the fuel has higher carbon content than petrol, and diesel vehicles generally produce higher emissions of local air pollutants. CO_2 emissions from heating with natural gas and coal are taxed at a near-zero rate (Figure 5.7, panel B). Several exemptions and discounts apply, including for heating fuels and diesel used in agriculture, fishery and forestry, on the grounds of competitiveness or social concerns. These concessions further reduce effective carbon prices, thereby weakening price signals for abatement.

The government should consider introducing carbon pricing in sectors not covered by the EU ETS. Modelling suggests that internalising externalities in fuel prices would drive substantial emission reductions and bring net welfare gains (World Bank, 2023[24]). Carbon pricing could take the form of a carbon tax element in the fuel excise levies. Its rate should be set at a low level and gradually be raised according to a pre-determined schedule until it reaches its full level in the next few years, to bring emissions down in line with the 2030 target (Figure 5.4). Setting a credible path of future carbon tax rates would provide an incentive for low-carbon consumption and investment without immediately imposing a large cost burden on households and firms. As a pre-requisite to introducing carbon pricing, the government should phase out current price caps on electricity and natural gas, which are planned to be in place until March 2025 (see below).

Romania should not wait for the EU reform of the Energy Taxation Directive to unilaterally introduce excise duties based, at least in part, on the carbon content of fuels. While discussions on the directive were ongoing at the time of writing, the current revision proposal envisages to set tax rates based on the energy content and environmental performance of fuels. Fifteen EU countries have already unilaterally implemented a national carbon pricing scheme, in the form of carbon tax or emission trading (Austria and Germany). Carbon taxes cover from 3% of national GHG emissions in Latvia to 65% in Luxembourg, with headline rates ranging between EUR 2/tCO_2 in Estonia and EUR 115/tCO_2 in Sweden (World Bank, 2023[28]). While a new EU-wide emission trading system will extend carbon pricing to transport and heating fuels from 2027 (European Council, 2023[5]), this does not prevent Romania from introducing a national carbon tax. Until end-2030, fuel suppliers can be exempt from the new trading system where there exists a national carbon price scheme with a price level equivalent or higher than in the EU system.

Figure 5.7. Romania's implicit carbon tax is among the lowest in Europe and uneven across fuels



Note: Panel A: The implicit carbon tax is calculated as the ratio between revenue from taxes on energy products (including explicit carbon taxes for countries that implement them) and GHG emissions from fuel combustion. It excludes prices emerging in the EU ETS. The carbon prices implied by energy taxes tend to be overestimated for two main reasons. First, the revenue data include revenue from electricity taxes, which, albeit usually negligible, should be excluded (OECD, 2019[29]). Second, as calculations are based on actual energy tax revenue, they factor in favourable tax treatments (discounts, exemptions) but not direct budgetary support to fossil fuels use or tax refunds. The average implicit carbon prices are largely driven by the excise rates on transport fuels, which are higher than on other fuels. Panel B: ETD = EU Energy Taxation Directive; emission factors based on Commission Decision 2007/589/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council.
Source: OECD calculations based on European Commission, Taxes in Europe database; Eurostat; IEA World Energy Balances database; and IEA CO_2 Emissions from Fuel Combustion Statistics: Greenhouse Gas Emissions from Energy database.

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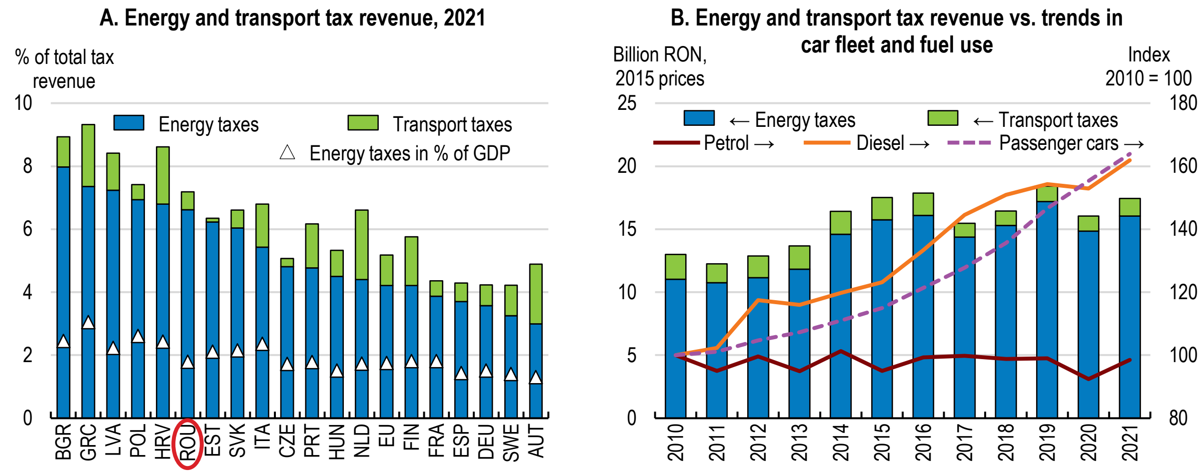
Energy taxation should be a pillar of the government's strategy to increase revenue (Chapter 2). Compared with other countries, energy taxes account for a significant share of total tax revenue in Romania (Figure 5.8, panel A). Rather than indicating high energy taxation, this reflects the low level of revenue raised from other taxes (Chapter 2). So far, energy tax rates have been too low to encourage a reduction in energy use. In the past decade, revenue rose in line with energy consumption (especially from transport activities) and car fleet (Figure 5.8, panel B). There is also room to introduce or adjust other environment-related taxes such as on vehicles (section 5.6) and landfilled waste (section 5.8). World Bank modelling suggests that raising fuel excise rates to reflect all climate and non-climate related externalities could raise revenue by 1.3% of GDP by 2030 (World Bank, 2023[24]) (Box 2.2). Even if the carbon tax revenue will decrease over time with the decarbonisation of the economy, it can help finance adjustment costs at the start of the transition (see below). As transport progressively shift to electromobility, Romania will eventually need comprehensive road use charging to internalise costs of car use and substitute transport fuel tax revenues (van Dender, 2019[30]) (section 5.6).

Figure 5.8. Energy tax revenue grew with fuel use and is a high share of total tax revenue



Source: Eurostat; IEA; UNECE, Transport Statistics database.

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Removing support to fossil fuel should be a priority

Removing support to fossil fuels and using the revenue gain for social spending, reductions in distortive taxes and productive investments can contribute to curbing Romania's GHG emissions while delivering better economic and distributional outcomes. Romania has long provided, directly or indirectly, support to fossil fuels. Conservative estimates put the fiscal costs of this support at 0.42% of GDP in 2021 (Bon-Mardion et al., 2023[31]). These subsidies consist of a mix of tax incentives and direct budgetary support for coal, natural gas and district heating, often via support to state-owned enterprises (World Bank, 2023[24]). Tax reductions, exemptions or allowances apply to heating fuels, as well as fuels used in agriculture, fishery and forestry. Other subsidies include a reduced VAT rate of 5% (compared to the standard 19% rate) for district heating and firewood used in residential and public buildings. Romania is lacking accurate data on fossil fuel subsidies, including tax expenditures and budgetary transfers (World Bank, 2023[24]).

Romania should develop a clear plan to gradually remove fossil fuel subsidies. This is also essential for carbon taxation to deliver effective price signals. Tax exemptions and discounts for fossil fuels reduce effective carbon prices, encouraging inefficient fuel consumption and higher emissions. Subsidies also have sizable fiscal costs and are generally not well targeted to the people and businesses most in need of government support. In addition, improving the efficiency of state-owned enterprises in the energy sector would contribute to reducing producer subsidies (IMF, 2023[32]) (Chapter 3).

Better data and communication on fossil fuel subsidies is needed. A transparent and systematic mapping of fossil fuel subsidies and other potentially environmentally harmful support measures – with an evaluation of their economic, social and environmental impacts – will be essential to identify reform priorities. Extensive communication and consultation with stakeholders regarding the reform process and the costs and benefits thereof will be key to improve social acceptability and reduce the risk of backtracking. Subsidies should be phased out according to a pre-defined schedule, so that energy prices rise incrementally (Elgouacem, 2020[33]) (IMF, 2023[32]). The subsidy reform plan should foresee measures to protect the poor (see below) and to support the competitiveness of the affected economic sectors.

The phase out of fossil fuel support related to the energy-crisis should be accelerated

As in most countries, the Romanian government implemented several measures to shield the economy and vulnerable households from the steep hike in energy prices (which started in the second half of 2021 and peaked in August 2022). Estimates of the fiscal costs of these support measures in 2022-23 range between 1% and 3.8% of GDP (OECD, 2023[34]) (Sgaravatti et al., 2021[35]). In 2022, the government initially introduced a direct compensation scheme on electricity and gas bills that was expected to benefit most household consumers of electricity and gas. The compensation scheme was superseded by a cap on electricity and natural gas prices, which was initially introduced for one year but later redefined and extended to March 2025. As from January 2023, retail prices of electricity and natural gas for households and small and medium-sized enterprises are set by law at levels prevailing before the surge in energy prices. These measures tend to benefit not just vulnerable groups but also better-off segments of the population. Wholesale prices are also capped. The fiscal cost of the price cap (through reimbursements to energy suppliers) is expected to be covered by windfall profit taxes on energy producers, as well as higher dividend payouts of state-owned enterprises (IMF, 2022[15]). However, repeated changes to the price capping scheme, taxes on windfall profits and revenue caps for energy producers have heightened energy market uncertainty and may discourage private investment in renewables (IEA, 2022[36]).

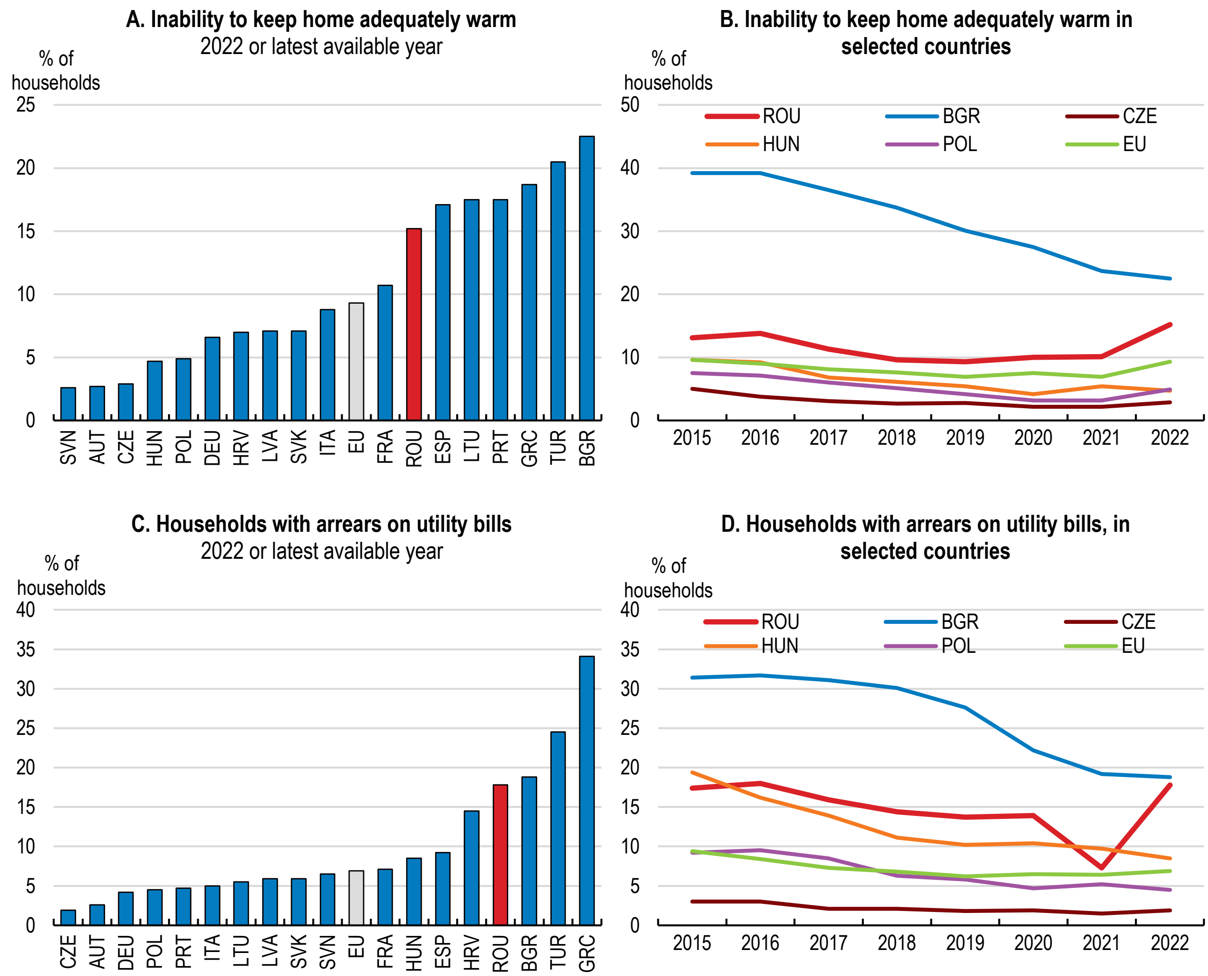
The Romanian authorities should bring forward the phase out of the energy price capping scheme. The cap on retail energy prices and several other measures – such as discounted and frozen excise duties on diesel and petrol and reduced VAT rates on electricity, natural gas and transport fuels – numb the incentive for consumers to save energy or to switch to cleaner fuels. The price caps effectively reversed the liberalisation of the retail markets of natural gas and electricity that had been completed for all energy customers in 2020 and 2021, respectively. Targeted and temporary income relief or other lump-sum payments that are disconnected from energy consumption (see next section) could shield vulnerable households from harm if energy prices spike again, while maintaining the integrity of the price signal.

Stronger emission pricing should go along with measures to alleviate energy poverty

Carbon pricing and fossil fuel subsidy removal can have important distributional implications in Romania, as in other countries (D’Arcangelo et al., 2022[37]). They would lead to higher energy costs, with potentially heavier impacts on the large proportion of the country’s population that is already at risk of energy poverty. Even before the energy crisis, 53% of the population spent more than 10% of their household budget on electricity, gas and other fuels, compared to the EU average of 27%. The energy crisis temporarily set back progress Romania had made on tackling energy poverty, documented in the previous *Economic Survey* (OECD, 2022[16]). The share of households that reported not being able to keep their home adequately warm and that of households with arrears on utility bills rose dramatically in 2022, and more so than in regional peers (Figure 5.9, Panels B and D). Both shares are among the highest in the European Union (Figure 5.9, Panels A and C). Many households in rural areas display low electricity consumption and are not connected to the natural gas grid. They mostly use wood stoves for heating and often procure firewood informally (section 5.7).

Romania needs to further improve the cost-effectiveness and targeting of its mechanisms to reduce energy poverty risks. The 2021 law on social protection measures for vulnerable energy consumers is a step in the right direction, as it provides an operational definition of households at risk of energy poverty. It offers vulnerable households monthly aid for heating during the cold season (between November and March), with the amount depending on income and type of heating. However, in 2022, the aid reached some 10% of households (883 000), less than the estimated 15% that do not manage to keep their homes warm (Figure 5.9, panel A). As support is tied to heating expenses and non-refundable, it encourages higher energy consumption to get the maximum aid amount. Also, it tends to distort the choice of heating systems, as the aid is the most generous for electric heating and least for natural gas, with wood and coal falling in between. More than 85% of beneficiaries use the carbon-intensive and polluting solid (wood and coal) and oil fuels.

Figure 5.9. A large and increasing share of the population cannot afford to pay for energy



Source: Eurostat.

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Support for heating and, more generally, for the energy needs of the poor should be designed to avoid interfering with energy prices and consumption decisions. Ideally, it should be untied from energy bills and provided as means-tested lump-sum transfers. Better targeting support to the people most in need requires improving data collection and ensuring good means-tested cash transfer mechanisms. Strengthening Romania's tax administration (Chapter 2) and digitalising government services and energy systems would enable better data collection and targeting. Accelerating the smart meter rollout is essential to digitalise the country's energy networks (section 5.5). Speeding up energy efficiency improvements in buildings and redesigning transport systems to reduce car-dependence would durably mitigate exposure to high energy prices (Hemmerlé et al., 2023[38]) (OECD, 2021[39]) (sections 5.6 and 5.7).

Recycling of potential revenues from carbon pricing and subsidy reforms to finance energy poverty reduction programmes should be considered. Between 2013 and 2022, auctioning of EU ETS emission allowances contributed over EUR 4 billion to Romania's state budget (EC, 2023[40]). In many countries, transferring a third of carbon pricing revenues to poor households through means-tested benefits is sufficient to mitigate energy affordability risk due to higher energy prices (Flues and van Dender, 2017[41]). For example, Ireland raised its carbon tax rate and committed to use the extra revenue to improve energy affordability (Box 5.4). Modelling suggests that using the potential extra revenue from a carbon tax to compensate vulnerable households can reduce consumption inequality in Romania (EPG, 2023[42]) (World Bank, 2023[24]). Transparency and clear communication of carbon pricing revenue use decisions are essential to reduce the risks of spending inefficiency linked to earmarking (Marten and van Dender, 2019[43]).

Box 5.4. Recycling carbon tax revenue for an equitable transition: The case of Ireland

Ireland introduced a carbon tax in 2010. The carbon tax applies to all fuels used in sectors not covered by the EU ETS. The carbon tax scope was gradually extended and the rate progressively increased from EUR 15/tCO_2 to EUR 33.5/tCO_2 in 2021. The government committed to raise the carbon tax by EUR 7.50/tCO_2 per year over the subsequent decade, to reach EUR 100/tCO_2 by 2030.

The government pledged to use the revenue from the carbon tax increase until 2030 (EUR 9.5 billion over ten years) to prevent fuel poverty, support workers displaced by the phase out of peat and finance climate-related investment. In line with this commitment, the government allocated part of the carbon tax revenue to enhance some social welfare schemes in 2021. These included an increase in benefits for children and people living alone, as well as a higher fuel allowance (a means-tested lump sum aiming to support vulnerable households with heating expenses). These increases were expected to mitigate the impact of the carbon tax on vulnerable households, as well as contributing to reducing poverty.

Source: (OECD, 2021[12]).

5.5. Decarbonising electricity generation

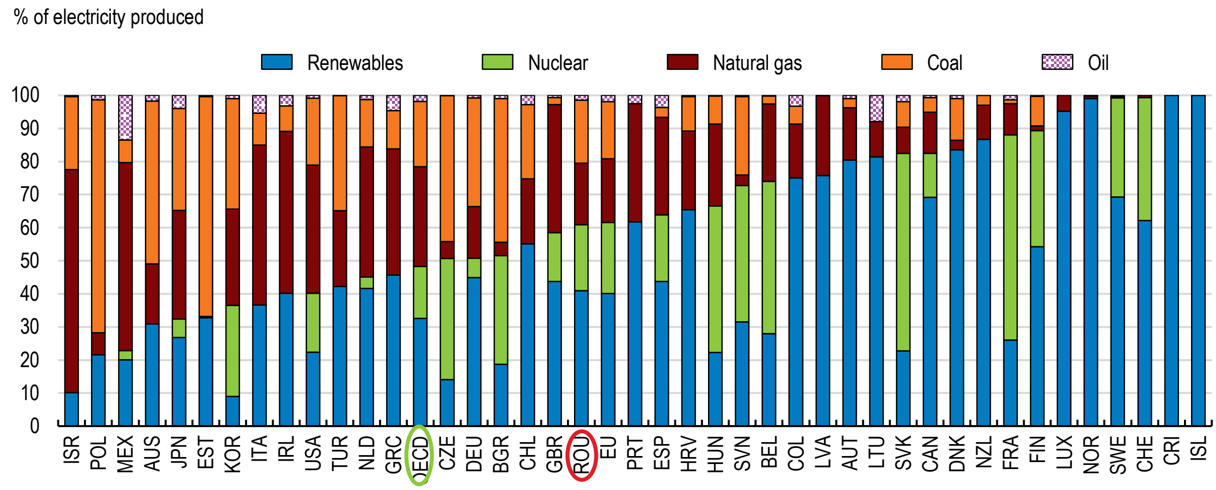
Decarbonising power production will be key for reducing GHG emissions. A quarter of Romania's energy-related GHG emissions come from energy industries' own production; the rest coming from burning fossil fuels in other sectors (Figure 5.3, panel B). Romania's reliance on coal and natural gas for electricity production has declined in the last decade to be in line with the EU average. Nonetheless, it remains high (40% of electricity generation) (Figure 5.10). Decarbonising may also improve energy affordability and will strengthen the security of energy supply, which was put under pressure by Russia's war of aggression against Ukraine. Romania is the second largest gas producer in the European Union but depends on imports during peak demand periods in winter.

In addition to decarbonising electricity supply, Romania needs to expand electricity generation to allow for the electrification of sectors such as transport, buildings and industry (IEA, 2023[44]). Romania thus needs to stick to its coal phase-out plans (see below) and significantly expand its low-carbon power capacity. Electricity accounts only for around 15% of final energy consumption in Romania, compared to the OECD average of 23%. As is typical across the OECD, direct combustion of fossil fuels is still the dominant source of energy use in most sectors, especially transport (Figure 5.11) (section 5.6).

As elsewhere, the government has strong steerage over the capacity and technology-mix of electricity production facilities. Romania's strategy for decarbonising electricity generation focuses on gradually phasing out coal and expanding power generating capacity by about one third compared to 2020, mostly with photovoltaics and wind. Significant investment is under way in nuclear, with the expansion of the Cernavoda nuclear complex and the planned installation of the first small modular nuclear reactor in the European Union. Romania is also investing in offshore natural gas fields. Timing and coordinating the increase in clean energy investment and divestment in fossil fuel supply is vital to avoid price spikes (IEA, 2023[44]) and ensure security of energy supply.

Figure 5.10. Much of Romania's electricity still comes from burning fossil fuels

Electricity generation by energy source, 2022



Note: Renewables include biofuels and waste, hydro, wind, solar, geothermal and other energies.
Source: IEA Electricity Information database.

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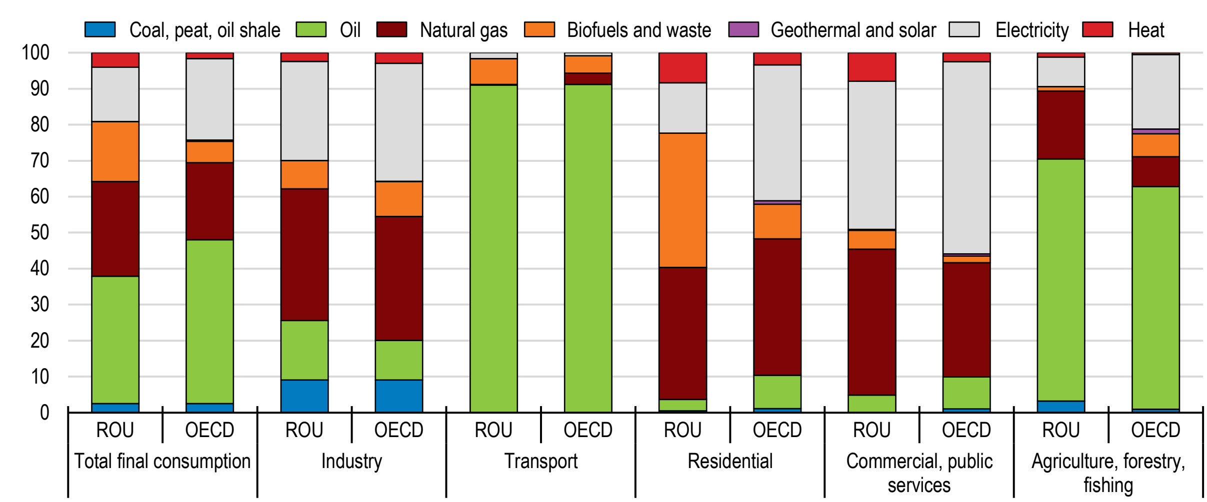
Figure 5.11. Electricity still plays a relatively little role in Romania's final energy use

Total final energy consumption by source and sector, 2021



Note: Total final energy consumption includes non-energy uses and consumption not elsewhere specified.
Source: IEA World Energy Balances database.

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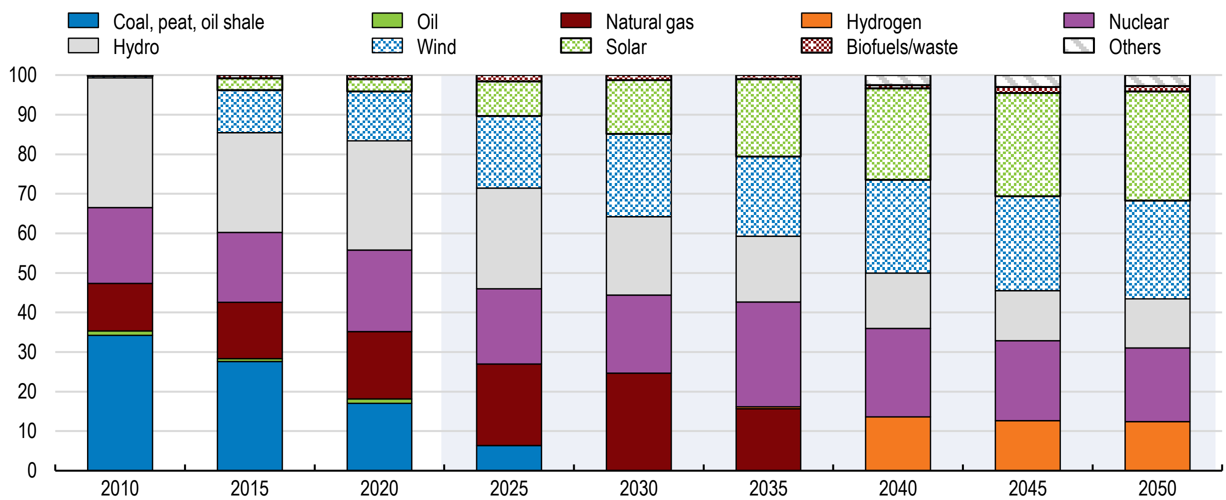
Phasing out coal is imperative to get on track to net zero

Complete coal phase-out is now legislated. In late 2022, Romania approved a law on the decarbonisation of the energy sector committing to a stepwise phase out of coal mining and coal power production by 2032. The country has already reduced its reliance on coal. Electricity production from coal halved between 2012 and 2022, replaced by natural gas, wind and solar (Figure 5.12), as carbon pricing in the EU Emissions Trading System made coal less competitive than other electricity sources. However, coal still accounts for nearly one fifth of power generation and is the largest single contributor to GHG emissions from electricity and heat generation in Romania (Figure 5.12 and Figure 5.3, panel C).

Figure 5.12. Coal power generation declined and must be phased out

Historic and projected electricity generation by source



Note: The shaded area indicates the electricity generation mix required to be on the net-zero pathway modelled by Romania's Long-term Strategy.
Source: (Government of Romania, 2023[2]); and IEA World Energy Balances database.

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The energy crisis has seen government delay some coal-plant closures. Most mines and power capacity are scheduled to be closed by end-2025. However, in response to rising energy prices, the government postponed closures initially scheduled from end-2022 to October 2023 and approved the expansion of three lignite mines. This government decision risks delaying Romania's successful break from coal, which already lags behind many EU countries (Beyond Fossil Fuels, 2023[45]).

Expansion of natural gas capacity, in addition to renewables, is planned to offset coal-generation phase out and manage energy supply risks. The government plans to nearly double natural gas generation capacity by 2026-27. More than half of the capacity addition is part of the EU-funded Restructuring Plan of the Oltenia Energy Complex, the country's major coal mining and electricity operator. All new gas capacity is expected to be compatible with hydrogen use, although, as elsewhere, there is uncertainty around the cost-competitiveness of powering these plants with low-emission hydrogen (IEA, 2022[46]). Retrofitting gas generation plants with carbon capture utilisation and storage (CCUS) is another, last resort, option to abate emissions from gas-fired power plants. However, CCUS is still an expensive technology and Romania lacks the necessary regulatory framework and financial incentives (Miu et al., 2022[47]) (section 5.8).

The authorities are also planning a fast exploitation of the Neptun Deep gas field in the Black Sea, including to reduce import dependence and enhance energy security. Gas from the Neptun Deep field is expected to enter the market in 2026 and to increase Romania's gas production well beyond domestic needs. Romania will, therefore, position itself as an alternative to Russia for gas supplies in the region. Looking ahead, new gas exploration projects run counter to climate mitigation objectives. Scenarios indicate that global demand for gas, as well as oil and coal, should start declining before 2030 to be in line with global climate ambitions (IEA, 2023[44]). Declining demand for fossil fuels could increase commercial risks to new projects. While Romania has not auctioned off new gas concessions in over a decade, the government should consider climate change and other environmental factors in licensing decisions for future oil and gas explorations. Some countries – such as Denmark, France and Ireland – have announced bans on new oil and gas explorations (OECD, 2022[48]). Such bans can signal a commitment to shifting away from fossil fuels and advancing climate change goals. They are in line with the IEA's assessment that no new long lead-time upstream oil and gas projects are needed in a net-zero scenario (IEA, 2023[44]). They also align with the call agreed at COP28 in Dubai in December 2023 for parties to the United Nation Framework Convention on Climate Change to contribute to transitioning away from fossil fuels in energy systems.

Methane emissions need to be tackled more vigorously. In late 2023 Romania joined the Global Methane Pledge, which gathers 155 countries committed to act towards reducing global methane emissions by at least 30% in 2020-30. One third of Romania's methane emissions are linked to coal, oil and gas production. The country is the EU's second largest emitter of methane from fuel production after Poland. In exiting from coal and expanding natural gas production, Romania would benefit from developing and implementing an action plan to reduce emissions of methane – a short-lived and powerful GHG – as done by Canada, Norway and the United States (IEA, 2023[49]). Abandoned underground coal mines continue to emit methane, especially in the first few years after operations cease (IEA, 2023[49]). Therefore, it is important to install methane capture technology in both closed and operating mines that will close in the near future. The captured methane can be used for power and heat generation. Most methane emissions from fuel extraction can be abated or captured with existing technology and at relatively low costs (IEA, 2023[49]). In addition to reducing GHG emissions, this avoids wasting a valuable resource.

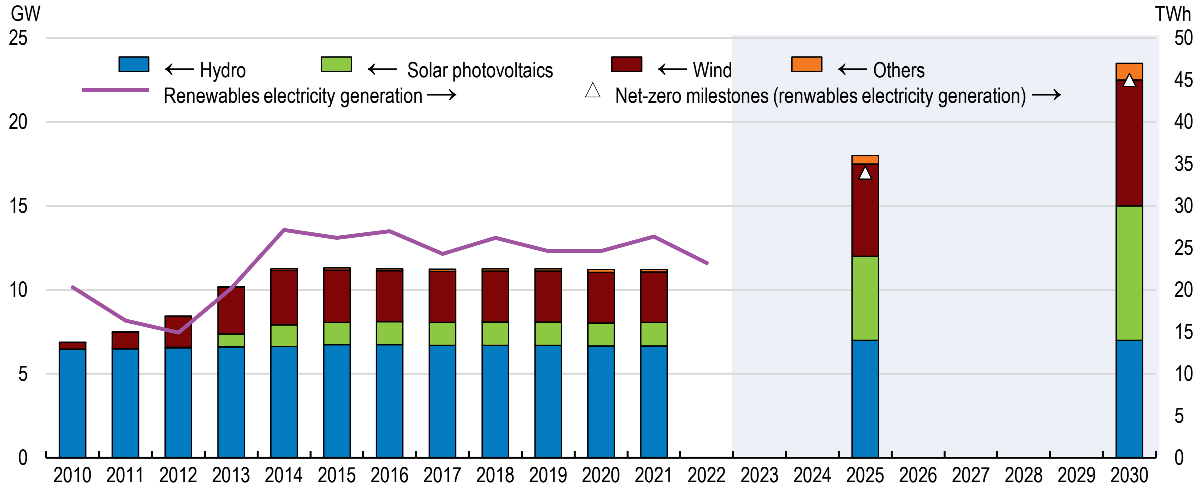
Recent measures aim to remove barriers to renewables deployment

Renewable sources are already important in Romania's electricity mix, but much more capacity is needed to compensate for the exit from coal, produce low-emission hydrogen and enable the electrification of the economy. Renewables accounted for 42% of total electricity generation in 2022, above the OECD and EU averages (Figure 5.10). The share of power generated from wind and solar photovoltaics (PV) rose between 2010 and 2014 (Figure 5.12). However, installation of new capacity from renewables and corresponding power generation have since stalled. Renewables capacity must more than double by 2030 for Romania to stay on the net-zero trajectory outlined by its Long-term Strategy (Figure 5.13). The Recovery and Resilience Plan pledges to install 3 Gigawatts of wind and solar capacity by mid-2026, which is less than half the additional capacity needed to stay on the Long-term Strategy's net-zero path.

There is much private-sector interest in the renewable power sector in Romania, but various bottlenecks slow down investment. As of May 2023, there were more than 49 Gigawatts booked into the grid for wind and PV projects under development, or more than double the renewable capacity needed to reach the 2030 Long-term Strategy's milestone (Figure 5.13). To ensure that projects are actually completed, Romania must address key barriers common to most EU countries: notably the slow pace of transmission and distribution network upgrades and lengthy and complex permitting procedures (IEA, 2023[50]). Shortage of skilled labour is another limiting factor (Chapter 2; section 5.9). There is also a case for more cost-effective government support for not yet competitive renewables to help leverage the broader societal gains of technology development.

Figure 5.13. Investment in renewables capacity stalled and needs to accelerate

Net capacity of renewable electricity plants (Gigawatt) and electricity generation from renewable sources (Terawatt hours, right axis)



Note: Others include geothermal, solar thermal, solid biofuels and biogases.
Source: (Government of Romania, 2023[2]); and IEA (2023), Renewables Information database.

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The government has taken steps to lower regulatory barriers (EC, 2023[9]), but more policy action is needed. Measures taken so far aim to streamlining permitting procedures (see below), clarifying the status of small-scale renewables (self-consumers and energy communities), and promoting renewable-based hydrogen production and use (Box 5.5). The government committed under the Recovery and Resilience Plan to introducing offshore wind legislation by end-2023, which will kickstart offshore wind deployment (although a maritime spatial plan is yet to be developed) (Stavaru and Soltan, 2023[51]). However, in general, the regulatory framework remains incomplete and fragmented. Uncertainty resulting from frequent legal changes, coupled with inconsistent and opaque application of regulations by various authorities, has held back investments in renewable power projects (Stancu Bîrsan, Cazacu and Porojan-Gheajă, 2023[52]).

Box 5.5. Romania's measures to promote renewable-based hydrogen

Romania aims to be a lead country in developing low-emission hydrogen. Low-emission hydrogen could be best used in industry – including steel, fertilisers, refineries and chemicals – and transport (EPG, 2021[53]). This would require massive investment in renewables and electrolysis capacity. As a first step, the government allocated EUR 111 million of its Recovery and Resilience Plan to a state aid scheme for the construction, by the end of 2025, of at least 60 Megawatts of electrolysers for hydrogen production from renewable sources. As of end-2022, 32 projects had applied for the aid scheme (Stavaru and Soltan, 2023[51]).

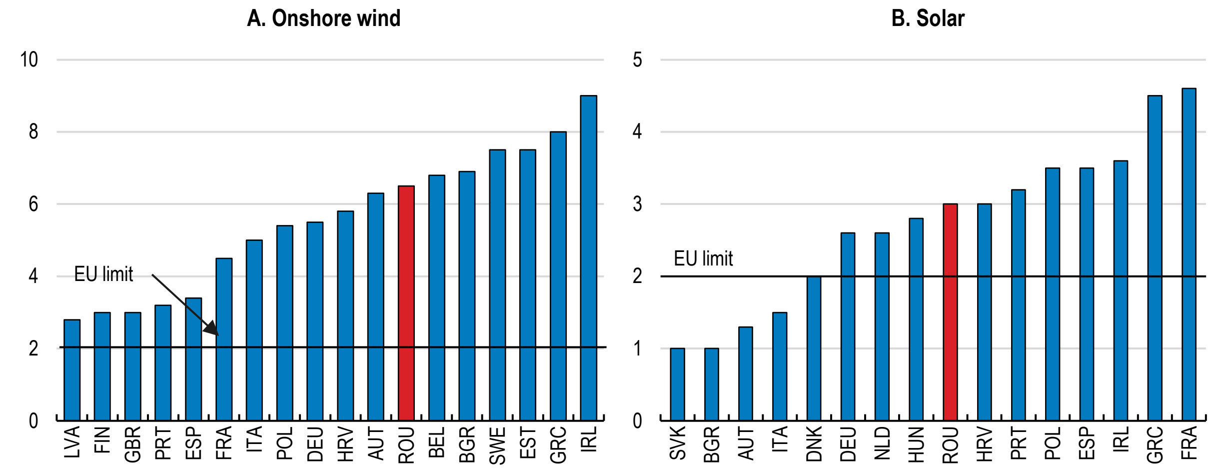
The country's draft National Hydrogen Strategy (under public consultation at the time of writing) and the 2023 "Hydrogen Law" provide a clear signal to investors. They aim to stimulate investments, thereby reducing production costs. The draft strategy envisages a substantial increase in renewable power capacity (8 Gigawatts by 2030) exclusively to feed electrolysers. It also identifies five potential "hydrogen valleys", i.e. geographical areas that host the whole hydrogen value chain in an integrated manner. The law sets a mandatory renewable-based hydrogen quota of at least 42% of industrial consumers' hydrogen needs as from 2030, increased to 65% from 2035. Tradable low-carbon hydrogen certificates will complement the quota system. This measure aims to create demand for low-emission hydrogen to encourage investments in the sector, in line with IEA recommendations (IEA, 2022[46]).

Streamlining permitting procedures

As in many other countries, long permitting procedures impede the deployment of renewables (Figure 5.14). The process in Romania requires applications for numerous permits. It also involves scattered and non-transparent procedures (Stancu Bîrsan, Cazacu and Porojan-Gheajă, 2023[52]). The time needed to get a permit is three years for PV installations and 6.5 years for onshore wind, well above the two-year limit set by the EU Renewable Energy Directive. Frequent regulatory and procedural changes, as well as inconsistencies in the authorities' approach to permit granting have led to project delays and higher costs. In a welcome move, the government introduced a one-stop-shop system for gathering all licensing procedures for industrial activities. However, the system is not yet fully operational and its implications for the energy sector remain unclear (Stavaru and Soltan, 2023[51]).

Figure 5.14. Lengthy permitting processes are slowing deployment of renewables

Permitting times, years



Note: The EU limit of 2 years is stated in the Renewable Energy Directive (2018/2001) as amended by Directive 2023/2413. Data only available for the countries presented in the Figure.
Source: OECD calculations based on (EC, 2022[54]).

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Recent measures to streamline permitting procedures are welcome but have room for improvement. Romania recently introduced measures to simplify licensing procedures for self-consumption PV projects and relax land-use restrictions (see below). As a result, and thanks to the "Casa Verde" programme, there has been a recent boom in household PV. The government could go further and follow the example of other EU countries that changed their procedures in the wake of Russia's invasion of Ukraine (IEA, 2023[50]). These adjustments focused on simplifying procedures and compressing their duration, exempting small projects from certain authorisations, and identifying areas where renewable energy projects can be fast-tracked (Table 5.2). In the Recovery and Resilience Plan, the Romanian government committed to establishing the legal framework for accelerated permitting in selected areas, in line with the third EU Renewable Energy Directive (Box 5.6). Romania also needs to secure more resources for permitting authorities, which are often understaffed and lack necessary expertise, especially at local level (EC, 2022[54]).

Romania is attempting to address difficulties related to land-use for renewable installations. Accelerating the deployment of PV and onshore wind will require more land to be opened up for these purposes (IEA, 2023[44]). Recent legislative changes allow granting building permits for renewable energy projects even in the absence of urban land-use plans, which are often outdated or missing. The changes also authorised the installation of renewable energy and storage capacity on less than 50 hectares of poorly productive agricultural land, without conducting costly and time-consuming re-zoning procedures. However, uncertainty by permitting authorities about how to interpret this rule has reportedly resulted in many renewable projects being unduly blocked (Stavaru and Soltan, 2023[51]). The government needs to clarify the intention behind the new rules, as well as the rules for using agricultural land for both farming and energy production. There is also an urgent need to complete the national land cadastre (Chapter 3), which covers less than half the country's properties and is particularly incomplete for rural areas. This discourages investments, including in renewables (EC, 2023[9]).

Table 5.2. Examples of streamlined procedures for renewable electricity in Europe

Country	Description of regulatory measures taken between March 2022 and October 2023
Austria	Public interest status and accelerated environmental impact assessment (EIA) for PV; projects can go ahead unless complaints are received.
Finland	Temporary priority until end-2025 in permit processing by regional administrative agencies.
France	Local authorities can designate preferred "go-to" and "no-go" areas for renewable energy development.
Germany	Priority to offshore wind in maritime spatial planning and streamlined permitting procedures; relaxed air radio navigation rules to accelerate the permitting process for onshore wind; all renewable projects are legally established as a matter of overriding public interest, giving them priority in approval and permitting decisions when evaluated against competing interests.
Ireland	Exemption from planning permission for rooftop PV, including for new buildings.
Italy	Simplified permitting and introduction of a limit of 150 days for finalising the procedures.
Lithuania	Exemption from production permits for PV and wind for self-consumption.
Luxembourg	Limit the permitting time to less than three months for PV installations and co-located energy storages systems.
Portugal	Exemption from the operating licence if the network operator confirms conditions for grid connection; simplified EIA for projects outside sensitive areas; exemption from EIA for PV installations occupying less than 100 hectares and wind stations located more than 2 km apart.
Romania	Exemption from building permit for solar panels (rooftop or ground mounted); simplified procedure for grid connection in case of self-consumption; legislation on one-stop-shop for industrial authorisations; reduced land-use restrictions.
Spain	Until 2024, accelerated environmental approvals for wind power plants up to 75 Megawatts and solar parks up to 150 Megawatts; shortened response time from six to two months; requirement for distribution grid operators to earmark 10% of their investment budget for upgrades to facilitate connection for new small-scale renewable power plants; 10% transmission capacity reserved for large self-consumption projects.

Source: Adapted from (IEA, 2022[36]), (IEA, 2023[50]) and (Stavaru and Soltan, 2023[51]).

Box 5.6. Renewable acceleration areas: The new EU approach to permitting

The third EU Renewable Energy Directive 2023/2413 introduces the concept of renewables acceleration areas, where renewable power projects benefit from simplified permitting processes. This approach aims to speed up permitting while preserving landscape and biodiversity, in line with some international experience. For example, in the US state of California, siting PV projects in pre-defined renewable power zones with low-biodiversity value tripled permitting speed and cut project costs by 7-14% (OECD, 2024[55]).

Under the EU Directive, permitting time limits for projects in renewable acceleration areas are brought down from two to one year for most technology. In addition, these projects, including co-located energy storage facilities and connection to the grid, are exempt from environmental impact assessment. The selection of renewable acceleration areas should prioritise artificial and built surfaces, transport infrastructure and surrounding land, industrial sites and degraded land not usable for agriculture. High-value environmental and biodiversity rich areas such as Natura 2000 sites (the EU network of nature protection areas) must be excluded. The countries' plans identifying these areas must undergo strategic environmental assessment, and the designation process should ensure public participation. EU Member States have 27 months from the entry into force of the directive to designate renewables acceleration areas.

Source: EU Renewable Energy Directive 2023/2413 of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources.

Accelerating grid development

Romania should continue to invest in expanding electricity grid capacity and cross-border connections. Investors point to grid bottlenecks as the primary hurdle to renewable expansion, as well as export of renewable power to neighbouring countries (EC, 2023[9]). At present, renewable electricity production has often to be curtailed to ensure grid stability. Transelectrica, Romania's state-owned transmission system operator, has been extending and upgrading the grid, but progress has been slow. Most investment goes into maintenance of the ageing transmission and distribution grids, often following service interruption, as opposed to digitalisation and extension of the networks (ANRE, 2023[56]). Closing the gap created by years of underinvestment will require significant time and resources. In the interim, developers of renewables projects compete for available connection capacity. While Transelectrica has a general obligation to grant access to the grid, developers can incur in delays and additional costs, for example for grid reinforcement works (Stancu Bîrsan, Cazacu and Porojan-Gheajă, 2023[52]). Quickly designating "renewables acceleration areas" (Box 5.6) would help prioritise grid developments, as has already been done in Australia, South Africa and the United States (in Texas) (IEA, 2023[57]).

More investment in electricity storage capacity and system flexibility is also needed. This would enable better integration of variable renewable sources, such as wind and PV, reduce the need for backup generation capacity and improve the reliability of the electricity grid. Romania's Recovery and Resilience Plan pledges to add some 240 Megawatts of storage capacity by mid-2026. The government should consider introducing incentives to encourage renewables developers to install electricity storage alongside PV and wind projects. The country should also accelerate the grid digitalisation and the smart metre rollout to improve demand response. Smart meters enable the introduction of dynamic price contracts, which encourage customers to adapt their electricity consumption to market conditions, for example to reduce consumption at peak times when prices are higher. In turn, this allows to facilitate meeting expected future high demand of electricity resulting from the progressive diffusion of electric vehicles and heat pumps (sections 5.6 and 5.7). Digitalisation of the grid would also help establishing more energy communities, which are in their infancy in the country (Box 5.7). However, as of end-2021, smart meters covered only 18% of Romania's households, one of the lowest shares in the European Union. The country foresees to reach an 80% coverage after 2024 (the EU target year was 2020) (ACER/CEER, 2022[58]).

The functioning of Romanian retail energy markets could be improved with a view to increasing competition, thereby reducing prices and improving energy affordability without direct price regulation. The country's retail markets of natural gas and electricity for residential customers are highly concentrated, with the three largest suppliers serving more than 80% of the electricity market and 90% of the natural gas demand. Prior to the introduction of the price caps, the rate at which residential customers switched suppliers was among the lowest in the European Union (ACER/CEER, 2022[58]). Romanian households seemed to have little awareness of opportunities to make savings on their energy bills by switching suppliers, despite the availability of an online tariff comparison tool that is certified by the energy market regulator. Removing the price cap is essential to allow customers to benefit from increased competition in retail energy markets.

Improving the targeting and cost-effectiveness of support mechanisms

Romania could better target support to emerging technologies. Most renewables support has taken the form of financial contributions to capital investment in wind, solar and hydropower facilities, mainly funded through EU funds. For small-scale renewables, support includes investment grants for residential PV (via Romania's "Casa Verde" programme) and net metering. In March 2022, Romania launched its first auction for wind and solar projects (EC, 2023[9]), as suggested by the previous *Economic Survey* (OECD, 2022[16]). Auctions may help minimise the fiscal cost of deploying renewables, as developers compete for power capacity allocations based on the lowest price. While auctions improve cost-effectiveness of support to renewables, Romania should over time reroute support for utility-scale projects from cost-competitive technologies such as solar, wind and hydro, towards those where cost-competitiveness remains a challenge (IEA, 2022[36]). These include electricity storage and hydrogen.

The ongoing development of contracting arrangements to mitigate revenue volatility for renewables power producers is welcome. Electricity price volatility is set to increase with the expansion of renewables. As short-term electricity wholesale markets are based on marginal pricing (the most expensive power unit that is needed to meet demand sets the price) electricity prices can fall to zero when renewable power is abundant and rise steeply in the opposite scenario. This poses challenges for renewables producers reliant on stable long-term revenues for recovering high fixed costs (OECD, 2023[59]). To address the issue of price volatility, a contract for difference scheme is slated for introduction in 2024, similar to schemes in several other European countries, including France, Greece, Hungary, Ireland, Italy, Poland, Spain and the United Kingdom. Contracts for difference reduce price (and therefore revenue) uncertainty for renewable generators by providing a guaranteed (strike) price for the electricity produced. The government provides subsidies if the wholesale market price falls below the strike price and requires payment if the price exceeds the strike price. The contracts for difference are expected to be funded (at least in part) through a levy applied to all final customers.

Box 5.7. The benefits of energy communities and some international experiences

Energy communities or community-based energy projects (where final consumers/renewables producers gather to share electricity locally produced by renewables plants) are a means to engage citizens in the clean energy transition, encourage energy efficiency, reduce energy bills and, ultimately, improve public acceptance of renewable energy projects. Experience also shows that such projects have generated employment opportunities. Energy communities can also improve the flexibility and resilience of energy systems. Digital tools are essential for the effective management of the energy system within the community, as well as to provide participants with access to their energy production and consumption data.

In Italy, energy communities and prosumers benefit from a scheme that provides guaranteed price (EUR 100-110 per Megawatt hour) for 20 years. The country's Recovery and Resilience Plan is providing EUR 2.2 billion to public administrations, households and micro-enterprises in small municipalities to build energy communities with a goal of installing 2 Gigawatts of renewable power capacity. The energy community of Magliano Alpi in the Italian Alps was able to cover 35% of their electricity needs through solar PV systems. Increased reliance on their own generation resources during peak demand periods alleviated grid stress and helped defer expensive infrastructure upgrades.

In Perth in Australia, a battery resource shared by 119 households resulted in collective savings of over USD 52 000 during a five-year period. The battery also helped ease pressure on the grid by cutting 85% of the participants' electricity offtake from the grid at peak times.

In South Africa, the Lyndoch residential community microgrid project, which interconnected over 30 homes via a tiered grid system (from household to household, to the village, to the national grid) was the country's first smart embedded residential rooftop microgrid. The pilot project is co-owned and maintained by the utility (Eskom), but members of the community were taught and certified by industry to assume roles in the development, installation, maintenance, operation and ownership of the energy system.

Source: (IEA, 2023[57]); (IEA, 2023[60]).

In a welcome move, in 2021, Romania reopened the possibility of long-term contracts between electricity users and producers (power purchase agreements), following a 10-year ban. These contracts are a market-based approach to mitigate buyers and sellers' exposure to price volatility. However, only a few agreements have been concluded so far due heightened energy price uncertainty amid successive crises (COVID-19, Russia's war of aggression in Ukraine). The ceilings on wholesale and retail electricity prices – in place since January 2023 – will have also reduced the gains from striking such agreements (section 5.4).

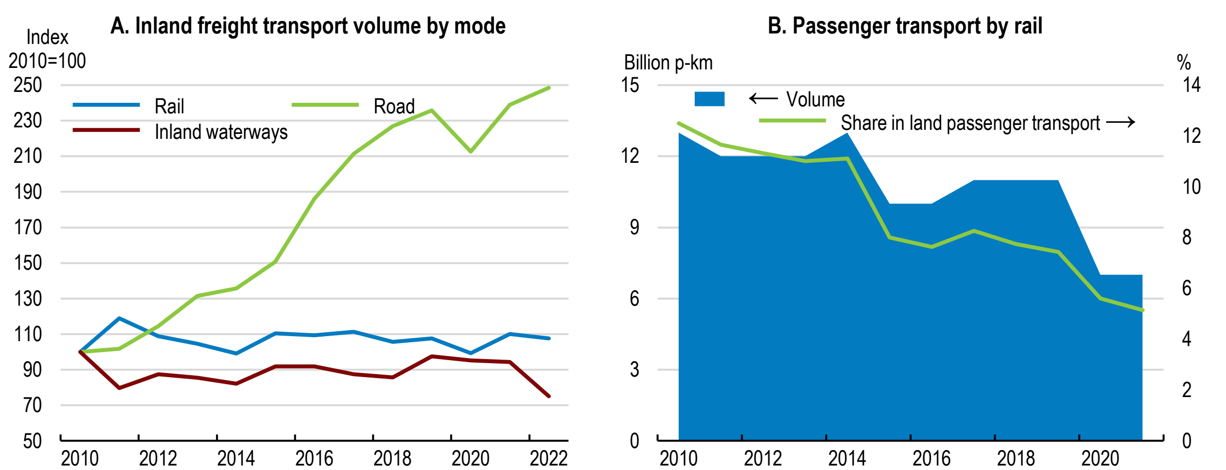
5.6. Setting the groundwork for low-emission transportation

Decarbonising Romania's transport system requires large investments and more cost-effective incentives. In its climate-neutral scenario, the Long-term Strategy calls for GHG emissions from transport to decline by 10% in 2021-30 to get on the net-zero pathway (Government of Romania, 2023[2]). However, transport emissions are projected to rise by 20% in the same period (Ministry of Environment, Water and Forests, 2023[3]), even with full implementation of ongoing and planned reforms and investments (Box 5.2). GHG emissions from transport rose in the last two decades, and by more than in any other sector of the economy (Figure 5.2), reflecting increasing economic activity, road freight and household income, as well as a growing and ageing vehicle fleet. Like everywhere, private cars and freight vehicles generate the bulk of transport emissions (UNFCCC, 2023[61]).

Large infrastructure gaps hinder transport decarbonisation

As discussed in the previous *Economic Survey*, Romania's transport infrastructure still lags most OECD countries (OECD, 2022[16]). Motorway density is low, with insufficient connections in rural regions. Nearly all roads are single-lane, resulting in extended transport times and heightened safety risks. Nonetheless, freight shipping by road remains faster than by rail and the preferred option by businesses. Indeed, freight transport by road has grown considerably (Figure 5.15, panel A), to account for 70% of freight movements in the country.

Figure 5.15. Rail transport is losing ground to driving



Note: Panel A: index of transport volume as measured in tonne-kilometres. Panel B: passenger transport volume measured in passenger-kilometres.
Source: Eurostat; and Odyssee-Mure.

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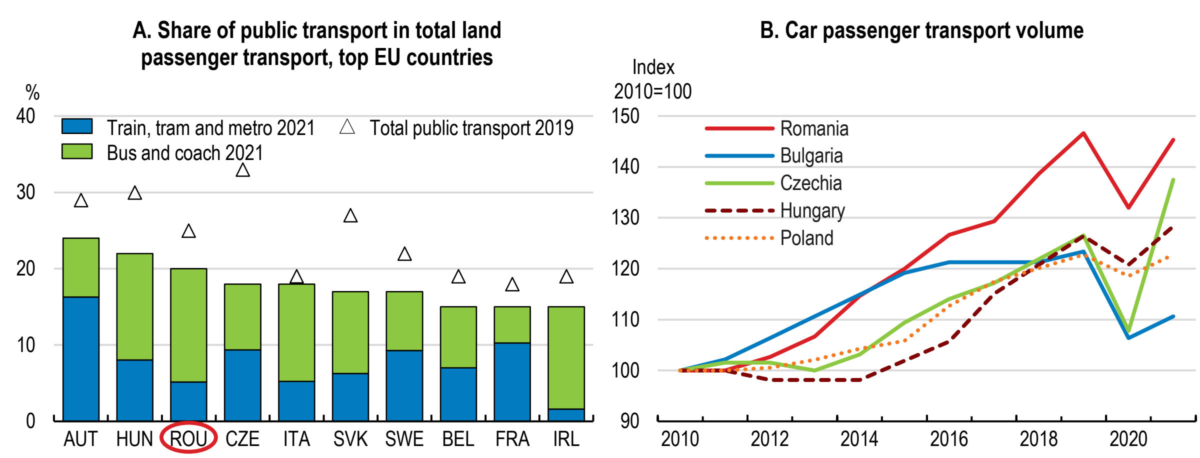
The rail network is extensive, but train services are inefficient due to underinvestment and inadequate maintenance. Less than 40% of rail lines are electrified and most are single-track. Few passenger rail lines can compete with road travel, such as the route between Bucharest and Constanta (the largest city on the Black Sea cost). Travelling by rail between Bucharest and other major Romanian cities, such as Cluj-Napoca and Timisoara, typically takes nearly twice as long as driving. Rail passenger traffic has steadily declined both in volume and as share of total land transport (Figure 5.15, panel B).

Addressing rail infrastructure shortcomings would support modal shift towards rail and help curb GHG emissions from transport. The Recovery and Resilience Plan allocates about EUR 3.5 billion to the modernisation and electrification of railway infrastructure and rolling stock. The government should ensure that these funds are efficiently spent. As the previous *Economic Survey* highlighted, weak infrastructure planning and project design along with inefficient public procurement contribute to Romania's underinvestment in transport networks (OECD, 2022[16]). The Ministry of Transport has consistently underspent relative to budget allocations (World Bank, 2023[62]), although spending of EU funds for transport infrastructure has accelerated recently. Improving administrative capacity and reducing political interference in project selection will be key to achieving higher-quality transport infrastructure (Chapter 3).

Enhancing urban mobility systems is a top priority

As in many other countries, transport within and between Romania's urban areas must undergo large structural changes to reduce overreliance on personal cars and reverse the erosion of public transport usage (OECD, 2021[39]). The country's public transport, mostly by bus, is more used than in other EU countries (Figure 5.16, panel A). However, development of and access to public transport vary considerably across cities and between urban and rural areas (EC, 2023[9]). The share of public transport in total passenger trips declined in the last decade – particularly in the wake of the COVID-19 pandemic – while travel by cars rose more than in regional peers (Figure 5.16, panel B). In 2021, the use of public transport had not yet recovered to pre-pandemic levels (Figure 5.16, panel A). Road trips in single-occupancy cars make up for most passenger transport in Romanian cities. In addition to generating GHG emissions and air pollution, these mobility patterns have increased traffic congestion and accident risks. Romania has the highest number of road fatalities per capita in Europe, including for cyclists and pedestrians. This, in turn, discourages walking and cycling. Active mobility in Bucharest is estimated to make up 16% of urban trips, below levels in other European capital cities (Rudolph and Amon, 2019[63]).

Figure 5.16. Public transport is widely used, but its role has declined to the benefits of private cars



Note: Panel B: index of car transport volume as measured in passenger-kilometres.
Source: Odyssee-Mure.

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Investing in extended and electricity-based public transport systems would help reduce car dependence, ensure access to affordable mobility and avoid exacerbating inequality. Lower income households tend to rely on public transport and walking. In 2022, 19% of Romania's households declared they could not afford a personal car, the highest share in the European Union (Eurostat, 2023[64]). Planned investments in metropolitan trains, urban public transport and cycling and walking infrastructure are welcome. The Recovery and Resilience Plan allocates EUR 1.8 billion to finance part of these investments.

Better integration of public transport systems could increase use. Public transport should evolve towards a Mobility-as-a-Service model that combines various transport modes (e.g. bus, metro, carsharing, biking, taxi) into a single, accessible and user-friendly system, including an integrated digital platform. This would increase the attractiveness of public transport and active mobility as part of an interconnected network of mobility services (ITF, 2021[65]). Several cities, including the capital Bucharest, have not yet fully integrated public transport services. Two companies operate Bucharest's extensive bus/tram and metro networks independently of each other, with a lack of transport interchanges. There has been some progress in integration. For instance, in 2021, the companies introduced a unique ticket for travel on both networks alongside their separate tickets. The Bucharest-Ilfov Public Transport Intercommunity Development Association, established in 2017 to oversee the country's largest public transport system (2.5 million passengers per day), has largely focused on the procurement of tram and bus services. The capital city and its surrounding county would benefit from developing the association into a fully-fledged metropolitan transport authority akin to those in Barcelona, London and Paris, for instance. Such authorities co-ordinate planning, investment and operation of transport infrastructure and services and have contributed to significantly improving public transport efficiency, attractiveness and usage (ITF, 2018[66]).

The new Law on Sustainable Urban Mobility (2023) is a step in the right direction and should be implemented without delay. This legislation aims to fill a longstanding gap in integrated urban and transport planning, which has allowed urban sprawl and unsustainable mobility patterns to continue. Less than half of Romania's urban municipalities have developed the Sustainable Urban Mobility Plans, despite these being required by law since 2001. Information about these plans' implementation and effectiveness is scarce (Andrei and Luca, 2022). The new law creates a national commission to provide technical support to municipalities for the development and implementation of the Sustainable Urban Mobility Plans. There are concerns about how the new plans will be coordinated with municipalities' general urban plans, many of which are outdated. Bucharest has been lacking such plan since a judicial decision in May 2022.

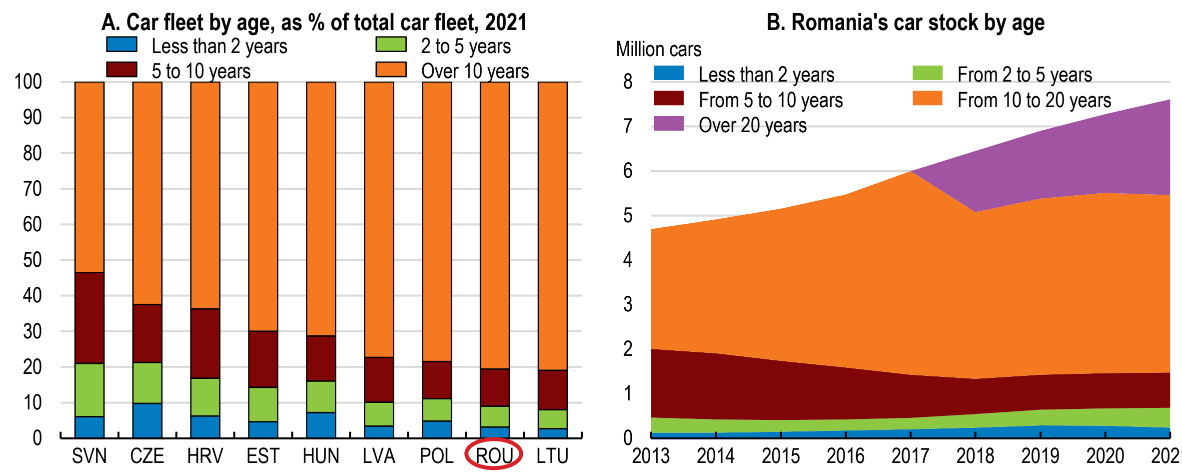
More can be done to manage demand for car travel so as to reduce congestion and emissions. Parking fees are low in Romanian cities and should be raised to discourage car trips. The Law on Sustainable Urban Mobility also opens the possibility of establishing low-emission zones in large urban areas. By banning polluting cars in certain parts of a city and certain times of day, low-emission zones encourage a shift to other types of transport. They can also accelerate a transition to lower-emission vehicles (see below). Such zones exist in several European cities, such as Amsterdam, Berlin and Madrid. Local governments should consider associating congestion charges to low-emission zones, as done in London and Milan. Congestion charges raise the cost of driving, discouraging unnecessary trips, reducing traffic congestion and improving driving conditions for both paying drivers and public buses. A pilot charging system – as implemented in Milan, for example – should be considered to showcase the benefits of the system and gain citizens' support (OECD, 2024[67]). Parking and congestion charges can also become a considerable revenue stream for local governments.

Outside urban centres, road tolls would help manage demand for driving on specific roadways or during particular times. Road tolls in Romania are fixed amounts paid per week, month or year of driving on non-urban roads, therefore providing little incentive to drive less and use alternative modes of transport. Starting from 2026, the vignette prices for passenger cars and light-duty vehicles are scheduled to vary based on the vehicle's emission category, while distance-based electronic tolls will apply to heavy-goods vehicles only. Looking ahead, Romania could benefit from a system of road tolls based on global navigation satellite system technology. Such systems apply different rates based on multiple factors including distance travelled, location and time, and the emission performance of both passenger and freight vehicles. This allows to reflect the various externalities of car use, including air pollution, road wear and tear, and accidents. Revenue from road tolls and congestion charges can in future help replace transport fuel tax revenues, which will decline with progressive electrification of the vehicle fleet (van Dender, 2019[30]).

Better price signals and charging networks are needed to transition to electric vehicles

Car ownership is expected to continue growing as Romania's income levels rise further. The country's car fleet grew by 75% in 2010-21 (Figure 5.17, panel B). Still, at 400 cars per thousand inhabitants, Romania's car ownership rate is the lowest in the European Union. Many vehicles are second hand, making the country's car fleet one of the oldest – and in turn most emission-intensive – among regional peers and in the European Union (Figure 5.17, panel A).

Figure 5.17. The car fleet is expanding and ageing



Note: Panel A: Centre and Eastern European countries. Panel B: data on cars older than 20 years are available from 2017; prior to 2017 the category of 10 to 20 years includes cars aged over 20 years.
Source: Eurostat.

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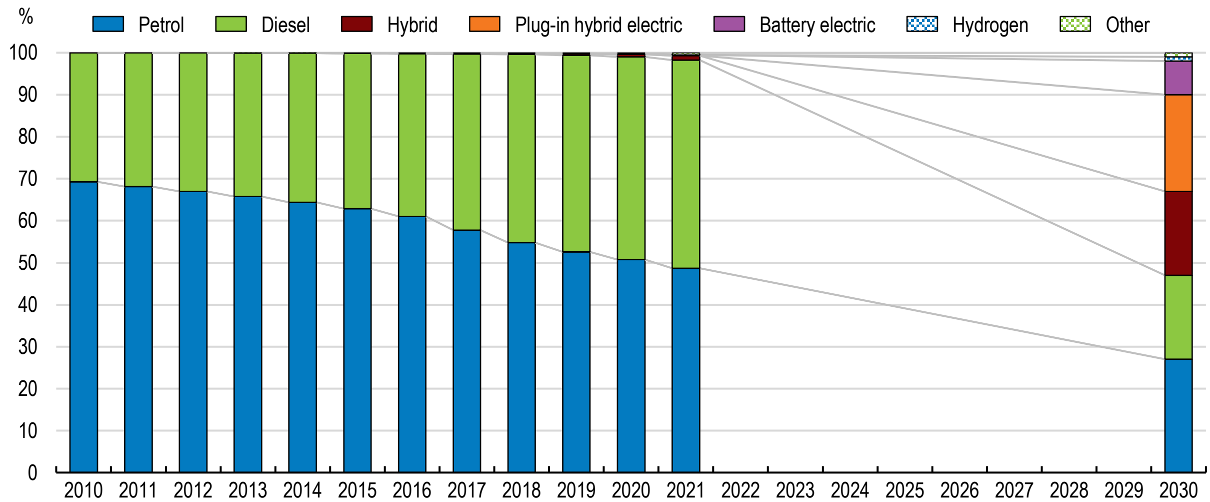
Romania's strategy to decarbonise transport depends on fast renewal of the vehicle fleet and a shift to electric mobility. According to the Long-term Strategy's carbon-neutral scenario, 31% of the car fleet will have to be electric by 2030 to abate GHG emissions from transport in line with a net-zero trajectory (Figure 5.18). The Strategy's modelling also envisages a renewal of bus and commercial vehicle fleets favouring hybrid, electric or hydrogen-fuelled vehicles. These vehicle categories would have to jointly reach 52% of the bus fleet and 42% of freight vehicles by 2030, from virtually zero today.

A steep acceleration in uptake of electric cars is needed. Electric cars make up less than 1% of Romania's vehicle stock, among the lowest shares in the European Union. Activity in the Romanian electric vehicle market has picked up recently. Sales of electric cars grew from virtually zero in 2015 to 9% of new car sales in 2022. This share is less than half the EU average (22%) but above that of other Central and Eastern European countries (Figure 5.19, panel A). Romania shares with other emerging economies some challenges to develop electromobility, including weak electricity grids (section 5.5) and reliance on second-hand vehicles (IEA, 2022[68]).

Figure 5.18. A massive shift to alternative fuel cars is needed to advance on the net-zero path

Composition of the passenger car fleet by fuel, historic trend and Long-term Strategy 2030 milestone



Note: Other includes cars fuelled by liquified petroleum gas, compressed natural gas and bi-fuel cars.
Source: (Government of Romania, 2023[2]); and UNECE Transport Statistics database.

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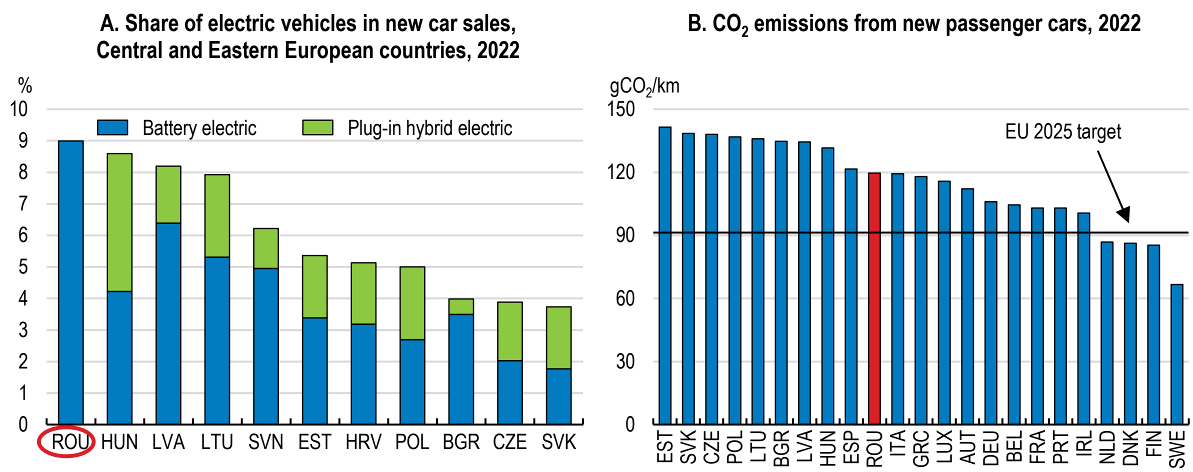
Higher and better designed fuel and vehicle taxes are needed. This will stimulate the renewal of the car fleet towards less carbon-intensive vehicles, including electric cars. As fuel taxes are relatively low and not based on a fuel's carbon content, they provide little incentive to purchase lower-emission vehicles. Low taxation of diesel has stimulated a shift to diesel-fuelled cars with negative impacts on CO_2 and local air pollutant emissions (section 5.4). As in many countries, electric vehicles are exempt from Romania's annual ownership tax. However, unlike practices in most EU countries, vehicle taxes are not directly tied to emissions of CO_2 or local air pollutants (the annual ownership tax is based only on engine capacity and the acquisition tax is a fixed fee). Partly because of these weak incentives, newly registered cars in Romania tend to be more carbon-intensive than in most EU countries (Figure 5.19, panel B). The Recovery and Resilience Plan announces the reform of taxes on vehicles in line with their environmental performance. This is welcome and should be pursued.

The authorities should consider revising the long-standing car scrapping programme "Rabla", which subsidises the purchase of new vehicles in exchange for scrapping older ones (Box 5.8). The programme has been renewed over time to support progressively cleaner vehicles, including electric cars, but it has not succeeded in renewing the fleet. The average age of the car stock has continued to rise, with 28% of cars being over 20 years old (Figure 5.17, panel B). Nonetheless, with its generous subsidies for electric vehicles, the programme led to a boom in electric car sales to 12% of all new cars as of October 2023. Until December 2023, the Rabla programme provided among the highest subsidies for purchasing electric vehicles in the European Union (Box 5.8). The government cut the subsidies by 80% starting in 2024. However, the Rabla programme still supports the purchase of internal combustion engine cars with emission levels that are above the average for new cars sold in every country in the European Union, which is inconsistent with climate mitigation objectives (Box 5.8) (Figure 5.19, panel B). Vehicle scrapping schemes are generally costly and inequitable ways to abate CO_2 and pollutant emissions, as they tend to benefit people who would buy a car and scrap their old one even without the subsidy, just a bit later in time (Buckle et al., 2020[69]) (Linn, 2020[70]). Only households who can afford to purchase a new vehicle and that already own cars can benefit from these subsidies. Scrapping programmes also tend to lock people into car-dependent transport systems and to increase the number of cars on the roads (OECD, 2021[39]). To partially address these problems, the authorities could consider a scrapping programme that exchanges an old car for a subsidy for the purchase of an electric bike (as done in France) or a subscription to public transport and shared-mobility services (as done in Canada's British Columbia).

Figure 5.19. Despite high electric car sales, new cars are carbon-intensive in international comparison



Note: Panel B: emission levels based on the WLTP (Worldwide harmonized Light vehicles Test Procedure).
Source: European Environment Agency (2023), Monitoring of CO_2 emissions from passenger cars; European Automobile Manufacturers' Association.

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Nonetheless, subsidies to electric vehicles may still be necessary while there remains a cost gap with traditional cars. The authorities should limit eligibility for Rabla subsidies to electric vehicles and cars with CO_2 emissions lower than average emissions from new cars registered in Europe (108.2 gCO_2/km in 2022). To mitigate the regressive impact of electric vehicle subsidies, the subsidy amount could be higher for low-income purchasers, as done in France, or the government could fund concessional loans for low-income households, as in Scotland. As the country's electric vehicle market matures, purchase subsidies should be accompanied and progressively replaced by higher taxation of internal combustion engine vehicles (see above). This should aim to reduce the difference in purchase price or lifetime cost between electric and traditional cars. France, for example, applies a bonus-malus system combining a subsidy for the purchase of electric vehicles and a heavy tax for the registration of high-emitting cars. Reducing and better targeting subsidies to vehicle purchase would free up resources that could be repurposed, for instance towards charging infrastructure and electric buses.

Development of Romania's charging-point network needs accelerate. The density of charging stations has increased but remains among the lowest in the European Union (Figure 5.20), with most pronounced gaps in rural areas. The government is taking steps to address this issue by providing funding for public charging infrastructure and for home charging, including via the Recovery and Resilience Plan. Subsidising charging stations with vehicles for short-term renting (carsharing) could improve access to electric vehicles for low-income households, who are less likely to own a car (Nicholas and Bernard, 2021[71]).

Box 5.8. Romania's long-standing car scrapping programme

The Rabla programme offers subsidies for the purchase of a new vehicle in exchange for scrapping one or two cars that have been registered in Romania for at least six years. The subsidy amount increases with the environmental performance of the new car, as well as with the number, age and pollutant emission levels of the scrapped old vehicles.

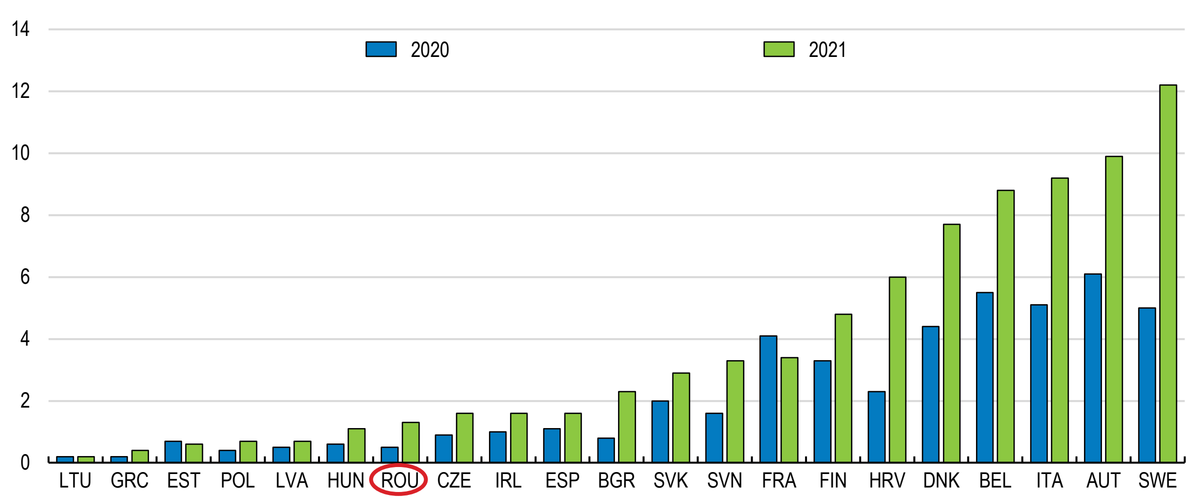
In 2023, the minimum level was RON 6 000 (EUR 1 200) for the purchase of a car emitting between 120g and 160g CO_2/km. This increased to RON 7 500 (EUR 1 500) for cars emitting up to 120g CO_2/km; RON 9 000 (EUR 1 800) for a hybrid vehicle; RON 26 000 (EUR 5 200) for a plug-in hybrid electric car; RON 51 000 (EUR 10 200) for a battery electric car. There were additional bonuses for scrapping vehicles older than 15 years complying with Euro 3 emission standards or lower; scrapping two vehicles; or purchasing a car running on liquified petroleum gas or compressed natural gas. In 2023, in countries that are members of both the European Union and the OECD, subsidies for electric vehicles ranged between EUR 3 000 in Austria, Italy and Portugal to EUR 9 000 in Greece and Luxembourg.

A new version of the Rabla scheme was introduced in 2023. The system is co-financed by the Environment Fund Administration and the 500 participating municipalities (out of about 3 000 local governments), for a total national budget of RON 240 million (EUR 49 million). The programme offers a subsidy of RON 3 000 (EUR 600) in exchange for scrapping a vehicle older than 15 years, with no obligation of purchasing another car. The beneficiary commits to not purchasing a car complying with Euro 5 and/or lower emission standards within three years of receiving the scrapping incentive. It is not clear how this commitment will be enforced. As the Euro 5 standard entered into force in 2009, the system allows to purchase an old and high polluting car. For comparison, the stricter Euro 6 standard has been in place in the European Union since 2015, and the more demanding Euro 7 standard is scheduled to become effective in mid-2025.

Source: European Automobile Manufacturers' Association; Romanian Environmental Fund Administration.

Figure 5.20. Romania has expanded EV charging infrastructure but lags other EU countries

Number of electric vehicle charging stations per 100 km of roads



Note: For better readability, the chart excludes Netherlands, Luxembourg, Germany and Portugal, which all had more than 20 charging points per 100 km of roads. The 2021 value were respectively: 64, 58, 26 and 25 electric vehicle charging stations per 100 km of roads.
Source: European Automobile Manufacturers' Association.

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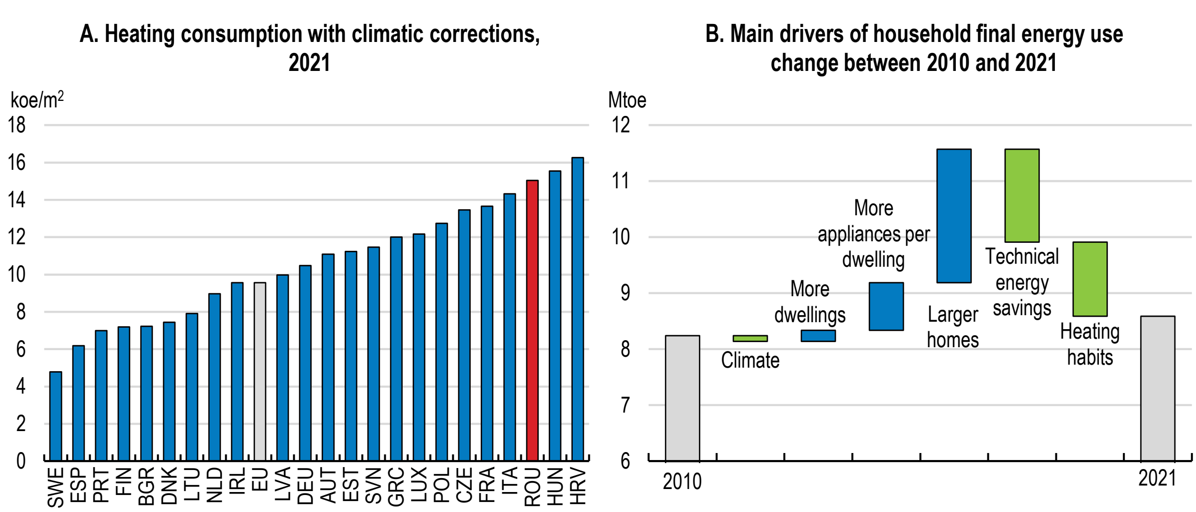
5.7. Making buildings less energy- and carbon-intensive

Decarbonising Romania's homes and other buildings is imperative yet challenging. Romania is one of the few EU countries where emissions from residential, commercial and public buildings increased over the period from 2005 to 2021 (EEA, 2023[72])(Figure 5.2, panel B). Higher living standards and increased household energy use were among the main drivers of this trend (Figure 5.21, panel B). People's homes are responsible for over 80% of GHG emissions and energy consumption from buildings. The full implementation of reforms and investments planned in the Recovery and Resilience Plan (Box 5.2) is expected to contribute to reducing these emissions. However, the projects in train are insufficient to meet the ambitious energy savings targets in the revised Energy Efficiency Directive (2023) or get Romania onto the net-zero pathway outlined in its Long-term Strategy. The Strategy calls for a 22% cut of emissions from buildings over 2021-30 to be on the net-zero path (Government of Romania, 2023[2]).

Improving the energy efficiency of existing residential buildings and switching to low-carbon heating and cooling systems would generate large energy savings and GHG emission reductions. It would also help containing households' energy bills and make buildings more resistant to the rising temperature expected with climate change (section 5.10). While new buildings have had to meet near-zero-energy standards since 2021, most existing homes are highly energy-intensive. Many also need maintenance and improvement of sanitation conditions (EC, 2023[9]) (OECD, 2022[16]). Heating accounts for two-thirds of energy use in Romania's dwellings. Energy use for home heating, per square meter, is among the highest in the European Union (Figure 5.21, panel A). This is mostly due to inadequate building insulation, inefficient heating systems and an old housing stock – built mostly before the introduction of strict thermal standards. The heating needs of larger homes and greater use of electrical appliances drove up households' energy use. Technical energy savings and changes in heating habits only partly offset the increase (Figure 5.21, panel B).

Figure 5.21. Heating consumption in residential spaces is high and increasing



Note: Panel A: The graph shows unit consumption of energy for space heating in buildings, adjusted for climate variations across countries and years. Panel B: technical energy savings refer to improved specific energy performance of equipment and buildings.
Source: Odysee-Mure.

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Removing impediments to renovations is crucial

Romania needs to accelerate the pace of building renovation. Its National Long-term Renovation Strategy aims to retrofit 77% of the building stock by 2050. Low-interest loans and grants have been available for several years to encourage thermal rehabilitation of the housing stock. However, the co-existence of multiple programmes, complex procedures and weak administrative capacity have hampered investments (OECD, 2022[16]). Only 0.5% of the building stock was retrofitted each year in the last decade. The annual renovation rate needs to increase to 3.4% this decade and rise further after that. The total investment needs are massive – estimated at EUR 12.8 billion (or 4.5% of 2022 GDP) in 2020-30 alone.

As in other countries, high upfront costs and long payback periods deter homeowners from initiating energy-saving renovation projects in Romania. Over 95% of the country's dwellings are occupied by their owners (Chapter 2). In theory, this makes the problem of split incentives to energy-efficient renovation less relevant for Romania and facilitates home improvement decisions, as the owner-occupier bears the investment costs and reaps benefits from reduced energy bills and higher property value (Hoeller et al., 2023[73]). However, the prevalence of informal rental agreements intensifies the split incentive problem in Romania's small rental market (Chapter 4), while many low-income homeowners likely have limited borrowing capacity (Chapter 2). Renovating multi-apartment blocks presents the additional complexity of balancing diverse preferences and financial contributions of multiple homeowners. As in other countries, at least two-thirds of owners need to agree for renovations to be undertaken in multi-apartment buildings, which is often an unachievable threshold. Lowering voting requirements to a simple majority, as done in Austria and Lithuania, could expedite decision making (Hoeller et al., 2023[73]). In Lithuania, social benefits, such as heating aid to low-income households, are made conditional on a household's agreement to multi-apartment building renovation. Mechanisms to facilitate agreement on renovation works should be coupled with easier access to financial assistance for low-income owners (see below).

To address the financial and collective decision-making challenges of renovating multi-apartment buildings, the Recovery and Resilience Plan establishes a Renovation Wave Fund worth EUR 2.2 billion to finance the energy and seismic renovation of about 5 million square metres of multi-household buildings and public buildings (EC, 2023[14]). The fund deviates from the legislative requirement for owner associations to cover at least 10% of renovation costs. It provides non-refundable grants that cover the full cost of the works. This approach is very costly. Since homeowners do not directly incur the expense of the interventions, demand is likely to be high. Given capacity constraints in the construction industry, there is a risk of subpar interventions and inflated pricing by builders.

In most countries, government support for building renovations is generally capped as a level or percentage of costs (Hoeller et al., 2023[73]). The Romanian authorities should consider following this approach in a more consistent manner across programmes, so that owners have a stronger financial stake in projects. Ideally, part of the support should be provided via concessional or guaranteed loans, while grants should prioritise lower-income households. These are more likely to occupy poor quality homes and are less likely to undertake renovations without significant assistance. Income-based eligibility criteria could help target support. This is done in France (Box 5.9). The current subsidy programme for multi-apartment blocks ultimately favours urban dwellers, who mostly live in flats (Figure 5.22, panel B). In 2024, a new grant programme for renovating single-family houses is set to be introduced, with priority given to vulnerable energy consumers. This is a step in the right direction, as two-thirds of Romania's population and 90% of lower-income households live in single-family houses (Figure 5.22).

Box 5.9. Targeting renovation subsidies to low-income households

If poorly targeted, subsidies for energy renovation can disproportionally support housing upgrades for higher-income homeowners. This is unfair and inefficient, as higher-income households are better able to afford investments without support and stand to benefit from it already. In contrast, lower-income households are less likely to undertake renovation projects without assistance. Distortions are more likely when subsidies are provided as non-refundable tax credits (i.e. the maximum value of the credit cannot exceed the recipient's tax liability, which is generally lower for low-income earners).

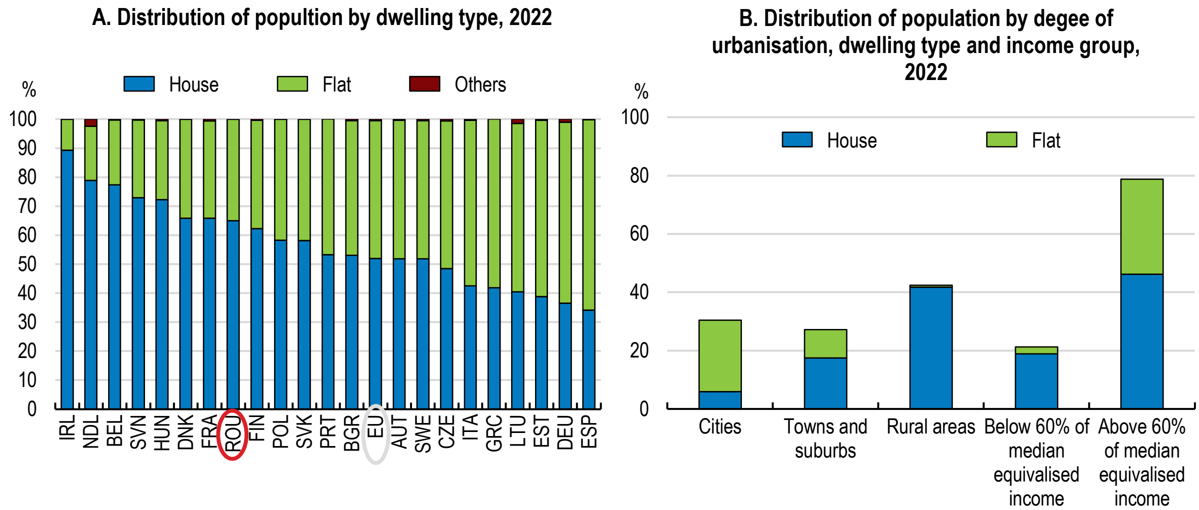
Introducing income-based eligibility criteria or providing refundable tax credits can better target support for energy renovation. This would be more effective in countries like Romania, where most low-income households own their own home. France's programme "MaPrimeRénov" offers higher grants for retrofitting projects carried out by lower-income households (up to EUR 10 000 per project) and an advance payment for the lowest income households. As a result, lower-income households accounted for two-thirds of the applications for funding received between April 2020 and June 2021. Nearly 300 000 applications were accepted in the same period, for a total of EUR 862 million.

Source: (Hoeller et al., 2023[73]) and (OECD, 2022[74]).

There is a need to improve data on buildings and energy use, as well as the administrations' capacity to monitor implementation of subsidised energy efficiency projects and realised efficiency gains. This would help design better policies, including financial support mechanisms. It would also support ex post assessment of a program's cost-effectiveness, permitting adjustments as necessary. The Long-term Renovation Strategy envisages establishing a database of energy performance certificates tied to the national digital register of buildings, currently under development. Energy performance certificates are mandatory for renting or selling a dwelling but have been considered a formality rather than a helpful guide in real estate transactions. This reflects inconsistent measuring approaches and low data credibility (Buildings Performance Institute Europe, 2018[75]). A 2023 regulation aims to improve the certificates, by upgrading the methodology for energy intensity calculation and including different pollution classes for buildings. Local authorities will have the possibility of reducing property taxes based on a building's energy efficiency rating (see Chapter 2 for a discussion on property taxes). However, for the new certificates to work effectively, the digital cadastre will have to be completed. This will provide greater certainty in real estate transactions and, in turn, help attract investment in energy efficiency. In addition, the prevalence of informality in the rental market undermines the effectiveness of energy performance certificates, while bounding tenants to homes with higher energy consumption. Promoting formalisation of rentals (Chapter 4) could enhance the effectiveness of energy efficiency regulations, benefiting both landlords and tenants (higher rentals for landlords and lower bills and better comfort for tenants).

Other non-financial barriers must be addressed to accelerate energy-efficient building renovations. These include insufficient awareness and information about energy-efficient solutions and benefits and a shortage of workers with expertise in renovations (Chapter 2; section 5.9). Romania could disseminate information through awareness raising campaigns and regional or local one-stop-shops for energy renovation, as envisaged by the Long-term Renovation Strategy. One-stop-shops exist in Austria, France, Germany and the Netherlands, among other countries, and provide a range of services to homeowners, including energy audits, financing advice, project management and monitoring. The target of approving the legislation for one-stop-shops by March 2024 is welcome, but practical implementation should follow suit. The energy market regulator provides online information for consumers on how to reduce energy consumption. However, many households lack information and control over their own energy use and expenses, which discourages energy-efficiency investments. For instance, in multi-apartment buildings, heating bills are often for the entire building rather than for each individual housing unit.

Figure 5.22. Most of Romania's population live in single-family houses, except in cities



Source: Eurostat.

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Accelerating the rollout of smart meters for heat, as well as electricity (section 5.5), would provide accurate data about energy consumption. More generally, by improving price and consumption awareness, smart meters are known to encourage energy-saving, including through regulation of indoor temperatures. Hence, they also help address potential "rebound effects" - the tendency to increase energy use, offsetting energy bill savings achieved through efficiency improvements. As mentioned above, regulated retail energy prices for households hinder the effectiveness of smart metres, as well as of energy efficiency regulations and subsides more generally.

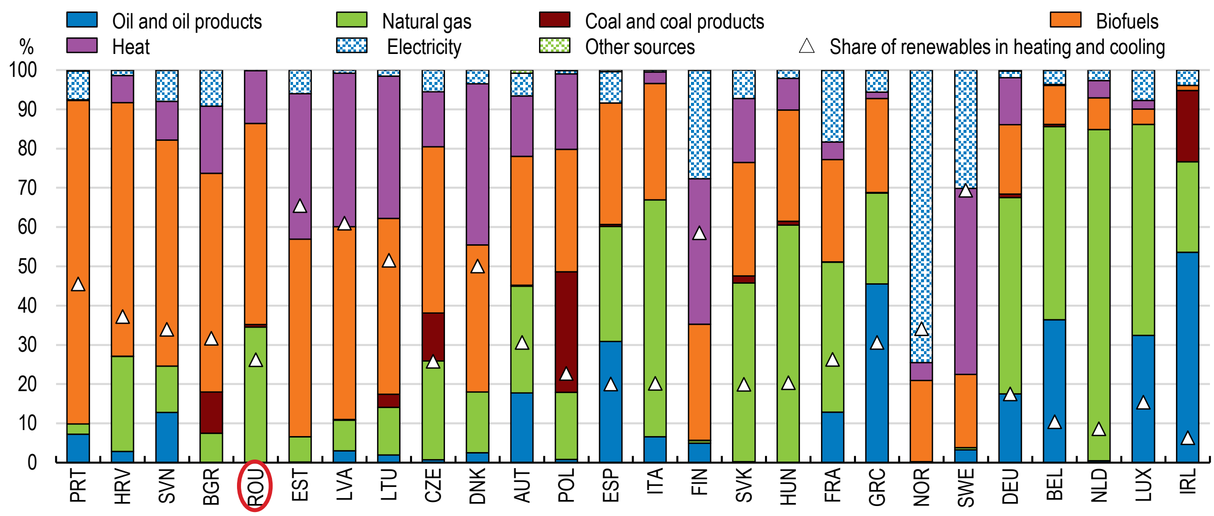
Moving away from firewood- and gas-based heating would provide multiple benefits

Romania needs to move away from wood-based fuel and natural gas for heating to renewables and electricity. Such fuel switch would complement the impact of thermal building retrofitting on reducing energy needs for heating and cooling. The 2023 draft National Energy and Climate Plan aims for renewable energy to meet 36% of energy consumption needs for heating and cooling by 2030. Renewables account for a quarter of thermal energy use (Figure 5.23), a share that has changed little in the last decade. Nearly all of this renewable energy is in the form of traditional woody biomass, mainly firewood. Firewood is the country's main source of energy for residential heating, covering over half of home heating needs (Figure 5.23). About half of households use firewood for heating or cooking, a share that reaches 90% in rural and remote areas, where natural gas networks are absent (OECD, 2022[16]). This is common to other Central and Eastern European countries (Figure 5.23).

Widespread burning of woody biomass generates several problems in Romania, as the 2023 draft National Energy and Climate Plan acknowledges. A large proportion of firewood is sourced informally and burned in inefficient domestic wood stoves – a major source of indoor air pollution with significant health impacts in Romania (EPG, 2023[42]) (OECD, 2022[16]). As trees and other vegetation absorb CO_2 from the atmosphere, harvesting wood means reducing carbon sink capacity, in addition to affecting the integrity of ecosystems. Burning wood immediately releases CO_2 in the atmosphere, while reforestation takes time. Hence, depending on the time needed for reforestation and the type of wood, emissions may increase for decades before they are reabsorbed (OECD, 2023[59]). Like other countries, Romania needs to carefully balance trade-offs between using biomass for heating and the need to increase land carbon sinks and protect biodiversity (EEA, 2023[76]) (section 5.8).

Figure 5.23. Woody biomass is the dominant renewable energy source used for residential heating

Residential heating by energy source and share of renewables in final energy consumption for heating and cooling, 2021 or latest available year



Source: Eurostat; IEA Energy end-uses and Efficiency Indicators database.

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More should be done to promote solar and heat-pump heating systems. The 2023 draft National Energy and Climate Plan foresees heat pumps to provide a quarter of thermal energy needs in Romania by 2030, from virtually zero today. Heat pumps and solar thermal technology offer more sustainable alternatives for decarbonising residential heating and cooling than combustion of biomass and gas boilers (EEA, 2023[76]). Heat pumps are a particularly viable heating solution for single-family houses, the dominant dwelling type in Romania (Figure 5.22). Solutions are needed to get past high upfront cost of heat pumps. The government should consider a programme of investment subsidies or loans to support the installation of solar collectors and heat pumps, as support for these investments has so far been limited (EC, 2023[9]). Financial support would complement reforms to remove favourable tax treatment of heating fuels, including firewood (section 5.4). The availability of low-priced, unregulated firewood discourages energy-efficient renovations and fuel switches in rural areas.

Enhancing the use of district heating (centralised heating systems serving multiple buildings) could also facilitate the integration of renewables into the heating energy mix. Countries with a higher share of renewables in heating and cooling (in industry, services and residential) often use a mix of biofuels and renewable waste to produce heat that is distributed to buildings (Figure 5.23). The use of district heating dramatically declined in the last two decades in Romania. As in other Central and Eastern European countries, in Romania many urban district heating systems and distribution networks are old, poorly maintained and marred by heat losses (Miu, Nazare and Diaconu, 2022[77]). They need urgent upgrades to become more efficient, flexible and integrate increasing share of renewables and waste as required by the recast Energy Efficiency Directive (2023). However, modernising these systems is complex and costly (Miu, Nazare and Diaconu, 2022[77]). The Recovery and Resilience Plan envisages a reform of district heating by developing flexible and highly efficient gas-fired electricity and heat cogeneration, with at least 300-Megawatt electricity production capacity.

Policy also needs to look toward eventual phase out of natural gas heating. In addition to high costs in rural areas, plans to develop the country's gas heating network risk locking households into fossil-fuel-based heating systems. A phase out of gas-fired heating should be considered (IEA, 2022[36]). Initially, the ban on gas boilers could apply to new homes and then gradually extend to all buildings, as done in Denmark, Germany, Ireland and the Netherlands. For existing buildings, a targeted boiler scrappage scheme could accelerate retrofits.

5.8. Policy options for abating emissions from industrial processes, agriculture and waste

More efforts are also needed to reduce emissions beyond energy use. Just above one-third of Romania's GHG emissions arise from industrial processes, agriculture and waste (Figure 5.3, Panel B). Emissions from chemical reactions in industrial processes, for example when producing cement or steel, are mostly covered by the EU Emissions Trading System (ETS). Gradually rising carbon prices under the EU ETS are expected to encourage emission reductions in these sectors. Low-carbon hydrogen (section 5.5) and carbon capture utilisation and storage (CCUS) technology provide ways to decarbonise some heavy industries (IEA, 2023[44]). The Long-term Strategy envisages using CCUS to capture half the emissions from cement manufacturing. Romania's large estimated CO_2 storage potential, extensive national network of oil and gas pipelines and expertise in fossil fuel extraction put the country in a favourable position to deploy CCUS technology (EPG, 2021[53]). However, progress on CCUS has been slow in Romania, as in most of the world (IEA, 2023[44]). No projects have emerged since 2012, when Romania's only proposal for a CCUS demonstrator was halted. Romania has done less than other countries to provide financial support for capital-intensive CCUS projects or to establish a robust regulatory framework to manage their potential liabilities associated with the long-term risk of leakage or release of captured CO_2 (EPG, 2021[53]).

With 17% of GHG emissions arising from agriculture (Figure 5.3, Panel B), Romania has one of the highest shares of agricultural emissions in the European Union (EU average is 11%) (OECD, 2023[78]). Agricultural emissions are projected to increase by 2030, even with the implementation of new measures (Ministry of Environment, Water and Forests, 2023[3]). In 2021, they were almost equally split between methane from enteric fermentation (i.e. cattle) and nitrous oxide from the application of fertilisers on agricultural soils. Policies to mitigate emissions include financial and technical support to adopt more climate-friendly farming practices – such as improved soil and manure management, changing animal feed or using less fertilisers, as well as awareness raising initiatives to encourage the uptake of less GHG-intensive diets (Errendal, Ellis and Jeudy-Hugo, 2023[79]). Romania should remove subsidies linked to the unconstrained use of variable inputs, such as discounted excise rates on fuels used in agriculture and forestry (section 5.4), and reduced VAT rates on fertilisers, pesticides and water for irrigation. By stimulating the use of fuels, fertilisers and water, this kind of agricultural support has the greatest potential to increase GHG emissions (OECD, 2022[80]).

Maintaining the carbon storage capacity of Romania's large old-growth forests will be essential to offset emissions from hard-to-abate sectors, including agriculture. Under current land management practices, removals from the land use, land-use change and forestry sector (LULUCF) are expected to decline in the period to 2030, while agricultural emissions are projected to rise (Ministry of Environment, Water and Forests, 2023[3]). In line with its commitment in the Recovery and Resilience Plan, Romania should step up monitoring and enforcement efforts to curb longstanding, widespread illegal logging (OECD, 2022[16]). Investment in upgrading the SUMAL Forest Inspector platform and wood traceability system and the establishment of a compensation scheme for forest owners are welcome. The scheme – in place between 2023 and 2027 – allocates EUR 200 million to compensate forest owners for unharvested wood due to mandatory ecological requirements. Similar programmes have been effective in reducing deforestation in other countries, such as Costa Rica (OECD, 2023[81]). The authorities should assess the scheme's effectiveness and additionality as it nears conclusion and consider extending its duration if the assessment yields positive results. Promoting the afforestation of degraded agricultural land would further help expand carbon sinks. Romania should also more effectively promote the uptake of solar and heat-pump heating systems, especially in rural areas, to encourage a shift away from firewood burning (section 5.7).

The circular economy transition can help achieve climate mitigation objectives and deliver broader health and environmental benefits. The government has introduced regulations and launched awareness raising campaigns to address Romania's low recycling rates and reliance on landfills for waste disposal. Municipal waste generation per capita has increased since the mid-2010s with rising income levels. In 2021, Romania landfilled three-quarters of its municipal waste, a rate over three times the EU average. Landfilled waste generates 6% of the country's GHG emissions (Figure 5.3, Panel B). Recycling rates have deteriorated since the mid-2010s and remain well below the EU average, as does the rate of composting (EC, 2023[9]). To stimulate recovery and recycling, Romania should improve separate collection and treatment of waste, invest in treatment infrastructure and curb illegal dumping. The Recovery and Resilience Plan allocates EUR 1.2 billion to this effect and to implement the national circular economy strategy (Figure 5.5; Box 5.2). A ban on landfilling of biodegradable waste and pay-as-you-throw waste fees would help divert waste and materials from landfills towards recycling and reuse. The country could also boost its capacity to produce biomethane from residues of its large agricultural and forestry sectors.

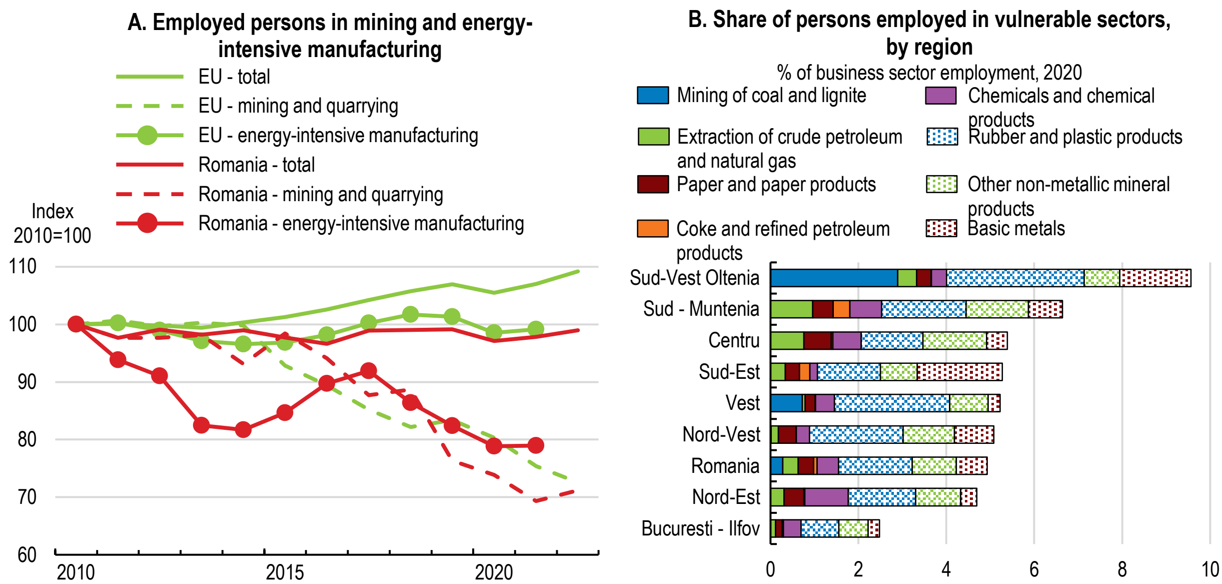
5.9. Supporting workers in the transition to net zero

The shift to a low-carbon economy will have employment implications. It will change skill needs and contribute to reallocations of workers across sectors and regions in Romania, as in Europe. According to OECD modelling, the implementation of the EU "Fit for 55 package" (aimed at achieving at least 55% emission reductions by 2030 relative to 1990) will reduce total employment growth in the European Union from 3% to 1.3% in the period to 2030. This will involve an employment reallocation from blue collar and farm workers to other jobs and sectors (Borgonovi et al., 2023[82]). Romania has already experienced reallocation of workers from mining and energy-intensive manufacturing to other sectors. While total employment remained broadly constant in the last decade, employment in mining and quarrying (mostly coal mining and gas extraction), decreased considerably, in line with a trend observed in the European Union (Figure 5.24, panel A). Employment in Romania's energy-intensive manufacturing (including oil refinery, chemicals, steel and cement) also dropped (Figure 5.24, panel A).

Job losses relating to decarbonisation will be highly localised. As mining and energy-intensive industries are regionally clustered, the social and employment impact of phasing out coal and decarbonising manufacturing will also be geographically concentrated. Sud-Vest Oltenia and Sud Muntenia have the largest shares of regional employment in the sectors most vulnerable to the net-zero transition as defined by (OECD, 2023[83]), primarily coal mining, gas extraction, plastics, metals and non-metallic minerals (Figure 5.24, panel B). These are also regions lagging on economic and social development (EC, 2023[9]), exacerbating their vulnerability to activity and job losses from the low-carbon transition. Over 32 000 jobs are expected to be lost in Romania's regions with the most carbon-intensive industries (EC, 2023[9]). In addition, the shift to electric vehicles will have uncertain implications for employment and skills in Romania's automotive industry (OECD, 2023[83]), which saw a 75% employment growth in 2010-20 and is dominant in the Vest region.

The most immediate impact will be felt in the coal sector, with the progressive closure of mines and power plants until a complete phase out by 2032 (section 5.5). Coal mining takes place in two regions – Sud-Vest Oltenia and Vest – where also most of Romania's coal-fired power plants are located. While coal mining accounts for less than 0.5% of total employment at national level, it makes up nearly 3% of direct employment in Sud-Vest Oltenia (Figure 5.24, panel B). The 2022 "Decarbonisation Law" foresees that workers laid off by the closure of coal mines and power plants will have priority in enrolling in vocational retraining, which is welcome.

Figure 5.24. Jobs in mining and energy-intensive industries are clustered and already declined



Note: Panel A: Energy-intensive manufacturing includes the NACE activities: paper and paper products (C17), coke and refined petroleum products (C19), chemicals and chemical products (C20), rubber and plastic products (C22), other non-metallic mineral products (C23), basic metals (C24). Panel B: the sectoral employment shares are based on business employment only from the Eurostat Structural Business Statistics.
Source: Eurostat; and OECD calculations.

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The government should ensure adequate support to workers and communities hard-hit by the phase-out of coal power and the net-zero transition more generally. Experiences in other countries suggest this requires an effective mix of active labour market policies, local investments and measures to remove obstacles to geographical labour mobility (OECD, 2023[84]). In late 2022, the government approved the Territorial Just Transition Plans for the regions most at risk of job losses from the low-carbon transition, which was a condition to access the EU Just Transition Fund (Box 5.10). However, these plans do not lay out the specific actions to be implemented. They also neglect the need to increase local technical and administrative capacity to implement the plans (Bankwatch, 2023[85]). This is a bottleneck to the implementation of these plans as it is for the absorption of EU funds more generally (OECD, 2022[16]).

Box 5.10. Romania's Just Transition Plans for coal regions

In late 2022, the government approved Territorial Just Transition Plans for three coal counties and three carbon-intensive counties. The Just Transition Fund will provide over EUR 200 million in 2021-27 for reskilling and active labour market support for about 30 000 workers (EC, 2023[9]). The plans for the three coal counties (Gorj and Dolj in Sud-Vest Oltenia and Hunedoara in the Vest region) aim to promote economic diversification. They envisage supporting entrepreneurship, including initiatives led by women and youth; reskilling and upskilling; supporting small and medium-sized enterprises operating in construction and renewable energy production, installation and maintenance, among other activities. Some measures have a gender dimension, such as childcare services to facilitate women's access to vocational training and reintegration into the workforce after having children (Chapter 4). The Territorial Just Transition Plans identify ethnic minorities as a target group for labour market programmes.

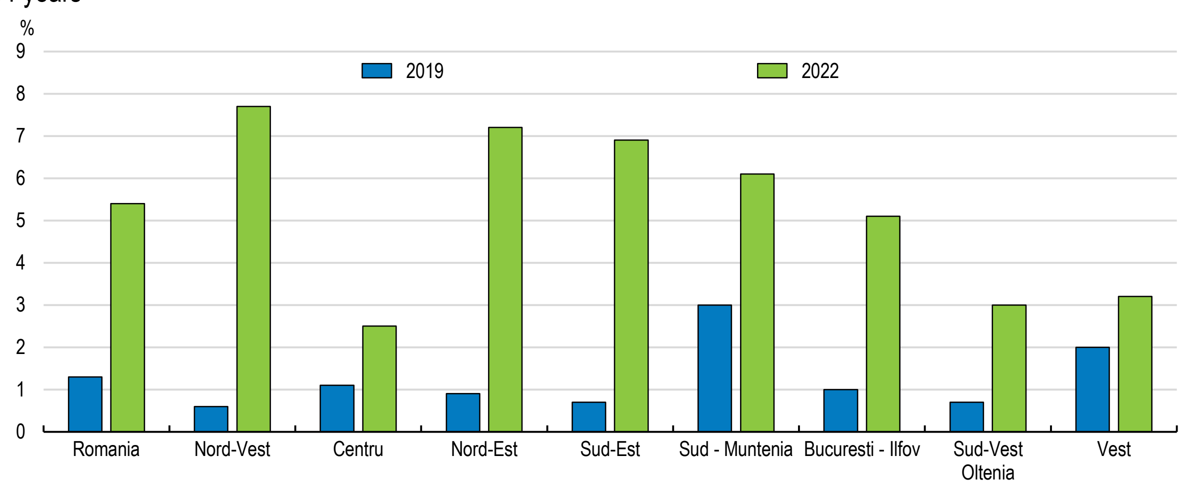
Source: (Bankwatch, 2023[85]); (Bankwatch, 2023[86])

Reskilling should be directed towards job categories in short supply, including those relating to the green transition. Romania's Long-term Strategy estimates 53 000 new jobs to be created by 2050, 40% of which by 2030, in manufacturing, construction, installation, operation and maintenance of renewable energy technologies. However, high skill shortages can hamper job creation (Chapter 2). Improving reskilling and matching would help alleviate such shortages as well as limit negative socio-economic impacts from large-scale job losses. In 2022, labour shortages were reported in Romania for 27 occupations that required specific skills or knowledge for the green transition, including insulation workers, civil engineers and construction managers (EC, 2023[9]). The government should further develop training activities related to energy building renovation and renewable energy integration into buildings, to support the decarbonisation of the building sectors (section 5.7). The accelerated deployment of heat pumps calls for a fast-growing number of skilled professionals throughout the entire value chain, including expert installers and energy advisers to guide homeowners in the choice of the best fitting heating system (Toleikyte et al., 2023[87]). As in other countries, the lack of skilled professionals is a barrier to the growth of heat pump market in Romania. It can also lead to lock-in effects due to the improper execution of building renovation works.

Government support for workers needs to be multi-faceted. Labour market programmes should support job search, particularly for displaced low skilled and older workers, and focus on training, especially for youth. Spending on training programmes for the unemployed markedly increased in Romania in the second half of the 2010s (EC, 2023[88]). Participation of working-age Romanians in upskilling and reskilling programmes, partly EU-funded, increased in all regions. Programmes included training for construction workers and specialists of energy performance of buildings (EC, 2023[9]). The Recovery and Resilience Plan will also finance training in the renewable energy sector. However, participation in regions most exposed to job losses and restructuring risks remains lower than in other regions (Figure 5.25). This raises concerns that workers in regions vulnerable to green-transition may be less open to retraining. One paper reports that participation in training appears to be especially low among blue collar workers in the "mining of coal and lignite" sector in Romania (Borgonovi et al., 2023[82]).

Figure 5.25. Participation in training grew but remains low, especially in vulnerable regions

Participation rate in education and training (during the last 4 weeks) of the population aged between 25 and 64 years



Source: Eurostat.

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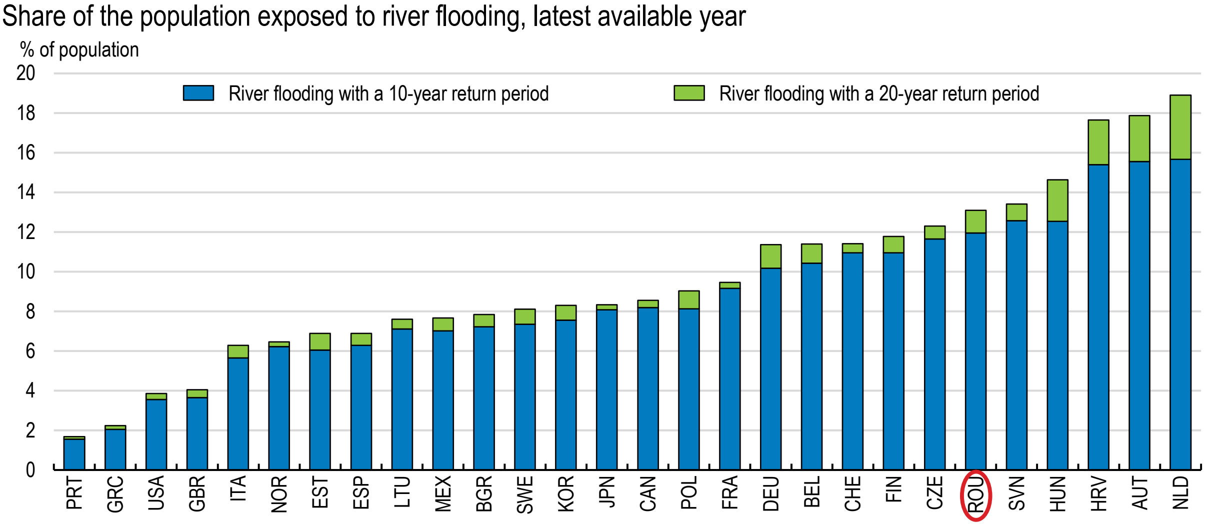
Broad policy efforts to improve the efficiency of the labour market can help adjustment to localised shocks, such as mine closures. As in other EU countries, there is scope to encourage greater labour mobility geographically and across sectors and skills. In Romania there is an abundance of professional licensing and certification requirements – which make it harder to change jobs. Regulatory restrictions for professions such as lawyers and civil engineers are stricter than the EU average (EC, 2023[9]). Beyond broader payoffs to the business environment (Chapter 3), reducing licensing and certification requirements could support employment reallocation in the green transition. Removing obstacles to regional mobility would aid labour market adjustments arising from the net-zero transition (Chapter 4).

5.10. Coping with mounting climate change risks

More extreme and variable climatic conditions will exacerbate Romania's vulnerability to natural disasters such as floods and droughts (in addition to the country's high seismic risk). In the last four decades, climate-related extreme weather events caused over 1 400 fatalities and losses and damages worth EUR 17.5 billion (6% of 2022 GDP) (EEA, 2023[89]). Population exposed to the risk of river flooding is higher than in most OECD countries (Figure 5.26), while some Romanian regions face water scarcity. A drought in 2022 was the most severe ever recorded in the country, affecting water supplies, hydropower generation, agricultural production and waterway navigation (World Bank, 2023[8]). The annual average temperature in Romania is already 1.5 degrees Celsius higher than in the period 1981-2010 and is set to rise further (World Bank, 2023[90]). In addition to impacts on farming, hotter temperatures will expose more people to periods of extreme heat. Currently, about 60% of the country's population is exposed to hot summer days with temperature above 35°C, on par with some of the highest levels of exposure in the OECD (OECD, 2023[91]).

Figure 5.26. Romania's population is highly exposed to river flooding

Share of the population exposed to river flooding, latest available year



Note: This indicator presents the annual percentage of the population exposed to river flooding with a 10- and 20-year return period. A return period is the average or estimated time that a flood event is likely to recur.
Source: (Maes et al., 2022[92]).

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Climate change will affect people's well-being and natural ecosystems, although with regional variations. Communities living in large urban centres, floodplains and drought-prone areas will likely bear the most intense impacts. Poverty, age and poor health aggravate vulnerability to climate risks (Climate-ADAPT, 2023[93]). The housing market and gentrification have tended to drive lower-income groups, including Roma communities, into areas at higher environmental and climate-related risk (Alexandrescu et al., 2021[94]). Roma communities – which suffer from poverty, material deprivation, poor housing and lack of access to basic services (Chapter 4) – appear to be also disproportionally exposed to flood hazards. These communities are less able to move to safer locations (EEA, 2023[95]). Insufficient incomes and coverage of social protection likely hinder the ability of vulnerable and marginalised groups, including Roma communities, to prepare for and adapt to natural disasters (OECD, 2023[96]) (World Bank, 2023[8]).

Better governance and insurance markets would enhance resilience to climate impacts

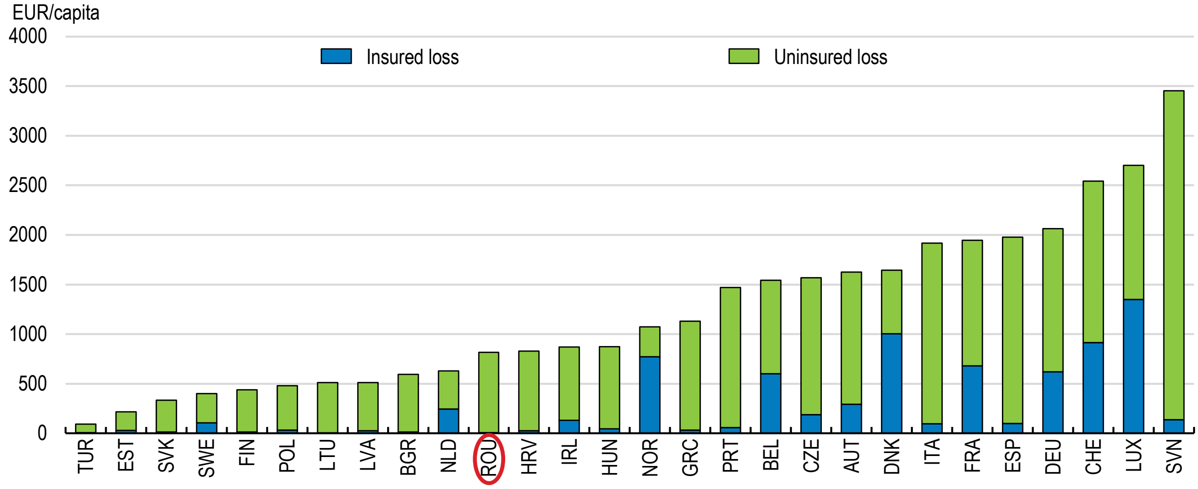
Romania has strengthened its capacity for climate modelling and the organisational framework for disaster risk management, but further progress is needed. The government should swiftly adopt and implement its new draft strategy for disaster risk reduction and related action plans. A revised national adaptation plan is set to be adopted by 2024. Co-ordination between these strategies and plans will be crucial to ensure effective adaptation action. Investment in building climate resilience and risk prevention remains limited (Climate-ADAPT, 2023[93]). The country needs to address remaining weaknesses in infrastructure, technology, and financial and institutional capacity. These weaknesses hinder the country's ability to adapt to climate change, especially in the eastern regions (EC, 2023[97]). Providing dedicated training programmes and guidance would help improve capacity of local authorities to prepare for and respond to extreme weather events.

Stricter enforcement of land-use and building regulations is necessary to prevent construction in high-risk areas. Romania's legislation requires that risk maps be integrated in urban and land-use plans. Local planning and building regulations forbid building in high-risk areas. However, many urban and land-use plans are outdated or outright missing, and risk maps are insufficiently detailed to enable proper local spatial planning (EC, 2023[97]). Instances of unauthorised building or corruption in issuing building permits undermine the integrity of urban development and may amplify exposure to climate-related risks.

Greater private insurance coverage for climate-related disasters would encourage households and businesses at risk to adopt risk-mitigating measures and reduce burdens on the public budget for disaster relief and financial support for rebuilding. Between 1980 and 2022, only around 1% of climate-related disaster losses were insured in Romania, lower than in many OECD countries (Figure 5.27). Average annual government liability for disaster losses is estimated between 0.25% and 0.4% of GDP, linked to the vulnerability of Romania's ageing housing stock and infrastructure (Cook et al., 2021[98]). Disaster risk financing is mostly reactive and relies on contingency loans, reserves and credits (EC, 2023[97]). The Pool of Insurance Against Disasters (PAID), a mandatory housing insurance against disaster risks, is the main proactive financing instrument. It offers simple and afforable policies, while sanctioning non-compliance (Box 5.11). However, insurance uptake is low, with only about 20% of residential buildings covered. This threatens the financial viability of the system (Climate-ADAPT, 2023[93]). Low coverage, especially in rural areas, appears due to a lack of risk awareness and financial literacy, low incomes, weak enforcement and moral hazard, given the expectation the government will subsidise emergency response and rebuilding (Box 5.11). Incomplete registration of land ownership, especially in rural areas, may be another barrier to insurance (Chapter 3). Romania could learn from the national catastrophe insurance programmes implemented in countries such as Denmark, France and Switzerland, which have achieved relatively high levels of insurance coverage (OECD, 2021[99]) (Figure 5.27). Improved dissemination of information on climate-related risks and impacts would help raise people's awareness and encourage uptake of insurance; this should form part of the national financial education strategy (Chapter 3).

Figure 5.27. Insurance is rarely used in Romania to cover the risks of economic losses due to climate-related extreme weather events

Per capita economic losses from climate-related extreme weather events, selected European countries, 1980-22



Source: European Environment Agency (2023), Economic losses from climate-related extremes in Europe.

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Climate change wide-ranging impacts require tailored policy responses

With heating and transport expected to rely on electricity in the future, building a climate-resilient power sector is key to avoid major disruption (IEA, 2021[100]). Extreme weather events test the resilience of electricity grids and are a major cause of large-scale power outages. Changing temperatures will alter energy demand patterns for cooling and heating, putting pressure on the electricity system. Lower water availability could impair hydropower and nuclear generation, which are key to decarbonise power generation (section 5.5). Diversifying the renewable power mix, strengthening incentives for energy conservation and upgrading grids are, therefore, important to reach both mitigation and adaptation goals. The authorities should ensure that energy sector investment plans, such as the ten-year electricity network development plans, systematically consider adaptation needs. The energy regulator could link part of the recoverable electricity charges to indicators of resilience, such as the time to restore service after an outage (performance-based rate making). This would provide incentives for utilities to invest in reinforcing their assets against extreme weather events (IEA, 2021[100]).

Box 5.11. Romania's natural catastrophe home insurance programme

The Pool of Insurance Against Disasters (PAID), operational since 2010, is a programme of mandatory housing insurance against risks of earthquakes, floods and landslides. It is a common insurance-reinsurance fund owned by several private insurance companies, backed with a state guarantee. The fund offers two policies depending on the construction materials of the insured buildings. The annual premium is a low EUR 10 for less resistant houses, for a maximum compensation of EUR 10 000; for more resistant bulidings, the annual premium is EUR 20 and the insured value is EUR 20 000. Premiums and insured values have not changed since the inception of the programme. Non-compliance with the mandatory insurance notionally carries fines of up to EUR 100 and non-eligibility for compensation from the central or local goverment budgets in the case of damages due to earthquakes, floods and landslides. Local authorities are required to inform the population about the insurance obligation, verify compliance and sanction non-compliance. However, no sanctions have ever been applied and, in practice, also non-eligible households have received state compensation in the past (EC, 2023[97]). As of November 2023, there were a little less than 2 million active PAID policies covering one fifth of homes. Voluntary insurance policies covering other risks and damages above the PAID programme threshold can be added after having purchased the mandatory policy.

Source: PAID Romania, https://www.paidromania.ro/.

High temperatures, landslides and floods could strain Romania's already inadequate road and railway networks (section 5.6). On average, annual flooding is expected to raise the costs of road transport by almost 6% and that of passenger railway transport by nearly 25% in Romania (World Bank, 2023[8]). Reduced water depths on major waterways have increasingly led to prolonged navigation restrictions (Climate-ADAPT, 2023[93]). Floods and other climate-related hazards should be routinely considered when planning and managing transport infrastructure, especially in project appraisal, procurement processes and maintenance operations (OECD, 2018[101]). Integrating multiple modes of transport would contribute to curb GHG emissions while reducing the impact of climate-related disruptions on passenger and freight movement (World Bank, 2023[8]). Sustainable urban mobility plans, being developed for most municipalities, should incorporate adaptation considerations (section 5.6).

Romania needs to modernise and reinforce its water infrastructure to withstand the pressures of climate change (World Bank, 2023[8]). Higher temperatures and lower precipitation threaten water security and will intensify competition among different water uses (Climate-ADAPT, 2023[93]). The Recovery and Resilience Plan allocates nearly EUR 1.5 billion until 2026 to investments in water systems, including flood defence. Planned investments in upgrading and expanding ageing irrigation infrastructure can help improve the resilience of small farms to droughts. These investments need to be complemented by agricultural practices that conserve soil moisture to reduce water requirements (World Bank, 2023[8]).

Nature-based solutions to building climate resilience can complement infrastructure investment such as flood barriers. Such measures include urban green spaces and restoration of forests and wetlands, which can reduce vulnerability to weather-related risks. Nature-based solutions are often less costly than infrastructure and provide additional climate mitigation benefits by increasing carbon storage capacity (OECD, 2021[102]). The recently developed flood risk management plans for the country's 11 river basins and the Danube River lay out a more integrated approach to flood prevention, with higher emphasis on nature-based solutions such as setting back dikes and providing more room for rivers (Fischer, 2023[103]). Protecting forests from climate change impacts (such as pests, degradation and wildfires) is key for both mitigation and adaptation objectives. Degraded or burnt forests release GHG emissions. Afforestation and reforestation investment planned in the Recovery and Resilience Plan are a step in the right direction, although they will cover less than 1% of the country's forest area (section 5.8).

Romanian urban areas are particularly vulnerable to extreme heat and floods (World Bank, 2023[8]). Near-zero-energy standards for new buildings and ongoing investments in retrofitting buildings to improve their energy efficiency and earthquake resistance can simultaneously bolster their capacity to withstand extreme heat (section 5.7). These efforts should be part of urban neighbourhood regeneration plans that include green spaces, renewables-powered community cool spaces and improved access to sustainable transport modes (World Bank, 2023[8]). Urban green space expansions, including parks and green roofs, lower the urban heat island effect (i.e. higher temperature due to human activities and heat-absorbing built environment). This helps reduce energy demand for cooling and related GHG emissions. Furthermore, urban green spaces contribute to carbon sequestration and increase water absorption capacity, thereby mitigating the risk of urban flooding (OECD, 2021[102]) (Box 5.12). As part of the Recovery and Resilience Plan, the government aims to plant over 3 million square metres of urban forests (equivalent to 600 football pitches) – a positive initiative.

Box 5.12. Green roofs against heat waves and urban floods: The case of Germany

About two-thirds of German cities have made green roofs mandatory in local land-use plans. Seven out of ten cities with more than 50 000 inhabitants require roof greening in their development plans. About a quarter of Germany’s larger cities provide financial subsidies for green roofs. The proposed funding can cover up to half of investment costs and represents on average 10-100 EUR/m^2 and 500-100 000 EUR per project. The total amount of greened roof areas was estimated at 120 million m^2 in 2019, more than double the area at the start of the last decade. The cities of Munich, Stuttgart and Berlin have the largest green roof areas.

Source: (OECD, 2023[104]).

Table 5.3. Recommendations on decarbonising the economy

MAIN FINDINGS	RECOMMENDATIONS (key recommendations in bold)
Strengthening the policy framework and governance capacity	
Romania does not have a climate framework law with a binding net-zero goal. It has not yet defined all the policy measures it needs to reach its 2030 climate and energy targets.	Look towards adopting a climate framework law that enshrines the long-term net-zero goal, sets procedures for defining and reviewing interim targets, allocates responsibilities, defines accountability mechanisms and establishes an independent advisory body.
Institutional capacity for climate policy making and implementation is weak. Monitoring of progress in climate policy action and outcomes is insufficient. Romania is often late in providing information required under EU and international commitments. Absorption of EU funds for low-carbon investment has been poor.	**Build administrative capacity for designing, implementing and monitoring climate policy measures and investments.**
Making carbon pricing more efficient	
Excise duties generate low implied carbon prices which differ across fuels, providing uneven abatement incentives. Various tax exemptions and other subsidies reduce the cost of fossil fuels, with high estimated fiscal costs. Coal and natural gas are taxed at near-zero rates. Increasing energy taxes and reforming fossil fuel subsidies are necessary but would heavily impact the large share of the population at risk of energy poverty.	**Improve carbon pricing by increasing energy tax rates in sectors outside the EU Emissions Trading System and by gradually removing fossil fuel subsidies. Channel part of the proceeds to vulnerable households and affected businesses.**
The cap on retail prices of electricity and natural gas, introduced in response to the energy crisis, has been extended to March 2025. This is untargeted and weakens incentives to save energy or switch to cleaner fuels.	Bring forward the phase out of current energy price caps.
Moving to a low-carbon electricity mix	
The government committed to phase out coal mining and power plants by 2032 at the latest. However, it postponed the first closures amid the energy crisis in 2022.	Ensure timely decommissioning of coal-fired power plants.
Romania does not have a comprehensive policy to address methane emissions. Production of fossil fuels generates one third of methane emissions in Romania. Abandoned coal mines continue to emit methane.	Develop methane-reduction plans for operating and decommissioned coal mines, as well as for oil and gas production and handling.
Renewables account for more than 40% of Romania's power generation. The country's renewable potential is high. However, progress in expanding and upgrading electricity grids has not been sufficient to support a substantial increase in renewable generation. Electricity storage capacity is also insufficient.	**Accelerate expansion, upgrading and digitalisation of electricity grids and investment in electricity storage.**
The government has simplified some licensing procedures and committed to further streamlining permitting in line with the third EU Renewable Energy Directive. However, rules for using agricultural land for renewables installations remain ambiguous. Frequent law changes and inconsistent application of regulations generate uncertainty and hinder investments.	Clarify agricultural land-use rules for renewable energy production.
Most of Romania's support to utility-scale renewables goes to mature technologies. The ongoing development of a contract for difference scheme to mitigate revenue volatility for renewables power producers is welcome. Power purchase agreements are allowed again, after a long ban, but are rarely used.	Gradually redirect financial support from cost-competitive technologies such as PV, wind and hydro towards emerging technologies.
Decarbonising transport	
Public transport use in cities has declined, while car driving has grown, increasing emissions. Cities lack integrated public transport systems.	**Invest in integrated, smart urban mobility systems centred on public transport and incorporating walking, cycling and shared mobility.**
The Law on Sustainable Urban Mobility (2023) is a step in the right direction to support municipalities in developing Sustainable Urban Mobility Plans. The absence of up-to-date general urban plans in many cities is of concern.	Ensure rapid development of Sustainable Urban Mobility Plans, as well as coherence between these plans and cities' general urban plans; support municipalities in implementing sustainable urban mobility plans.
Romania's large cities make little or no use of traffic demand-management tools such as parking fees and congestion charges. Tolls on the national road network do not vary with distance driven.	Raise parking pricing in high-demand locations in cities. Establish low-emission zones in large urban areas and consider linking them with congestion charges.

MAIN FINDINGS	RECOMMENDATIONS (key recommendations in bold)
Decarbonising transport	
The efficiency of train services is low due to underinvestment and poor maintenance. Most rail lines are single track and not electrified. Infrastructure weaknesses make rail less competitive than road haulage and impede modal shifts towards rail that would help curb GHG emissions.	Accelerate investment in the upgrade and electrification of rail lines; expand and improve train connections, both internationally and nationally.
The government cut overly generous and regressive subsidies for electric vehicle purchases as of 2024. However, the scrapping programme still supports purchases of high-emission cars and risks increasing the number of cars on the roads. The share of electric cars in new car sales has grown recently, but the uptake of electric cars is still limited.	Limit the subsidies of the *Rabla* car scrapping programme to purchases of zero- and low-emission vehicles and alternative transport modes. Target the subsidy at lower-income applicants.
The networks of charging stations for electric vehicles are undersized.	Ramp up the roll out of electric charging stations, including through investment planned in the Recovery and Resilience Plan.
Taxes on car acquisition and ownership are not based on fuel efficiency, CO_2 emissions and air pollutant emissions. Most cars are old and highly polluting.	Revise vehicle taxes so that they increase with the vehicle's emissions of CO_2 and air pollutants.
Promoting energy-efficient and low-carbon buildings	
Homes are energy-intensive due to their age, bad insulation, and inefficient heating. Current retrofitting support for multi-flat buildings is fiscally costly. A grant programme for renovating single-family houses is set to be introduced in 2024, with priority given to vulnerable energy consumers.	**Ensure support for renovations is adequately targeted.** Continue to provide sufficient support to single-family house renovations, especially in rural areas and for the energy poor.
Information about energy-efficient solutions and related financing is insufficient to encourage building renovations or changing heating systems. The intention to establish one-stop-shops for energy renovations is welcome.	Run more information and awareness campaigns for energy efficiency renovation.
Less than a fifth of Romania's households are equipped with a smart meter, which allows consumers to control their energy use.	Roll out smart meters faster and promote greater competition in retail electricity and natural gas markets.
Renewables account for a quarter of thermal energy use in Romania, a share that has changed little in the last decade. Woody biomass and natural gas are the main heating fuels. Solar thermal and heat pump systems are little used.	Support household purchases of solar thermal systems and heat pumps through means-tested subsidies or loans. Phase out gas boilers, banning them in new buildings as a first step.
Widespread burning of firewood in inefficient stoves, especially in rural areas, increases indoor air pollution and contributes to depleting forest carbon sinks. Increased investment in monitoring and the new compensation scheme for forest owners are welcome steps to tackle persistent illegal logging.	Step up efforts to tackle illegal logging through improved monitoring and enforcement.
Supporting vulnerable workers and communities during the transition to net zero	
The 2021 law on social protection for vulnerable energy consumers marks progress in tackling widespread energy poverty. However, aid remains tied to energy use and may distort heating behaviour.	Ensure that support to the energy poor is means-tested and untied from energy consumption.
The net-zero transition will change skill needs and lead to reallocation of workers. The employment impact of phasing out coal and decarbonising manufacturing will be geographically concentrated. Spending on, and participation in, training programmes has markedly increased, but is not yet sufficient.	Increase access to quality active labour market programmes and worker training, in particular in coal-dependent communities and across other sectors and regions potentially hard-hit by the net-zero transition.
Strengthening resilience to climate change impacts	
Climate change will intensify Romania's vulnerability to natural disasters such as floods and droughts. Planned investments will contribute to strengthening resilience, but policy coherence needs to be improved. Capacity disaster risk management has improved, but climate risks and preventive measures are not yet fully mainstreamed in land-use and sectoral planning.	**Incorporate climate-related risks and adaptation considerations into spatial planning and sectoral investment strategies. Better enforce building regulations to prevent building in risk-prone areas.** Leverage nature-based solutions to mitigate climate-change impacts in both urban and rural areas.
The mandatory catastrophe insurance programme covers only a fifth of homes, with many households unaware of climate-related risks. This potentially exposes the government to high liabilities for losses when disasters hit.	Promote higher insurance coverage for climate-related disasters, including through awareness and financial education campaigns and stricter enforcement of the mandatory home insurance programme.

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ROMANIA

Romania's economy withstood significant adverse shocks in the wake of Russia's invasion of Ukraine and the ensuing energy crisis. Tackling high inflation is the immediate task for macroeconomic policy. Fiscal consolidation would complement restrictive monetary policy in keeping demand at sustainable levels. Greater tax revenues are needed to stabilise the public debt burden while funding priority spending – including on critical infrastructure, pensions, health care and the education system. Productivity growth is a powerful engine for lifting living standards but sustaining it will require a sound investment climate backed by strong competition, predictable policymaking, financial inclusion and effective controls against corruption. Romania's Recovery and Resilience Plan is helping drive reform. More policy focus is needed on addressing disparate socio-economic outcomes within Romania and to lift employment among groups underrepresented in formal work, including women. Faster progress is also required to decarbonise the economy by 2050. Romania needs more renewable power and big energy savings to reduce fossil fuel use. Energy-efficient buildings, better transport systems and consistent price signals for abatement are also needed. Efficient and fair policies can limit costs from the net-zero transition, shield affected communities from hardship, and prepare people for changing climates.

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