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COMMISSION STAFF WORKING DOCUMENT

2024 Country Report - Ireland

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on the economic, social, employment, structural and budgetary policies of Ireland

{COM(2024) 607 final} - {SWD(2024) 600 final}



European
Commission

Ireland

2024 Country Report

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at 25**



ECONOMIC AND EMPLOYMENT SNAPSHOT

Ireland's economic momentum softens

Ireland's economy slowed after years of strong growth, mostly due to the weakening performance of multinationals⁽¹⁾. The country entered a technical recession in 2023, recording a decline in GDP of 3.2% year-on-year. Multinationals headquartered in Ireland were the driving force behind this decline. Their exports were hit by global headwinds and a normalisation following a period of rapid growth. This was primarily driven by a fall in previously buoyant chemical and pharmaceutical exports and contract manufacturing. By contrast, computer services exports continued to grow markedly.

Domestic economic activity continued to rise. Despite the overall slowdown in the economy, modified domestic demand, an indicator that aims to exclude the effects of multinationals, increased in 2023. This rise was driven by consumer spending and housing investment. The strong domestic activity is also reflected in the continued growth of sectors not dominated by multinationals, whose value added increased by 3.8% in 2023. The overall economic outlook for 2024 and 2025 is positive, with real GDP growth projected to be 1.2% in 2024 and 3.6% in 2025.

Economic disparities persist

Ireland's economy is split between domestic and multinational corporations that have varying levels of economic performance. Although Ireland maintains robust overall productivity, domestic firms lag behind foreign companies and top-performing Member States. In the past year, labour productivity among foreign companies was seven times more than in domestic companies. Foreign companies also significantly outpaced domestic companies in terms of gross value added, employment and wage growth.

Ireland's reliance on the multinational sector for economic development exposes concentration risks in the economy. Potential shocks to a limited number of large firms pose disproportionate risks to the Irish economy, creating potential vulnerabilities for overall exports, employment and tax receipts. The divergent economic performance also has implications for regional development; there are clear disparities between regions hosting multinationals (in and around Dublin and Cork) and regions dominated by Irish-owned small and medium-sized companies (SMEs). These areas are falling behind in productivity, innovation and competitiveness (see Annex 17).

Challenges related to labour market dynamics, financial hurdles and innovation constraints weigh particularly on the growth of SMEs. As employment growth by multinationals outpaces that of the domestic sector, labour shortages become more acute for Irish SMEs. Half of them cite difficulties in recruiting skilled workers as their most

⁽¹⁾ The cut-off date for the data used to prepare the 27 Country Reports was 15 May 2024.

Box 1: Ireland's competitiveness in brief

Ireland's competitiveness is strong, facilitated by a supportive business environment, high levels of education, skills and digitalisation and low regulatory burden. Ireland's ability to attract foreign direct investment has contributed to the country having one of the highest levels of productivity in the EU.

However, competitiveness challenges remain:

- **Delays in critical infrastructure delivery, particularly in housing, energy and water**, which leads to significant capacity constraints and hampers the integration of new renewables production and industrial processes. This is exacerbated by a scarcity of labour and skills resources, particularly in the construction sector and the green skills domain, which are essential for the expansion of Ireland's infrastructure.
- **High concentration of economic activity in a few multinational-dominated sectors** that leaves Ireland exposed if there is a downturn in those sectors.
- **Low levels of investment in research and development** that hold back innovation, productivity and growth, especially in the domestic industry.

pressing issue ⁽²⁾. Moreover, high business costs hinder SMEs ability to grow, dragging down Ireland's competitiveness. The investment rate of Irish firms lags behind that of EU peers ⁽³⁾. In addition, Irish SMEs are not as engaged internationally as their EU counterparts: two out of three Irish SMEs are not involved in exporting activities, limiting their growth potential. Furthermore, Ireland's R&D expenditure remains below the EU average, with a significant proportion of public support channelled through tax credits, which only reaches a small proportion of all SMEs.

Labour and housing shortages persist

The jobs market remains tight, and employment is at record highs. The unemployment rate remained low at 4.4% in April 2024. Employment growth was supported by an increase in labour supply, driven by both an increase in female participation and inward migration. Job vacancies recorded a significant rise during

the pandemic but have progressively reduced to low levels since. Nevertheless, skills and labour shortages are still a pressing challenge for employers across different skill categories and sectors. Real wages have yet to rebound from the sharp decline in 2022, which continued in 2023 due to persistent inflation. The expected increase in real wages in the forecast period needs to be accompanied by higher productivity growth and/or changes in profit margins to maintain competitiveness. The national minimum wage (EUR 12.70 per hour) in 2024 remains below 60% of the median wage (EUR 13.80 per hour). The national minimum wage is to be set at 60% of the median wage from 2026 ⁽⁴⁾.

Low housing affordability and availability remains a societal challenge and reduces Ireland's attractiveness as an economic hub. Due to persistent shortfalls in housing supply, house and rental prices have increased by around a third over the past 4 years, almost double the rate of inflation, and starting from already high levels. This affects younger

⁽²⁾ Eurobarometer, 2023, SMEs and skills shortages.

⁽³⁾ Economic Insights, spring 2024.

⁽⁴⁾ The civil society organisation 'Living Wage Technical Group,' using the 'minimum essential standard of living' approach, has estimated the 2024 living wage to be EUR 14.80 per hour.

Box 2: UN Sustainable Development Goals (SDGs)

Ireland performs well in all SDGs related to macroeconomic stability and productivity (SDGs 8 and 16) and fairness (SDGs 3, 4, 10) but is moving away from the targets for some SDGs related to environmental sustainability (SDGs 6, 11, 15).

Although there are signs of catching up, Ireland is far below the EU average on climate action (SDG 13) due to the high net greenhouse gas emissions per capita and persistent net greenhouse gas emissions from the land use and forestry sector (see Annex 1).

age groups in particular ⁽⁵⁾. It also makes it difficult for companies, particularly SMEs, to attract skilled labour and for the public sector to maintain sufficient workforce levels for e.g. education and healthcare services and construction (see Annex 10). Shortages of social housing and low affordability have resulted in long waiting lists ⁽⁶⁾ and an over-reliance on short-term rent supplement solutions for around 75 000 families not on these waiting lists. Homelessness has reached record levels (see Annex 14).

The construction sector's capacity is increasing. New housing completions continued to increase in 2023 to almost 33 000 and are expected to rise further. While this meets the targets set in the 2021 'housing for all' plan, the real need for yearly housing completions is probably closer to 50 000 due to higher than expected demographic growth, also due to the war in Ukraine. Raising construction capacity further will take time and test the limits of Ireland's infrastructure, particularly transport, water supply and the energy grid.

Disadvantaged groups continue to face significant labour market challenges, even though they are an untapped source of labour. The disability employment gap stood at 37% in 2022, the highest in the EU ⁽⁷⁾ (see Social

Scoreboard in Annex 14). Evidence also points to a high post-secondary education gap for people with a disability. The employment situation and poverty risks of single parents have improved in the last decade. However, Ireland still has the highest proportion of single parents living in low work-intensity households and one of the lowest shares of poor children aged less than 3 years in childcare in the EU. Similarly, the 2022 census confirmed that Roma and Traveller communities remain marginalised, with unemployment rates of 17% and 61% respectively.

Pensions and healthcare remain challenges for the public finances

Ireland's public finances are solid, but long-term risks remain prominent. Ireland's government balance saw another surplus in 2023, reaching 1.7% of GDP (2.9% of GNI* ⁽⁸⁾). Short-term fiscal risks are low, after several years of above-expectations tax revenues, which led the Government to create two new funds. The first, the Future Ireland Fund, is designed to future-proof public finances. The second, the Infrastructure, Climate and Nature Fund, will support capital

⁽⁵⁾ ESRI, 2023, Housing Affordability across Europe: mixed picture for Ireland.

⁽⁶⁾ Housing Agency, 2023, Summary of Social Housing Assessments.

⁽⁷⁾ As mentioned in the Joint Employment Report 2024, the prevalence of disability based on the GALI

concept and the disability employment gap based on EU-SILC data are negatively correlated, (2022 Pearson correlation coefficient = -0.5).

⁽⁸⁾ Modified GNI (GNI*) excludes globalisation effects and reflects the income standards of Irish residents more accurately than GDP. See Central Statistics Office, '[modified GNI](#)' for more detail.

investment in infrastructure during economic downturns and helps meet climate and environmental goals. The government balance continues to be skewed by windfall corporation tax revenues associated with multinationals. Gross government debt was 44.4% of GDP at the end of 2023, equivalent to around 76% of GNI*. The tax base remains narrow, and there is scope to expand waste disposal taxes (see Annex 19). Ireland is also taking steps to safeguard the pension system against the cost of rising life expectancy and low fertility rates.

The healthcare system continues to face long-standing issues. Since primary care coverage is not universal, the hospital sector continues to be under pressure. Healthcare spending exceeds budgeted amounts regularly.

IMPLEMENTATION OF KEY REFORMS AND INVESTMENTS USING EU INSTRUMENTS

Funding from the Recovery and Resilience Facility (RRF) and cohesion policy is mutually reinforcing Ireland's efforts to boost its competitiveness and foster sustainable growth. In addition to the EUR 914 ⁽⁹⁾ million of RRF funding, cohesion policy provides Ireland with EUR 988.6 million in the 2021-2027 period. Support from these two instruments combined represents around 0.4% of the country's 2023 GDP (around 0.7% of GNI*) compared to the EU average of 5.38% of GDP (see Annex 4).

Under its recovery and resilience plan (RRP), Ireland has launched important policy measures that are expected to improve the country's competitiveness. Ireland has already undertaken investments in skills, education, retrofitting of public buildings and sustainable mobility. It is now investing in the green and digital transformation of businesses and R&D.

The implementation of Ireland's recovery and resilience plan is underway, however timely completion requires increased efforts. Ireland has submitted one payment request, corresponding to 40 milestones and targets in the plan, for which the Commission adopted a positive preliminary assessment on 21 May 2024 (see Annex 3). Emerging delays in the implementation of the RRP measures could put in jeopardy the timely and effective implementation of the plan. The timely submission of the forthcoming payment request will be important for catching up.

⁽⁹⁾ On 22 March 2024, Ireland submitted a revised plan, including a RepowerEU chapter, which is under assessment. The Commission has given a positive assessment on 21 May 2024. If this assessment is endorsed by the Council, the amount of grants available under the RRF would increase to EUR 1.15 billion.

Cohesion policy funding helps reduce the country's territorial and social disparities and tackling growth and competitiveness challenges. Under the 2014-2020 cohesion programming period, support focused on the areas of energy efficiency, R&D and measures to get unemployed people into work. In the current 2021-2027 programming period, support is focused on upskilling, social inclusion, reducing child poverty, strengthening measures to get unemployed people into work, research and innovation, energy efficiency and urban development.

Promoting business competitiveness

As part of the RRP, Ireland is implementing measures to improve businesses' digitalisation. At least 720 companies will receive support to develop an online presence, digitalise products and processes and use digital technologies to develop new markets and business models. Four digital innovation hubs, also with the support of the digital Europe programme, will facilitate the digital transformation of SMEs and public sector organisations. These measures promote the adoption of digital technologies by companies, increasing their competitiveness at home and abroad.

The RRF and cohesion policy funds support measures that aim to reduce regulatory barriers for SMEs and improve innovation. Through the RRF, Ireland has introduced an 'SME Test' in policymaking. This test requires government departments to assess the burden of any new regulation or legislation on SMEs. This helps identify efficient, alternative policy options and ensures that SMEs do not face unnecessary or disproportionate regulatory obstacles when

starting up and growing their businesses. This is complemented by the European Regional Development Fund (ERDF). The Fund strengthens regional innovation ecosystems by building capacity in newly created 'technological universities', which function as regional knowledge hubs.

Enabling high-quality education and research

Ireland is improving access to upskilling and reskilling of the workforce, especially for the skills needed for the green transition. Through the RRP, Ireland strengthened the SOLAS 'Skills to Compete' programme and established the 'Green Skills' training programme, aiming to enrol at least 81 250 participants. This is complemented by the European Social Fund, under which almost 320 000 participants benefitted from social inclusion and skilling measures in the 2014-2020 period. Among them were over 59 000 long-term unemployed who participated in labour market activation programmes.

The RRP includes several measures to improve digital literacy. This includes introducing high-speed broadband connectivity in 990 primary schools, funding ICT infrastructure in 3 923 primary and post-primary schools and lending laptops to around 21 500 disadvantaged further and higher education students. The RRP also supports technological universities in reforming their study programmes and training staff, with a focus also on digital transformation and learning for sustainability.

R&D programmes help address the lack of public investment in innovation in the Irish economy. As part of the National Grand Challenges programme, calls for funding for research and innovation projects supporting the green and digital transitions are being launched. This is complemented by the ERDF, which will boost research and innovation in 8 280 enterprises.

Unlocking investments for the green transition

Ireland is taking steps to improve waste water infrastructure and energy efficiency through retrofitting while addressing energy poverty. Ireland is improving waste water infrastructure in its RRP by upgrading waste water treatment plants whose discharges have been identified as putting significant pressure on receiving water bodies. Through the RRP, Ireland has started retrofit projects for selected public sector buildings to reduce public bodies' energy consumption and related energy costs. The Sustainable Energy Authority of Ireland pathfinder projects will enable Ireland to apply the experience and lessons learnt to similar retrofit actions. While the measures included in the Irish RRP focus on increasing energy efficiency in the public sector, the ERDF complements this by targeting residential homes, and specifically targets households in, or at risk of, energy poverty. By 2029, the ERDF programmes will have supported energy efficiency improvements in more than 26 600 Irish households since its commencement in 2014.

The RRP helps to enable a greener, more efficient transport system, improving sustainable mobility for commuters in the Cork area. In 2023, Ireland signed a contract for delivery of zero-emission rolling stock for Irish Rail. The measure will further modernise Kent Station and install a second rail track on the Glounthaune to Middleton line. This will increase the frequency, connectivity and reliability of the rail network. By providing zero-emission trains, the RRP will also reduce pollution in the Cork area.

The RRF and cohesion policy funds support measures aimed at addressing the need for climate adaptation while ensuring a just transition for citizens. The RRP aims to change land use from peat extraction to carbon sequestration for approximately 33 000 hectares. The plan will also contribute to increasing

biodiversity, support bog amenities and ecosystems and improve water quality and flood risk management. As part of the RRP, Ireland has already started a preliminary study on peatland rehabilitation. The Just Transition Fund supports Ireland's Midland Region by addressing the impact of transitioning away from peat for electricity generation. This includes financing the reskilling of workers and promoting entrepreneurship for economic reconversion. Additionally, the natural capital financing facility of the European Investment Bank provides funding for Peatland Finance Ireland. This organisation is tasked with setting up and ensuring the management of a national financing system for peatland restoration in Ireland.

has also helped to identify the most suitable reforms and investments linked to the REPowerEU chapter and supported many other policy areas.

Improving macroeconomic stability and the quality of public institutions

Ireland continues to reform its corporate tax rules to make sure corporations pay their fair share of taxes. The RRP reform aims to limit opportunities for aggressive tax planning, particularly double non-taxation of interest, royalties and dividends. This will create a fairer environment that ensures a level playing field for local and foreign businesses.

The RRF aims to strengthen anti-money laundering supervision. One of the key reforms of the Irish RRP includes increased inspections of trust and company service providers, a sectoral risk assessment of such providers and new legislation providing further sanctioning powers to non-financial sector supervisors. This will ensure better prevention of financial crimes and enhance financial transparency and accountability.

The technical support instrument (TSI) has helped strengthen the public administration. In 2023, the support provided to Ireland focused on strengthening policy development and foresight in public services and helping Ireland to implement specific reforms and investments included in the RRP. The TSI

FURTHER PRIORITIES AHEAD

Ireland faces additional challenges related to: (i) climate action and energy; (ii) environmental sustainability; (iii) green skills shortages; (iv) social and affordable housing supply; (v) pension sustainability; (vi) healthcare cost-effectiveness; (vii) domestic SME productivity; and (viii) labour market integration of disadvantaged groups. Tackling these challenges will help increase Ireland's long-term competitiveness and ensure the resilience of its economy. It will also help make further progress in achieving the SDGs.

It is important that, where possible, the identified challenges are addressed both at national and regional level to reduce regional disparities and improve the administrative and investment capacity in a balanced way across the country.

Accelerating climate action

Achieving the objectives set in Ireland's climate law and EU legislation needs substantial efforts. Increased international obligations are especially demanding for Ireland because Irish emissions have increased by 9.2% from 1990 to 2022⁽¹⁰⁾, notwithstanding a fall between 2021 and 2022. This underlines the need to accelerate the implementation of Ireland's climate policies, which are currently insufficient to meet its climate obligations. Under the revised Effort Sharing Regulation, Ireland is required to reduce emissions by 42% by 2030 compared to 2005 levels. In its draft national energy and climate plan, Ireland has indicated a projected decrease in emissions by 28.9%

⁽¹⁰⁾ Environmental Protection Agency, 2023, Provisional 1990-2022 Inventory Data.

in 2030 compared to a 2005 baseline. This falls short of the 2030 target by 13.1 percentage points. Ireland could intensify efforts to bolster the adoption of renewable energy and advance climate mitigation strategies, including strengthening energy efficiency policies.

Curbing emissions from agriculture and land use as well as the transport sector is of utmost importance. Agricultural emissions accounted for 38% of total greenhouse gas emissions in 2023, and transport accounted for 17.7%⁽¹¹⁾. The sectoral carbon budgets and the 2023 climate action plan envisaged a reduction in agricultural emissions by 25% in 2030 compared to 2018. Although these emissions decreased by 1.4% between 2021 and 2022, they are still higher than the proposed pathway set out in the 2023 climate action plan. To stay within the first carbon budget allocation, the agricultural sector will need to reduce emissions by 8.3% annually⁽¹²⁾. More broadly, it is essential to keep reducing environmental pressure from agricultural practices including by increasing the proportion of organic agriculture and improving soil health. Overall, Ireland's land use, land-use change and forestry (LULUCF) sector currently releases more greenhouse gases than it stores. Current efforts in forestry and peatland rehabilitation, in particular, are crucial to improve the LULUCF sector's contribution to carbon sequestration. Decarbonising the transport sector is also essential for Ireland to meet its the sectoral target of reducing transport emissions by 50% in 2030⁽¹³⁾ compared to 1990

⁽¹¹⁾ According to the draft national energy and climate plan submitted in January 2024.

⁽¹²⁾ According to the draft national energy and climate plan submitted in January 2024.

⁽¹³⁾ OECD, 2022, Redesigning Ireland's Transport for Net Zero.

Accelerating the deployment of electric vehicles and their recharging infrastructure is critical. Ireland has only about 2 680 publicly accessible charging points, one for every 23 electric vehicles, which is far fewer than the EU average of one for every 10. However, additional charging points are not likely to be enough to meet the transport emissions targets. There is a need in parallel for a rapid reduction in travel demand and a shift to more sustainable modes of transport if Ireland is to achieve its decarbonisation targets and obligations.

To reach the goal of 80% renewable electricity by 2030 while ensuring a stable energy supply will require new capacity, a more flexible grid and increased interconnectivity. The power system continued to show signs of vulnerability in 2023, primarily due to the high dependency on imported gas and inadequate capacity. In contrast with EU trends, retail energy prices in Ireland did not fall in 2023, staying at more than twice their pre-energy crisis average. Ireland made significant progress in the installed capacity of renewables, increasing renewable capacity by 6% in 2023. It also took meaningful steps to implement reforms to accelerate deployment of offshore renewables. However, the share of renewable energy in the gross final energy consumption remains below the EU average (13.1% compared to 23% in 2022). The deployment of wind and solar photovoltaic systems could be further accelerated through faster permitting, identifying acceleration areas, introducing fast-track procedures and simplifying grid connection processes. Other measures are needed to enable the further electrification of the economy. These include major upgrades to the transmission, distribution and storage infrastructure and flexibility options, such as demand response and behind-the-meter mechanisms to absorb the large volumes of variable generation and avoid curtailment.

Energy efficiency is key to achieving climate objectives, but improvements are lagging. Energy consumption keeps increasing year-on-year, but improved

energy efficiency would help break this trend. Primary energy consumption increased by 4.5% between 2012 and 2021, increasing 3.7% year-on-year from 2021 to 2022. Despite comprehensive energy saving programmes, Ireland's efforts, especially in the residential sector, fall short of the trajectory needed to achieve its 2030 reduction target. The 2024 climate action plan sets out a range of measures to improve energy efficiency and demand management across the economy, such as increasing retrofits and the uptake of heat pumps beyond the initial 2023 plan. The successful implementation of existing plans and accelerated action and ambition will be crucial in meeting energy efficiency targets.

Addressing skill shortages in the green sector

Skills and labour shortages have increased in the green sector in recent years, creating bottlenecks in the transition to a net-zero economy. According to the European Labour Authority, labour shortages were reported in 2023 for several occupations that required specific skills or knowledge for the green transition, including civil engineers, plumbers and pipe fitters, and other engineering professionals. Labour shortages are especially prevalent in the construction and engineering sectors⁽¹⁴⁾. By 2030, between 2 600 and 2 800 skilled workers will be needed for the deployment of wind and solar energy.

Teacher shortages have become more acute, and there are problems with retaining new teachers, who often work on part-time and temporary contracts (see Annex 15). Recent research has highlighted that school infrastructural deficits and teacher supply problems are affecting the capacity of schools to offer diverse curricular- and extra-curricular

⁽¹⁴⁾ European Labour Authority, 2024, Report on labour shortages and surpluses 2023.

activities⁽¹⁵⁾. Persistent teacher shortages may ultimately damage the quality of education.

Improving environmental sustainability

Ireland's recycling, composting and anaerobic digestion levels are still insufficient (see Annex 9). Municipal waste generation in Ireland is higher than the EU average, with 40.8% of it recycled in 2020. However, the country is at risk of missing the 2025 targets for municipal waste recycling. In addition, the circular material use rate reached 1.8% in 2022 but remains significantly lower than the EU average (11.5%). There is still an estimated annual investment gap of EUR 827 million over 2021-2027 to achieve the circular economy transition. More investment is required in areas such as eco-design, repair, reuse and remanufacturing and in infrastructure for separating waste collection and treatment, and recycling facilities.

An ageing infrastructure and decades of underinvestment have adversely affected water services. Only 62.3% of the population was connected to secondary wastewater treatment in 2020. Leakage rates are among the highest in the EU, and drinking water supply is a persistent problem in parts of the country. Substantial investment is needed to tackle these shortcomings: the annual investment gap in water management is expected to reach EUR 910 million over 2021-2027⁽¹⁶⁾. While below the EU average, nitrate pollution of waterbodies caused by intensive agriculture has been on an increasing trend. The Irish authorities are encouraged to continue their current efforts to implement the derogation decision on

nitrates and to support farmers in the transition, especially the most vulnerable ones. Water extraction and changes to waterbodies are not sufficiently monitored due to the absence of a proper legal framework.

Tackling persistent shortages of social and affordable housing

Scaling up construction of social housing under the 'housing for all' plan faces significant challenges. A total of 8 110 new social housing units were built in 2023. This was an increase compared to the 7 433 social housing units built in 2022 but below the target of 9 100. This was mainly due to labour shortages in construction and higher input and financing costs. Existing social housing construction schemes, often managed at local level, have faced difficulties scaling up. In response, the government has further increased investment in acquisition and leasing of existing housing stock to use for social housing. While this is necessary to reduce the number of households at risk of homelessness due to private landlords selling rental properties, further increases in the government's role in homebuilding will be important, particularly when high interest rates hamper the viability of construction projects.

Although social housing remains high on the government's agenda and record levels of funding have been allocated, the implementation of reforms to increase construction capacity will be crucial. To increase the number of newly built social housing units, the government made additional investments. These included increasing staffing for local authorities and doubling the capitalisation of the Land Development Agency to unlock land not being developed by the private sector and build on state lands (also part of the RRP). These investments were accompanied by reforms aiming to speed up planning, through the 2023 Planning and Development Bill, and construction through standardised designs and layouts

⁽¹⁵⁾ Carroll, E., S. McCoy and K. Ye (forthcoming May 2024). Embracing Diversity in all its Forms.

⁽¹⁶⁾ European Commission estimates based on OECD, EIB and Eurostat data.

and modern methods of construction. While it is too early to evaluate how sufficient these measures are, fully implementing them is critical to helping alleviate Ireland's housing crisis. In addition, effective construction project management in the context of scarce labour resources as well as measures to train skilled construction workers, or source workers from abroad, will be essential.

Graph 3.1: Social housing new build

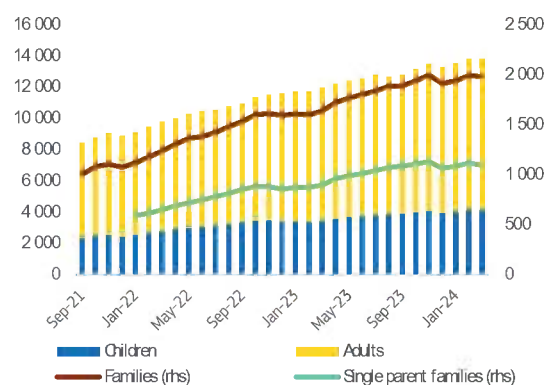


New build excludes housing units delivered through leasing or acquisition of existing properties.

Source: Department of Housing, Local Government and Heritage (DHLGH)

Disadvantaged groups affected by the housing crisis experience record homelessness, including children and single parents. There are programmes to provide supported housing for homeless people, such as Housing First, the youth homelessness strategy and pilots for homeless families with complex needs. However, since the introduction of the overarching 'housing for all' plan in September 2021, child and family homelessness almost doubled, with single-parent families particularly affected (see Graph 3.2). There is scope for more preventive action, such as the 'cost rental tenant in situ scheme', which allows tenants to stay in rentals bought by the Housing Agency. As termination of the rental contract is a prime cause of homelessness, strengthening tenants' rights will be key to stop the increase.

Graph 3.2: Homelessness



Does not include: those staying with family and friends; rough sleepers; homeless families temporarily accommodated in housing owned by their local authority; women and children in domestic violence shelters; asylum seekers in transitional accommodation

Source: DHLGH

The availability of affordable housing further deteriorated due to persistent supply shortages combined with higher than expected population growth. While preliminary evidence for Dublin shows a net increase in new rental stock, the availability of affordable housing remains key for social cohesion and competitiveness. To make more affordable housing available, the government has started to build cost-rental homes⁽¹⁷⁾. However, it will take several years until enough homes are built to have a measurable impact on the rental supply. For first-time home buyers, a set of demand-based measures are in place, such as the help-to-buy and shared-equity schemes. While these have the potential to bridge the affordability gap, close monitoring of these demand-based measures will be crucial so that they do not risk becoming a recurrent expenditure and can be reduced when affordability improves.

⁽¹⁷⁾ Cost rental is a new form of public housing in Ireland, targeting people who are above the social housing income limits. It aims to deliver rents at least 25% below the market level.

Addressing the costs of ageing on the sustainability of the pension system

The impact of an ageing population on the costs of the pension system needs continued attention. The proportion of the population aged over 64 relative to that of working age (20-64) is projected to more than double between 2022 and 2070. Correspondingly, pension system costs are estimated to increase by 2.8 percentage points of GDP in the same timeframe. This ranks Ireland among the EU Member States with the highest future cost of ageing⁽¹⁸⁾. To deal with rising life expectancy and low fertility rates, an independent actuarial review, commissioned by Ireland's Department of Social Protection, suggested increasing pay related social insurance (PRSI) rates by 0.08 percentage points per year up to 2076.

Ireland is taking steps to safeguard the pension system although the chosen solution may raise concerns about fairness between generations and require further action in the future. Having decided not to raise the pension age, Ireland opted to tackle the pressures of an ageing population through higher pension contributions. Starting in 2024, Ireland introduced incremental increases in the pay related social insurance (PRSI) rate. The rate will increase by 0.1 percentage points from 1 October 2024 and further increases in all rates (are expected between 2025 and 2028. This is in line with the suggestions in the independent actuarial review. However, further measures might be needed as of 2029, as changes to PRSI rates will be reviewed again between 2027 and 2028, informed by an updated actuarial review.

Besides the increase in social insurance contributions, Ireland is implementing

other measures set out in the *Roadmap for Pensions 2018 to 2023*. A 10-year phased transition to the 'total contributions approach' is legislated to begin in 2025. Recommended by an independent pensions commission, this approach is meant to ensure a link between pension benefits and the number of years people have worked and paid contributions. Moreover, implementation of an automatic enrolment retirement savings system is under way to address the low proportion of employees with supplementary pensions, particularly in the private sector. The enrolment of the first participants is expected by early 2025. However, there are reports of widespread scepticism in the pension industry and among business leaders about this timeline.

Making healthcare more cost-effective and accessible

The public healthcare system has continued capacity constraints and no universal coverage, and there are concerns related to its fiscal sustainability. Ireland is the only country in the EU without universal primary care coverage, and this puts more pressure on hospitals. In 2023, measures to extend primary care coverage were implemented. A strategic policy project has been initiated for 2024 and 2025 to review existing eligibility requirements and to develop policy options for a universal healthcare plan. An implementation strategy is, therefore, yet to be drawn up. Budgetary overspends are another recurring concern, and an inter-departmental 'productivity and savings' taskforce has been announced to look at how to improve the health system's cost-effectiveness without affecting the quality or accessibility of care. The need for better cost-effectiveness is underscored by the fact that population-ageing is expected to put pressure on the healthcare system: this is projected to lead to a 1.5 percentage point increase in public healthcare expenditure as a percentage of GDP by

⁽¹⁸⁾ European Commission and EPC, 2024, Ageing Report.

2070 for Ireland compared to a 0.4 percentage point increase for the EU ⁽¹⁹⁾.

Action to address long-standing challenges in healthcare is under way although it has shown no results. Several measures included in the RRP have the potential to improve the cost-effectiveness of the healthcare system. One of these measures is the new consultant contract of March 2023, which aims to contribute to achieving a universal single-tier healthcare system.

Realising the full potential of Ireland's economy

The productivity of multinational and domestic companies differs significantly. Multinationals maintain significantly higher levels of productivity due to frontier innovation and economies of scale. Total factor productivity, as measured by multifactor productivity, in sectors dominated by domestic firms has fallen short compared to Ireland's euro area counterparts ⁽²⁰⁾. Stronger links between domestic firms and multinationals through enhanced information flow, collaborative innovation incentives, labour mobility initiatives and policies aimed at supply-chain integration can elevate the productivity of domestic firms. More direct funding for R&I would also boost this productivity. Improving the technical capabilities of SMEs and removing barriers to the take-up of R&D tax credit would help SMEs contribute to and benefit from the wider economic ecosystem, strengthening the resilience of the economy.

High business costs impede the growth of domestic industry and SMEs. The issue of high legal expenses persists. High litigation costs, coupled with delays and uncertainties brought by the legal system,

contribute to the high indirect expenses businesses face. High housing costs are also a significant concern. They threaten Ireland's attractiveness as a location for investment by raising business costs through wage increases and limiting labour mobility. The banking sector is still highly concentrated, with only three retail banks in operation, warranting close monitoring over the level of competition. Ireland has one of the highest borrowing costs in the eurozone, despite a recent decrease in the premium over the euro area. Lending by Irish banks to SMEs has decreased by over two thirds since 2012, with 40% of Irish SMEs having no banking debt ⁽²¹⁾. Although traditional financing for SMEs has been reduced, this gap has been partially bridged by extensive government support, particularly from agencies like Enterprise Ireland, and by non-bank lenders operating in Ireland. Compared to the EU average, a low proportion of Irish firms report financial constraints or barriers to investment caused by the limited availability of financing.

People with a disability, single parents and Travellers still experience difficulties in finding work or training courses. Since 2022, the public employment services have reached out proactively to clients with a disability to raise awareness of available support. There is ample evidence of discrimination in the workplace, and the jobs available to people with disabilities to lift them out of poverty. Fear of losing their disability benefits frequently prevents people from starting a job ⁽²²⁾, which would require a potential adjustment to allowances. Evidence suggests that the expansion of the National Childcare Scheme led to a substantial and gradual reduction in poverty risks facing single parents and enabled more of them to take up work. There is still significant room to further improve access to childcare for children living in poverty, including those in single-parent

⁽¹⁹⁾ European Commission and EPC, 2024, Ageing Report.

⁽²⁰⁾ IMF, 2023, Boom Without Disease? Impact of Multinational Enterprises in Ireland.

⁽²¹⁾ Central Bank of Ireland, 2024, Quarterly Bulletin 2024Q1.

⁽²²⁾ European Disability Forum, 2023, 7th European Human Rights Report.

households, and give better social support to single parents seeking education and training. For Travellers, increased adaptation of employment schemes for the needs of the Traveller community, administrative capacity, and a more rigorous monitoring of the commitments in the pathways to work 2021-2025 strategy will be crucial. Integrating these groups will contribute to Ireland's growth and help the country reach its 2030 national employment and poverty reduction targets.

Box 3: The mid-term review of cohesion policy funds for Ireland

The mid-term review of cohesion policy funds is an opportunity to assess cohesion policy programmes and tackle emerging needs and challenges in EU Member States and their regions. Member States are reviewing each programme taking into account, among other things, the challenges identified in the European Semester, including in the 2024 country-specific recommendations. This review forms the basis for a proposal by the Member State for the definitive allocation of 15% of the EU funding included in each programme.

Ireland has made progress in implementing the cohesion policy programmes and the European Pillar of Social Rights, but challenges remain as outlined in this report, including Annexes 14 and 17. In particular, Ireland continues to register major economic and social disparities between metropolitan areas and other areas in the country, especially in the Northern and Western Region. There are major weaknesses in getting vulnerable groups into work or training; they face disproportionately high poverty risks and social exclusion. Against this background, it is important to continue implementing the planned priorities, with particular attention to: (i) strengthening innovation ecosystems at regional level to contribute to reducing the innovation gap between the Northern and Western Region and the other two regions; (ii) facilitating access to social services and developing targeted skills measures, particularly for the most vulnerable, to address labour shortages, poverty and social exclusion.

Ireland could benefit from the opportunities provided by the Strategic Technologies for Europe Platform (STEP) ⁽²³⁾ initiative to boost investment in digitalisation and digital transformation in SMEs and research for clean energy technologies. This is in line with the Irish smart specialisation strategy and Ireland's industry 4.0 strategy 2020-2025 and the establishment of future manufacturing Ireland.

⁽²³⁾ [Regulation \(EU\) 2024/795](#)

KEY FINDINGS

With its wide policy scope, Ireland's recovery and resilience plan (RRP) includes measures to address a series of structural challenges, in synergy with other EU funds, including cohesion policy funds, by:

- **Contributing to the green transition** with investments in retrofitting, peatland rehabilitation, wastewater management systems as well as Improving permitting, planning and grid connection procedures to accelerate the roll-out of renewables;
- **Improving macroeconomic stability and the quality of public institutions** by tackling aggressive tax planning and strengthening anti-money laundering supervision;
- **Promoting the country's fiscal sustainability** by improving the cost-effectiveness of the healthcare system and ensuring that the expected increase in pension costs is financed in a structural and transparent manner;
- **Enabling high-quality education and research** by increasing the level of public R&D investment, reducing the dependence on tax credits, and developing digital skills and the connectivity of schools.
- **Supporting disadvantaged communities** by developing skills and increasing the supply of social and affordable housing;

The implementation of Ireland's recovery and resilience plan is facing increasing challenges. Renewed efforts are key for a successful implementation of all the measures of Ireland's recovery and resilience plan by August 2026.

Beyond implementing these reforms and investments in the RRP and cohesion programmes, Ireland would benefit from:

- **Further addressing the healthcare system's fiscal sustainability and equity;**
- **Boosting productivity and competitiveness of domestic businesses**, in particular SMEs, by pursuing diversification strategies to mitigate potential risks associated with adverse developments in the multinational sector.
- **Fostering investment in electricity networks**, flexibility and storage capacity to absorb a higher share of renewable energy and to mitigate increasing electricity demand;
- **Addressing skills shortages**, especially in the construction and green sectors;
- **Addressing teacher shortages in the school education sector;**
- **Reinforcing efforts to increase the supply of social and affordable housing;**
- **Supporting employment and social inclusion of disadvantaged groups;**
- **Improving the LULUCF sector's contribution to carbon sequestration.**
- **Making the waste management system more efficient**, reducing waste production, increasing reused and recycled content, improving waste separation and achieving lower incineration rates;
- **Boosting investment in water infrastructure.**

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CROSS-CUTTING INDICATORS

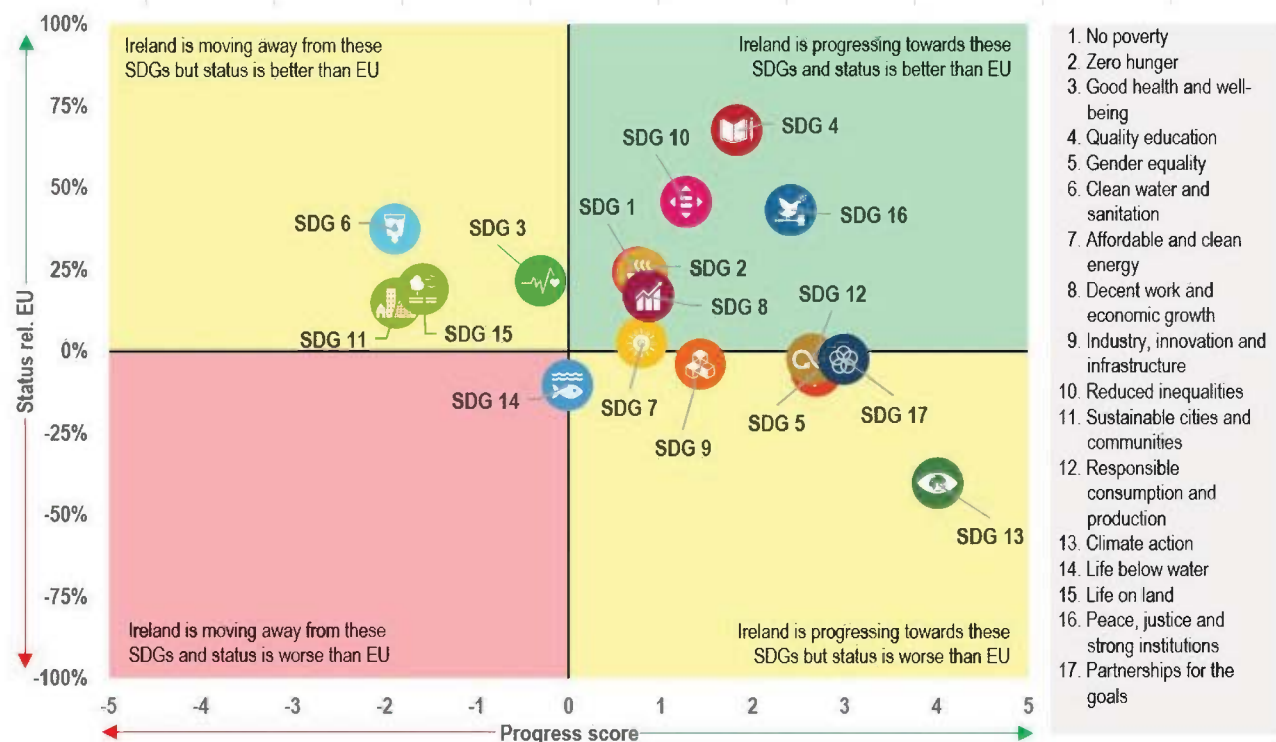
ANNEX 1: SUSTAINABLE DEVELOPMENT GOALS

This Annex assesses Ireland's progress on the Sustainable Development Goals (SDGs) along the four dimensions of competitive sustainability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change and the environmental crisis, while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on the SDGs in an EU context.

While Ireland is improving on most SDG indicators related to *environmental sustainability*, it is moving away from SDG 6 (Clean water and sanitation), SDG 11 (Sustainable cities and communities) and SDG 15 (Life on land). It needs to catch up

with the EU average in some areas, in particular on SDG 13 (Climate action). Ireland has made progress on climate mitigation (SDG 13), including on net greenhouse gas emissions (from 14.8 tonnes per capita in 2017 to 13.1 tonnes in 2022). Nevertheless, it remains above the EU average (7.3 tonnes per capita in 2022). Net greenhouse gas emissions from land use, land use change and forestry slightly decreased (from 73.8 tonnes CO₂ eq. per km³ in 2017 to 56.9 tonnes in 2022) but remain significantly higher than the EU average (-56 tonnes in 2022). Ireland's ambitions in tackling climate challenges increased with its climate action plan, which was introduced in 2019 and is updated annually. On waste generation and management (SDG 12), the circular material use rate increased marginally, from 1.7% in 2017 to 1.8% in 2022, but remains significantly lower than the EU average (11.5% in 2022). Ireland's material footprint increased (from 12 tonnes per inhabitant in 2017 to 12.1 tonnes in

Graph A1.1: Progress towards the SDGs in Ireland



For detailed datasets on the various SDGs, see the annual Eurostat report '[Sustainable development in the European Union](#)'; for details on extensive country-specific data on the short-term progress of Member States: [Key findings – Sustainable development indicators – Eurostat \(europa.eu\)](#). A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past 5 years. The calculation does not take into account any target values as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.

Source: Eurostat, latest update of 25 April 2024. Data refer mainly to the period 2017-2022 or 2018-2023. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

2022), below the EU average (14.9 tonnes in 2022). On SDG 11 (Sustainable cities and communities), Ireland is moving away from the goal due to a deterioration in the quality of life in both cities and communities. The severe housing deprivation rate increased from 1.2% of the population in 2015 to 1.4% in 2020, although this is lower than the EU average of 4.3%. There is a higher percentage of the population reporting crime, violence or vandalism in their area (11.3%; compared to the EU average of 10.7% in 2020). Ireland also has a lower percentage of the population connected to at least secondary wastewater treatment (SDG 6; 62.3% in 2021 compared to an EU average of 80.9%). Ireland is also moving away from the target for SDG 15 (Life on land), as the percentage of total land area covered by forests decreased from 22.4% in 2015 to 19.0% in 2018, significantly below the EU average at 43.5%.

Ireland performs well on SDG indicators related to *fairness* (SDGs 1, 3, 4, 5, 7, 8, 10).

The country performs better than the EU average and is making progress on several indicators related to inequality, poverty, inclusive growth, health and well-being, education and gender equality. Ireland performs well on the severe material and social deprivation rate (SDG 1), which fell from 6.9% of the population in 2017 to 5.8% in 2022 compared to the EU average of 6.7% in 2022. However, the in-work at-risk-of-poverty rate increased slightly from 5.1% in 2017 to 5.3% in 2022. The country has improved on several fairness-related indicators such as self-reported unmet needs for medical care (SDG 3; 2.6% in 2022, against 2.8% in 2017) and early leavers from education and training (SDG 4; 4.0% in 2023, against 5.0% in 2018). There was a deterioration in the percentage of the population unable to keep their homes adequately warm (SDG 7; 7.2% in 2022, against 4.4% in 2017, as compared to the EU average of 9.3% in 2022), while the long-term unemployment rate improved (SDG 8; 1.1% in 2023, against 2.1% in 2018). In addition, the income share of the bottom 40% of the population (SDG 10) increased to 22.8% of income in 2022 from 21.3% in 2017.

Ireland is improving on some SDGs on *productivity* (SDGs 4 and 8), but still needs to catch up with the EU average for others (SDG 9 - Industry, innovation and

infrastructure). The percentage of adults with at least basic digital skills (SDG 4; 72.9% in 2023) is above the EU average (55.5%), although this leaves almost one third of the population aged 16-74 lacking basic digital skills. On SDG 8 (Decent work and economic growth), the percentage of young people neither in employment, education nor training aged 15-29 dropped from 11.6% in 2017 to 8.5% in 2023 and is below the EU average (11.2% in 2023). However, Ireland is lagging behind the EU average on SDG 9 (Industry, innovation and infrastructure). The Irish research and innovation system suffers from underinvestment, as shown by gross domestic expenditure on R&D (SDG 9; 0.96% of GDP in 2022 compared to the EU average of 2.24%). However, when looking at modified gross national income (GNI*), R&D expenditure (1.78% of GNI*)⁽²⁴⁾ was nearer the EU average (see Annex 11). The Irish RRP includes significant reforms and investments to boost innovation and digital skills. In particular, the National Grand Challenges programme incentivises innovation in green, climate and digital solutions.

Ireland performs well on SDG indicators related to *macroeconomic stability* (SDGs 8 and 16).

The country performs well on SDG 8 (Decent work and economic growth) and SDG 16 (Peace, justice and strong institutions). Ireland has enjoyed significant growth in real GNI* per capita (SDG 8; from EUR 41 361 in 2017 to EUR 48 660 in 2022). Despite these improvements, Ireland still faces challenges. The Irish RRP includes several measures on taxation and pensions. As for access to justice (SDG 16), Ireland has improved on general government total expenditure on law courts, up from EUR 131.6 in 2017 to EUR 157.9 per capita in 2022 (EU average EUR 113.7 in 2022).

As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other annexes.

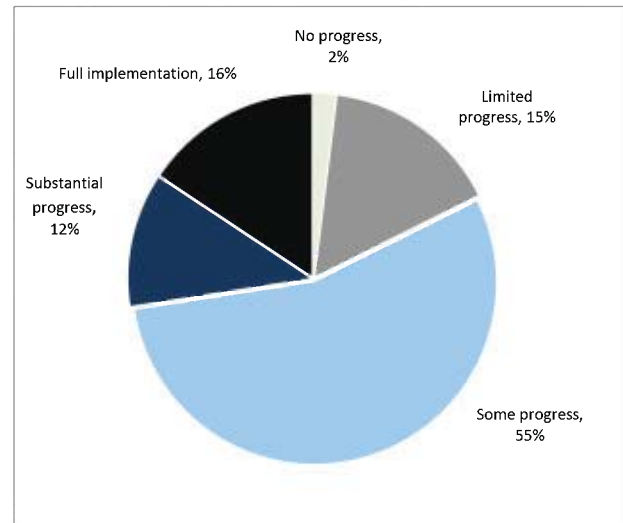
⁽²⁴⁾ GNI* excludes globalisation effects and more accurately reflects the income standards of Irish residents than GDP. See Central Statistics Office, [Modified GNI](#) for more details.

ANNEX 2: PROGRESS IN THE IMPLEMENTATION OF COUNTRY-SPECIFIC RECOMMENDATIONS



The Commission has assessed the 2019-2023 country-specific recommendations (CSRs)⁽²⁵⁾ addressed to Ireland as part of the European Semester. These recommendations concern a wide range of policy areas that are related to 15 of the 17 Sustainable Development Goals (see Annexes 1 and 3). The assessment considers the policy action taken by Ireland to date⁽²⁶⁾ and the commitments in its recovery and resilience plan (RRP)⁽²⁷⁾. At this stage of RRP implementation, 83% of the CSRs focusing on structural issues from 2019-2023 have recorded at least 'some progress', while 15% recorded 'limited progress' (see Graph A2.1). As the RRP is implemented further, considerable progress in addressing structural CSRs is expected in the years to come.

Graph A2.1: Ireland's progress on the 2019-2023 CSRs (2024 European Semester)



Source: European Commission.

⁽²⁵⁾ 2023 CSRs: [EUR-Lex - 32023H0901\(07\) - EN - EUR-Lex \(europa.eu\)](#)

2022 CSRs: [EUR-Lex - 32022H0901\(07\) - EN - EUR-Lex \(europa.eu\)](#)

2021 CSRs: [EUR-Lex - 32021H0729\(07\) - EN - EUR-Lex \(europa.eu\)](#)

2020 CSRs: [EUR-Lex - C:2020:282:TOC - EN - EUR-Lex \(europa.eu\)](#)

2019 CSRs: [EUR-Lex - 32019H0905\(07\) - EN - EUR-Lex \(europa.eu\)](#)

⁽²⁶⁾ Including policy action reported in the national reform programme and in Recovery and Resilience Facility (RRF) reporting (twice a year reporting on progress in implementing milestones and targets and resulting from the payment requests assessment).

⁽²⁷⁾ Member States were asked to effectively address in their RRP's all or a significant subset of the relevant country-specific recommendations issued by the Council. The CSR assessment presented here considers the degree of implementation of the measures included in the RRP and of those carried out outside of the RRP at the time of assessment. Measures laid down in the Annex of the adopted Council Implementing Decision on approving the assessment of the RRP, which are not yet adopted or implemented but considered credibly announced, in line with the CSR assessment methodology, warrant 'limited progress'. Once implemented, these measures can lead to 'some/substantial progress or full implementation', depending on their relevance.

Table A2.1: Summary table on 2019-2023 CSRs

Ireland	Assessment in May 2024*	RRP coverage of CSRs until 2026	Relevant SDGs
2019 CSR 1	Limited Progress		
<i>Achieve the medium-term budgetary objective in 2020. Use windfall gains to accelerate the reduction of the general government debt ratio.</i>	Not relevant anymore	Not applicable	SDG 8, 16
<i>Limit the scope and number of tax expenditures, and broaden the tax base.</i>	Limited Progress		SDG 8, 10, 12
<i>Continue to address features of the tax system that may facilitate aggressive tax planning, and focus in particular on outbound payments.</i>	Limited Progress	Relevant RRP measures being planned as of 2020	SDG 8, 16
<i>Address the expected increase in age-related expenditure by making the healthcare system more cost-effective and by fully implementing pension reform plans.</i>	Some Progress	Relevant RRP measures being planned as of 2020, 2021	SDG 3, 8
2019 CSR 2	Some Progress		
<i>Provide personalised active integration support and facilitate upskilling, in particular for vulnerable groups and people living in households with low work intensity.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 4, 8, 10
<i>Increase access to affordable and quality childcare.</i>	Substantial Progress		SDG 4, 5
2019 CSR 3	Some Progress		
<i>Focus investment-related economic policy on low carbon and energy transition, the reduction of greenhouse gas emissions,</i>	Substantial Progress	Relevant RRP measures being planned as of 2020, 2021, 2022	SDG 7, 9, 10, 11, 13
<i>sustainable transport,</i>	Some Progress	Relevant RRP measures being planned as of 2022	SDG 10, 11
<i>water,</i>	Some Progress	Relevant RRP measures being planned as of 2021, 2022	SDG 6, 10, 11, 12, 15
<i>digital infrastructure</i>	Some Progress	Relevant RRP measures being planned as of 2021, 2022, 2023	SDG 9, 10, 11
<i>and affordable and social housing, taking into account regional disparities.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 1, 2, 8, 10, 11
<i>Implement measures, including those in the Future Jobs strategy, to diversify the economy and improve the productivity of Irish firms – small and medium enterprises in particular - by using more direct funding instruments to stimulate research and innovation</i>	Some Progress	Relevant RRP measures being planned as of 2022	SDG 8, 9
<i>and by reducing regulatory barriers to entrepreneurship.</i>	Some Progress	Relevant RRP measures being planned as of 2022	SDG 8, 9
2020 CSR 1	Some Progress		
<i>Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment.</i>	Not relevant anymore	Not applicable	SDG 8, 16
<i>Improve accessibility of the health system and strengthen its resilience, including by responding to the health workforce's needs and ensuring universal coverage for primary care.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 3
2020 CSR 2	Substantial Progress		
<i>Support employment through developing skills.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 4
<i>Address the risk of digital divide, including in the education sector.</i>	Full Implementation	Relevant RRP measures being planned as of 2021	SDG 4
<i>Increase the provision of social and affordable housing.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 1, 2, 8, 10
2020 CSR 3	Some Progress		
<i>Continue to provide support to companies, in particular SMEs, especially through measures ensuring their liquidity.</i>	Substantial Progress		SDG 8, 9
<i>Front-load mature public investment projects</i>	Full Implementation	Relevant RRP measures being planned as of 2021, 2022	SDG 8, 16
<i>and promote private investment to foster the economic recovery.</i>	Some Progress	Relevant RRP measures being planned as of 2021, 2022	SDG 8, 9
<i>Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy,</i>	Substantial Progress	Relevant RRP measures being planned as of 2020, 2021, 2022	SDG 7, 9, 13
<i>sustainable public transport,</i>	Some Progress	Relevant RRP measures being planned as of 2022	SDG 11
<i>water supply and treatment,</i>	Some Progress	Relevant RRP measures being planned as of 2021, 2022	SDG 6, 12, 15
<i>research and innovation</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 9
<i>and digital infrastructure.</i>	Some Progress	Relevant RRP measures being planned as of 2021, 2022, 2023	SDG 9
2020 CSR 4	Limited Progress		
<i>Broaden the tax base.</i>	Limited Progress		SDG 8, 10, 12
<i>Step up action to address features of the tax system that facilitate aggressive tax planning, including on outbound payments.</i>	Limited Progress	Relevant RRP measures being planned as of 2020	SDG 8, 16
<i>Ensure effective supervision and enforcement of the anti-money-laundering framework as regards professionals providing trust and company services.</i>	Some Progress	Relevant RRP measures being planned as of 2021	SDG 8, 16

(Continued on the next page)

Table (continued)

2021 CSR 1	Not relevant anymore		
In 2022, pursue a supportive fiscal stance, including the impulse provided by the Recovery and Resilience Facility, and preserve nationally financed investment.	Not relevant anymore	Not applicable	SDG 8, 16
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	Not relevant anymore	Not applicable	SDG 8, 16
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the national budget, and to the quality of budgetary measures in order to ensure a sustainable and inclusive recovery. Prioritise sustainable and growth-enhancing investment, in particular investment supporting the green and digital transition.	Not relevant anymore	Not applicable	SDG 8, 16
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy and sustainability of health and social protection systems for all	Not relevant anymore	Not applicable	SDG 8, 16
2022 CSR 1	Some Progress		
In 2023, ensure that the growth of nationally financed primary current expenditure is in line with an overall neutral policy stance, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine. Stand ready to adjust current spending to the evolving situation.	No Progress	Not applicable	SDG 8, 16
Expand public investment for the green and digital transitions, and for energy security taking into account the REPowerEU initiative, including by making use of the Recovery and Resilience Facility and other Union funds.	Full Implementation	Not applicable	SDG 8, 16
For the period beyond 2023, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions.	Full Implementation	Not applicable	SDG 8, 16
Address the expected increase in age-related pension expenditure by ensuring the fiscal sustainability of the state pension system.	Some Progress	Relevant RRP measures being planned as of 2020	SDG 8
2022 CSR 2			
Proceed with the implementation of its recovery and resilience plan, in line with the milestones and targets included in the Council Implementing Decision of 8 September 2021.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports.		
Submit the 2021-2027 cohesion policy programming documents with a view to finalising their negotiations with the Commission and subsequently starting their implementation.	Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.		
2022 CSR 3	Limited Progress		
Focus efforts on boosting the circular economy. In particular, develop both infrastructure and policies to prevent waste and increase reused and recycled content, and develop a more effective system for the separate collection of recyclable waste, including biodegradable waste.	Limited Progress	Not applicable	SDG 6, 12, 15
Promote safer and cleaner waste water circuits.	Limited Progress	Relevant RRP measures being planned as of 2022	SDG 6, 12, 15
2022 CSR 4	Some Progress		
Reduce overall reliance on fossil fuels.	Some Progress	Relevant RRP measures being planned as of 2020 and 2021	SDG 7, 9, 13
Accelerate the deployment of renewable energy, in particular offshore wind, including by introducing reforms to improve the efficiency of the planning and permit system, particularly by reducing the duration of procedures.	Substantial Progress	Not applicable	SDG 7, 8, 9, 13
Upgrade energy infrastructure, including for storage and enhance the stability of the grid.	Some Progress	Not applicable	SDG 7, 9, 13
Ensure the fast implementation of deep building retrofits.	Some Progress	Relevant RRP measure being planned as of 2021	SDG 7
Accelerate the electrification of transport, including by installing charging facilities.	Some Progress	Relevant RRP measure being planned as of 2021	SDG 11
2023 CSR 1	Substantial Progress		
Wind down the emergency energy support measures in force, as soon as possible in 2023 and 2024. Should renewed energy price increases necessitate new or continued support measures, ensure that these are targeted at protecting vulnerable households and firms, fiscally affordable, and preserve incentives for energy savings	Full Implementation	Not applicable	SDG 8, 16
While maintaining a sound fiscal position in 2024,	Full Implementation	Not applicable	SDG 8, 16
preserve nationally financed public investment and ensure the effective absorption of RRF grants and other EU funds, in particular to foster the green and digital transitions.	Full Implementation	Not applicable	SDG 8, 16
For the period beyond 2024, continue to pursue investment and reforms conducive to higher sustainable growth and preserve a prudent medium-term fiscal position.	Full Implementation	Not applicable	SDG 8, 16
Ensure the fiscal sustainability of the state pension system by specifying its financing arrangements.	Some Progress	Relevant RRP measures being planned as of 2020	SDG 8, 10, 12
2023 CSR 2			
Significantly accelerate the implementation of its recovery and resilience plan, also by ensuring sufficient resources, and swiftly finalise the addendum and the REPowerEU chapter with a view to rapidly starting its implementation. Proceed with the speedy implementation of cohesion policy programmes, in close complementarity and synergy with the recovery and resilience plan.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports. Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.		

(Continued on the next page)

Table (continued)

2023 CSR 3	Limited Progress		
Accelerate investments to speed up the circular economy. Further develop both waste treatment infrastructure associated with the higher steps of the waste hierarchy and economic instruments to prevent waste and increase reused, remanufactured and recycled content. Develop a more effective system for the separate collection of recyclable waste, including biodegradable waste. Divert waste from landfilling and incineration, with a particular focus on plastic and biowaste.	Limited Progress		SDG 12
Increase efforts to accelerate investments in the drinking water and wastewater infrastructure.	Limited Progress	Relevant RRP measures being planned as of 2022	SDG 6
2023 CSR 4	Some Progress		
Reduce overall reliance on fossil fuels	Some Progress	Relevant RRP measures being planned as of 2020 and 2021	SDG 7, 9, 13
Focus efforts on improving flexibility in the electricity system and improving energy system integration. Design and implement a dedicated strategy for the development of demand-side response and accelerate the roll-out of smart metering infrastructure and smart grid technologies.	Some Progress		SDG 7, 8, 9, 13
Streamline the planning and permitting framework for renewables, storage and grid connectors.	Substantial Progress		SDG 7, 9, 11, 13
Implement additional measures that support energy efficiency in private and public buildings to reduce energy bills and energy system costs.	Some Progress	Relevant RRP measure being planned as of 2021	SDG 7, 9, 13
Accelerate the installation of public charging points for zero-emission vehicles.	Some Progress	Relevant RRP measure being planned as of 2021	SDG 7, 9, 13
Step up policy efforts aimed at the provision and acquisition of skills and competences needed for the green transition.	Some Progress	Relevant RRP measure being planned as of 2021	SDG 4

Note:* See footnote ⁽⁵¹⁾.

** RRP measures included in this table contribute to the implementation of CSRs. Nevertheless, additional measures outside the RRP are necessary to fully implement CSRs and address their underlying challenges. Measures indicated as 'being implemented' are only those included in the RRF payment requests submitted and positively assessed by the European Commission.

Source: European Commission



This Annex provides a snapshot of Ireland's implementation of its recovery and resilience plan (RRP), past the mid-way point of the Recovery and Resilience Facility's (RRF) lifetime. The RRF has proven central to the EU's recovery from the COVID-19 pandemic, helping speed up the twin green and digital transition, while adapting to geopolitical and economic developments, and strengthening resilience against future shocks. The RRF is also helping implement the UN Sustainable Development Goals and address the country-specific recommendations (see Annex 2).

The RRP paves the way for disbursing up to EUR 914 million⁽²⁸⁾ in grants under the RRF over the 2021-2026 period, representing 0.2% of Ireland's GDP⁽²⁹⁾. As of 15 May, Ireland still had its full RRF allocation available, which will be disbursed after the assessment of fulfilment of the 105 milestones and targets⁽³⁰⁾ included in the Council Implementing Decision⁽³¹⁾ (CID).

Ireland's progress in implementing its plan is recorded in the Recovery and Resilience Scoreboard⁽³²⁾. The scoreboard gives an overview of the progress made in implementing the RRF as a whole. Graph A3.1 shows the current state of play as reflected in the scoreboard.

Ireland has submitted a REPowerEU chapter to be added to its RRP, to phase out its dependency on Russian fossil fuels, diversify its energy supplies and produce

more clean energy in the coming years. The chapter, once approved by the Council, will contribute to ensuring the supply of affordable, secure, and sustainable energy.

Table A3.1: Key facts of the Irish RRP

Initial plan CID adoption date	8 September 2021
Scope	Revised plan with REPowerEU chapter under assessment
Last major revision	8 December 2023
Total allocation	EUR914 million in grants (0.2% of 2023 GDP)
Investments and reforms	14 investments and 10 reforms
Total number of milestones and targets	105
Fulfilled milestones and targets	40 (38% of total)

Note: If the REPowerEU chapter is positively approved by the Council on 21 June 2024, the total number of milestones and targets will increase to 118 with five additional investments and one additional reform. The fulfilled milestones and targets reflect the positive preliminary assessment by the Commission on 21 May.

Source: RRF Scoreboard.

The plan has a strong focus on the green transition, dedicating 42% of the available funds to measures that support climate objectives and 34.2% of its total allocation to support the digital transition. It also retains a strong social dimension with social protection measures, especially related to support for reskilling and upskilling of workers and social and affordable housing.

With one payment request recently assessed, the implementation of Ireland's RRP is underway. However, timely completion requires increased efforts. Ireland's first payment request received a positive preliminary assessment by the Commission on 21 May 2024. The EFC has four weeks from the date of the positive assessment to deliver its opinion. The payment to Ireland can take place following the EFC's opinion, and the adoption of a payment decision by the Commission. The related 40 milestones and targets cover reforms and investments such as an amended carbon tax, high-speed connectivity and ICT infrastructure for schools and investments to support upskilling and reskilling of workers. Table A3.2 highlights some relevant measures that will be implemented before 2026 to keep making

⁽²⁸⁾ On 22 March 2024, Ireland submitted a revised plan, including a REPowerEU chapter, which is under assessment. The Commission has given a positive assessment on 21 May 2024. If this assessment is endorsed by the Council, the amount of grants available under the RRF would increase to EUR 1.15 billion.

⁽²⁹⁾ GDP information is based on 2023 data. Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en

⁽³⁰⁾ A milestone or target is satisfactorily fulfilled once a Member State has provided evidence to the Commission that it has reached the milestone or target and the Commission has assessed it positively in an implementing decision.

⁽³¹⁾ <https://data.consilium.europa.eu/doc/document/ST-11046-2021-ADD-1/en/pdf>

⁽³²⁾ https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/country_overview.html

Ireland’s economy greener, more digital, inclusive, and resilient.

Table A3.2: Measures in Ireland's RRP
Upcoming reforms and investments
<ul style="list-style-type: none">• Community Health Networks• Online census response pilot• Upgrade of the Gounthaune-Midleton rail line
<i>Source:</i> FENIX.



EU funding instruments provide considerable resources for recovery and growth to the EU Member States. In addition to the EUR 914.4 million of Recovery and Resilience Facility (RRF) funding described in Annex 3, EU cohesion policy funds⁽³³⁾ provide EUR 988.6 million to Ireland for the 2021-2027 period⁽³⁴⁾. Support from these two instruments combined represents around 0.38% of the country's 2023 GDP, compared to an EU average of 5.38% of GDP⁽³⁵⁾. Cohesion policy supports regional development, economic, social and territorial convergence and competitiveness through long-term investment in line with EU priorities and with national and regional strategies.

During the 2014-2020 programming period, cohesion policy funds boosted Ireland's competitiveness, with tangible achievements notably in energy efficiency, research and development, and labour market measures. By the end of the eligibility period in December 2023, 2014-2020 cohesion policy funds⁽³⁶⁾ had made EUR 1.2 billion available to Ireland⁽³⁷⁾, of which EUR 612.1 million has been disbursed since March 2020, when the COVID-19 pandemic began⁽³⁸⁾. CRIL helped mitigate the impact of the COVID-19 pandemic by supporting the purchase of EUR 311 million in personal protective equipment. REACT-EU provided supports for the reopening of schools (EUR 77 million), purchase of laptops for disadvantaged students (EUR 11 million) and following

implementation of CARE and FAST-CARE, supports for Ukrainian refugees (EUR 53 million).- The achievements of cohesion policy funds over the programming period included the improvement of the energy efficiency of more than 20 100 houses, the creation of more than 860 new research jobs, and the creation of more than 1 000 jobs in businesses. In the same period, almost 320 000 participants benefitted from the European Social Fund, among them 59 000 long-term unemployed who participated in labour market activation programmes.

In the current programming period (2021-2027), cohesion policy will provide a further boost to Ireland's competitiveness, to the green transition and to social cohesion, improving the living and working conditions of Ireland's people. In 2021-2027, the European Regional Development Fund (ERDF) will strengthen research and innovation in 8 280 businesses, most of them SMEs, and 6 530 residential dwellings will see their energy performance improved, helping people overcome the challenges of the green transition. Measures funded by the Just Transition Fund (JTF) are estimated to achieve a yearly greenhouse gas emissions reduction of 263 314 tonnes of CO₂ equivalent. Ireland's European Social Fund Plus allocation amounts to over EUR 0.5 billion. More than 90 000 workers and unemployed people will receive support through skilling, social inclusion, and activation measures. Furthermore, 20 000 children will benefit from better social services, while EUR 68 million is allocated for food aid and basic material assistance for those most in need. With this work, cohesion policy substantially contributes to achieving the UN Sustainable Development Goals (SDGs) in Ireland, in particular SDG 1 (No poverty), SDG 9 (Industry, innovation, infrastructure) and SDG 7 (Affordable and clean energy).

Through combined action, cohesion policy and the recovery and resilience plan (RRP) have a mutually reinforcing impact in Ireland. For instance, there are strong complementarities between the RRP and cohesion policy when it comes to retrofitting Ireland's building stock to improve energy efficiency and reduce energy poverty. While the measures included in the Irish RRP focus on increasing energy efficiency in the public sector by upgrading the public building stock,

⁽³³⁾ In 2021-2027, cohesion policy funds include the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund.

⁽³⁴⁾ European territorial cooperation (ETC) programmes are excluded from the figure. In 2021-2027, the total investment, including national financing, amounts to EUR 2.1 billion.

⁽³⁵⁾ RRF funding includes both grants and loans, where applicable. The EU average is calculated for cohesion policy funds excluding ETC programmes. GDP figures are based on Eurostat data for 2022.

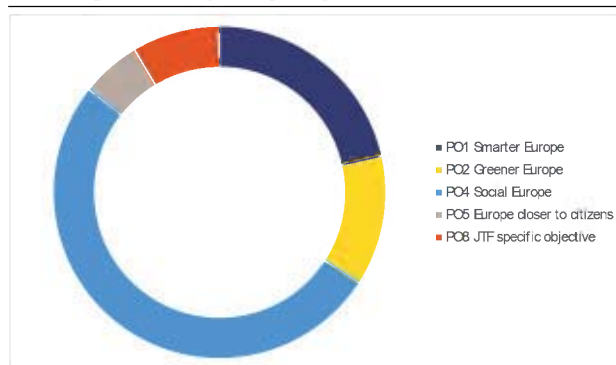
⁽³⁶⁾ In 2014-2020, cohesion policy funds included the European Regional Development Fund, the European Social Fund and the Youth Employment Initiative. REACT-EU allocations are included but ETC programmes are excluded.

⁽³⁷⁾ In 2014-2020, the total investment, including national financing, amounted to EUR 2.1 billion.

⁽³⁸⁾ Cut-off date: 14 May 2024.

the ERDF targets residential homes in or at risk of energy poverty. Furthermore, there are strong complementarities between the reduction of peat-dependence for electricity generation and the rehabilitation of peatlands. RRP measures support changing land use from peat extraction to carbon sequestration while increasing biodiversity, supporting ecosystems, and improving water quality and flood risk management. At the same time, the JTF focuses on Ireland's Midlands by facilitating the phase-out of peat for electricity generation. This is being achieved by supporting the diversification of the local economy, restoring degraded peatlands, regenerating industrial heritage assets, and supporting smart and sustainable transport options. The contribution of cohesion policy and RRP funding by policy objective is illustrated by Graphs A4.1 and A4.2.

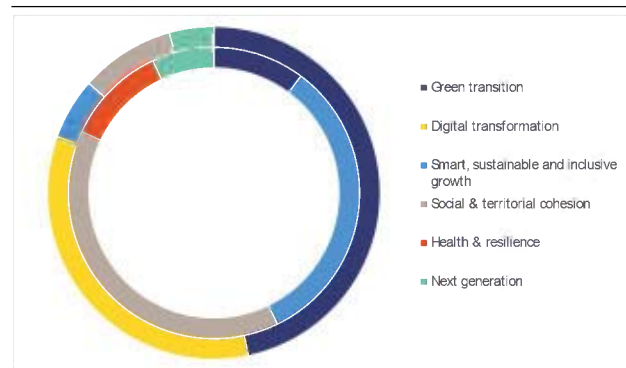
Graph A4.1: Distribution of cohesion policy funding across policy objectives in Ireland



Source: European Commission.

The Technical Support Instrument (TSI) helps Ireland invest in its public administration and create a better enabling environment for EU and national investment. The TSI has funded projects in Ireland to design and implement growth-enhancing reforms since 2018. The support provided included action to contribute to the implementation of the Ireland's Recovery and Resilience Plan; assistance in the supervision of Institutions for Occupational Retirement Provision; transition to a plan-led regime for the development of offshore renewable energy; and support in measuring citizen's satisfaction with key government services. The TSI also helps Ireland to implement specific reforms and investments included in its RRP, such as identifying the most suitable reforms and investments linked to the REPowerEU chapter.

Graph A4.2: Distribution of RRF funding by pillar in Ireland



(1) Each RRP measure helps achieve the aims of two of the six policy pillars of the RRF. The primary contribution is shown in the outer circle while the secondary contribution is shown in the inner circle. Each contribution represents 100% of the RRF funds. Therefore, the total contribution to all pillars displayed on this chart amounts to 200% of the RRF funds allocated to Ireland.

Source: European Commission.

Ireland also receives funding from several other EU instruments, including those listed in Table A4.1. For a more complete view of loans, see Table 4.2 on EU funded loans along with complementary bilateral Member States-funded loans given to Ireland in the context of its past financial assistance programme and their outstanding amounts.

Table A4.1: Support from EU instruments in Ireland

EU grants			
	Amount 2014-2020 (EURmillion)		Amount 2021-2027 (EURmillion)
Cohesion policy	1 165.0		988.6
RRF grants (1)	-		914.4
Public sector loan facility (grant component) (2)	-		6.4
Common agricultural policy (3)	13 600.0		7 535.0
EMFF/EMFAF (4)	147.6		142.4
Connecting Europe Facility (5)	477.7		39.6
Horizon 2020 / Horizon Europe (6)	1 202.7		697.9
LIFE programme (7)	55.6		74.8
Brexit Adjustment Reserve	-		1 015.2
EU guarantees			
	EU Guarantee (EURmillion)		Volume of operations (EURmillion)
European Fund for Strategic Investment 2015-2020 (8)	407.9		1 037.2
InvestEU 2021-2027 (9)	88.1		349.7
EU loans			
	Period	Total amount available (EUR million)	Disbursed amount (EURmillion)
SURE (10)	2020-2022	2 473.9	2 473.9

(1) RRF implementation period is 2021-2026.

(2) The public sector loan facility's programming period is 2021-2025 and the amount reflects the national share in its grant component reserved until the end of the period.

(3) Common agricultural policy programming periods are 2014-2022 and 2023-2027.

(4) EMFF – European Maritime and Fisheries Fund, EMFAF – European Maritime, Fisheries and Aquaculture Fund.

(5) Data on the Connecting Europe Facility covers transport and energy and has a cut-off date of 15 May 2024.

(6) Data on Horizon Europe (2021-2027) has a cut-off date of 13 May 2024.

(7) 2021-2027 data on the LIFE programme has a cut-off date of 15 May 2024.

(8) The amount of the EU guarantee signed under the EFSI Infrastructure and Innovation Window was derived based on the signed amount of the operations and the average internal multiplier, as reported by the EIB (cut-off date is 31 December 2023).

(9) The amount of the EU guarantee and of the volume of operations signed under InvestEU includes the EU compartment as well as the Member State compartments (cut-off date is 31 December 2023).

(10) SURE - European instrument for temporary support to mitigate unemployment risks in an emergency.

Source: European Commission.

Table A4.2: EU / euro area loans under the 2010-2018 financial assistance programmes

EU / euro area loans under the 2010-2018 financial assistance programmes (1)			
	Period	Total amount disbursed (EUR billion)	Outstanding amount (EURbillion)
Member State bilateral loans	2010-2013	4.8	0
European Financial Stability Facility	2010-2013	18.4	18.4
European Financial Stabilisation Mechanism	2011-2014	22.5	19.7

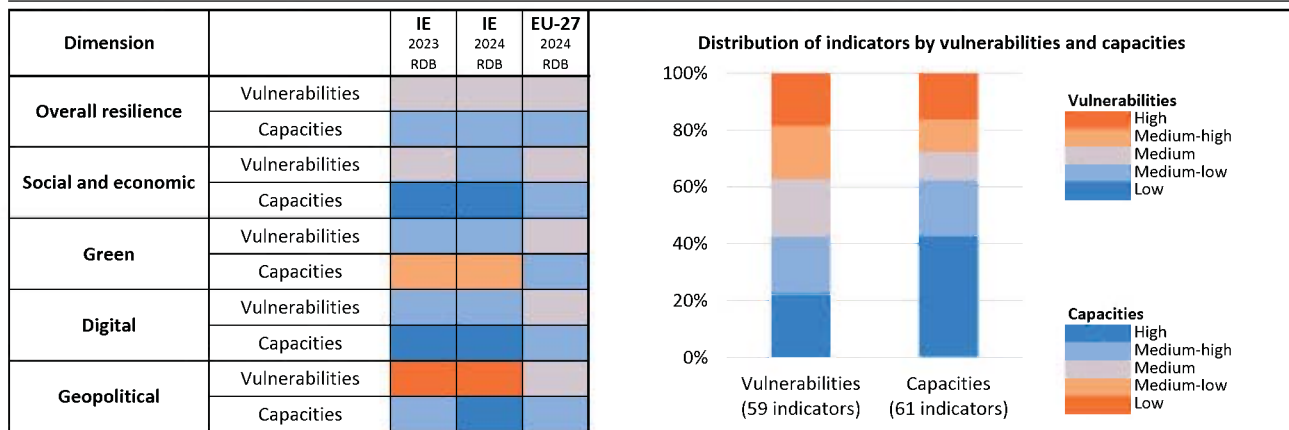
(1) Data include upfront retained amounts (prepaid margin, service fee). The cut-off date is 15 May 2024.

Source: European Commission.



ANNEX 5: RESILIENCE

Table A5.1: Resilience indices across dimensions for Ireland and the EU-27



(1) The synthetic indices aggregate the relative resilience situation of countries across all considered indicators. For an indicator, each country's relative situation in the latest available year is compared with the collection of values of that indicator for all Member States and all years in the reference period.

Source: Resilience Dashboards - version spring 2024, data up to 2022.

This Annex uses the Commission's resilience dashboards (RDB)⁽³⁹⁾ to show Ireland's relative resilience capacities and vulnerabilities⁽⁴⁰⁾ that may be of relevance for societal, economic, digital and green transformations, and for dealing with future shocks and geopolitical challenges.⁽⁴¹⁾

According to the set of resilience indicators in the RDB, Ireland has medium overall vulnerabilities and medium-high overall capacities, both of which have remained stable compared to last year and on a par with the EU average. This is reflected in the distribution of indicators across different resilience categories: about 70% of capacity indicators are in the medium to high category, while over 60% of vulnerability indicators are medium to low.

⁽³⁹⁾ 2020 Strategic Foresight Report: *Charting the course towards a more resilient Europe* (COM(2020) 493), https://ec.europa.eu/info/strategy/strategic-planning/strategic-foresight/2020-strategic-foresight-report/resilience-dashboards_en. Resilience is defined as the ability not only to withstand and cope with challenges but also to undergo transitions, in a sustainable, fair, and democratic manner.

⁽⁴⁰⁾ Vulnerabilities describe features that can exacerbate the negative impact of crises and transitions, or obstacles that may hinder the achievement of long-term strategic goals, while capacities refer to enablers or abilities to cope with crises and structural changes and to manage transitions.

⁽⁴¹⁾ This Annex is linked to Annex 1 on SDGs, Annex 6 on the green deal, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource productivity, efficiency and circularity, Annex 10 on the digital transition and Annex 14 on the European pillar of social rights.

In the social and economic dimension, Ireland's capacities are high, while its vulnerabilities have improved compared to the 2023 RDB, going from medium to medium-low. Some vulnerability indicators have markedly improved, including a fall in the long-term unemployment rate and in the number of young people neither in employment nor in education and training.

In the green dimension, Ireland continues to have medium-low vulnerabilities and medium-low capacities. It has higher vulnerabilities with respect to raw material consumption per capita but has lower vulnerabilities in the area of fossil fuels subsidies. At medium-low, its resilience capacities remain unchanged, below the EU average, but the number of environmental patents per capita have increased compared to the 2023 RDB.

In the digital dimension, there have been no significant changes in Ireland's high capacities and medium-low vulnerabilities relative to the 2023 RDB. It ranks first in the EU for the value of e-commerce sales. That said, it would do well to improve its resilience, particularly by addressing areas where its vulnerability indicators are below the EU average, such as the ICT trade deficit in services.

Ireland's vulnerabilities in the geopolitical dimension remain stable overall, while its capacities have increased from medium-high to high. The country has slightly increased the size of its armed forces, but it

still ranks 25th in the EU. Military expenditure is also still relatively low compared to the rest of the EU. Some capacity indicators have markedly improved, including an increase in the proportion of non-EU citizens in total employment.

Ireland's green transition needs more action in several areas, for example to specify policies to achieve the 2030 effort sharing target and on sustainable water management. This Annex provides a snapshot of climate, energy, and environmental aspects of the transition in Ireland ⁽⁴²⁾.

Ireland's draft updated national energy and climate plan (NECP) contains only partial and preliminary information on the investment needs to achieve its 2030 climate and energy targets for some of the Energy Union dimensions, without a breakdown for each. The plan provides a preliminary analysis of the incremental and redirected capital investment needs for 2022-2030. But it lacks the total need, a yearly breakdown and the public/private split. It provides some information on funding for some measures, but not consistently for all measures, which means it is not possible to identify funding gaps. The plan does not indicate the contribution from the Recovery and Resilience Facility to the funding sources. It also gives unclear information about the creation of a National Energy Efficiency Fund. It does highlight government funding for energy efficiency support programmes in the residential sector via the Sustainable Energy Authority ⁽⁴³⁾.

The policies and measures planned by Ireland to reduce its emissions in the effort sharing sectors are insufficient to reach its 2030 effort sharing target ⁽⁴⁴⁾. Ireland's 2022

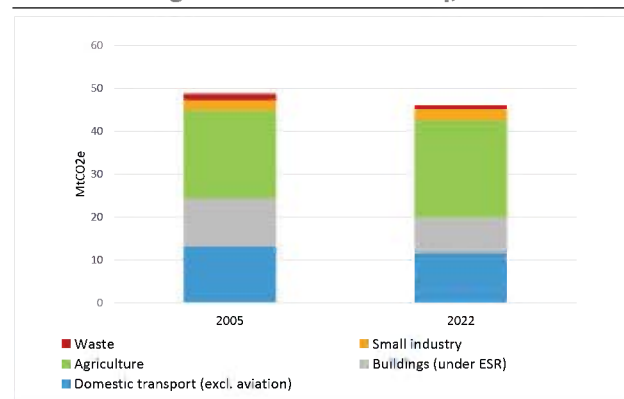
⁽⁴²⁾ This Annex is complemented by Annex 7 on energy transition and competitiveness, Annex 8 on the fair transition to climate neutrality, Annex 9 on resource efficiency, circularity, and productivity, and relevant topics in the other annexes to this country report.

⁽⁴³⁾ See European Commission (2023), Assessment of the draft updated national energy and climate plan of Ireland, https://commission.europa.eu/publications/commission-recommendation-assessment-swd-and-factsheet-draft-updated-national-energy-and-climate-20_en

⁽⁴⁴⁾ The national greenhouse gas emission reduction target is laid down in Regulation (EU) 2023/857 (the Effort Sharing Regulation). The aim is to align the action in the sectors concerned with the objective to reach the EU-level economy-wide target of greenhouse gas reductions of at least 55% compared to 1990 levels. The target also applies to the sectors outside the current EU Emissions Trading System, notably buildings (heating and cooling), road

greenhouse gas emissions from its effort sharing sectors are expected to come in at 3.4% below 2005 levels. Current policies are projected to reduce Ireland's effort sharing emissions by 10.2% from 2005 levels by 2030. The additional policies planned are projected to reduce these emissions by 28.9% from 2005 levels, leaving a gap of 13.1 percentage points to Ireland's effort sharing target to achieve a 42% reduction ⁽⁴⁵⁾. Ireland has enshrined its commitment to achieve climate neutrality by 2050 in legislation ⁽⁴⁶⁾.

Graph A6.1: Greenhouse gas emissions from the effort sharing sectors in Mt CO₂eq, 2005-2022



Source: European Environment Agency.

There is scope for increasing Ireland's target for renewable energy in its final updated NECP ⁽⁴⁷⁾. Ireland's renewable

transport, agriculture, waste, and small industry (known as the effort sharing sectors).

⁽⁴⁵⁾ The effort sharing emissions for 2022 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections on the impact of current policies ('with existing measures', WEM) as per Ireland's draft updated NECP. The plan does not provide emissions projections for the effort sharing sectors 'with additional measures' (WAM). That information is based on the latest data that had to be reported by 15 March 2023 under Article 18 of Regulation 2018/1999 (the Governance Regulation).

⁽⁴⁶⁾ Climate Action and Low Carbon Development Act (amendment) of 2021.

⁽⁴⁷⁾ The EU target set out in the revised Renewable Energy Directive is to have 42.5% of gross final energy consumption coming from by 2030, with the aspiration to reach 45%. The formula in Annex I to Directive (EU) 2023/1791 sets the indicative national contribution for Ireland at 11 230 Mtoe for primary energy consumption and 9 858 Mtoe for final energy consumption.



energy contribution set out in its draft updated NECP, 31.4% by 2030, is significantly below the required 43%. Its energy efficiency contributions of 11.29 Mtoe in primary energy consumption and 10.45 Mtoe in final energy consumption for 2030 set in the draft updated NECP are aligned with the contribution required under the Energy Efficiency Directive.

Road transport is by far the main form of transport in Ireland and is slowly shifting to sustainable forms⁽⁴⁸⁾. At 1.5 % in 2022, the share of battery electric vehicles in Ireland's car passenger fleet is above the EU average (1.2 %). However, it has only about 2 680 publicly accessible charging points, or one for every 23 vehicles, far fewer than the EU average of 1:10. With passenger cars used for 86 % of distances travelled, Ireland is in line with the EU average. Its low share of rail transport, 2 %, is offset by the use of buses and coaches, used for 13 % of distances travelled. Freight is transported almost entirely by road, with negligible use of other modes. Road congestion puts a high burden on commuter time⁽⁴⁹⁾. With only 53 km, Ireland has the lowest share of electrified railways in the EU.

Efforts are underway in Ireland to step up action to reach the 2030 target for net carbon removals through land use, land-use change and forestry (LULUCF). Specifically, it is working to safeguard and restore peatlands and improve soil management. Ireland's LULUCF sector currently releases more greenhouse gases than it stores, as it has a relatively small forested area and high emissions from grasslands on organic soils. For reaching the 2030 LULUCF target, a reduction of the sector's greenhouse gas emissions by 626 kt CO₂eq is yet missing⁽⁵⁰⁾.

Climate adaptation is fully embedded in Ireland's climate policy framework, but the

⁽⁴⁸⁾ Unless otherwise indicated, data in this section refer to 2021. See European Commission, 2023, [EU transport in figures, transport.ec.europa.eu](https://transport.ec.europa.eu/figures).

⁽⁴⁹⁾ In 2020, road vehicle drivers experienced peak-hour delays of 36 hours on average in Ireland (EU average: 29 hours).

⁽⁵⁰⁾ National LULUCF targets of the Member States in line with Regulation (EU) 2023/839.

measures are still incremental. Its 2023 climate action plan identifies the most immediate risks such as floods, droughts and storms, and sets out a range of adaptation-specific measures. A draft National Adaptation Framework has been completed and was subject to public consultation in Q1 2024 with a view to publication by end Q2 2024. Ireland's Climate Change Advisory Council has nevertheless warned that human and financial resources for adaptation are inadequate and there is a lack of information on the costs of and investment requirements for adaptation. It also indicates that measures to build resilience are still small-scale, reactive and incremental. Ireland's climate protection gap⁽⁵¹⁾ is low, indicating a good share of insurance coverage, including insurance against floods and coastal floods⁽⁵²⁾.

Ireland is significantly behind schedule on implementing EU law on water policy.

Ireland's river basin status and water services give cause for concern. While the water exploitation index plus (WEI+) has remained far below the threshold value indicating water scarcity (on average 0.7% over 2000-2020 with the worst seasonal water scarcity conditions only 1 % in Q4 of 2019) Droughts affected on average 0.2% of land in Ireland over 2000-2020, but the high value of 5.3% in 2022 suggests the emergence of recurrent seasonal droughts. 46 % of all surface water bodies achieved a good or high ecological status, and only 1% failed to achieve a good chemical status (against the EU averages of 31 % and 35 %). Ireland would benefit from improving its wastewater treatment and drinking water infrastructure. Public water-service infrastructure in Ireland is older than the EU average. About 50% of Ireland's urban waste waters are still not collected or treated in compliance with the Urban Waste Water Treatment Directive. Leakage rates are some of the highest in Europe and drinking water supplies are still breaching the law in parts of the country. Ireland has yet to deliver its long-promised regime for controlling water abstraction and regulating hydromorphological changes to water bodies.

⁽⁵¹⁾ On the climate protection gap, see the annotations to Table A6.1.

⁽⁵²⁾ Also see the Commission's 2023 [recommendation](#) on Ireland's progress on climate adaptation.

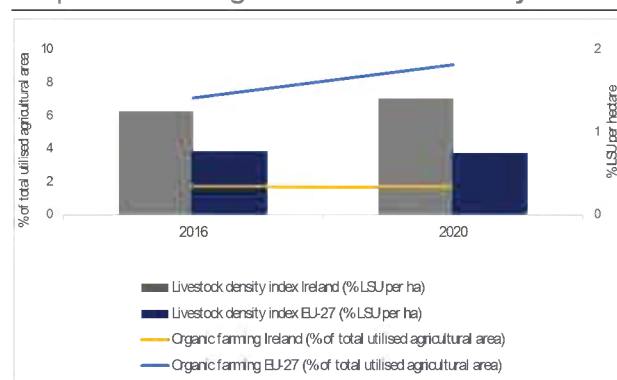
Nature in Ireland is under pressure, resulting in biodiversity loss and habitat deterioration. Ireland has protected almost 14% of land and over 9% of its marine area as Natura 2000 sites. In 2022/23 Ireland significantly increased the protection of its marine area from 2.3% to 9.2%. According to the report on the conservation status of habitats and species covered by Article 17 of the Habitats Directive in 2013-2018, only 15% of habitats and 56% of species were in a good conservation status⁴. The common farmland bird index was one of the highest in Europe. However, significant challenges remain for Ireland to protect birds effectively in special protection areas and in the wider countryside. Many species are in serious decline and some breeding species are even at serious risk of extinction. Urgent action is needed to remedy concerns about breeding waders and farmland birds and to finalise work on identifying and designating marine protected sites. With less than 2.5% of Ireland's marine waters protected, this is one of the poorest records in the Natura 2000 network. It is also necessary to reverse declines in the condition of land sites under the Habitats Directive. Only 15% of habitats are in a favourable condition and over half are in ongoing decline. Peat bogs are just one example of this decline.

Food waste production remains relatively high while composting and digestion levels could be improved. With 150 kg/person of food waste in 2021, Ireland was above the EU average of 131 kg/person. Most of it was generated from household activities, processing and manufacturing and restaurants and food service. Composting and digestion of municipal waste is insufficient and reached 70 kg/person in 2020, representing 10.9% of total municipal waste.

There is scope to increase the share of more sustainable agricultural practices, such as organic farming. In Ireland, the annual output of the agricultural sector fell to EUR 8.5 billion in 2023, having constantly increased since 2015⁽⁵³⁾. The rate of adoption of organic farming practices remains rather low. The share of land under organic farming reached 2% of utilised agricultural area in

2021, against the EU average of 9.1%⁽⁵⁴⁾. Under the 2023-2027 CAP Strategic Plan Ireland aims to more than triple the area of agricultural land farmed organically from 2% to 7.5% and has considerably increased financial support to this end. Additionally, 2030 target in Ireland's Climate Action Plan 2023 is 10% of land area to be organic. It can contribute achieving the EU goal of at least 25% by 2030.

Graph A6.2: Changes in livestock density.



Livestock unit (LSU)/ha of UAA: it measures the stock of animals (cattle, sheep, goats, equidae, pigs, poultry and rabbits) converted in LSUs per hectare of UAA.

Source: Eurostat.

Ireland's livestock farming sector is moving to more intensive practices. While most EU Member States lowered livestock density between 2010 and 2020, Ireland increased its livestock density index from 1.23% in 2010 to 1.41%, above the EU average of 0.75%. Intensive poultry and pig farming are the industrial activities that put the highest burden on the environment in terms of ammonia emissions into the air. The agricultural sector was responsible for generating 99.2 % of all ammonia emissions, against the EU average of 90.7 %.

Nitrates pollution of water bodies and soil degradation due to intensive agriculture is a matter of concern. The latest figures (2017) for the gross nitrogen balance on agricultural land in Ireland indicate an average surplus of 62.3 kg of nitrogen per hectare per year, higher than in the previous year. The nitrate content in groundwater is below the EU average at 13.3 versus 20.5 mg nitrates/l and 1.5% of groundwater monitoring stations show levels above the maximum 50 mg nitrates/l. The gross phosphorous balance was 23.1 kg/ha in

⁽⁵³⁾ Due to e.g. higher production costs and weather conditions.

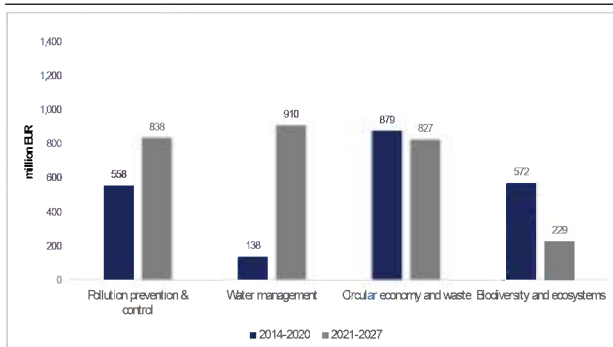
⁽⁵⁴⁾ In 2020.

2017. Based on the best available information on soil health issues at Member State level used in the impact assessment for the Soil Monitoring Law⁽⁵⁵⁾, 59% of Irish soil could be considered as in an unhealthy state⁽⁵⁶⁾. Nitrogen excess affects 79% of agricultural land, while 62% of peatland is used for agriculture. Conservation tillage practices, which increase soil organic carbon, were used in 8% of tillable area in Ireland in 2016⁽⁵⁷⁾.

Air quality in Ireland is generally good with exceptions. The latest available annual estimates (2021) by the European Environmental Agency point to Ireland suffering about 110 years of life lost for every 100,000 inhabitants due to exposure to particulate matter (PM2.5) and 16 due to NO2. The indicator for smog-precursor emission intensity to GDP decreased by 63% between 2008 and 2021, reaching 0.49 tonne/EUR'10 in 2021. All three metrics stand below the EU average.

investment gap was estimated at EUR 2.2 billion a year, or 0.7% of GDP (below the EU average of 0.8%). The gap is estimated to be increasing over the 2021-2027 period at EUR 3.4 billion per year. There remains an opportunity to increase funding, in particular for water management (EUR 910 million per year), pollution prevention and control (EUR 838 million per year), and circular economy and waste (EUR 827 million per year). The investment gap for biodiversity and ecosystems decreased, but Ireland would also benefit from investing in biodiversity and ecosystems.

Graph A6.3: Environmental investment gap, annual average



The numbers are computed by the European Commission based on the latest internal reports, Eurostat, EIB and national data sources.

Source: European Commission.

Ireland would benefit from investing more in sustainable water management, in pollution prevention and control, and in the circular economy and in waste. Over the 2014-2020 period, the environmental

⁽⁵⁵⁾ [SWD 417 final of 5.7.2023](#) - impact assessment for the Directive of the European Parliament and of the Council on Soil Monitoring and Resilience (Soil Monitoring Law), (see p. 10, pp. 189-190 and pp. 835-845).

⁽⁵⁶⁾ However, not all soil degradation processes could be quantified for all land uses. This number simply indicates an order of magnitude.

⁽⁵⁷⁾ Eurostat, [Share of tillage practices in arable area EU27](#).

Table A6.1: Indicators tracking progress on the European Green Deal from a macroeconomic perspective

							Target	Distance	
							2030	WEM	WAM
							2018	2019	2020
							2021	2022	2023
							2024	2025	2026
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ANNEX 7: ENERGY TRANSITION AND COMPETITIVENESS

This Annex ⁽⁵⁸⁾ sets out Ireland's progress and challenges in accelerating the net-zero energy transition while bolstering the EU's competitiveness in the clean energy sector ⁽⁵⁹⁾. It considers measures and targets put forward in the draft updated National Energy and Climate Plans (NECP) for 2030 ⁽⁶⁰⁾.

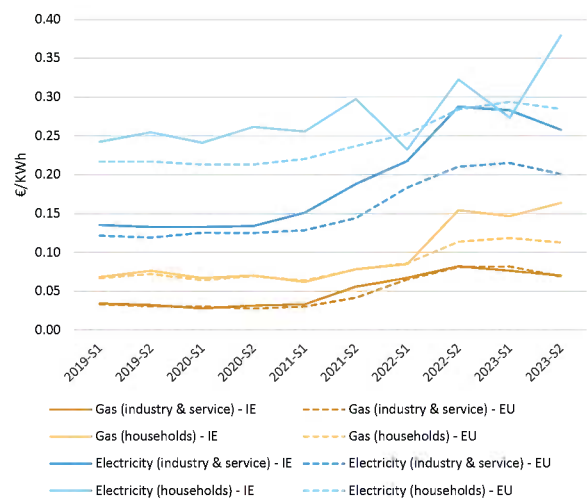
Unlike the trend observed in the EU, retail energy prices for household consumers in Ireland did not decline in 2023, persisting at record-high levels compared to pre-crisis averages. During the first half of 2023, average household gas and electricity prices gradually declined by 5% and 15%, respectively, before resuming an upward trend and peaking above the EU average by 11% for gas and 39% for electricity. On the other hand, average prices for industrial consumers both on electricity and gas gradually decreased throughout the year. Average electricity prices however persisted above the EU average by 28% in the second half of 2023 while average gas prices remained in line with the EU average.

Ireland provides several direct support measures to energy consumers, which are partly income related. A permanent monthly fuel allowance to help with the cost of heating homes is paid to approximately 365 000 households who are dependent on long-term social welfare or health service payments.

As of March 2022, and into 2024 several additional lump sum payments were made to cushion the impact of increased heating costs. Because of increasing electricity prices, every household with an electricity meter received €800 credit on their electricity accounts between April 2022 and March 2023. Between the end of 2023 and April 2024, domestic electricity customers will receive a

further €450 off their electricity bills, to be paid in 3 instalments.

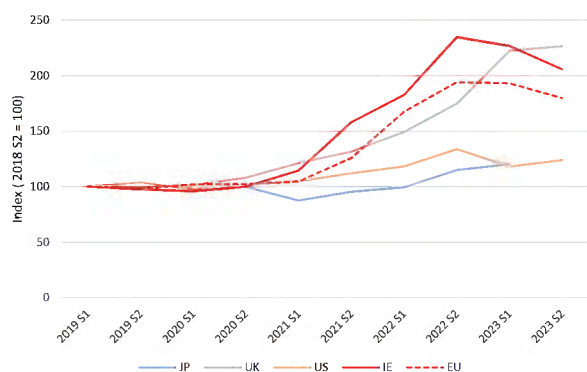
Graph A7.1: Ireland's energy retail prices for households and industry & service



(1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
(2) For households, the consumption bands are D2 for gas and DC for electricity
(3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes

Source: Eurostat.

Graph A7.2: Trends in electricity prices for non-household consumers (EU and foreign partners)



(1) For Eurostat data (EU and IE), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness.
(2) JP = Japan

Source: Eurostat, IEA.

In relative terms, electricity prices for non-household consumers have increased significantly compared to the US and Japan, thus potentially affecting the international competitiveness of energy-intensive industries in Ireland.

⁽⁵⁸⁾ It is complemented by Annex 6 as the European Green Deal focuses on the clean energy transition and by Annex 8 on the action taken to protect the most vulnerable groups, complementing ongoing efforts under the European Green Deal, REPowerEU and European Green Deal Industrial Plan.

⁽⁵⁹⁾ In line with the Green Deal Industrial Plan and the Net-Zero Industry Act.

⁽⁶⁰⁾ Ireland submitted its [draft updated NECP](#) in December 2023.

Ireland has a relatively high dependency on imported gas from the UK, which has a key role in Ireland's energy system, providing almost 30% of energy needs. Ireland's power system is under severe stress due to a combination of systemic and unplanned factors. The regulator warned of significant risks of capacity inadequacy for the coming years.

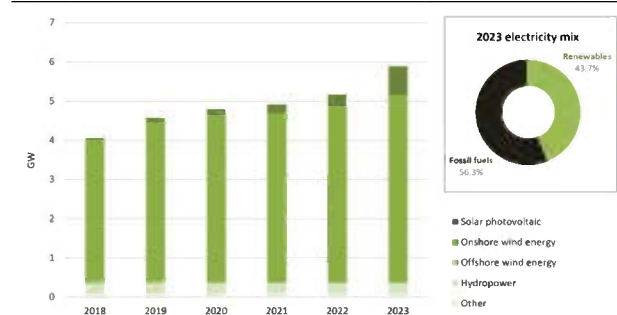
Energy security is very sensitive to disruptions in the supply of gas to Ireland from the UK and Norway. The 'Energy Security in Ireland to 2030' report emphasised that Ireland's future energy supply will be more secure by moving to an electricity-led system. The main long-term security of supply measure for electricity will continue to be the Capacity Mechanism, which will secure sufficient investment in generation and demand response resources to ensure security of supply. Measures to mitigate potential supply risks include additional import capacity, reducing energy use, energy storage, additional electricity interconnection, fuel diversification and renewable gases (such as biomethane and hydrogen), and moving away from burning peat for heat. Ireland managed to reduce its gas demand between August 2022 - December 2023 by 5% in comparison with the average of the previous five years.

Renewable installed capacity increased by 6% in 2022, mainly driven by an increase in onshore wind. The total ⁽⁶¹⁾ in Ireland for 2022 was 4 619 MW, of which 25 MW was offshore wind. Ireland has ambitious plans to reach more than 10 GW of installed wind capacity by 2030, of which more than 5 GW offshore. This goal aligns with Ireland's non-binding agreement laid down by the non-binding goals in the 2023 EU Sea Basins agreements.

As regards solar deployment, the total installed capacity in 2022 was 135 MW ⁽⁶²⁾ but industry estimates expected a significant acceleration with about 1 000 MW to be connected to the grid by the end of 2023. Ireland also converted its last

peat-fired power plant to the use of biomass in 2023.

Graph A7.3: Ireland's installed renewable capacity (left) and electricity generation mix (right)



(1) "Other" includes renewable municipal waste, solid biofuels, liquid biofuels, and biogas.

Source: IRENA, Ember.

Ireland made significant steps in implementing reforms to accelerate the deployment of offshore renewables but the timeline for delivery on targets is tight. It started implementing the transition to a planned regime for offshore renewables in 2023 and established the Maritime Area Regulatory Authority to manage maritime area consents.

The first offshore auction under the Offshore Renewable Electricity Support Scheme (ORESS) delivered high volumes of wind capacity and marked a promising start for the sector. As regards onshore renewables, the Renewable Electricity Support Scheme (RESS) remains the primary vehicle, with two auctions held in 2023, although they resulted in disappointing volumes of wind capacity. This is mainly related to planning and permitting bottlenecks, considering also that Ireland has still not designated all Natura sites for marine habitats and species. The publication of a schedule of auctions for the next 3 years will provide visibility for the pipeline of onshore and offshore projects. The acceleration of solar PV, and the promotion of distributed renewables and community projects has been a success and a new support scheme also started to provide support to small, non-domestic solar PV installations, complementing the successful microgeneration support scheme.

Ireland's grid is in the process of modernisation. New capacity, a more flexible grid and increased interconnectivity will be critical to ensuring security of

⁽⁶¹⁾ IRENA Report 2023.

⁽⁶²⁾ IRENA report Renewable Energy Statistics 2023, the data might differ from the Eurostat data because of using different methodology in calculating the capacity in AC and DC.

supply and meeting its 80% renewable electricity target by 2030. Completing the Ireland-France Celtic Interconnector Project of Common Interest will restore Ireland's connection to the EU post-UK withdrawal, strengthening security of supply and renewable integration. New projects are also ongoing to strengthen interconnection with the UK, including Northern Ireland.

Consumer empowerment in the electricity and gas markets is significant, but the deployment of smart meters is still lagging. The number of electricity suppliers remained relatively stable, with 2 suppliers leaving the market due to financial difficulties in 2022. No data are available for 2022 but in 2021, both for electricity and gas, nearly 100% of all contracts had fixed prices.

Switching rates in both electricity and gas are gradually increasing and were at just below 20% in 2022. The National Smart Metering programme will make smart meters available for every home by the end of 2024. In 2022 56% of households had a smart meter (EU average is 80%). In its draft updated NECP, Ireland expressed its intention to increase the number of sustainable energy communities to 1 500 by 2030.

Overall energy consumption keeps increasing year on year and there is a significant untapped potential in energy efficiency. In 2022, Ireland had a primary energy consumption of 14.3 Mtoe, a 3.7% increase compared to 2021, and a 4.5% increase compared to 2012. It had final energy consumption of 12.0 Mtoe, a 4.7% increase compared to 2021 and an 11.4% increase compared to 2012. In 2022, the largest increase was from the transport sector, which increased its final energy consumption by 20.1%.

Most of the expected savings correspond to longstanding measures but further measures need to be defined and budgeted. Ireland intends to develop a smart financing initiative, including energy performance contracting for the public sector. Ireland organised a comprehensive energy savings programme for the public sector, with a strong focus on renovation of public buildings. Ireland's sustainable energy authority has a dedicated Behavioural Economics Unit engaging with consumers on energy efficiency.

Ireland's efforts in the residential sector still fall short of the trajectory to its 2030 reduction target for energy consumption by buildings. The final energy consumption of the residential sector in Ireland decreased in 2022 compared to 2021 but has increased by 7.4% since 2015 ⁽⁶³⁾.

The share of renewables in heating and cooling remains very low (6.3% in 2022). Heating and cooling represent almost 80% of Ireland's residential final energy consumption. Ireland has announced a ban on gas boilers in new buildings by 2025 (there are approximately 400 000 individual gas boilers installed in the country). Approximately 20 000 heat pumps were sold in 2022, an increase of 140% compared to 2020, reaching a total stock of around 85 000 installed heat pumps in the residential sector ⁽⁶⁴⁾. The Climate Action Plan and National Retrofit Plan published in 2021 set ambitious targets to retrofit the equivalent of 500,000 homes to a Building Energy Rating (BER) of B2/cost optimal and the installation of 400,000 heat pumps in existing homes to replace older, less efficient heating systems by end-2030. In February 2022 the Government announced a package of supports to make it easier and more affordable for homeowners to undertake home energy upgrades, including increased grants.

The Irish recovery and resilience plan (RRP) includes €115 million for energy efficient residential and public buildings. Following the 2022 National Heat Study, new measures, including an expansion of the Support Scheme for Renewable Heat (SSRH), the introduction of a Renewable Heat Obligation and new standards for solid fuel heaters will complement the current SSRH and the grants for heat pumps under the retrofit schemes; however, it is not clear whether these new measures are already aligned with the ambitious objectives of the Climate Action Plan.

⁽⁶³⁾ Final energy consumption in households from Eurostat (data-tables of December 2023), climate-corrected by the Joint Research Centre with reference period 2005-2022 (FEC climate corrected = FEC/ (HDD/HDD reference period)).

⁽⁶⁴⁾ See "Heat Pump Market: Country Fiches", available at <https://publications.jrc.ec.europa.eu/repository/handle/JRC137131>

Ireland is carrying out a very low number of checks on products covered by eco-design and energy labelling. This generates serious concerns with respect to the level playing field among economic operators and uncertainty as to compliance levels.

More than half of Irish households get their electricity and gas from the supplier of last resort. 14.5% of consumers have a prepayment electricity meter, which allows for a better control of electricity consumption. Both rates are the highest among EU countries. Disconnection rates due to non-payment of gas and electricity bills are among the lowest in Europe.

Ireland plans to have 2 GW of renewable hydrogen in development by 2030, as set out in its National Hydrogen Strategy, published in July 2023. While renewable hydrogen in Ireland will help decarbonise hard-to-abate sectors and reinforce energy security in Ireland, the expected relatively low domestic demand underscores the need for suitable infrastructure to facilitate exports to consumption centres across Europe. Network plans still to be developed.

Ireland has historically relied on imports for clean technologies. However, there are a few small-scale manufacturing units for batteries and positive developments in R&D initiatives, especially for offshore wind. In the wind supply chain, Ireland is involved in components testing and grid management software. Also, Dublin hosts a growing company focused on developing a modular floating offshore wind platform, with promising applications for deep-water deployment.

Currently, manufacturing capacity in Ireland is confined to domestic-scale wind turbines, managed by an Irish company based in Galway. On energy storage, there are two small-scale lithium-ion battery producers operating in Tipperary and Galway, one of which specialises in the electrification of off-highway electric vehicles such as construction dozers and mining trucks.

For solar PV, a new Irish-Indian company unveiled plans to start Ireland's first solar module manufacturing plant in the Midlands. The EUR 24m plant will have a maximum rated output of 300 MW when fully operational.

Public investment in energy-related R&I decreased from 0.022% of GNI* in 2014 to 0.005% in 2021. To reverse this trend, Ireland's Sustainable Energy Authority has begun publishing yearly calls to fund innovative energy research development and demonstration projects. The main financing instrument supporting energy R&I is the SEAI National Energy Research Development & Demonstration (RD&D) Funding Programme.

Table A7.1: Key Energy Indicators

		Ireland				EU							
		2019	2020	2021	2022	2019	2020	2021	2022				
ENERGY DEPENDENCE	Import Dependency [%]	68.7%	71.1%	77.0%	79.2%	60.5%	57.5%	55.5%	62.5%				
	of Solid fossil fuels	67.9%	55.9%	106.0%	126.5%	43.3%	35.8%	37.3%	45.8%				
	of Oil and petroleum products	99.0%	103.2%	98.4%	100.6%	96.7%	96.8%	91.7%	97.7%				
	of Natural Gas	53.0%	63.7%	71.1%	73.9%	89.7%	83.6%	83.6%	97.6%				
	Dependency from Russian Fossil Fuels [%]												
	of Natural Gas	0.0%	0.0%	0.0%	0.0%	39.7%	41.3%	41.1%	21.0%				
	of Crude Oil	0.0%	0.0%	0.0%	0.0%	28.8%	26.7%	26.4%	19.5%				
of Hard Coal	6.5%	23.6%	80.7%	35.8%	43.5%	49.1%	47.4%	21.5%					
		2016	2017	2018	2019	2020	2021	2022					
DIVERSIFICATION OF GAS SUPPLIES	Gas Consumption (in bcm)	5.1	5.3	5.5	5.5	5.6	5.2	5.3					
	Gas Consumption year-on-year change [%]	17.4%	2.5%	3.9%	1.5%	0.3%	-6.2%	1.5%					
	Gas Imports - by type (in bcm)	2.0	1.7	2.0	2.9	3.4	3.7	3.8					
	Gas imports - pipeline	2.0	1.7	2.0	2.9	3.4	3.7	3.8					
	Gas imports - LNG	0.0	0.0	0.0	0.0	0.0	0.0	-					
	Gas Imports - by main source supplier (in bcm) (1)												
	United Kingdom	2.0	1.7	2.0	2.9	3.4	3.7	3.8					
		2019	2020	2021	2022	2023							
LNG Terminals - storage capacity m3 LNG	Number of LNG Terminals	0	0	0	0	0							
	LNG Storage capacity (m3 LNG)	0	0	0	0	0							
	Underground Storage												
	Number of storage facilities	0	0	0	0	0							
	Technical Capacity (bcm)	0.0	0.0	0.0	0.0	0.0							
		2016	2017	2018	2019	2020	2021	2022	2023				
ELECTRICITY/ENERGY	Gross Electricity Production (GWh) (2)	30,512	30,874	31,135	30,956	32,267	31,862	33,856	-				
	Combustible Fuels	23,387	22,525	21,546	19,771	19,440	20,968	21,551	-				
	Nuclear	0	0	0	0	0	0	0	-				
	Hydro	973	895	932	1,132	1,224	1,036	948	-				
	Wind	6,147	7,444	8,640	10,019	11,549	9,778	11,208	-				
	Solar	5	10	18	33	53	79	148	-				
	Geothermal	0	0	0	0	0	0	0	-				
	Other Sources	-	0	0	0	0	0	0	-				
	Gross Electricity Production [%]												
	Combustible Fuels	76.6%	73.0%	69.2%	63.9%	60.2%	65.8%	63.7%	-				
	Nuclear	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-				
	Hydro	3.2%	2.9%	3.0%	3.7%	3.8%	3.3%	2.8%	-				
	Wind	20.1%	24.1%	27.7%	32.4%	35.8%	30.7%	33.1%	-				
	Solar	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%	0.4%	-				
	Geothermal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-				
	Other Sources	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-				
	Net Imports of Electricity (GWh)	-	712	-	679	-	28	645	-	152	1,588	252	-
	As a % of electricity available for final consumption	-2.7%	-2.5%	-0.1%	2.3%	-0.5%	5.4%	0.8%	-				
	Electricity Interconnection [%]		7.4%	7.1%	6.3%	6.6%	0.0%	0.0%	0.0%				
Share of renewable energy consumption - by sector [%]													
Electricity	27.1%	30.3%	33.3%	36.5%	39.1%	36.4%	36.8%	-					
Heating/cooling	6.2%	6.6%	6.4%	6.3%	6.3%	4.9%	6.3%	-					
Transport	5.2%	7.4%	7.2%	8.9%	10.2%	4.4%	5.5%	-					
Overall	9.2%	10.5%	10.9%	12.0%	16.2%	12.4%	13.1%	-					
		2019	2020	2021	2022	2023							
CLEAN ENERGY	VC investments in climate tech start-ups and scale-ups (EUR Mln)	12.41	21.55	72.20	256.88	42.32							
	as a % of total VC investment (3) in Ireland start-ups and scale-ups	2.2%	1.7%	4.2%	15.5%	2.5%							
	Research & Innovation spending in Energy Union R&I priorities												
	Public R&I (EUR mln)	25.5	21.8	23.3	-	-							
	Public R&I (% GDP)	0.007%	0.006%	0.005%	-	-							
	Private R&I (EUR mln)	135.1	106.0	-	-	-							
	Private R&I (% GDP)	0.038%	0.028%	-	-	-							

(1) The ranking of the main suppliers is based on the latest available figures (for 2022).

(2) Venture Capital investment includes Venture Capital deals (all stages), Small M&A deals and Private Equity (PE) growth deals (for companies that have previously been part of the portfolio of a VC investment firm or have received Angel or Seed funding).

Source: Eurostat, Gas Infrastructure Europe, JRC elaboration based on PitchBook data (03/2024), JRC SETIS (2024).

(3) Interconnection from Ireland to GB currently stands at 500MW - ROI & N.I. stands at 1000MW through the East West and Moyle interconnectors respectively.

ANNEX 8: FAIR TRANSITION TO CLIMATE NEUTRALITY

This Annex monitors Ireland's progress in ensuring a fair transition towards climate neutrality and environmental sustainability, particularly for workers and households in vulnerable situations. Ireland's green economy is expanding. Between 2015 and 2021, total jobs in the environmental goods and services sector grew by 65.6% (to around 40 000) (EU: 18.2%). However, the sector accounts for only 1.7% of total employment, below the EU average (2.7%). Also between 2015 and 2022, the greenhouse gas (GHG) emission intensity of Ireland's workforce (see Graph A8.1 and Table A8.1) fell from 28.4 to 24.4 tonnes per worker, indicating a positive trend in the green transition, even though it is still above the EU average (14.3 tonnes per worker in 2022). In line with the Council Recommendation of 2022 on ensuring a fair transition towards climate neutrality⁽⁶⁵⁾, upskilling and reskilling measures, particularly in regions that traditionally relied heavily on declining industries, are essential for smooth labour market transitions. Ireland's recovery and resilience plan (RRP) outlines crucial reforms and investments for a fair green transition⁽⁶⁶⁾, complementing the territorial just transition plan and actions supported by the European Social Fund Plus (ESF+). Ireland is set to receive up to EUR 84.5 million from the Just Transition Fund (JTF) until 2027. Along with national co-financing, a total of EUR 169 million will help communities in the Midlands Region phase out climate-polluting activities⁽⁶⁷⁾.

Employment in sectors that are most affected by the green transition slightly decreased. In 2023, employment in Ireland's energy-intensive industries⁽⁶⁸⁾ comprised 0.9%

⁽⁶⁵⁾ Council Recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality (2022/C 243/04) covers employment, skills, tax-benefit and social protection systems, essential services and housing.

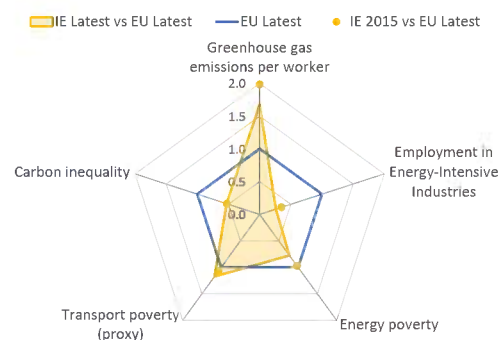
⁽⁶⁶⁾ See the 2022 country report, Annex 6 and Annex 3 for an overview.

⁽⁶⁷⁾ Department of the Environment, Climate and Communications press release – 'Programme for the EU Just Transition Fund' investment of €169 million in Midlands region officially launched, <https://www.gov.ie/en/press-release/54a6d-programme-for-the-eu-just-transition-fund-investment-of-169-million-in-midlands-region-officially-launched/>

⁽⁶⁸⁾ Mining and quarrying (NACE B), chemicals (C20), minerals (C23), metals (C24) and automotive (C29)

of total employment (1.2% in 2015), well below the EU average (3.5%). Employment in mining and quarrying has fallen by 18.3% since 2015 (to around 5 800 workers in 2023). Job vacancy rates in transforming sectors, such as water supply, sewerage, waste management and remediation activities, are rising (see Graph A8.2), and the move away from peat harvesting to renewables like wind and biomass is creating more high-quality green jobs⁽⁶⁹⁾. In construction, a key sector for the green transition, the job vacancy rate is much lower than the EU average (0.7% vs 3.6% in the EU in 2023). According to the European Labour Authority (ELA)⁽⁷⁰⁾, labour shortages were reported in 2023 for a number of occupations that required specific skills or knowledge for the green transition⁽⁷¹⁾, including civil engineers, plumbers and pipe fitters and engineering professionals not elsewhere classified.

Graph A8.1: Fair transition challenges in Ireland



Source: Eurostat, EU Labour Force Survey, EMPL-JRC GD-AMED/AMEDI+ and DISCO(H) projects (see Table A8.1).

Upskilling and reskilling are key for workers in energy-intensive industries, particularly in regions affected by the green transition. By 2030, between 2 600 and 2800 additional skilled workers will be needed for the deployment of wind and solar energy, which may require an investment in skills of EUR 25-

⁽⁶⁹⁾ See 'Bord na Mona', <https://www.bordnamona.ie/>

⁽⁷⁰⁾ Based on the European Labour Authority 2024 EURES Report on labour shortages and surpluses 2023, i.e., data submitted by the EURES National Coordination Offices.

⁽⁷¹⁾ Skills and knowledge requirements are based on the European Skills Competences and Occupations (ESCO) taxonomy on skills for the green transition.



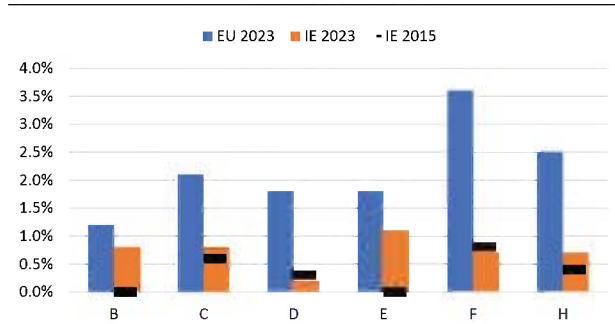
Table A8.1: Key indicators for a fair transition in Ireland

Indicator	Description	IE 2015	IE	EU
GHG per worker	Greenhouse gas emissions per worker – CO ₂ equivalent tonnes	28.4	23.9 (2022)	14.3 (2022)
Employment EII	Employment share in energy-intensive industries, including mining and quarrying (NACE B), chemicals (C20), minerals (C23), metals (C24) and automotive (C29)	1.2%	0.9% (2023)	3.5% (2023)
Energy poverty	Share of the total population living in a household unable to keep its home adequately warm	9.0%	7.2% (2022)	9.3% (2022)
Transport poverty (proxy)	Estimated share of the AROP population that spends over 6% of expenditure on fuels for personal transport	39.9%	43.6% (2023)	37.1% (2023)
Carbon inequality	Ratio between the consumption footprint of the top 20% vs bottom 20% of the income distribution	1.4	1.5 (2021)	2.7 (2021)

Source: Eurostat (env_ac_ainah_r2, lfsa_egan2d, ilc_mdcs01), EU Labour Force Survey (break in time series in 2021), EMPL-JRC GD-AMEDI/AMEDI+ and DISCO(H) projects.

31 million⁽⁷²⁾. To promote skills development, the RRP and the Just Transition Mechanism provide training for reskilling workers in regions affected by the transition, together with a broader training offer at national level under the SOLAS recovery skills programme.

Graph A8.2: Job vacancy rate in transforming sectors and mining and quarrying



B - Mining and quarrying

C - Manufacturing

D - Electricity, gas, steam and air conditioning supply

E - Water supply; sewerage, waste management and remediation activities

F - Construction

H - Transportation and storage

Source: Eurostat (jvs_a_rate_r2).

Energy poverty indicators have significantly worsened recently, due to the spike in energy prices⁽⁷³⁾. The share of the population unable to keep their homes adequately warm decreased from 9.0% in 2015 to 7.2% in 2022, below the EU average (9.3%)⁽⁷⁴⁾. However, the indicator increased by 4.0 percentage points between 2021 and 2022 on the back of energy price increases due to supply constraints caused by the COVID-19 pandemic and Russia's war of aggression

⁽⁷²⁾ EMPL-JRC AMEDI+ project.

⁽⁷³⁾ Economic and Social Research Institute (2022) – energy poverty at highest recorded rate.

⁽⁷⁴⁾ Energy poverty is a multi-dimensional concept. The indicator used focuses on an outcome of energy poverty. Further indicators are available at the [Energy Poverty Advisory Hub](#).

against Ukraine, despite the emergency measures implemented in Ireland. In particular, 12.2% of the population at risk of poverty (AROP) (EU: 20.1%) and 6.8% of lower middle-income households (in deciles 4-5) (EU: 11.6%) were unable to keep their homes adequately warm in 2022. Also, in January 2023, 43.6% of the population at risk of poverty spent a considerable proportion of their budget (more than 6%) on private transport fuels (EU: 37.1%)⁽⁷⁵⁾. Ireland responded to energy poverty by implementing temporary solutions, such as raising fuel allowances and providing one-time lump-sum welfare payments. Ireland also adopted the Energy Poverty Action Plan, published in December 2022, with actions focused on improving the efficiency of homes, supporting lower income households with their energy costs and minimising the costs of climate and energy security policy for consumers.

Despite being below the EU average, environmental inequalities remain an issue in Ireland. In 2021, the consumption footprint for 20% of the population with the highest income was 1.5 times higher than the footprint of the poorest 20%⁽⁷⁶⁾ (EU: 1.8). For the richest 20% of households, the consumption footprint is highest for food and mobility while for the poorest 20% of households it is for food and housing. In 2021, the average levels of air pollution stood below the EU average (7.0 vs 11.4 µg/m³ PM2.5),

⁽⁷⁵⁾ Affordability of private transport fuels is one key dimension of transport poverty. The indicator has been developed in the context of the EMPL-JRC GD-AMEDI/AMEDI+ projects. Methodology explained in [Economic and distributional effects of higher energy prices on households in the EU](#).

⁽⁷⁶⁾ Developed in the context of the EMPL-JRC DISCO(H) project. Methodology explained in [Joint Research Centre, 2024. Carbon and environmental footprint inequality of household consumption in the EU. JRC137520](#). The EU average refers to EU27 without Italy (household income data not available for IT in the HBS).

and all regions were below critical levels of air pollution ⁽⁷⁷⁾. However, it is estimated that more than 400 premature deaths annually were due to exposure to air pollution ⁽⁷⁸⁾.

Ireland has progressed in its commitment to ensuring a fair transition towards climate neutrality in the context of the Council Recommendation of 2022. Its Just Transition framework is endorsed in its climate action plan. Key administrative organisations are implementing the different measures. The fair transition is supported by the JTF and national resources, especially in the regions most affected by the green transition. Ireland is making efforts to involve stakeholders and the wider public in policy planning. Regulations in the field of occupational safety and health are focused on trends of the green economy and new renewable energy sources. As regards public procurement, the Green Public Procurement Guidance for the Public Sector contains sustainable and green requirements. Ireland plans to gradually increase carbon tax rates until 2030 and to allocate the revenues to support the green transition ⁽⁷⁹⁾.

⁽⁷⁷⁾ Two times higher than the recommendations in the WHO Air Quality Guidelines (annual exposure of 5µg/m³).

⁽⁷⁸⁾ [EEA - Air Quality Health Risk Assessment](#)

⁽⁷⁹⁾ Based on the monitoring review of the Council Recommendation on ensuring a fair transition towards climate neutrality, which took place in October 2023.

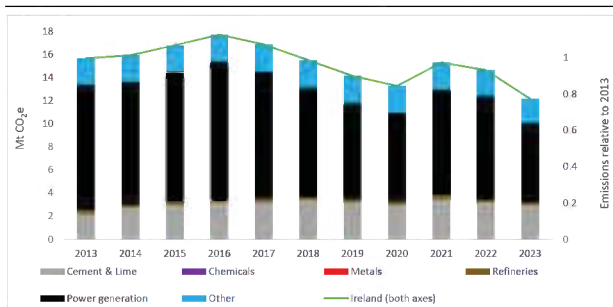
The green transition of industry and the built environment, in particular decarbonisation, resource efficiency and circularity, is essential to boost Ireland's competitiveness. In this regard, priorities for Ireland are waste management and the use of circular materials in industry and construction.

Despite some positive trends, Ireland is not on track to achieve the Circular Economy Action Plan goals, mainly due to unsustainable waste management and low use of recycled materials. Ireland's material footprint dropped to 10.19 tonnes per capita in 2020 and then increased to 12.10 tonnes per capita in 2022, which is below the EU average. Waste production per capita fluctuated below the EU average and amounted to 3.3 tonnes per capita in 2022. The 2022 Eco-Innovation Scoreboard placed Ireland in the 'average performers group', with a score of 110.4. Furthermore, as of September 2023, Ireland totalled 19 awarded EU Ecolabel licences and 147 products with the EU Ecolabel, recovering after a drop in 2022. However, the take-up of licences and products remained low. There is still room to make better use of the potential of the circular economy transition to drive the decarbonisation of Ireland's industry.

with another 23% originating from cement and lime production⁽⁸¹⁾. Total ETS emissions were 14% lower in 2023 than in 2019. At the same time, greenhouse gas emissions in industry sectors (cement and lime, refineries, and other industries) declined by 10%. Looking back to 2013, greenhouse gas emissions in power generation declined by 37% but increased in the industry sectors, driven by a 36% increase for cement and lime production.

There is still room to make better use of the potential of the circular economy transition to improve the efficiency of the Irish industry. The use of secondary material hovered well below the EU average, reaching 1.8% in 2022. By contrast, resource productivity has steadily increased in recent years, showing better results than the EU average. In 2022, it stood at 3.7 purchasing power standards per kilogram. Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help minimise negative impacts on the environment and reduce dependence on volatile raw material markets. Furthermore, Ireland was dependent on imports for 33.1% of materials used in 2022, compared with an EU average of 22.4%, making the country comparatively more vulnerable to supply chain disruptions.

Graph A9.1: ETS emissions by sector since 2013



Source: European Commission.

In Ireland, greenhouse gas emissions covered by the EU emissions trading system (ETS)⁽⁸⁰⁾ have declined very slowly since 2013. In 2023, 56% of emissions from ETS installations came from power generation,

Ireland will benefit from stepping up investment in recycling to meet all EU targets for 2025. Municipal waste generation in Ireland is higher than the EU average, and 40.8% of it was recycled in 2020. The country is on track to meet the 2025 targets for packaging recycling but is at risk of missing the one for municipal waste. The plastic packaging recycling rate is still cause for concern and stood at 27.9% in 2021, well below the EU average of 40.7%. In recent years, Ireland has shifted from landfilling to incineration, which has become prominent in waste treatment. The country is on track to achieve the target of a

⁽⁸⁰⁾ This analysis excludes air travel. For more details and the data sources, see Weitzel, M; van der Vorst, C. (2024), Uneven progress in reducing emissions in the EU ETS, JRC Science for policy brief, JRC138215, Joint Research Centre.

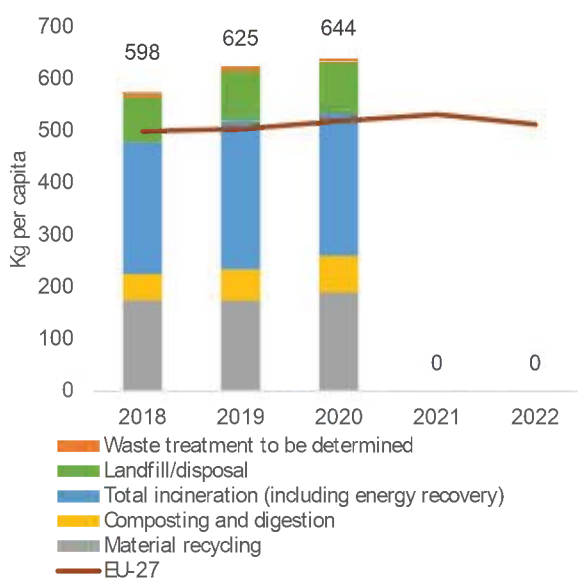
⁽⁸¹⁾ Peat almost disappeared from the power generation mix in 2022, but the use of coal temporarily increased in 2021 and 2022 after declining sharply in previous years. In addition, gas remained the primary source of electricity generation in 2022, despite the significant increase in renewables in the past decade.

Table A9.1: **Circularity indicators**

	2018	2019	2020	2021	2022	2023	EU-27	Latest year
Industry								
Resource productivity (purchasing power standard (PPS) per kilogram)	24	25	28	32	37	-	25	2022
Circular material use rate (%)	1.7	1.6	1.7	1.9	1.8	-	11.5	2022
Eco-innovation index (2013=100)	101.3	100.4	100.3	100.8	110.4	-	121.5	2022
Recycling of plastic packaging (%)	27.1	27.5	29.0	27.9	-	-	40.7	2021
Cost of air emissions from industry (EUR/ton)	2.7	24	22	2.6	-	-	352.7	2021
Built environment								
Recovery rate from construction and demolition waste (%)	100.0	-	-	85.5	-	-	89.0	2020
Soil sealing index (base year = 2006)	104.4	-	-	-	-	-	103.4	2018
Non-residential floor area (m ² per capita)	11.1	11.1	11.1	-	-	-	18.0	2020
Waste backfilled (%)	72.7	-	72.7	-	34.8	-	9.9	2020

Source: Eurostat, European Environment Agency.

maximum of 10% of landfilling by 2035. Furthermore, 83.4% of e-waste was recycled in 2021, above the EU average of 81.3%. Furthermore, a total of 4 new patents on waste and recycling were awarded in 2019, confirming a trend of slow circular economy innovation uptake.

Graph A9.2: **Treatment of municipal waste**

Source: Eurostat.

Ireland has scope to further limit pollution from industry. In 2021, the impact of particulate matter emissions from industry on air quality was lower than the EU average. In 2021, the grams of PM₁₀ emitted per economic output (EUR'10)⁽⁸²⁾ decreased to 0.02, versus an EU average of 0.09. Moreover, between 2010 and 2021, Ireland's industrial

sector decreased its emissions into the air of all main pollutants except for heavy metals (cadmium, mercury, and lead), the emissions of which increased by 218%. Emissions into water show less encouraging trends, with a 28% increase in nitrogen, total organic carbon and phosphorous. Ireland has scope to improve hazardous waste treatment. In 2020, the country produced 178 kg of hazardous waste per capita – well below the EU average of 214 kg per capita – and treated only 12.4% of it.

There is scope to improve the efficiency of Ireland's built environment. Ireland's residential and non-residential floor areas per capita are both below the EU average. They have slightly decreased over time, unlike in the rest of the EU. In 2020, Ireland submitted a long-term renovation strategy aiming to decarbonise the building stock. Circular economy principles in line with whole-life carbon approaches for buildings would need to be integrated into the planning.

Despite some positive trends, there is still room for improving waste management in Ireland's built environment, especially regarding wastewater treatment. After a drop in 2012, waste generated from construction and demolition activities per capita dramatically increased, even though it remained well below the EU average. The proportion of backfilling decreased to 55.5% in 2020, above the EU average of 9.9%. Ireland's recovery rate equalled 100% in 2020, achieving the Waste Framework Directive's target for 2020. In 2021, 62% of the Irish population was connected to at least secondary wastewater treatment, well below the EU average.

⁽⁸²⁾ In 2010 prices.

including strategic dependencies, cybersecurity and climate change.

Ireland performs well in the area of digital infrastructure/connectivity. Ireland scores above the EU average in fixed (optical fibre) broadband coverage, but take-up is low for at least 1 Gbps fixed broadband (9.5% compared to the EU average of 18.5%). The RRP envisages building a low-latency edge platform to harness 5G technology for the benefit of public services.

Irish businesses have integrated digital technology to a good extent. The share of SMEs with at least a basic level of digital intensity, at 66%, is considerably above the EU average of 58%. Businesses in Ireland are good at making use of available digital technologies. For example, use of big data, artificial intelligence and cloud computing services, at 64%, is above the EU average of 55%. The RRP includes several measures to: (i) support the digitalisation of businesses (including the creation of Irish European Digital Innovation Hubs); (ii) advance digital capabilities through developing a shared government data centre; and (iii) promote digital-related investment in R&D. In 2022, 2% of enterprises in Ireland reported ICT service outage due to cyberattacks (e.g. ransomware attacks, denial of service attacks). Over the same year, 35.4% of enterprises developed or reviewed their ICT security policy within the previous 12 months.

Public services in Ireland are highly digitalised, for both businesses and citizens. Ireland scores 81 out of 100 on public services for citizens, above the EU average of 79, and 100 on public services for businesses. To facilitate people's interaction with public services, Ireland has set up an electronic identification (eID) scheme called MyGovID. However, Ireland has not yet notified this scheme to the Commission under the eIDAS

(⁸⁶) See for example OECD (2019): OECD Economic Outlook, Digitalisation and productivity: A story of complementarities, [OECD Economic Outlook, Volume 2019 Issue 1 | OECD iLibrary \(oecd-ilibrary.org\)](#) and OECD (2019): Going Digital: Shaping Policies, Improving Lives – Summary, <https://www.oecd.org/digital/going-digital-synthesis-summary.pdf>.

Regulation. Ireland still performs weakly on access to e-health records with a score of 11, when the EU average is at 79. The RRP aims to create an online response option for the population census and includes a suite of e-Health projects.

Table A10.1: Key Digital Decade targets monitored by the Digital Economy and Society Index indicators

	2022	Ireland 2023	2024	EU 2024	Digital Decade target by 2030 (EU)
Digital skills					
At least basic digital skills	70%	70%	73%	56%	80%
% individuals	2021	2021	2023	2023	2030
ICT specialists ⁽¹⁾	6.3%	6.3%	6.2%	4.8%	20 million
% individuals in employment aged 15-74	2021	2022	2023	2023	2030
Digital infrastructure/connectivity					
Fixed very high capacity network (VHCN) coverage	78%	84%	87%	79%	100%
% households	2021	2022	2023	2023	2030
Fibre to the premises (FTTP) coverage ⁽²⁾	62%	72%	78%	64%	-
% households	2021	2022	2023	2023	
Overall 5G coverage	72%	84%	85%	89%	100%
% populated areas	2021	2022	2023	2023	2030
Digitalisation of businesses					
SMEs with at least a basic level of digital intensity	64%	NA	66%	58%	90%
% SMEs	2021		2023	2023	2030
Data analytics	NA	NA	37%	33%	-
% enterprises			2023	2023	
Cloud	47%	47%	53%	39%	-
% enterprises	2021	2021	2023	2023	
Artificial intelligence	8%	8%	8%	8%	-
% enterprises	2021	2021	2023	2023	
AI or cloud or data analytics ⁽³⁾	NA	NA	64%	55%	75%
% enterprises			2023	2023	2030
Digitalisation of public services					
Digital public services for citizens	80	81	81	79	100
Score (0 to 100)	2021	2022	2023	2023	2030
Digital public services for businesses	100	100	100	85	100
Score (0 to 100)	2021	2022	2023	2023	2030
Access to e-health records	NA	0	11	79	100
Score (0 to 100)		2022	2023	2023	2030

(1) The 20 million target represents about 10% of total employment.

(2) The fibre to the premises coverage indicator is included separately as its evolution will also be monitored separately and taken into consideration when interpreting VHCN coverage data in the Digital Decade.

(3) At least 75% of EU enterprises have taken up one or more of the following, in line with their business operations: (i) cloud computing services; (ii) big data; (iii) artificial intelligence.

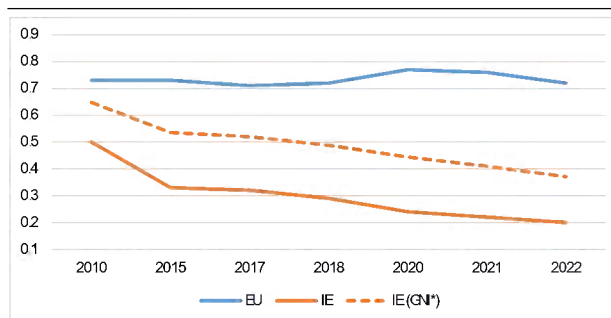
Source: Digital Economy and Society Index.

This Annex provides a general overview of the performance of Ireland's research and innovation system, which is essential for delivering the twin transition and ensuring long-term competitiveness.

Ireland is a 'strong innovator' with a performance above the EU average, though increasing at a slower pace. According to the 2023 edition of the European Innovation Scoreboard (EIS), Ireland is at 115.8% of the EU average, which is above the average for strong innovators, although lower than in 2022⁽⁸⁷⁾. Ireland's EIS performance is still increasing (by 2.3 percentage points between 2016 and 2023) but at a significantly lower rate than the EU during the same period (8.5 pps). Strengths include employment in knowledge-intensive activities and the percentage of people with tertiary education, while the main weakness remains the low level of R&D investment, in particular in the public sector.

Ireland's R&D intensity (R&D expenditure as a percentage of GDP) in 2022, at 0.96% of GDP, continues to be among the lowest in the EU. However, Ireland's increasing GDP has an impact and, in terms of modified gross national income (GNI*), which excludes distortions from foreign-owned firms, Ireland's R&D intensity (R&D expenditure as a percentage of GNI*) in 2022 was significantly higher at 1.78% and the absolute level of R&D investment continues to grow⁽⁸⁸⁾. Nevertheless, research intensity in Ireland in terms of GDP has been on a declining trend since 2010 (-4.1% per year) while public R&D intensity, at 0.2% in 2022 (0.37% of GNI*), is among the lowest in the EU and reaching the research intensity target of 2.5% of GNI* by 2030 will be a challenge.

Graph A11.1: Public expenditure on R&D as % of GDP and GNI*



Source: Eurostat.

The research and innovation (R&I) investments in Ireland's recovery and resilience plan (RRP) can be expected to boost overall R&D intensity while directing R&I efforts towards accelerating the twin transitions. The national grand challenge measure uses challenge-based funding to support research and innovation and incentivises researchers to focus on projects with the potential to contribute to the climate, healthcare and agriculture sectors and facilitate the green and digital transition. Several calls under the measure are already being implemented.

Ireland has a relatively well-developed R&I system including the public science base. This is reflected in the level of high-quality publications (although decreasing slightly in recent years), new graduates in science and engineering, and science-business linkages, including the flagship Disruptive Technologies Innovation Fund (DTIF). Ireland's R&I strategy, Impact 2030, identifies the need for a resilient research base and aims to deliver system-wide impacts and add value to the activities of R&I performers and funders, including through the establishment of a single funding agency for public research⁽⁸⁹⁾. However, the very low level of public R&D intensity may be placing this relatively good performance at risk.

Tax credits are an important tool for stimulating firm-level R&D investments but may not be as useful for supporting SMEs as direct funding instruments. Tax credits

⁽⁸⁷⁾ European Commission (2023) European Innovation Scoreboard 2023 – Country profile Ireland, ec-rtd-eis-country-profile-ie.pdf (europa.eu). The EIS provides a comparative analysis of innovation performance in the EU countries, including the relative strengths and weaknesses of their national innovation systems (also compared to the EU average).

⁽⁸⁸⁾ Department of Further and Higher Education, Research, Innovation and Science (2024), The Research and Development Budget 2022-2023, [gov - The Research and Development Budget 2022 to 2023](https://www.gov.ie/en/publications-and-statements/2024-03-the-research-and-development-budget-2022-to-2023/) (www.gov.ie)

⁽⁸⁹⁾ Department of Further and Higher Education, Research, Innovation and Science (2022), Impact 2030: Ireland's research and innovation strategy (2022), [gov - Impact 2030: Ireland's Research and Innovation Strategy](https://www.gov.ie/en/publications-and-statements/2022-03-impact-2030-irelands-research-and-innovation-strategy/) (www.gov.ie)

can be effective but might not be as helpful to start-ups and innovative young firms in emerging sectors, as highlighted in the current smart specialisation strategy ⁽⁹⁰⁾. While SMEs continue to comprise most claimants of the R&D tax credit, large firms dominate in terms of the overall cost of the credit and the size of individual claims ⁽⁹¹⁾. Greater use of direct funding instruments could help to stimulate research and innovation and improve the productivity of firms, especially SMEs.

⁽⁹⁰⁾ Department of Enterprise, Trade and Employment (2022), National smart specialisation strategy for innovation 2022-2027, [national-smart-specialisation-strategy-for-innovation-2022-2027.pdf](https://enterprise.gov.ie/national-smart-specialisation-strategy-for-innovation-2022-2027.pdf) (enterprise.gov.ie)

⁽⁹¹⁾ National Competitiveness & Productivity Council (20213), Ireland's Competitiveness Challenge 2023, <https://www.competitiveness.ie/publications/2023/ireland%20s%20competitiveness%20challenge%202023.pdf>

Table A11.1: Key innovation indicators

Ireland	2010	2015	2020	2021	2022	EU average (1)
Key indicators						
R&D intensity (GERD as % of GDP)	1.59	1.18	1.15	1.11	0.96	2.24
<i>R&D intensity (GERD as % of GNI*)</i>	2.06	1.92	2.14	2.07	1.78	
Public expenditure on R&D as % of GDP	0.50	0.33	0.24	0.22	0.2	0.73
<i>Public expenditure on R&D as % of GNI*</i>	0.65	0.54	0.45	0.41	0.37	
Business enterprise expenditure on R&D (BERD) as % of GDP	1.10	0.85	0.9	0.89	0.77	1.48
<i>Business enterprise expenditure on R&D (BERD) as % of GNI*</i>	1.43	1.38	1.68	1.66	1.43	
Quality of the R&I system						
Scientific publications of the country within the top 10% most cited publications worldwide as % of total publications of the country	11.6	12.5	11.39	:	:	9.6
Patent Cooperation Treaty patent applications per billion GDP (in PPS)	2.3	1.9	1.76	:	:	3.4
Academia-business cooperation						
Public-private scientific co-publications as % of total publications	7.6	9.8	9.4	8.9	9.2	7.6
Public expenditure on R&D financed by business enterprise (national) as % of GDP	0.011	0.009	:	0.007	:	0.054
<i>Public expenditure on R&D financed by business enterprise (national) as % of GNI*</i>	0.014	0.015	:	0.013	:	
Human capital and skills availability						
New graduates in science & engineering per thousand pop. aged 25-34	17.8	18.2	26	26.9	:	16.9
Public support for business enterprise expenditure on R&D (BERD)						
Total public sector support for BERD as % of GDP	0.179	0.316	:	0.207	:	0.204
<i>Total public sector support for BERD as % of GNI*</i>	0.232	0.513	:	0.385	:	
R&D tax incentives: foregone revenues as % of GDP	0.134	0.269	0.175	0.174	:	0.104
<i>R&D tax incentives: foregone revenues as % of GNI*</i>	0.17	0.44	0.326	0.324	:	
Green innovation						
Share of environment-related patents in total patent applications filed under the Patent Cooperation Treaty (%)	9.40	9.70	8.80	:	:	14.70
Finance for innovation and economic renewal						
Venture capital (market statistics) as % of GDP	0.042	0.044	0.069	0.057	0.07	0.085
<i>Venture capital (market statistics) as % of GNI*</i>	0.05	0.07	0.13	0.106	0.130	
Employment share of high growth enterprises measured in employment (%)	:	21.67	:	:	:	12.51

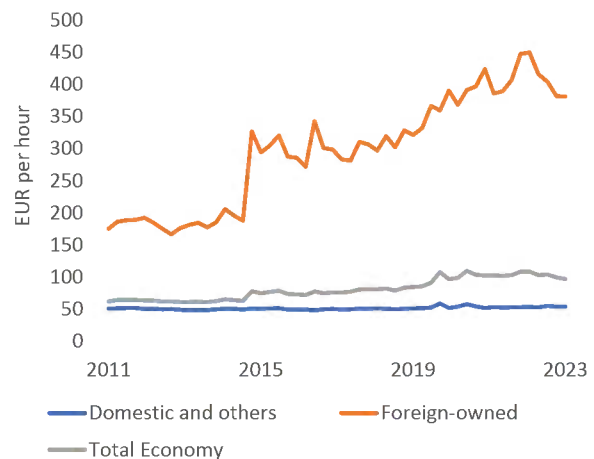
(1) EU average for the last available year or the year with the largest number of country data.

Source: Eurostat, OECD, DG JRC, Science-Metrix (Scopus database and EPO's Patent Statistical Database), Invest EU.

Ireland's economy has been resilient in the face of overlapping crises, but mixed signals may point to a slowdown. Ireland boasts the second highest GDP per capita in the EU, behind Luxembourg. However, as the Irish economy comprises both large multinationals and smaller domestic firms, headline indicators mask signals on the state of the economy's competitiveness. Following rapid growth of 9.4% in 2022, Ireland's GDP growth declined by -3.2% in 2023 as post-pandemic exports from the multinational sector subsided, most notably in sectors such as pharmaceuticals, chemicals and ICT manufacturing. At the same time, accounting for the distortions caused by the presence of multinationals, Irish domestic activity appeared to be more robust despite the overall slowdown in the economy.

Headline productivity levels are strong, but underlying figures suggest Ireland's two-speed economy lags top performing Member States. In 2023, Irish labour productivity was the highest in the EU, 197% of the EU average. Over the past 5 years, industrial productivity growth has surged by 7.7%, way above the EU average of 1.2%. However, Irish productivity figures are artificially distorted due to the strong presence of multinationals⁽⁹²⁾. Accounting for distortion effects by using gross national income*⁽⁹³⁾, Irish productivity growth remains strong, but it lags top performing Member States. Moreover, Ireland's productivity growth is powered by sectors dominated by multinationals, with domestic firms lagging way behind. This results in a two-speed economy. In 2023, labour productivity in Ireland's foreign-owned sector was roughly seven times greater than in Ireland's domestic sector⁽⁹⁴⁾.

Graph A12.1: Labour productivity comparison



Source: CSO Ireland.

Ireland's lopsided industrial policy exposes risks for its economic resilience. Its reliance on multinationals for economic development exposes concentration risks for the economy. The Irish Fiscal Advisory Council has warned that Ireland's corporation tax receipts remain "incredibly concentrated and inherently very risky"⁽⁹⁵⁾. It estimates that the top three firms account for 43% of corporation tax receipts⁽⁹⁶⁾. Ireland spends significantly less than other countries on small and medium-sized enterprises (SMEs) and young firms due to its focus on low corporate income taxes to boost its competitiveness. OECD data shows that Ireland allocates 0.02% of GDP to SME-focused areas, compared to a benchmark of 0.25% of GDP for similar advanced economies⁽⁹⁷⁾. The concentration of a small number of highly productive multinationals in a narrow range of sectors has led to asymmetric impacts on the Irish economy. One study in 2019⁽⁹⁸⁾ showed that a productivity shock to

⁽⁹²⁾ Irish GDP developments and multinational enterprises' activities, https://ec.europa.eu/economy_finance/forecasts/2022/su_mmer/ip183_en_thematic_box_1.pdf

⁽⁹³⁾ Demystifying Ireland's national income: a bottom-up analysis of GNI* and productivity <https://www.fiscalcouncil.ie/wp-content/uploads/2023/06/Demystifying-Irelands-national-income-a-bottom-up-analysis-of-GNIstar-and-productivity-202306final.pdf>

⁽⁹⁴⁾ CSO, Productivity in Ireland Quarterly – <https://www.cso.ie/en/statistics/nationalaccounts/productivityinirelandquarterly/>

⁽⁹⁵⁾ Fiscal Assessment Report, IFAC, 2023

<https://www.fiscalcouncil.ie/wp-content/uploads/2023/12/Fiscal-Assessment-Report-December-2023-Irish-Fiscal-Advisory-Council-Dublin.pdf>

⁽⁹⁶⁾ Irish Fiscal Advisory Council, <https://www.fiscalcouncil.ie/wp-content/uploads/2023/12/Box-F-What-is-happening-Irelands-corporation-taxes.pdf>

⁽⁹⁷⁾ OECD, Quantifying Industrial Strategies (QuIS) project, benchmarking countries: Ireland, Denmark, France, Italy, Netherlands, Sweden, United Kingdom, Canada, and Israel.

⁽⁹⁸⁾ What is behind aggregate productivity growth in Ireland? <https://enterprise.gov.ie/en/publications/publication->

the five largest firms accounted for about one-third of aggregate productivity growth.

Shortages in labour, skills, and materials are limiting growth. With low unemployment levels and high vacancy rates, Ireland's labour market may be experiencing a skills mismatch. Over the past 5 years, labour shortages have been more acute in Ireland than in other Member States (see table A12.1). In 2023, nearly two-fifths of firms said they faced constraints in labour supply, almost double the EU average. Ireland suffers not only from a shortage of labour but also skills (see Annex 14). According to the EIB Investment Survey, 91% of Irish firms cite a dearth of skilled staff as a barrier to investment, one of the highest in the EU⁽⁹⁹⁾. Since 2012, multinational employment has doubled compared to an increase of just over a third in the domestic sector. In addition, half of all Irish SMEs cite difficulties in hiring workers with the right skills as the most serious problem for their business⁽¹⁰⁰⁾. To help alleviate skills shortages, the Critical Skills Employment Permit⁽¹⁰¹⁾ was introduced, which eliminates labour market tests for strategic jobs and streamlines permitting procedures for workers from outside the European Economic Area. In 2022-2023, ICT professionals accounted for a fifth of all permits issued, the second highest sector behind healthcare workers⁽¹⁰²⁾. As well as shortages in labour, material shortages are a major limiting factor to activity. In 2023, 41% of Irish firms in industry reported shortages in materials or equipment, more than double the EU average (17%).

Finance remains a significant cost for businesses, in particular SMEs. The cost of borrowing for Irish businesses has long been above the euro area average and one of the highest in Europe. While the premium above the euro area average has fallen due to

monetary tightening, interest rates in Ireland are at their highest since 2008⁽¹⁰³⁾. With only three fully operating banks in the market following the exit of Ulster Bank and KBC, there are fewer financing options for SMEs, and the lack of competition may push up borrowing costs further. Demand for bank financing has decreased over the past decade, falling from a peak of 39% in 2012, to 18% in 2023⁽¹⁰⁴⁾. In parallel, refusal rates have declined, with the percentage of businesses refused or rejected loans falling to 3.1% in 2023⁽¹⁰⁵⁾. The contraction in traditional financing demands by SMEs has partly been replaced by wide-ranging government support provided by agencies such as Enterprise Ireland, and increasingly by the development of Ireland's growing non-banking finance market (see Annex 18). SMEs suffer from late payments, with around 43% experiencing late payments in the last 6 months and payment delays of over 2 weeks, both public (18 days) and private (15 days), which is roughly in line with the EU averages.

Delays in delivering quality infrastructure hinders Ireland's growth potential, but progress is being made. In 2023, Ireland achieved its highest place in the IMD World Competitiveness Ranking, ranking 2nd, 9 positions higher than the previous year⁽¹⁰⁶⁾. In contrast to its lofty overall score, mainly thanks to its economic performance, Ireland ranks 19th on Infrastructure and 29th on the sub-pillar Basic infrastructure. One of the main bottlenecks for infrastructure delivery is planning⁽¹⁰⁷⁾. In November 2023, the Irish government put forward the Planning and Development Bill. It aims to streamline the planning process, notably by introducing deadlines for local authorities and An Bord Pleanála (Ireland's public planning body) and reducing recourse to judicial reviews. Greater progress is being made in relation to energy

[files/research-paper-what-is-behind-aggregate-productivity-growth-in-ireland.pdf](https://www.parliament.gov.at/files/research-paper-what-is-behind-aggregate-productivity-growth-in-ireland.pdf)

(99)EIB Investment Survey 2023.

(100)Eurobarometer 2961 / FL537.

(101)<https://enterprise.gov.ie/en/what-we-do/workplace-and-skills/employment-permits/permit-types/critical-skills-employment-permit/>

(102)Employment Permit Statistics, Department of Enterprise, Trade and Employment.

(103)ECB Dashboard

<https://data.ecb.europa.eu/data/datasets/MIR/dashboard>

(104)SME Credit Demand Survey – 2023.

<https://www.gov.ie/pdf/?file=https://assets.gov.ie/291281/19314c55-a002-4fda-aeac-8a4a877e9958.pdf#page=null>

(105)SAFE survey, ECB.

(106)IMD, World Competitiveness Ranking 2023.

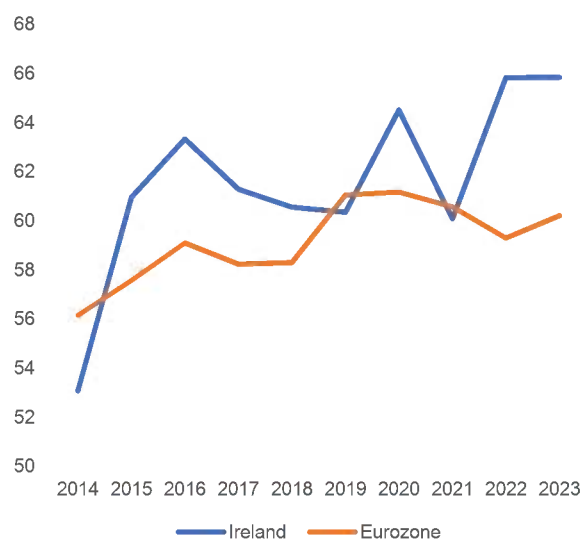
(107)Ireland's Competitiveness Scorecard 2023, National Competitiveness and Productivity Council.

infrastructure, in particular offshore wind. As well as the publication of the Maritime Area Planning Act 2021, Ireland completed its first offshore wind renewable energy auction in 2023. The publication of Ireland's Hydrogen Strategy⁽¹⁰⁸⁾ and the National Industrial Strategy for Offshore Wind⁽¹⁰⁹⁾ illustrate opportunities to expand Ireland's economic model.

There are opportunities for Ireland to further integrate with the single market. Irish intra-EU trade has been below the EU average in the past 5 years, accounting for roughly 33% of its GDP. While Ireland performs better than most EU Member States on the integration of services (17% vs EU average of 15%), intra-EU trade for goods accounted for less than 20% of GDP in 2022, compared to an EU average of 31%. Irish trade is asymmetric and concentrated. In 2021, the top five exporters accounted for 44% of total goods exports⁽¹¹⁰⁾. In contrast, data from the Survey on access to finance of enterprises (SAFE) shows that two in three Irish SMEs do not export⁽¹¹¹⁾. Of those exporting SMEs, only 14% of trade was destined for the Eurozone, behind the UK (65%) and above the US (10%)⁽¹¹²⁾. On single market rules, Ireland's scores are mixed, with the transposition deficit of single market directives below the EU average but a conformity deficit on average greater than EU peers. At the same time, infringements on single market issues are below the EU average. Ireland solved 86.8% of the 53 SOLVIT cases it handled, slightly below the EU average of 88.3%. On public procurement, the low number of public procurement review proceedings initiated, following proposals from economic operators, against the decisions of contracting authorities (and entities) raises

concerns about the effectiveness of the public procurement remedies system, linked to its affordability and speed.

Graph A12.2: Non-exporting SMEs (%)



Source: SAFE, ECB.

Innovation is being held back by low levels of expenditure and lack of expertise (see Annex 11). Ireland is a strong innovator, with more than half of firms (57.6%) engaging in innovation activities, which is above the EU average⁽¹¹³⁾. While performing well, Ireland's advantage over the EU is becoming smaller, and there is a growing gap between foreign and domestic firms engaging in innovation expenditure. R&D expenditure, even accounting for distortions caused by multinationals, is consistently below EU levels, with disparities between large businesses and SMEs. While the low uptake of SME tax credits is a barrier to R&D investment, expertise in R&D is cited as the second highest skills shortage for SMEs⁽¹¹⁴⁾.

Ireland is in the intermediary stage of implementing the components needed to connect to the Once-Only Technical System (OOTS)⁽¹¹⁵⁾. As part of the Single Digital Gateway Regulation⁽¹¹⁶⁾, the system will

⁽¹⁰⁸⁾ National Hydrogen Strategy, <https://www.gov.ie/pdf/?file=https://assets.gov.ie/263248/f982c10f-eca6-4092-a305-90000e5213ed.pdf#page=null>

⁽¹⁰⁹⁾ Ireland's Offshore Wind Industrial Strategy, <https://enterprise.gov.ie/en/publications/publication-files/powering-prosperity.pdf>

⁽¹¹⁰⁾ Eurostat, Concentration of trade by NACE Rev. 2 activity.

⁽¹¹¹⁾ SAFE survey, <https://data.ecb.europa.eu/data/datasets/SAFE/SAFE.H.IE.SME.A.o.o.o.D7.ZZZZ.EX1.AL.WP>

⁽¹¹²⁾ SME Credit Demand Survey – April-September 2022. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/245813/7748a172-f81f-4231-b74f-cod07b343711.pdf#page=null>

⁽¹¹³⁾ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Community_Innovation_Survey_2020_-_key_indicators

⁽¹¹⁴⁾ Eurostat.

⁽¹¹⁵⁾ Implementing Regulation (EU) 2022/1463.

⁽¹¹⁶⁾ Regulation (EU) 2018/1724.

enable the automated cross-border exchange of evidence between competent authorities, improving online access to information, administrative procedures and assistance within the EU. The onboarding of Irish competent authorities is crucial for the system to function smoothly and to reduce

administrative burden.

Table A12.1: Industry and the Single Market

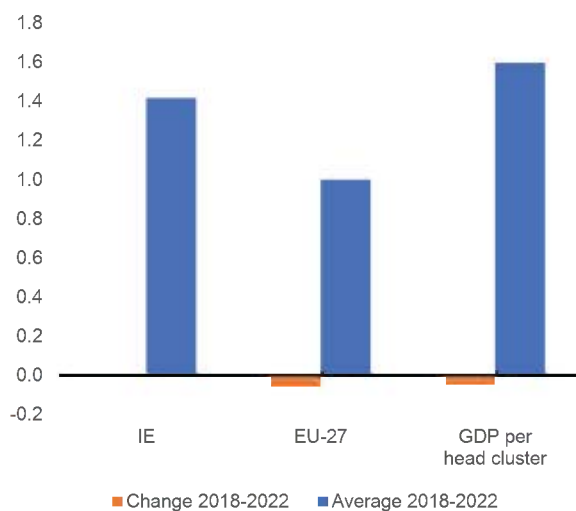
Ireland							
POLICY AREA	INDICATOR NAME	2019	2020	2021	2022	2023	EU27 average*
HEADLINE INDICATORS							
Economic Structure	Net Private investment, level of private capital stock, net of depreciation, % GDP ¹	28	12.7	-4.3	-3.2	-2.6	3.8
	Net Public investment, level of public capital stock, net of depreciation, % GDP ¹	1	1	0.8	0.8	1	1.2
Cost competitiveness	Real labour productivity per person in industry (% yoy) ²	-0.5	19.8	17.3	13.6	-11.7	-1.24
	Nominal unit labour cost in industry (% yoy) ²	4.9	-17.3	-12.8	-8.9	21	9.83
SINGLE MARKET							
Single Market integration	EU Trade integration, % (Average intra-EU imports + average intra EU exports)/GDP ²	32.7	30.2	32.6	35.8	34.5	42.9
Compliance	Transposition deficit, % of all directives not transposed ³	0.8	1.3	2.2	1.2	0.5	0.7
	Conformity deficit, % of all directives transposed incorrectly ³	1.1	1.3	1.2	1.6	1.5	1.1
	SOLVIT, % resolution rate per country ³	93.1	87.0	87.0	91.9	87.0	88.3
Restrictions	Number of pending infringement proceedings ³	22	26	23	18	23	25.9
	EEA Services Trade Restrictiveness Index ⁴	0.05	0.05	0.05	0.05	0.05	0.05
Public procurement	Single bids, % of total contractors ³	16	14	15	21	16	28.6
	Direct Awards, % ³	0	2	4	1	1	8.1
ECONOMIC STRUCTURE							
Shortages	Material Shortage (industry), firms facing constraints, % ⁵	13.2	13.6	38.5	52.0	40.8	17.2
	Labour Shortage using survey data (industry), firms facing constraints, % ⁵	17.3	9.2	24.8	46.8	37.5	23.3
	Vacancy rate, % of vacant posts to all available ones (vacant + occupied) ²	1.025	0.7	1.3	1.5	1.0	2.5
Strategic dependencies	Concentration in selected raw materials, Import concentration index based on a basket of critical raw materials ⁶	0.14	0.14	0.15	0.16	0.19	0.22
	Installed renewables electricity capacity, % of total electricity produced ²	43.3	44.7	45.6	47.4	-	53
BUSINESS ENVIRONMENT - SMEs							
Investment obstacles	Impact of regulation on long-term investment, % of firms reporting business regulation as major obstacle ⁷	16.1	13.5	18.4	8.0	13.0	22.2
Business demography	Bankruptcies, Index (2015=100) ²	-	-	-	-	-	105.6
	Business registrations, Index (2015=100) ²	115.4	93.4	103.7	95.7	60.2	120.2
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment ⁸	-	16	14	14	15	15
	Payment gap - public sector, difference in days between offered and actual payment ⁸	-	26	11	19	18	16
	Share of SMEs experiencing late payments in past 6 months, % ⁹	43.2	39.3	34.9	38.6	42.6	48.7
Access to finance	EIF Access to finance index - Loan, Composite: SME external financing over last 6 months, index values between 0 and 1 ¹⁰	0.21	0.22	0.24	0.49	-	0.49
	EIF Access to finance index - Equity, Composite: VC/GDP, IPO/GDP, SMEs using equity, index values between 0 and 1 ¹⁰	0.20	0.13	0.16	0.14	-	0.17

Source: (1) AMECO, (2) Eurostat, (3) Single Market Scoreboard, (4) OECD, (5) ECFIN BCS, (6) COMEXT and Commission calculations, (7) EIB Investment Survey, (8) Intrum Payment Report, (9) SAFE survey, (10) EIF SME Access to Finance Index.

* Own Commission calculations for the EU27 average.

Ireland's public administration is essential for the economy's competitiveness by, in particular, shaping the conditions for the twin transitions and creating a favourable business environment. Ireland's high level of perceived government effectiveness remains stable compared to other Member States (Graph A13.1). In 2023, the government launched the Better Public Services strategy for 2030. It aims to serve the public and build trust in public institutions through digital and innovation, ensuring the workforce of the future and evidence-informed policies. In addition, the strategy highlights the public sector's leadership role in driving climate action⁽¹¹⁷⁾. A set of measures in the National Development Plan are expected to reduce the administrative burden associated with delivering major capital projects.

Graph A13.1: Government effectiveness



Average value over 2018-2022 and change over 2018-2022.

The GDP per head bar shows the mean value of the government effectiveness indicator for the group of EU countries belonging to the same GDP per head cluster as Ireland (EU countries are ranked in terms of their GDP per head and grouped into three equally sized clusters).

Source: Worldwide Governance Indicators.

E-government maturity in Ireland scores close to the EU average. However, the share of users of government websites or applications and the degree of development of open government data are relatively high

⁽¹¹⁷⁾ Department of Public Expenditure, NDP Delivery and Reform (2023), Better Public Services – Public Service Transformation 2030 Strategy, <https://www.gov.ie/en/publication/80247-better-public-services-public-service-transformation-2030-strategy/>

(Table A13.1). To improve the quality of public services, including their digital delivery, Ireland is following a design-led approach⁽¹¹⁸⁾ by creating dedicated teams, setting out pathways for reskilling and upskilling staff, drawing up design-specific job descriptions and creating a framework for procuring design services. This approach will underpin the delivery of seamless life events via a digital service (MyGovID).

Ireland is taking steps to maintain the civil service's good age and skill structure. An independent review⁽¹¹⁹⁾ confirmed that the recruitment of senior civil servants is robust. Additional improvements identified in the review concerning the recruitment process are related to increased transparency, efficiency in time and more equal opportunities. This is important given that gender parity in senior civil service positions continues to be below the EU average (Table A13.1). A Senior Posts Remuneration Committee will advise the government on a consistent approach to pay determination. In 2023, the Public Service Apprenticeship Plan was updated to increase the number of annual apprenticeships across the public service and in local authorities. Amendments to the Public Service Sick Leave Scheme aimed to improve the access and protection of staff experiencing illness.

Ireland's policymaking faces certain shortcomings, including insufficient cooperation between departments in policy design, a weak link between policy and implementation, limited stakeholder engagement, and an insufficient use of evidence, data, and impact assessments⁽¹²⁰⁾. In 2023, new structures such as the Research

⁽¹¹⁸⁾ Department of Public Expenditure, NDP Delivery and Reform (2023), Action Plan for Designing Better Public Services, <https://www.gov.ie/en/publication/1e3e2-action/>

⁽¹¹⁹⁾ Department of Public Expenditure, NDP Delivery and Reform (2023), Review of Senior Public Service Recruitment and Pay Determination Processes, <https://www.gov.ie/en/publication/dddo8-review-of-senior-public-service-recruitment-and-pay-determination-processes/>

⁽¹²⁰⁾ OECD (2023), Strengthening Policy Development in the Public Sector in Ireland, https://www.oecd-ilibrary.org/governance/strengthening-policy-development-in-the-public-sector-in-ireland_6724d155-en

and Innovation Funding Agency ⁽¹²¹⁾ and the Civil Service Research Network were set up to improve the link between research and policy design. Furthermore, the guidelines on public consultations are being updated. Ireland is also working to expand its approach to green budgeting ⁽¹²²⁾

The lack of data on the efficiency of litigious and non-litigious civil and commercial cases does not allow analysts to properly evaluate the overall efficiency of the judicial system. The main challenge is the length of proceedings; according to the 2022 annual report of the Courts Service. The average length of proceedings in the High Court in 2022 was 871 days, an increase of 74 days from 2021. The EU Justice Scoreboard 2024 states that in 2022 the clearance rate for non-criminal cases was 84%, the lowest in the EU, partly due to cases being registered even if parties decide not to pursue them. The quality of the justice system is good overall. The number of judges in the Irish legal system has been increased, but remains low in comparative terms, although Ireland has several non-court adjudicative bodies dealing with cases which, in other jurisdictions, are dealt with in the courts by judges. The government continues to work to address concerns in relation to litigation costs and the legal aid system. The level of digitalisation is advanced, and Ireland has published and been implementing several digital strategies that may contribute to fill gaps in the digitalisation of justice. On judicial independence, no systemic deficiencies have been reported ⁽¹²³⁾.

⁽¹²¹⁾ Department of Further and Higher Education, Research, Innovation and Science press release, <https://www.gov.ie/en/press-release/2ae5b-minister-harris-announces-taighde-eireann-research-ireland-as-the-official-name-of-the-new-research-and-innovation-funding-agency/>

⁽¹²²⁾ Department of Public Expenditure, NDP Delivery and Reform (2021), Public Service Performance Reports, <https://www.gov.ie/en/collection/61d3f-public-service-performance-reports/>

⁽¹²³⁾ For a more detailed analysis of the performance of the Irish justice system, see the 2024 EU Justice Scoreboard (forthcoming) and the country chapter on Ireland in the Commission's 2024 Rule of Law Report (forthcoming).

Table A13.1: Public administration indicators

IE Indicator ⁽¹⁾	2019	2020	2021	2022	2023	EU-27 ⁽²⁾
E-government and open government data						
1 Share of internet users within the last year that used a public authority website or app	n/a	n/a	n/a	n/a	87.3	75.0
2 E-government benchmark overall score ⁽³⁾	n/a	69.5	70.7	71.6	74.2	75.8
3 Open data and portal maturity index	0.9	0.9	1.0	0.9	0.9	0.8
Educational attainment level, adult learning, gender parity and ageing						
4 Share of public administration employees with higher education (levels 5-8, %)	62.3	65.9	67.8 (b)	68.2	71.4	52.9
5 Participation rate of public administration employees in adult learning (%)	15.3	11.6	15.4 (b)	14.2	13.2	17.9
6 Gender parity in senior civil service positions ⁽⁴⁾	35.4	33.8	33.4	20.6	22.6	9.2
7 Ratio of 25-49 to 50-64 year olds in NACE sector O	1.6	1.7	1.9 (b)	1.6	1.7	1.5
Public financial management						
8 Medium-term budgetary framework index	0.7	0.7	0.7	0.7	n/a	0.7
9 Strength of fiscal rules index	1.0	1.0	1.0	1.0	n/a	1.4
Evidence-based policy making						
10 Regulatory governance	n/a	n/a	1.16	n/a	n/a	1.7

(¹) High values denote a good performance, except for indicator # 6. (²) 2023 value. If unavailable, the latest value available is shown. (³) Measures the user centricity (including for cross-border services) and transparency of digital public services as well as the existence of key enablers for the provision of those services. (⁴) Defined as the absolute value of the difference between the percentage of men and women in senior civil service positions. Flags: (b) break in time series; (u) low reliability.

Source: E-government activities of individuals via websites, Eurostat (# 1); E-government benchmark report (# 2); Open data maturity report (# 3); Labour Force Survey, Eurostat (# 4, 5, 7); European Institute for Gender Equality (# 6); Fiscal Governance Database (# 8, 9); OECD Indicators of Regulatory Policy and Governance (# 10).

ANNEX 14: EMPLOYMENT, SKILLS AND SOCIAL POLICY CHALLENGES IN LIGHT OF THE EUROPEAN PILLAR OF SOCIAL RIGHTS

The European Pillar of Social Rights is the compass for upward convergence towards better working and living conditions in the EU. This Annex provides an overview of Ireland's progress in implementing the Pillar's 20 principles and the EU headline and national targets for 2030 on employment, skills and poverty reduction.

The labour market continued to expand despite sharp rises in business costs and consumer prices. In 2023, the employment rate reached 79.1%, well above the EU average, and above Ireland's 2030 national employment target of 78.2%. Labour shortages decreased, however businesses continue to struggle with hiring skilled staff, especially for technical professions. According to the Banking & Payments Federation Ireland, 61% of Irish SMEs found it challenging to recruit machine operators and skilled tradespersons. Extending and improving the offer of vocational education and training (VET) could help address labour shortages. The sectors with the highest rates of job vacancies in 2023 included scientific and technical activities, public administration and defence, and finance. Irish women are now more highly educated than their male counterparts and the female employment rate is at a historical high. The gender employment gap decreased to 9.9 percentage points (pps) in 2023, below the EU average of 10.2pps.

While the system to upskill and reskill people is well-established, participation is relatively low. Participation in adult learning over the past 12 months increased to 48.3% in 2022 and remained above the EU average (39.5%). However, considerable efforts will be required to reach the 2030 national target for adult learning and training of 64.2% (see table A14.2). Along with persisting labour shortages and other challenges, low participation in upskilling is undermining Ireland's potential to improve its economic competitiveness. Ireland is among the top performers in digital skills, with 72.9% of people having at least basic digital skills. Although the overall labour market results are good, active labour market policies (ALMPs) in Ireland have suffered from administrative challenges. These are linked to a range of disincentives to participation,

fragmented legal provisions, different target groups and the criteria for participation. There is scope for making ALMPs more responsive to the labour market and to reverse an over-emphasis on public employment provision and work programmes, to the benefit of training courses for more specific skills.

Poverty and social exclusion remain challenges, especially for vulnerable groups. Among those most affected are persons with disabilities, Travellers and Roma, older people, and single parents. Indexing welfare payments could help Ireland reach the national 2030 target of 90 000 fewer people at risk of poverty or social exclusion (AROPE).

Table A14.1: Social Scoreboard for Ireland

Policy area	Headline indicator	
Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)	48.3
	Early leavers from education and training (% of the population aged 18-24, 2023)	4
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2023)	72.9
	Young people not in employment, education or training (% of the population aged 15-29, 2023)	8.5
	Gender employment gap (percentage points, population aged 20-64, 2023)	9.9
	Income quintile ratio (S80/S20, 2022)	4.1
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2023)	79.1
	Unemployment rate (% of the active population aged 15-74, 2023)	4.3
	Long term unemployment (% of the active population aged 15-74, 2023)	1.1
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2022)	107.2
	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2022)	20.7
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2022)	22.7
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2022)	56.39
	Disability employment gap (percentage points, population aged 20-64, 2022)	37
	Housing cost overburden (% of the total population, 2022)	3.9
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2022)	19.1
	Self-reported unmet need for medical care (% of the population aged 16+, 2022)	2.6
<div> <div>Critical situation</div> <div>To watch</div> <div>Weak but encouraging</div> <div>Good but to monitor</div> <div>On average</div> <div>Better than average</div> <div>Best performers</div> </div>		

Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2024 for details on the methodology.

Source: Eurostat.

The AROPE rate of persons with disabilities slightly increased in 2022, to 39.5%, and is twice as high as for the total population. While their employment situation improved, Ireland still recorded the highest disability employment gap in the EU, at 37pps in 2022



(EU average: 21.4 pps) ⁽¹²⁴⁾. Persons with disabilities have a very low employment rate and are overrepresented in households with a low rate of work intensity. There is ample evidence of discrimination at work, and the jobs available to persons with disabilities are often inadequate to lift them out of poverty. Fear of losing the disability benefits frequently prevents people from entering work ⁽¹²⁵⁾. Also, persons with disabilities tend to have high rates of early school leaving and lower levels of educational attainment. There is also a high tertiary education gap of 16.1pps (EU average: 11.3pps) for persons with disabilities in the 30-34 age group. Supportive policy interventions for more inclusive education, and reinforcement of career guidance and coaching, appear important. Since 2022, the public employment services have reached out proactively to clients with a disability to raise awareness of the support that is available to them. The ESF+ co-finances the Workability Programme, which will support 5 000 persons with disabilities to enter education and employment in 2021-2027.

A 2022 census confirmed that Roma and Traveller communities remain marginalised. The Travellers' employment rate was 18% and the unemployment rate 61% (vs 4.5% overall), while less than 4% had finished tertiary education. The employment rate of Roma stood at 61%, whereas their unemployment rate was at 17%. Almost two-thirds of Traveller families live in social housing and face discrimination in the private rental sector. Shortcomings in the implementation of the 2017-2021 Traveller and Roma Inclusion strategy point to a need for increased financing and administrative capacity and a more rigorous monitoring of the next strategy.

The adequacy of pensions has deteriorated over recent years, especially for women. The AROPE rate for people over 65, which is a key indicator of pension adequacy, increased from 21.3% in 2021 to 25.7% in 2022. The AROPE rate for women rose to 30%, a 7.3pps

increase since 2019. The reasons why women often do not qualify for a contributory pension include long periods of unpaid domestic and care work. Gender inequalities in the system and pension adequacy therefore remain a challenge. Ireland is one of three countries in the EU that do not have a pension indexation system in place.

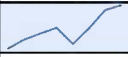


The employment situation and poverty risks of single parents improved, however they remain outliers, both compared to other Irish households and to the rest of the EU. Their AROPE rate decreased significantly, from 57.7% to 50.3 between 2021 and 2022. This might be the combined effect of substantial subsidies for early childhood education and care for low-income single parents, and because more of them are taking up work. Still, at 50.3%, their AROPE rate was 2.5 times higher than for the total population. Ireland recorded the highest share of single parents living in low work-intensity households in the EU. There is significant room to improve the social protection of single parents. Maintaining the adequacy of welfare benefits as children grow, or as single parents enter employment, is not sufficiently addressed at present.

Childcare attendance increased for children below 3 years of age but is still far from the Barcelona target of 45%. At 19.1%, Ireland was well below the EU average of 35.9% in 2022. It also has one of the lowest shares of poor children below three in childcare in the EU, which highlights difficulties for some children to access childcare, hindering their parents' participation to the labour market (see also Annex 15). Measures in the 2024 national budget are expected to boost participation. These include more public funding for the sector and increased subsidies for parents, and an 'equal participation model' focusing on disadvantaged families. The model may enable children in need to access free early childhood education and care, as called for by the European Child Guarantee.

⁽¹²⁴⁾ As mentioned in the Joint Employment Report 2024, the prevalence of disability based on the GALI concept and the disability employment gap based on EU-SILC data are negatively correlated, (2022 Pearson correlation coefficient = -0.5).

⁽¹²⁵⁾ European Human Rights Report – Issue 7 2023

Table A14.2: **Situation of Ireland on 2030 employment, skills and poverty reduction targets**

Indicators	Latest data	Trend (2016-2023)	2030 target	EU target
Employment (%)	79.1 (2023)		78.2	78
Adult learning ¹ (%)	48.3 (2022)		64.2	60
Poverty reduction ² (thousands)	41 (2022)		-90	-15 000

(1) Adult Education Survey, adults in learning in the past 12 months, [special extraction excl. guided on-the-job training](#).

(2) Change in the number of persons at risk of poverty or social exclusion (AROPE), reference year 2019.

Source: Eurostat, DG EMPL.

Despite an increase in housing supply in 2023, the country continues to grapple with a housing crisis and the affordability of housing is a concern. In 2023, 32 500 housing units were completed, an increase of 10% on the previous year. Almost 58 000 households were assessed as needing social housing support. In addition, over 59 000 households that could not afford their rent received Housing Assistance Payments, and around 11 400 social houses were delivered in 2023. The situation was further aggravated with more than 100 000 refugees arriving from Ukraine by February 2024 ⁽¹²⁶⁾. In March 2024, a record of almost 14 000 people were homeless, of which over 4 000 children. The situation worsened with the lift of the eviction ban in April 2023, affecting children and one-parent families in particular. However, other factors must also be considered, as homelessness had been increasing since January 2022, even while the ban was active (although the rate of increase slowed down, and child homelessness fell during the period). Termination of the rental contract is one of the main reasons for homelessness. A third of the population depends on the private rental sector, this amid a 6.7% annual increase in rents for new tenancies since the end of 2022, which followed years of already significant rises in rents. The housing cost overburden rate is limited but has been increasing. Improving tenants' rights, a ban on evictions during winter, and targeting support on the most vulnerable (including single-parent households) may prevent the crisis from

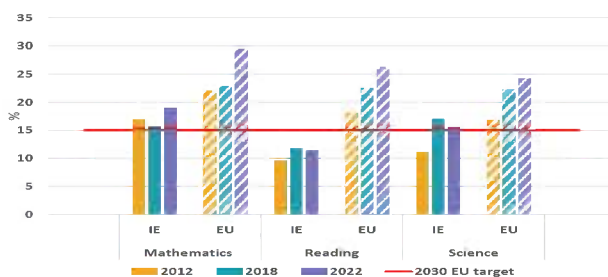
worsening. The Irish recovery and resilience plan envisages reforms to increase the provision of social and affordable housing.

⁽¹²⁶⁾ [Central Statistical Office Ireland, Arrivals from Ukraine Series 12](#)

This Annex outlines the main challenges of Ireland's education and training system based on the 2023 Education and Training Monitor and the 2022 OECD Programme for International Student Assessment (PISA) results.

Despite a decrease in mathematics performance, quality and equity of education remain high in Ireland. The 2022 PISA⁽¹²⁷⁾ results show that Ireland ranks above the EU average in reading, mathematics and science (see Table A15.1 and Graph A15.1). Underachievement in reading (11.4%) has been among the lowest in the EU since 2012, and in science (15.6%) it is close to the EU 2030 target. In mathematics, (19%), it somewhat increased since 2018 (by 3.3 pps). Ireland has one of the smallest socio-economic gaps in its underachievement rate in mathematics (23.9 pps vs EU 37.2 pps). The difference in the underachievement rates of students with and without migrant background is not statistically significant. The proportion of top

Graph A15.1: Underachievement rates by field, PISA 2012, 2018 and 2022



Source: OECD (2023).

performers in mathematics at 7.2% is close to the EU average, but the gender gap in favour of boys among top performers in mathematics (4.9 pps) and science (4 pps) is comparatively high. Ireland continues to reform its curricula, including in mathematics.

Teacher shortages and retaining new teachers are key challenges. While the profession is attractive to many young people, and in 2021, at 28.4%, the proportion of teachers aged 25-34 was among the highest in the EU (15.8%), it has shrunk by 5.7 pps since

2015. Part-time and temporary contracts are a disincentive for new teachers to stay in the profession, and experts call for urgent measures to retain new teachers⁽¹²⁸⁾. Despite the increased number of teachers⁽¹²⁹⁾, according to headteacher reports, in 2022, 67.8% (vs 53.4% in the EU) of 15-year-olds attended schools whose capacity to provide instruction could be hindered by the lack of staff, as compared with 44.8% in 2018⁽¹³⁰⁾. Apart from the main challenges (high accommodation costs and demographic issues), the demand for teachers has increased also due to the positive policy in school education such as reduced student-teacher ratio requirements in disadvantaged schools.

Substantial policy reforms in early childhood education and care (ECEC) are well under way. Ireland has achieved or surpassed the interim targets under *First 5*, the strategy for ECEC (2019-2028). The professionalisation of childcare workers continues, also with ESF+ support. Increased investments in 2024 aim to improve the affordability of ECEC below the age of 3 (see Annex 14). The results of a pilot on hot meals in ECEC settings in disadvantaged areas will inform decisions on a wider support scheme, and on the best support for migrant families to improve their participation in formal childcare. Children from non-English-speaking immigrant households are less likely to be in informal and formal care⁽¹³¹⁾.

The rate of early leavers from education and training is low but remains high for vulnerable groups. The early school leaving rate at 4.0% in 2023 is among the lowest in the

⁽¹²⁸⁾ Harford, J.; B. Fleming. (2023), Teacher supply in Ireland: anatomy of a crisis, <https://doi.org/10.1080/03323315.2023.2222709>

⁽¹²⁹⁾ Department of Education (2023), Statistical Bulletin – July 2023, <https://www.gov.ie/pdf?file=https://assets.gov.ie/263000/f2932136-6191-4e56-9afo-5b315e85702f.pdf#page=null>

⁽¹³⁰⁾ OECD (2023), PISA 2022 Results (Volume II), https://www.oecd-ilibrary.org/education/pisa-2022-results-volume-ii_a97db61c-en

⁽¹³¹⁾ Sprong, S., Stopek, J. (2023), Differences in childcare use between Irish-born and immigrant households in Ireland, <https://www.esri.ie/publications/differences-in-childcare-use-between-irish-born-and-immigrant-households-in-ireland>

⁽¹²⁷⁾ OECD (2023), PISA 2022 Results (Volume I), <https://doi.org/10.1787/53f23881-en>.

Table A15.1: EU-level targets and other contextual indicators under the European Education Area strategic framework

Indicator	Target	2012		2018		2023	
		Ireland	EU-27	Ireland	EU-27	Ireland	EU-27
¹ Participation in early childhood education (age 3+)	96%	82.4% ²⁰¹³	91.8% ²⁰¹³	100.0%	92.2%	96.4% ²⁰²¹	92.5% ^{2021,d}
² Low-achieving 15-year-olds in:	Reading	< 15%	9.6%	18.0%	11.8%	22.5%	11.4% ²⁰²²
	Mathematics	< 15%	16.9%	22.1%	15.7%	22.9%	19.0% ²⁰²²
	Science	< 15%	11.1%	16.8%	17.0%	22.3%	15.6% ²⁰²²
Early leavers from education and training (age 18-24)	³ Total	< 9 %	9.9%	12.6%	5.0%	10.5%	4.0%
	³ By gender	Men	12.0%	14.5%	6.1%	12.1%	5.1%
		Women	7.8%	10.6%	3.9%	8.7%	2.9% ^u
	⁴ By degree of urbanisation	Cities	8.0% ^b	11.2%	4.5%	9.4%	4.2% ^u
		Rural areas	10.6% ^b	14.0%	5.2%	11.0%	3.5% ^u
	⁵ By country of birth	Native	9.3%	11.3%	5.4%	9.2%	3.9%
		EU-born	18.2%	26.2%	: ^u	22.4%	: ^u
		Non EU-born	8.9%	30.1%	: ^u	23.0%	: ^u
⁶ Socio-economic gap (percentage points)		26.3	:	20.7	29.5	23.9 ²⁰²²	37.2 ²⁰²²
⁷ Exposure of VET graduates to work-based learning	≥ 60% (2025)	:	:	:	:	39.2%	64.5%
Tertiary educational attainment (age 25-34)	⁸ Total	45%	50.3%	34.1%	56.2%	38.7%	62.7%
	⁸ By gender	Men	43.8%	29.1%	52.1%	33.3%	59.0%
		Women	56.3%	39.2%	60.0%	44.2%	66.3%
	⁹ By degree of urbanisation	Cities	56.6% ^b	43.5%	65.1%	49.0%	69.9%
		Rural areas	43.0% ^b	24.8%	47.8%	27.7%	56.2%
	¹⁰ By country of birth	Native	49.8%	35.4%	53.8%	39.7%	57.9%
		EU-born	44.6% ^u	29.3%	52.1%	36.7%	52.5%
		Non EU-born	61.7%	24.2%	68.7%	31.0%	76.7%
¹¹ Participation in adult learning (age 25-64)	≥ 47% (2025)	:	:	46.0% ²⁰¹⁶	37.4% ²⁰¹⁶	48.3% ²⁰²²	39.5% ²⁰²²
¹² Share of school teachers (ISCED 1-3) who are 55 years or over		13.6% ²⁰¹³	22.7% ²⁰¹³	12.8%	23.8%	12.3% ²⁰²¹	24.5% ²⁰²¹

Notes: b = break in time series; d = definition differs; e = estimated; p = provisional; u = low reliability; : = data not available.

Source: 1,3,4,5,7,8,9,10,12 = Eurostat; 11= Eurostat, Adult Education Survey; 2,6 = OECD, PISA.

EU. The rate, however, remains high among vulnerable groups, including people with disabilities⁽¹³²⁾ and Travellers. Ireland continues supporting students with special needs. In 2024, it plans for an additional 744 special needs teachers and 1 216 special needs assistants in mainstream and special classes, and special schools. There are still needs for investment in new mainstream school buildings given demographic projections, and in the upgrading of existing schools⁽¹³³⁾.

The tertiary educational attainment rate is the highest in the EU; progress on equity will be important. In 2023, at 62.7%, the tertiary attainment rate was among the highest in the EU. While, overall, 83% of graduates are in employment 9 months after graduating, the rate for graduates with disabilities is 69%, ranging from 57% to 74% depending on the

nature of the disability⁽¹³⁴⁾. Progress assessment on the national access plan will be important (review scheduled for 2025). Ireland is progressing a policy for a unified tertiary sector⁽¹³⁵⁾. The new joint tertiary degree route provides a transition from further education to higher education, offering new pathways. Among various investment initiatives (e.g. human capital, funds for technological universities), in 2024, Ireland allocated EUR 95 million to address pay shortfalls and the high student-staff ratio (22.8:1 in Ireland compared with 17:1 in the OECD)⁽¹³⁶⁾.

⁽¹³⁴⁾HEA (2023), Graduate Outcomes and Disability Report, <https://hea.ie/2023/02/23/hea-publishes-graduate-outcomes-and-disability-report/>.

⁽¹³⁵⁾Department of Further and Higher Education, Research, Innovation and Science press release - <https://www.gov.ie/en/press-release/9c968-minister-harris-announces-significant-policy-development-on-unified-tertiary-sector/>

⁽¹³⁶⁾OECD (2023), Education at a Glance 2023, <https://doi.org/10.1787/e13bef63-en>

⁽¹³²⁾EU-SILC UDB 2018, release 2020, version 1.

⁽¹³³⁾ESRI (2024), The National Development Plan in 2023: priorities and capacity, <https://doi.org/10.26504/sustat123>.

Ireland has an effective lifelong learning and upskilling policy, but needs are high in the context of the green transition. Starting from a very low base, the green sector is growing strongly (see Annex 8), but new skills will be needed in Ireland ⁽¹³⁷⁾. Supported by the Recovery and Resilience Facility, Ireland enhances learning for sustainability also in the technological sector to equip students and staff with the necessary competences ⁽¹³⁸⁾.

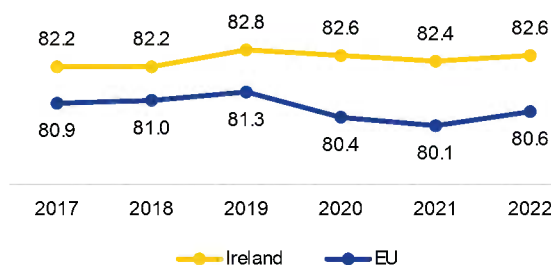
⁽¹³⁷⁾ OECD (2023), OECD Skills Strategy in Ireland, <https://doi.org/10.1787/d7b8b40b-en>

⁽¹³⁸⁾ 'N-TUTORR' available at <https://www.transforminglearning.ie/>

A healthy population and an effective, accessible and resilient health system are prerequisites for a sustainable economy and society. This Annex provides a snapshot of population health and the health system in Ireland.

Life expectancy at birth in Ireland is among the highest in the EU. There was a drop in life expectancy between 2019 and 2021 due to the COVID-19 pandemic. However, life expectancy rebounded partly in 2022 as mortality from COVID-19 declined⁽¹³⁹⁾. In 2021, the leading causes of death were cancer, and diseases of the circulatory system ('cardiovascular diseases'), followed by diseases of the respiratory system. Mortality from preventable and treatable causes in Ireland is lower than in most other EU countries. However, behavioural risk factors such as obesity and excessive alcohol consumption are significant public health concerns. This is partly reflected in the above-average incidence of cancer in the Irish population, although age-standardised mortality rates from cancer are close to the EU average.

Graph A16.1: Life expectancy at birth, years



Source: Eurostat.

Health spending relative to GDP in Ireland decreased in 2021 and remained below the EU average. Between 2020 and 2021, health spending increased in nominal terms by 8%, but as a proportion of GDP health spending fell from 7.1% to 6.6%, compared to 10.9% in the EU as a whole. Provisional data suggest that in 2022 total healthcare spending fell further to 6.0% of GDP. However, relative to modified GNI, a more meaningful measure than GDP for Ireland, health spending in 2021 remained high

at 12.2%⁽¹⁴⁰⁾. Per capita spending on inpatient and long-term care is above the EU average, whereas spending on outpatient care, disease prevention, pharmaceuticals and medical devices is below the EU average. Although household out-of-pocket expenditure accounts for a lower-than-average fraction of health expenditure, payments towards voluntary health insurance represent nearly 12% of total health spending, which is almost triple the EU average. This is because almost half of the population has private health insurance⁽¹⁴¹⁾ to bypass the long, persistent waiting lists in the public system – which, in turn, creates health inequalities, as poorer patients cannot afford private health services. The share of total health spending that was publicly funded (77.4%) remained below the EU average of 81.1%. Public spending on health is projected to rise by 1.5 percentage points (pps) of GDP by 2070 due to population ageing, compared to 0.6 pps for the EU overall, leading to fiscal sustainability challenges in the long term (see Graph 16.2 and Annex 21).

In 2021, spending on prevention in Ireland amounted to 5.9% of total spending on healthcare, similar to the 6.0% for the EU overall. Between 2019 and 2021, spending on disease prevention in Ireland more than doubled, in line with the trend across the EU. Proportionally, budget shares for prevention across the EU increased most for emergency response, disease detection and immunisation programmes. A worrying development from a public health perspective is the marked increase in the consumption of antibiotics in Ireland – up 30% from 2021 to 2022, to a level now exceeding the EU average. Under the Council Recommendation on stepping up EU action to combat antimicrobial resistance in a One Health approach⁽¹⁴²⁾, the national recommended target for Ireland is to reduce

⁽¹⁴⁰⁾ The amount of business done by multi-national firms in Ireland has a strong effect on its GDP and makes it less suitable as a basis for comparison. Modified gross national income (GNI*) can be used as an alternative indicator of the size of the domestic economy.

⁽¹⁴¹⁾ Houses of the Oireachtas (2022). Retrieved from https://data.oireachtas.ie/ie/oireachtas/libraryResearch/2022/2022-12-15_bill-digest-health-insurance-amendment-bill-2022_en.pdf, page 6.

⁽¹⁴²⁾ [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H0622\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023H0622(01))

⁽¹³⁹⁾ Based on data provided directly by Member States to the European Centre for Disease Prevention and Control, under the European Surveillance System.

Table A16.1: Key health indicators

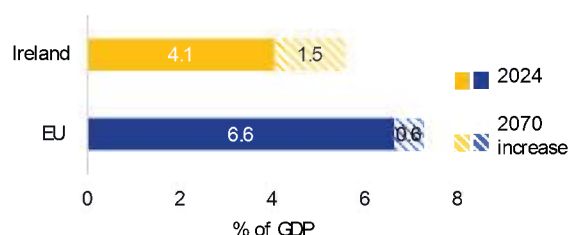
	2018	2019	2020	2021	2022	EU average (latest year)
Treatable mortality per 100 000 population (mortality avoidable through optimal quality healthcare)	75.9	71.0	69.7	69.2	NA	93.3 (2021)
Cancer mortality per 100 000 population	262.1	261.5	255.5	248.0	NA	235.4 (2021)
Current expenditure on health, % GDP	6.9	6.7	7.1	6.6	6.0	10.9 (2021)
Public share of health expenditure, % of current health expenditure	74.0	74.3	78.0	77.4	NA	81.1 (2021)
Spending on prevention, % of current health expenditure	2.6	2.7	3.2	5.9	5.9	6.0 (2021)
Available hospital beds per 100 000 population	297	288	289	289	NA	525 (2021)
Doctors per 1 000 population	3.3	3.3	3.5	4.0	NA	4.1 (2021)*
Nurses per 1 000 population	12.9	13.3	NA	14.6	15.2	7.9 (2021)
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants per day ***	22.4	22.8	18.6	17.8	23.1	19.4 (2022)

Note: The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used. Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Nurses' density data refer to practising nurses in all countries except Ireland, France, Portugal, Slovakia (professionally active) and Greece (hospital only).

Source: Eurostat Database; except: * OECD, ** Joint Questionnaire on non-monetary healthcare statistics, *** ECDC, **** Council Recommendation on stepping up EU actions to combat antimicrobial resistance in a One Health approach.

total consumption of antibiotics by 27% by 2030 compared to the 2019 level.

Graph A16.2: Projected increase in public expenditure on healthcare over 2024-2070



Baseline scenario.

Source: European Commission / EPC (2024).

There are long-standing issues of doctor shortages and long waiting times for healthcare. Ireland continues to have a relatively high density of nurses, well above the EU average. With a significant increase in doctor density over the last decade, in 2021 Ireland approached the EU average number of practising doctors per 1 000 population. Despite this positive development and the large number of medical graduates from Irish universities, current and projected shortages of doctors remain substantial, including for general practitioners. A large proportion of medical graduates are international students with limited options for completing their postgraduate practice in Ireland. An increasing number of early-career Irish-trained doctors emigrate, with demanding working conditions in Ireland and the comparative advantages of practising overseas in other English-speaking, high-income countries as key drivers. Although

the number of patients on hospital waiting lists for more than a year decreased by nearly 45% between December 2020 and December 2022, in January 2023 the overall number of patients on waiting lists for hospital treatment remained over 20% higher than in January 2020. To address this issue the government formulated a new Waiting List Action Plan in early 2023.

Ireland allocated approximately 8.2% of the resources under its recovery and resilience plan (RRP) to investments and reforms in healthcare. Ireland's RRP features a set of investments in the country's digital health infrastructure worth EUR 75 million, to be completed by the end of 2025. These investments include developing and setting up e-pharmacy and integrated financial management systems at national level to improve the use of resources in the Irish healthcare system. In general, such investments may help Ireland overcome the slow uptake of digital health solutions. For example, the number of individuals accessing personal health records online in Ireland is below the EU average, indicating that Ireland is lagging behind in the uptake of e-health and overall health systems digitalisation. Through its RRP Ireland introduced the new Slàintecare Consultant Contract⁽¹⁴³⁾, from 8 March 2023. It is expected to gradually phase out private practice in public hospitals, alleviate recruitment difficulties, and reduce inequalities

⁽¹⁴³⁾Department of Health (2022). <https://www.gov.ie/en/press-release/33536-minister-for-health-announces-government-approval-of-new-slaintecare-consultant-contract/>.

in access to care and inefficiency caused by the two-tier (public/private) design of the Irish healthcare system.

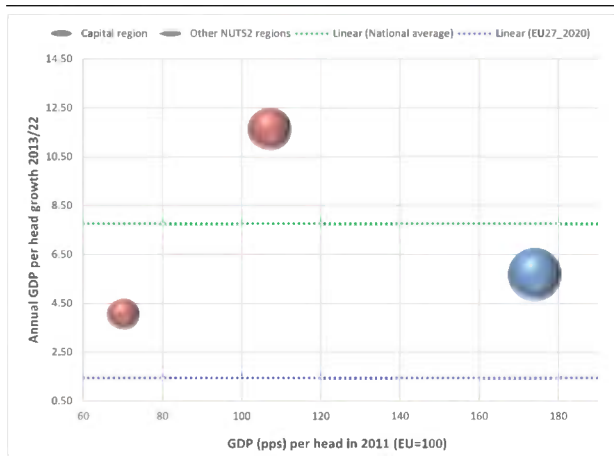
ANNEX 17: ECONOMIC AND SOCIAL PERFORMANCE AT REGIONAL LEVEL

Annex 17 showcases the economic and social regional dynamics in Ireland. It provides an analysis of economic, social and territorial cohesion in Irish regions and assesses emerging investment needs to foster economic growth, social development and competitiveness in the country.

Overview of economic and social performance at regional level

Ireland had the second highest GDP per capita in the EU, yet internal regional disparities remain high. Ireland outperforms the EU average in terms of GDP per capita in purchasing power standard by a significant margin, at 235% in 2022. However, major disparities become apparent at the NUTS 2 and NUTS 3 levels. While the southern region had the highest GDP per capita level at 286% of the EU average in 2022, and the eastern and midland (EM) region at 247%, the northern and western (NW) region lagged far behind, at 83%.

Graph A17.1: Average GDP per capita growth vs GDP per capita - Ireland



Source: DG REGIO calculations based on JRC (ARDECO) and Eurostat data.

Ireland benefited from high growth in 2012-2022, but it left the NW region lagging behind the other two regions. All regions experienced rates well above the EU average of 1.6%. Yet, the figures for the southern and EM regions at a staggering 12.69% and 7.16%

respectively outperformed the growth of just 5% in the NW region (Figure 1) ⁽¹⁴⁴⁾.

Wide differences in levels of labour productivity across Ireland's regions persist (Figure 2) and largely explain the differences in GDP per capita. The southern region was the most productive and records the highest real productivity growth, at 9.7% on average between 2012 and 2022 against 2% for the NW region. Labour productivity in the EM region grew by 3.6% in the same period. The differences between Irish regions mirror wide differences in productivity levels between Irish firms and large multinational corporations. Ireland remains dependent on the activities of a limited number of multinational corporations, which are concentrated in certain counties in the southern and EM regions. Lower productivity levels in the other regions and lower growth for Irish companies throughout the whole country have contributed to growing regional disparities. This is also demonstrated by the large differences in income. The median household disposable income was EUR 53 101 in the EM region, EUR 42 690 in the southern region, and EUR 38 530 in the NW regions. It should be noted that income levels fell in all regions when adjusted for inflation ⁽¹⁴⁵⁾.

Regional disparities are less apparent when it comes to employment indicators. In 2023, the NW region's employment rate of 78.7% stood slightly higher than the southern region's rate of 77.9%, whereas the EM region's rate stood at 80%. After experiencing a slight fall during the COVID-19 pandemic, in 2023, all regions experienced a rise in employment levels. The unemployment rate is lower than the EU average (6.1%) in all NUTS 2 regions, displaying no significant regional differences in unemployment rates between regions. The lowest is in the NW region, at 3.8% while in the southern and EM regions, the unemployment rate stood at 4.2% and 4.5% respectively.

⁽¹⁴⁴⁾ Note that in 2016, the Irish statistical institute significantly revised GDP annual growth in 2015 from 7% to 26%. This revision corresponds to the relocation of preexisting intangible assets by multinationals to Ireland.

⁽¹⁴⁵⁾ See Survey on Income and Living Conditions (SILC) 2021, [Income Survey on Income and Living Conditions \(SILC\) 2021 - Central Statistics Office](#)



Table A17.1: Selected indicators at regional level in Ireland

NUTS region name	GDP per head (PPS)	Real productivity growth	GDP growth	Population growth	At-risk-of-poverty or social exclusion	Employment rate, ages 20-64	Unemployment rate	Greenhouse Gas Emissions	Transport performance by car
	EU27 = 100 (2022)	Average % change on the preceding year, 2013-2022	Average % change on the preceding year, 2013-2022	Average annual change per 1000 residents, 2013-2021 (EU 2011-2022)	% of population, 2022	% of population aged 20-64, 2023	% of labour force, 2023	Tons of CO2 equivalent per head, 2022	Share of population in a 120-km radius that can be reached within 1h30 (%), 2021
European Union (27 MS)	100	0.7	1.6	1.9	21.6	75.3	6.1	8	77.2
Ireland	235	5.7	9.01	10.4	20.7	79.1	4.3	12.2	77.4
Northern and Western	105	2	5	7.8	25.3	78.7	3.8	14.9	57.9
Southern	286	9.7	12.69	7.9	22.4	77.9	4.2	16.7	67.3
Eastern and Midland	247	3.6	7.16	13	18	80	4.5	8.3	91

Source: Eurostat, EDGAR database.

Ireland has a mix of regions above and below the EU average in terms of regional competitiveness, displaying an innovation divide between regions. According to the Regional Competitiveness Index 2.0, in 2022, Ireland with a score of 112.0 ranked above the EU average of 100 ⁽¹⁴⁶⁾. The NW region had the lowest score with 98.2, while the southern and EM regions stood at 105.1 and 121.7 points, respectively. The same variation is reflected in the more advanced sub-components of the index, i.e. the efficiency sub-index (covering higher education, lifelong learning and the labour market) and the innovation sub-index, with the NW region displaying a more moderate performance than the other two regions. This is also mirrored in a lower share of employment in high-technology sectors in the NW region compared to the two other regions (the southern and EM regions' shares stood at 9.8% and 11.8% respectively while the NW regions' share stood at 5.8%).

Ireland significantly exceeds the average EU greenhouse emissions per capita. In 2022, the NW and southern regions emitted 14.9 and 16.7 tonnes of CO₂ equivalent per capita, and the EM region 8.3 tonnes (EU average 8 tonnes).

Regional differences continue to persist in accessibility levels. The NW region is less accessible, partly because of being less urbanised than the two other regions. In 2021, a resident of the NW region could reach only 57.9% of the neighbouring population living in a radius of 120 km in less than 90 minutes,

whereas this figure was 91% and 67.3% for the EM and southern regions.

Regional disparities are also reflected in poverty levels. The NW region's population is at-higher-risk-of-poverty and social exclusion than the other regions. In 2022, 25.3% of the NW region's population was at-risk-of-poverty and social exclusion against 22.4% in the southern region and 18% in the EM region. This also reflects the existing rural-urban divide in Ireland, where 25.5% of the rural areas' population was at-risk-of-poverty or social exclusion in 2022, against 16.2% in cities. Homelessness, however, remains largely an urban issue. Over 70% of people living in crisis accommodation are registered in the Dublin area ⁽¹⁴⁷⁾.

Cohesion policy efforts in Ireland are concentrated on the NW region. As a transition region, it is receiving significantly higher funds per capita compared with the other two regions. Equally, significant funding under the PEACEPLUS programme and a small part of the Just Transition Fund are being implemented in the NW region.

In contrast to the EU trend, where several EU countries are projected to experience a decline in their population, Ireland is projected to see a population growth until 2030 ⁽¹⁴⁸⁾. In 2013-2021, Ireland saw a population growth with an average annual rate

⁽¹⁴⁶⁾ EU Regional Competitiveness Index 2.0 2022 edition Revised May 2023 - https://ec.europa.eu/regional_policy/information-sources/publications/working-papers/2023/eu-regional-competitiveness-index-2-0-2022-edition_en.

⁽¹⁴⁷⁾ Department of Housing, Local Government and Heritage (2023), [gov.ie - Homeless Report – September 2023 \(www.gov.ie\)](https://gov.ie/Homeless-Report-September-2023)

⁽¹⁴⁸⁾ Commission report on 'The impact of demographic change in Europe', accompanying the Commission communication on 'Harnessing talent in Europe's regions' - [Inforegio - Harnessing Talent in Europe: a new boost for EU Regions \(europa.eu\)](https://inforegio.eu/Harnessing-Talent-in-Europe-a-new-boost-for-EU-Regions).

of 10.4 per 1 000 inhabitants while the EU's average annual rate stood at only 1.9 per 1 000 inhabitants. This positive trend is particularly true for the EM region, which saw the greatest demographic growth (average annual rate of 13.0 per 1 000 inhabitants) in the country. Ireland, in comparison with other EU countries, is relatively youthful, as evidenced by the fact that 65.3% of its population fell within the 15-64 age range in 2022. Especially in the EM region, people aged between 15 and 64 constitute 66.8% of the population while this figure stood at 64.0 in the southern region and at 63.3% in northern region.

Investment and subnational reform needs ahead

Cohesion policy investments in Ireland support selected areas of particular relevance for the green and digital transition and for social convergence. The investment mix focuses on strengthening innovation eco-systems at the regional level in order to contribute to reducing the innovation gap between the NW region and the other two regions. In the same vein, investments in integrated urban development target mainly towns and settlements in order to contribute to reducing disparities between Ireland's metropolitan areas around Dublin and Cork and smaller towns and settlements.

The investment strategy agreed in the programmes adopted in 2022 is still valid for the current economic and social situation in Ireland. Considering recent developments, Ireland could put more emphasis on the social and labour market inclusion of vulnerable groups and on adult learning, to address existing skills and labour shortages. When developing new project calls, Ireland could explore possibilities to improve aspects of climate mitigation and adaption within the existing programme, including investments in net-zero technology manufacturing. Efforts to ensure that stakeholders at regional and local levels continue to fully embrace all the investments possibilities under the programmes could be sustained.

Ireland could benefit from the opportunities under the Strategic Technologies for Europe Platform initiative to boost

investments in critical technologies to support industry transformation.

Support to regional innovation systems is at the heart of EU cohesion policy in the NW region and is instrumental to overcoming the development lag of this transition region. However, Irish national policies will be key to initiating a catching-up process in the transition region, given the modest size of EU cohesion policy investments in Ireland.

In recent years, Ireland has emerged as a significant international financial hub, particularly for investment banks, money-market funds, and investment funds. Irish financial firms fall broadly into two quite distinct groups: internationally-oriented investment banks, fund-management companies and insurance firms on one side, and retail banks serving the domestic market on the other. There are now three domestically-owned banks offering banking services in the Irish retail market. Two foreign-owned banks, KBC Ireland and Ulster Bank Ireland, closed all their branches in 2023 and are winding down their operations in the country. Two of the three remaining retail banks are still part-owned by the government, which acquired stakes in all three of them during the Irish banking crisis, beginning in 2009. In addition to the traditional banks, there are also 218 credit unions that do not fall under EU banking regulation. These credit unions provide basic banking services to their members, mainly consumer loans and – increasingly – mortgages and small business loans. The retail space is also served by non-bank lenders that do not take deposits but have become significant providers of credit to SMEs.

The retail banking sector has by now largely worked out the legacy non-performing loan stock left over from the financial crisis. The Irish banking crisis of 2008-2012 left Irish banks burdened with a large stock of non-performing loans (NPLs). The retail banks' NPL ratio peaked at 31.9% in Q4 2014. Since then, the retail banks have worked out most of their legacy NPL stock, mainly through portfolio sales and securitisation. Their efforts have paid off, and their NPL ratio of 2.4% in September 2023 is now close to the EU average of 1.8%. The pandemic did not cause any setbacks in asset quality, as government grants for households and businesses supported the solvency of borrowers⁽¹⁴⁹⁾. Nevertheless, the risks on banks' balance sheets have increased since the pandemic, as evidenced by the rise in

loans classified in the Stage 2⁽¹⁵⁰⁾. The current number of business insolvencies remains benign despite cyclical headwinds. Insolvencies picked up from a low base to a total of 321 in the first half of 2023, compared to 208 in the same period of 2022, but they remained below the levels seen before the pandemic. The share of corporate loans in the Stage 2 category of increased risks stood at 24.0% in December 2023, almost unchanged from a year earlier (24.1%) and still considerably above pre-pandemic levels (below 10%).

Widening lending margins have boosted net interest income and the profitability of retail banks. The retail banks' dependence on interest income had a negative impact on their profitability during the extended period of low interest rates. The general uptick in rates since 2022 has thus been very advantageous for banks, which raised their lending rates while deposit rates remained contained. Meanwhile, the liquidity position of banks has remained strong, supported by the steady availability of deposits. Net fee and commission income have also grown, while operating costs have risen at a much slower pace, despite rising staff expenses. Return on equity reached 13.9% (annualised) in the year to September 2023, which is the best performance in more than a decade, up from 7.0% in 2022. Despite these positive developments, uncertainty remains over the sustainability of this level of profitability, given the potential pressure for higher deposit rates and the potential for adverse credit outcomes. High operating costs remain a structural drag on profitability.

Investment banks account for about half of Irish banking assets and cater mainly to international clients from their Irish base. Ireland has become an international hub for investment banking services, after some globally acting investment banks chose Ireland as their EU base after the UK left the EU. The combined assets of the three largest investment banks in Ireland amounted to EUR 351 billion at the end of 2023, up strongly from

⁽¹⁴⁹⁾ The Employment Wage Subsidy Scheme (which ran from September 2020 to May 2021) provided affected businesses with a subsidy covering their employees' wages. It succeeded the Temporary Wage Subsidy Scheme (which ran from March 2020 to August 2020).

⁽¹⁵⁰⁾ According to the classification by the International Financial Reporting Standards 9 (IFRS 9), these are loans the credit quality of which has been judged to have deteriorated since the loan was initially made.

Table A18.1: Financial Soundness Indicators

	2017	2018	2019	2020	2021	2022	2023	EU	Median
Total assets of the banking sector (% of GDP)	352.6	336.5	351.3	369.4	326.2	309.9	302.6	257.0	184.6
Total assets of the banking sector (% of GNI*)	573.0	565.6	595.1	683.2	607.0	574.5	-	-	-
Share (total assets) of the five largest banks (%)	45.5	46.1	49.7	55.7	60.0	65.6	-	-	69.6
Share (total assets) of domestic credit institutions (%) ¹	51.2	48.6	44.4	40.7	44.3	40.9	40.8	-	62.9
NFC credit growth (year-on-year % change)	1.2	3.9	2.3	8.4	23.1	15.5	2.5	-	2.4
HH credit growth (year-on-year % change)	-1.5	-0.8	0.1	-1.5	-1.6	-1.2	1.8	-	1.4
Financial soundness indicators: ¹									
- non-performing loans (% of total loans)	9.9	5.5	3.4	3.4	2.4	1.7	1.5	1.8	1.8
- capital adequacy ratio (%)	25.2	25.4	24.9	25.4	25.5	24.5	24.7	19.6	20.1
- return on equity (%) ²	5.0	4.9	3.7	-2.2	4.5	3.3	9.4	9.9	13.2
Cost-to-income ratio (%) ¹	64.5	66.1	70.9	71.5	73.4	59.7	50.6	52.8	44.9
Loan-to-deposit ratio (%) ¹	95.3	90.2	91.5	83.9	72.7	74.6	80.2	93.3	80.2
Central bank liquidity as % of liabilities	1.8	0.7	0.4	1.3	3.9	0.3	0.1	-	0.7
Private sector debt (% of GDP)	248.5	230.2	209.5	190.3	168.1	147.1	-	133.0	118.4
Private sector debt (% of GNI*)	403.8	386.9	354.9	351.9	312.8	272.7	-	-	-
Long-term interest rate spread versus Bund (basis points)	48.4	55.5	58.4	45.0	43.7	60.3	43.2	107.7	104.2
Market funding ratio (%)	81.1	81.3	83.3	85.2	88.0	88.2	-	50.8	39.8
Green bonds outstanding to all bonds (%) ³	-	-	-	1.2	1.6	1.9	2.6	4.0	2.7

1-3 4-10 11-17 18-24 25-27 Colours indicate performance ranking among 27 EU Member States.

(1) Last data: Q3 2023.

(2) Data is annualized.

(3) Data available for EA countries only, EU average refers to EA area.

Source: ECB, Eurostat.

EUR 32 billion at year-end 2015. These banks provide services to their corporate clients across the EU. As they serve mainly international customers, these investment banks are less impacted by Ireland's domestic economy.

Irish businesses have sustained robust performance, with strong turnover and profitability indicators. Non-financial firms' resilience is supported by their low amount of debt owed to domestic banks, with this debt sharply declining since the global financial crisis. Nearly half of SMEs have no financial debts. Loan delinquencies have not increased significantly in recent years in spite of the weak economic situation elsewhere in Europe. However, the possibility of moderating aggregate demand and wage-growth pressures loom, posing a potential threat.

The commercial real estate (CRE) lending segment poses risks, due to structural and cyclical factors. The CRE sector is facing weaker demand for office and retail space due to both cyclical headwinds and significant structural changes, especially after the pandemic. The sector must also cope with higher costs arising from inflation and more stringent requirements on the energy efficiency of buildings. Meanwhile, CRE borrowers are set to face higher interest payments. All these factors have led to a fall in CRE prices (a 20% decrease since the pandemic). However, the Irish retail banks' exposure to CRE is not particularly large compared to EU peers.

Property funds, with a strong presence of international investors, hold more than one third of domestic investible CRE. Because of this, the Central Bank of Ireland has introduced macroprudential measures for Irish-domiciled property funds to strengthen the system's resilience to CRE shocks.

The household sector remains resilient, as inflation declines and a tight labour market supports wage growth, but rising interest rates are straining budgets, increasing vulnerability in some segments. There is little evidence of a widespread decline in the repayment capacity of borrowers. The impact of monetary-policy tightening has been limited due to the large-scale use in recent years of mortgages with interest rates that are fixed for a period of years. Nevertheless, the impact of increasing interest rates is becoming more visible in certain susceptible segments, and a significant number of borrowers express concerns that additional increments in debt repayment instalments would strain their financial resources and make their loans unaffordable.

Credit growth remains relatively modest, displaying divergent trends across segments. Following a strong recovery after the pandemic, credit growth to the non-financial private sector has significantly reduced, both for large enterprises and SMEs, as credit conditions have tightened. However, lending for house purchases and other household credit has accelerated in recent

months and is driving overall credit growth. Mortgage credit growth has so far remained high, relying on a strong residential real estate (RRE) market. Although RRE price growth has slowed significantly in recent months, contrary to the CRE market, price falls in the residential sector have so far not been recorded. In the future, higher interest rates should weaken mortgage demand, with negative implications for house price growth. Nevertheless, the long-standing imbalance between housing supply and demand may support current house prices.

Ireland has become an important hub for insurance companies that hold relevant market shares in other EU countries. The large majority of Irish insurers are subsidiaries of international groups and are mainly focused on cross-border business. Less than 30% of premiums by value written by Irish insurance companies cover Irish-based risk. Despite rising interest rates and high inflation, the solvency position of the Irish insurance sector has remained stable. However, a decrease in economic activity may reduce demand for insurance, and tighter credit conditions could impact the value of bond investments.

Ireland also hosts a large and complex market-based finance (MBF) sector, which is mostly externally oriented, but its linkages with the Irish economy have been growing. The MBF market, dominated by investment funds and money-market funds, reached a total asset value of EUR 5.4 trillion in Q2-2023. Even though the MBF sector's linkages to households and domestic banks are limited, there are some exceptions that include property funds which invest in CRE in Ireland and some non-bank lenders which provide credit to SMEs in Ireland. Moreover, the very large size of the sector (about 20 times GNI) and the possible systemic implications of this, warrant close monitoring. The measures taken by the central bank to strengthen oversight of the MBF sector and the leading role that Irish authorities have taken in developing macroprudential frameworks and tools aimed at addressing systemic risks arising from non-bank financial intermediaries are noteworthy ⁽¹⁵¹⁾.

⁽¹⁵¹⁾ The measures taken and the ongoing work on macroprudential policies for the MBF sector can be found in [Macro-prudential Policy | Central Bank of Ireland](#).

This annex provides an indicator-based overview of Ireland's tax system. It includes information on the tax structure (the types of tax that Ireland derives most of its revenue from), the tax burden on workers, and the progressivity and redistributive effect of the tax system. It also provides information on tax collection and compliance, and on the risks of aggressive tax planning (ATP) activity.

The Irish tax base is relatively narrow and reliant on corporate taxes from foreign-owned enterprises. Foreign-owned enterprises contribute more than two thirds of Ireland's Gross Value Added. Corporate tax revenue reached EUR 23.8 billion in 2023, another all-time high. However, its growth (+5.3% relative to 2022) has been more modest than in previous years. This has been largely in line with overall tax revenue growth (+6%). The Irish economy shrank by 3.2% in 2023 on the back of a global economic slowdown and higher interest rates. This has contributed to the parallel slowing-down of corporate tax revenue increases. At the same time, the average forward-looking effective tax

rates on corporate income were 6.6 pps below the EU average in 2022. The level of revenue from environmental taxation is below the EU average. Pollution and resources taxes account for only 0.3% of environmental taxes. There is therefore potential to strengthen the application of the 'polluter pays' principle. Ireland has only implemented two of the six main types of pollution and resources taxes (i.e. taxes on waste landfilling and plastic products). There is still scope to expand waste disposal taxes (including incineration) and implement the four other types (i.e. taxes on NOx emissions, waste discharge into water, fertilisers and pesticides).

Ireland has reformed its laws on withholding taxes imposed on outbound interest, dividends and royalty payments. The Commission has long asked Ireland to prevent ATP. A19.1 Outbound payments remain very important for the Irish economy (Graph A19.2). In particular, Ireland has higher outbound royalty payments than the rest of the EU combined. Following Ireland's Recovery and Resilience Plan (RRP), new legislation

Table A19.1: Taxation indicators

		Ireland					EU-27				
		2010	2020	2021	2022	2023	2010	2020	2021	2022	2023
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	27.8	19.8	20.7	20.9		37.9	40.0	40.4	40.2	
	Total taxes (including compulsory actual social contributions) (% of GNI*)	36.0	36.6	38.5	38.7						
	Labour taxes (as % of GDP)	12.2	8.7	8.7	8.7		20.0	21.3	20.7	20.3	
	Labour taxes (as % of GNI*)	15.8	16.2	16.3	16.1						
	Consumption taxes (as % of GDP)	9.9	5.6	5.9	5.5		10.8	10.7	11.2	11.0	
	Consumption taxes (as % of GNI*)	12.8	10.4	11.1	10.2						
	Capital taxes (as % of GDP)	5.7	5.4	6.1	6.7		7.1	8.0	8.6	8.9	
	Capital taxes (as % of GNI*)	7.4	10.0	11.3	12.5						
	Of which, on income of corporations (as % of GDP)	2.4	3.2	3.6	4.5		2.4	2.5	3.0	3.4	
	Of which, on income of corporations (as % of GNI*)	3.1	5.9	6.6	8.4						
	Total property taxes (as % of GDP)	1.4	0.9	1.1	0.9		1.9	2.3	2.2	2.1	
	Total property taxes (as % of GNI*)	1.8	1.6	2.0	1.7						
	Recurrent taxes on immovable property (as % of GDP)	0.8	0.3	0.4	0.4		1.1	1.2	1.1	1.0	
	Recurrent taxes on immovable property (as % of GNI*)	1.0	0.6	0.7	0.8						
	Environmental taxes as % of GDP	2.5	1.2	1.1	0.9		2.4	2.2	2.3	2.0	
	Environmental taxes as % of GNI*	3.2	2.2	2.1	1.6						
Progressivity & fairness	Tax wedge at 50% of average wage (Single person) (*)	16.3	22.3	22.8	22.7	22.7	33.9	31.7	32.1	31.8	31.7
	Tax wedge at 100% of average wage (Single person) (*)	30.9	35.2	35.9	35.6	35.1	41.0	40.1	39.9	40.0	40.2
	Corporate income tax - effective average tax rates (1) (*)		12.4	12.4	12.4			19.5	19.0	19.0	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	20.5	14.9	16.6	15.7		8.6	8.1	8.2	7.9	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		9.4	6.3				40.9	35.5		
	VAT Gap (% of VAT total tax liability, VTTL)(**)		10.9	12.7	6.7			9.7	5.4		

(1) Forward-looking Effective Tax Rate (OECD).

(2) A higher value indicates stronger redistributive impact of taxation.

(*) EU-27 simple average.

(**) Forecast value for 2022, if available. For more details on the VAT gap, see European Commission, Directorate-General for Taxation and Customs Union, VAT gap in the EU - 2023 report, <https://data.europa.eu/doi/10.2778/911698>. For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, <https://data.europa.eu/doi/10.2778/911698>. For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, https://ec.europa.eu/taxation_customs/taxation-1/economic-analysis-taxation/data-taxation_en.

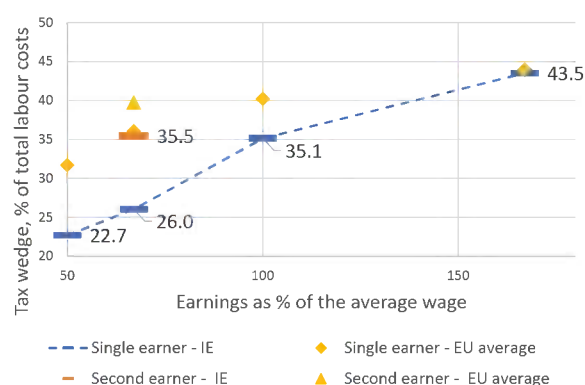
Source: European Commission and OECD.

against tax-free transfers of profits to non-EU countries via interest, royalty and dividend payments has been in effect since April 2024. This ensures that outbound payments to certain jurisdictions are subject to withholding tax. Those countries include EU-blacklisted non-cooperative jurisdictions in tax matters as well as zero- and no-tax jurisdictions. However, bilateral agreements allow for derogation from the new legislation. Where this happens, additional monitoring will prevent non-taxation. Moreover, no low-tax jurisdictions (those where CIT rates are between zero and 9% ⁽¹⁵²⁾) are included in the new legislation.

More reforms were part of Ireland's RRP with the aim of broadening the country's tax base and bringing its revenue-to-GDP ratio closer to the EU average. Those reforms include changing corporate residence rules in 2013, or amending the calculation rules for capital allowances for intangible assets (CAIA), which has been implemented through the Finance Act 2020. In the field of environmental taxation, the RRP includes a measure to increase the carbon tax steadily by EUR 7.5 per ton of carbon used yearly until 2025. Ireland's long-term carbon tax policy provides for increases scheduled until 2030.

A legislative package enacted by both Ireland and the US has gradually made it possible to tackle ATP. First, Ireland removed the 'double Irish' structures in 2013 and 2014. Those structures had been used by US-based MNEs to shelter profits from taxation. Second, the US in 2017 enacted the Tax Cuts and Jobs Act (the TCJA), which introduced a low-taxed income category for intangible assets (GILTI). This legislation created a strong incentive for US-based MNEs to repatriate patents from low-tax jurisdictions and tax havens all over the world back to the US. This has resulted in a significant change since 2020 in the destination of these royalty payments with the vast majority now going directly to the US where they are subject to tax.

Graph A19.1: Tax wedge for single and second earners as a % of total labour costs, 2023



The second earner tax wedge assumes a first earner at 100% of the average wage and no children. For the methodology of the tax wedge for second earners, see OECD, 2016, *Taxing Wages 2014-2015*.

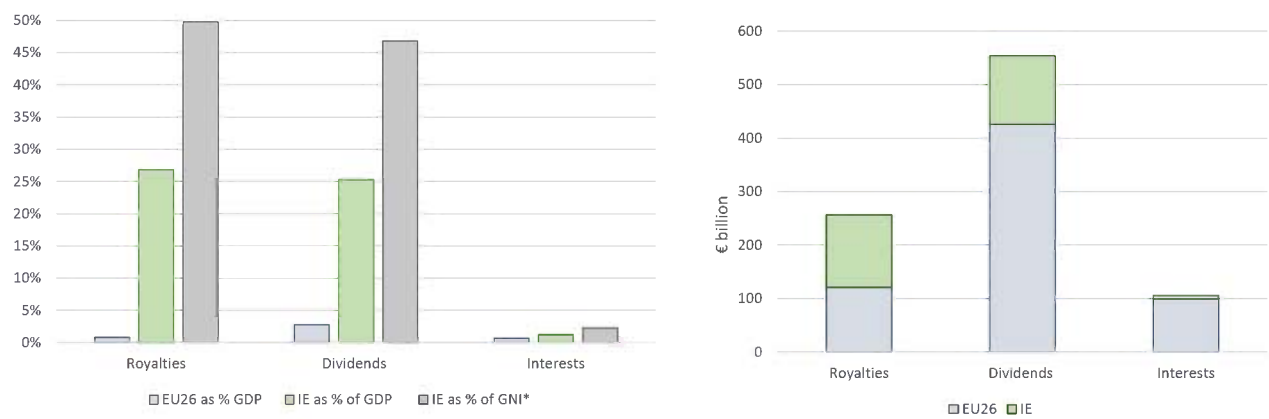
Source: European Commission.

Ireland's labour tax burden is very low, but labour taxation is more progressive. Ireland's share of labour taxes in overall tax revenue is not even half the EU average and the lowest of all Member States (Table A19.1). The labour tax wedge for Ireland in 2023 was considerably below the EU average for average and lower wage levels (see Graph A19.1). Also, second earners at 67% of the average wage, whose spouses earn the average wage, were subject to a lower tax wedge than the EU average. However, they were taxed more heavily than single people at the same wage level. The difference between the tax wedge for high- and low-wage earners (167% and 50% of the average wage) was among the largest in the EU, indicating the high progressivity of the labour tax system. The tax-benefit system's ability to reduce income inequality as measured by the Gini coefficient was significantly above the EU average (see Table A19.1) and the highest of all Member States.

Further progress has been achieved in terms of the digitalisation of Ireland's tax administration. The 2022 annual report on taxation shows that Ireland scores highly on filing tax with 100% and 97% of corporate income and personal income tax returns respectively being filed electronically. Ireland's VAT gap (an indicator of the effectiveness of VAT enforcement and compliance, where a low gap indicates high effectiveness) decreased to 6.7% in 2021 (partly due to COVID effects) but remained above the EU-wide gap of 5.4%.

⁽¹⁵²⁾In the EU Hungary has the lowest CIT rate (9%).

Graph A19.2: Outbound foreign direct investment (FDI) income payments from Ireland and the rest of the EU-27 relative to the size of their economies (in % of GDP and GNI, left) and in absolute terms (EUR billions, right), 2022



Source: CSO data, European Commission.

ANNEX 20: TABLE WITH ECONOMIC AND FINANCIAL INDICATORS



Table A20.1: Key economic and financial indicators

	2004-07	2008-12	2013-20	2021	2022	2023	forecast	
							2024	2025
Real GDP (y-o-y)	5.7	-1.4	9.1	15.1	9.4	-3.2	1.2	3.6
Potential growth (y-o-y)	.	-0.2	9.5	4.3	5.0	4.3	3.6	3.3
Private consumption (y-o-y)	6.0	-1.4	1.2	8.5	9.4	3.1	2.3	3.1
Public consumption (y-o-y)	4.4	-1.4	5.2	6.6	4.5	1.9	1.1	0.8
Gross fixed capital formation (y-o-y)	8.3	-6.2	22.3	-40.4	5.1	2.9	1.5	2.4
Exports of goods and services (y-o-y)	6.7	1.8	14.0	15.1	13.9	-4.8	2.5	5.2
Imports of goods and services (y-o-y)	8.2	-0.5	14.7	-7.5	15.9	0.4	3.0	4.6
Contribution to GDP growth:								
Domestic demand (y-o-y)	5.6	-2.6	6.7	-14.0	4.0	1.6	1.1	1.5
Inventories (y-o-y)	0.0	0.0	0.3	0.5	1.0	1.0	0.0	0.0
Net exports (y-o-y)	-0.3	2.0	1.1	28.6	3.7	-6.9	0.4	2.3
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	.	-1.6	1.9	1.1	2.3	2.4	1.5	1.1
Capital accumulation (y-o-y)	.	0.8	3.7	-0.5	-0.3	-0.2	-0.2	-0.1
Total factor productivity (y-o-y)	.	0.7	3.8	3.7	3.0	2.2	2.3	2.3
Output gap	2.3	-2.9	-0.5	4.6	9.1	12	-1.1	-0.8
Unemployment rate	4.8	13.0	7.7	6.2	4.5	4.3	4.4	4.4
GDP deflator (y-o-y)	2.0	-0.9	1.9	0.5	6.6	3.0	2.6	1.9
Harmonised index of consumer prices (HICP, y-o-y)	2.5	0.6	0.2	2.4	8.1	5.2	1.9	1.8
HICP excluding energy and unprocessed food (y-o-y)	2.1	0.0	0.5	1.6	5.0	5.1	2.9	2.1
Nominal compensation per employee (y-o-y)	5.3	0.6	2.7	2.6	2.7	2.7	4.4	4.1
Labour productivity (real, hours worked, y-o-y)	2.4	2.9	7.2	8.0	0.8	-6.8	-0.5	1.3
Unit labour costs (ULC, whole economy, y-o-y)	3.8	-1.3	-3.7	-5.5	0.1	11.8	4.8	2.0
Real unit labour costs (y-o-y)	1.7	-0.3	-5.5	-5.9	-6.1	8.6	2.1	0.1
Real effective exchange rate (ULC, y-o-y)	2.7	-3.4	-5.3	-5.6	-3.6	4.9	0.2	-0.4
Real effective exchange rate (HICP, y-o-y)	1.6	-2.0	-1.1	0.1	-4.3	2.3	.	.
Net savings rate of households (net saving as percentage of net disposable income)	14	7.7	6.3	15.7	7.7	.	.	.
Private credit flow, consolidated (% of GDP)	30.7	7.0	-5.2	1.9	2.0	.	.	.
Private sector debt, consolidated (% of GDP)	177.0	260.3	248.9	168.1	147.1	.	.	.
of which household debt, consolidated (% of GDP)	85.7	107.6	50.3	29.7	25.5	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	91.3	152.8	198.5	138.4	121.6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (1)	.	.	8.1	2.1	1.5	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	2.3	8.1	-9.4	10.4	8.1	4.7	3.8	3.9
Corporations, gross operating surplus (% of GDP)	33.9	33.9	52.3	60.0	62.0	57.9	57.2	57.4
Households, net lending (+) or net borrowing (-) (% of GDP)	-8.5	2.3	2.2	4.7	1.8	2.1	2.2	2.1
Deflated house price index (y-o-y)	8.4	-13.3	7.2	4.2	5.0	-3.3	.	.
Residential investment (% of GDP)	12.3	3.9	2.0	2.0	2.4	2.7	.	.
Current account balance (% of GDP), balance of payments	-3.9	-3.4	-2.8	13.7	10.8	9.9	9.1	9.5
Trade balance (% of GDP), balance of payments	10.4	15.0	19.3	40.1	39.9	33.5	.	.
Terms of trade of goods and services (y-o-y)	-1.1	-0.7	0.0	-1.5	0.5	-0.4	-0.1	-0.1
Capital account balance (% of GDP)	0.2	0.1	-6.2	0.3	-0.2	-1.9	.	.
Net international investment position (% of GDP)	-31.4	-120.3	-177.5	-130.9	-116.8	-105.9	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (2)	1.3	-224.9	-276.1	-323.4	-234.0	-286.0	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (2)	950.9	1385.0	1364.8	1407.8	1136.7	1218.1	.	.
Export performance vs. advanced countries (% change over 5 years)	.	.	49.9	46.2	36.6	26.7	.	.
Export market share, goods and services (y-o-y)	-2.8	-4.0	14.1	-3.7	-4.7	-5.8	-1.0	1.4
Net FDI flows (% of GDP)	11.2	-4.0	-13.2	11.7	6.4	0.5	.	.
General government balance (% of GDP)	1.5	-15.0	-1.6	-1.5	1.7	1.7	1.3	1.2
Structural budget balance (% of GDP)	.	.	-1.2	-3.9	-3.0	1.0	1.8	1.6
General government gross debt (% of GDP)	25.4	84.1	71.5	54.4	44.4	43.7	42.5	41.3

(1) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

(2) NIIP excluding direct investment and portfolio equity shares.

Source: Eurostat and ECB as of 2024-5-17, where available; European Commission for forecast figures (Spring forecast 2024).

This annex assesses fiscal sustainability risks for Ireland over the short, medium and long term. It follows the multi-dimensional approach of the European Commission's 2023 Debt Sustainability Monitor, updated based on the Commission 2024 spring forecast.

1 – Short-term risks to fiscal sustainability are low. The Commission's early-detection indicator (S0) does not point to any major short-term fiscal risks (Table A21.2)⁽¹⁵³⁾. Government gross financing needs are expected to remain low in the short term at around 2% of GDP on average over 2023-2024 (Table A21.1, Table 1). Irish sovereign debt maintains its positive market presence and investor confidence. All major rating agencies have positive rating or outlook on Ireland.

2 – Medium-term fiscal sustainability risks appear low.

The DSA baseline shows that the government debt-to-GDP ratio is projected to continue declining over the medium term, to around 17% of GDP in 2034. (Graph 1, Table 1)⁽¹⁵⁴⁾. The debt reduction is supported by the assumed structural primary surplus (excluding changes of cost of ageing) of 2.5% of GDP. This appears plausible compared with past fiscal performance⁽¹⁵⁵⁾.

⁽¹⁵³⁾The S0 is a composite indicator of short-term risk of fiscal stress. It is based on a wide range of fiscal and financial-competitiveness indicators that have proven to be a good predictor of emerging fiscal stress in the past.

⁽¹⁵⁴⁾The assumptions underlying the Commission's 'no-fiscal policy change' baseline include in particular: (i) a structural primary surplus, before ageing costs, of 2.5% of GDP from 2024 onwards; (ii) inflation converging linearly towards the 10-year forward inflation-linked swap rate 10 years ahead (which refers to the 10-year inflation expectations 10 years ahead); (iii) the nominal short- and long-term interest rates on new and rolled over debt converging linearly from current values to market-based forward nominal rates by T+10; (iv) real GDP growth rates from the Commission 2024 spring forecast, followed by the EPC/OGWG 'T+10 methodology projections between T+3 and T+10 (average of 2.9%); (v) ageing costs in line with the 2024 Ageing Report (European Commission, Institutional Paper 279, April 2024). For information on the methodology, see the 2023 Debt Sustainability Monitor.

⁽¹⁵⁵⁾This assessment is based on the consolidation space indicator, which measures the frequency with which a tighter fiscal position than assumed in a given scenario has been observed in the past. Technically, this consists of looking at the percentile rank of the projected SPB within the distribution of SPBs observed in the past in the

The debt decline also benefits from a still favourable but decreasing snowball effect of 1.0% of GDP annually on average over 2025-2034. Government gross financing needs are expected to remain low over the projection period at 1.5% of GDP on average.

The baseline projections are stress-tested against four alternative deterministic scenarios to assess the impact of changes in key assumptions relative to the baseline (Graph 1). Under the *historical structural primary balance (SPB) scenario* (i.e. the SPB returns to its historical 15-year average of -2.0% of GDP) the debt ratio would be higher than under the baseline by about 34 pps. of GDP in 2034, though still below 60% of GDP. Under the *adverse interest-growth rate differential scenario* (i.e. the interest-growth rate deteriorates by 1 pp. of GDP compared with the baseline), the debt ratio would be somewhat higher than under the baseline by around 2 pps. in 2034. Under the *financial stress scenario* (i.e. interest rates temporarily increase by 1 pp. compared with the baseline) the government debt ratio would be broadly unchanged compared with the baseline in 2034. Finally, under the *lower structural primary balance scenario* (i.e. the projected cumulative improvement in the SPB over 2023-2024 is halved), the debt ratio would be slightly higher than under the baseline by about 4 pps. in 2034.

The stochastic projections indicate low risk, pointing to a limited sensitivity of these projections to plausible unforeseen events⁽¹⁵⁶⁾. These stochastic simulations indicate a 20% probability that the debt ratio will be higher in 2028 than in 2023, implying low risks given the low debt level. Though, the uncertainty surrounding the baseline debt projections is medium, as 80% of the simulated debt paths lie in a wide range of 36 pps. in five years' time (Graph 2).

3 – Long-term fiscal sustainability risks appear overall medium. This assessment is

country, taking into account all available data from 1980 to 2022.

⁽¹⁵⁶⁾The stochastic projections show the joint impact on debt of 2000 different shocks affecting the government's budgetary position, economic growth, interest rates and exchange rates. This covers 80% of all the simulated debt paths and therefore excludes tail events.

based on the combination of two fiscal gap indicators, capturing the required fiscal effort to stabilise debt (S2 indicator) and bring to 60% of GDP (S1 indicator) over the long-term⁽¹⁵⁷⁾. This assessment is mainly driven by the projected increasing ageing costs and the favourable initial budgetary position.

The S2 indicator points to medium fiscal sustainability risks. The indicator shows that, relative to the baseline, the SPB would need to increase by 2.2 pps. of GDP in 2025 to ensure debt stabilisation over the long term. This result is driven by the projected increase in ageing-related costs (contribution of 4.5 pps. of GDP), which is only partly offset by the favourable initial budgetary position (-2.3 pp. pps. of GDP). In particular, the projected increase in pension expenditure (contribution of 2.6 pps. of GDP), but also of health-care and long-term care spending (+1.3 pps. and +1.1 pps. of GDP respectively) drive these results (Table A21.1, Table 2). Hence, while several investments and reforms in the RRP contribute to supporting the efficiency of the Irish health care system, additional measures may be required to further improve the efficiency and fiscal sustainability of the Irish long-term care system.

The S1 indicator points to low fiscal sustainability risks. The indicator shows that the country would not need to improve its fiscal position to bring its debt to 60% of GDP by 2070. This result is mainly driven by the projected increase in age-related public spending (contribution of 3.1 pps. of GDP), that is fully offset by the favourable initial budgetary position (-2.8 pps. of GDP) and the current distance of the government debt ratio from the

60% reference value (-0.4 pp. of GDP) (Table A21.1, Table 2).

4 – Finally, several additional risk factors need to be considered in the assessment.

On the one hand, risk-increasing factors include higher interest rates, a relatively large share of short-term public debt as well as public debt held by non-residents and the negative net international investment position, though this largely reflects the presence of multinationals and the International Financial Services Centre⁽¹⁵⁸⁾. Finally, alternative metrics to GDP suggest higher fiscal sustainability risks. On the other hand, risk-mitigating factors include relatively stable financing sources (with a diversified and large investor base), the currency denomination of debt, and historically still low borrowing costs.

⁽¹⁵⁷⁾The S2 fiscal sustainability indicator measures the permanent SPB adjustment in 2024 that would be required to stabilise public debt in the long term. It is complemented by the S1 indicator, which measures the permanent SPB adjustment in 2024 to bring the debt ratio to 60% by 2070. For both the S1 and S2 indicators, the risk assessment depends on the amount of fiscal consolidation needed: 'high risk' if the required effort exceeds 6 % of GDP, 'medium risk' if it is between 2% and 6% of GDP, and 'low risk' if the effort is negative or below 2% of GDP. The overall long-term risk classification combines the risk categories derived from S1 and S2. S1 may notch up the risk category derived from S2 if it signals a higher risk than S2. See the 2023 Debt Sustainability Monitor for further details.

⁽¹⁵⁸⁾The thresholds used for the fiscal sustainability risk classification can be found in Table A1.3 on pp.125 of the 2023 Debt Sustainability Monitor.

Table A21.1:Debt sustainability analysis - Ireland

Table 1. Baseline debt projections	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Gross debt ratio (% of GDP)	54.4	44.4	43.7	42.5	41.3	37.7	34.3	31.0	28.1	25.4	22.9	20.8	18.9	17.2
Changes in the ratio	-3.7	-10.0	-0.7	-1.2	-1.2	-3.5	-3.5	-3.3	-2.9	-2.7	-2.4	-2.1	-1.9	-1.7
of which														
Primary deficit	0.8	-2.4	-2.3	-1.9	-2.0	-2.0	-2.0	-2.0	-1.9	-1.8	-1.7	-1.5	-1.4	-1.3
Snowball effect	-7.1	-7.1	0.8	-0.9	-1.5	-1.6	-1.5	-1.3	-1.0	-0.9	-0.7	-0.6	-0.5	-0.4
Stock-flow adjustments	2.7	-0.5	0.8	1.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs (% of GDP)	5.7	2.5	1.8	2.6	3.5	2.2	1.6	1.5	1.4	1.0	1.2	1.2	1.1	0.5

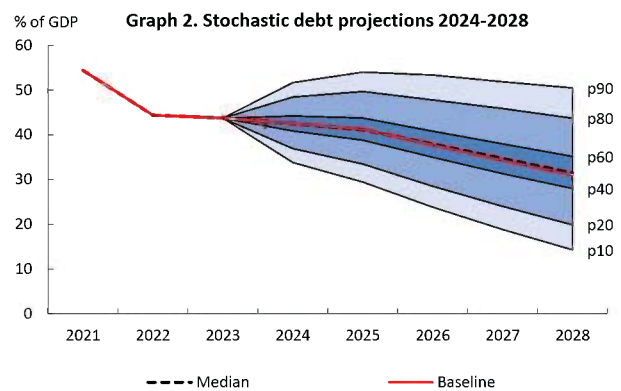
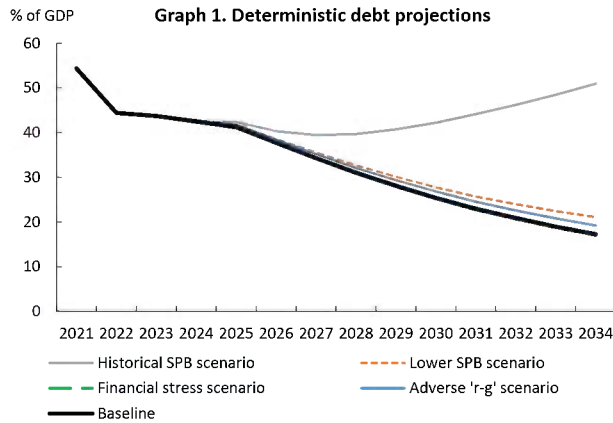


Table 2. Breakdown of the S1 and S2 sustainability gap indicators

	S1	S2
Overall index (pps. of GDP)	0.0	2.2
of which		
Initial budgetary position	-2.8	-2.3
Debt requirement	-0.4	
Ageing costs	3.1	4.5
of which		
Pensions	2.0	2.6
Health care	0.9	1.3
Long-term care	0.7	1.1
Education	-0.4	-0.5

Source: Commission services.

Table A21.2:Heat map of fiscal sustainability risks - Ireland

	Overall	Medium term - Debt sustainability analysis (DSA)						Long term		
		Deterministic scenarios					Stochastic projections	S1	S2	Overall (S1 + S2)
		Baseline	Historical SPB	Lower SPB	Adverse 'r-g'	Financial stress				
Overall		LOW	LOW	LOW	LOW	LOW	LOW			
Debt level (2034), % GDP		17.2	50.9	21.1	19.2	17.4				
Debt peak year		2024	2034	2024	2024	2024				
Fiscal consolidation space		34%	70%	36%	34%	34%				
Probability of debt ratio exceeding in 2028 its 2023 level							20%			
Difference between 90th and 10th percentiles (pps. GDP)							36.2			

(1) Debt level in 2034. Green: below 60% of GDP. Yellow: between 60% and 90%. Red: above 90%. (2) The debt peak year indicates whether debt is projected to increase overall over the next decade. Green: debt peaks early. Yellow: peak towards the middle of the projection period. Red: late peak. (3) Fiscal consolidation space measures the share of past fiscal positions in the country that were more stringent than the one assumed in the baseline. Green: high value, i.e. the assumed fiscal position is plausible by historical standards and leaves room for corrective measures if needed. Yellow: intermediate. Red: low. (4) Probability of debt ratio exceeding in 2028 its 2023 level. Green: low probability. Yellow: intermediate. Red: high (also reflecting the initial debt level). (5) the difference between the 90th and 10th percentiles measures uncertainty, based on the debt distribution under 10000 different shocks. Green, yellow and red cells indicate increasing uncertainty. (For further details on the Commission's multidimensional approach, see the 2023 Debt Sustainability Monitor)

Source: European Commission (for further details on the Commission's multidimensional approach, see the 2023 Debt Sustainability Monitor).