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Think-tank for action on social change

The Future of the Irish State: **2025 and Beyond**

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Executive summary

Executive summary

This report investigates the fundamental challenges that will affect Irish society in the years ahead. The climate crisis, digital transformations, and the cost-of-living crisis have all created uncertainty within Irish society, accentuating already eroding trust in government bodies. Now, the State has the opportunity to address these concerns by prioritising interventionist policies that explicitly tackle the issues most affecting people's lives. This report will assess the State of critical issue areas and identify solutions for emerging challenges – creating a roadmap for policymaking that reestablishes public trust, supports democracy, and enacts positive long-term change.

Economic context

The years following the financial crisis and Great Recession have been tumultuous for the Irish economy. From Brexit and Covid-19 to the Russian invasion of Ukraine and the ensuing cost-of-living crisis, the Irish economy has overcome challenges and performed well. High levels of growth, demand and employment, and low levels of inflation and unemployment suggest a strong economic environment. However, a legacy of underinvestment in public infrastructure threatens to undermine the State's long-term growth.

The Irish State should leverage its strong economic positioning to embrace an interventionist approach to policymaking in critical areas that pose serious challenges to society in the short and long-term, namely climate action, artificial intelligence (AI), and the cost of living. These concerns threaten to reshape ideas about work and society in Ireland, including those of public sector workers. This report aims to evaluate the scale of these challenges, assessing the existing policy environment and worker perceptions of these issues. By examining case studies of ambitious state action in other countries, the report aims to outline how the Irish State could address critical challenges in a way that facilitates the creation of good jobs and improves life opportunities, with implications for participatory democracy and trust in the State itself.

Making it affordable for people to live and work

Approximately one in five respondents to a recent survey of Fórsa members reported that they expect their job satisfaction and quality of life to decline in the coming years. This sentiment is particularly prevalent among younger members below the age of 45. Growing job dissatisfaction and pessimism about the future of work are especially notable among younger workers. This is unsurprising given the significant increases in the cost of living since 2022 due to global shocks, which have exacerbated long-standing recruitment and retention crises across the public sector. These challenges have created more difficult working conditions for staff and negatively impacted the provision of public services. Additionally, roles involving face-to-face delivery of services have not benefited from the improved flexibility that other workers have experienced with the expansion of remote-working practices in recent years. The high cost of living is leading to a rise in the number of people living in commuter towns, and the Government's failure to invest in public transport infrastructure means public and civil service workers are facing longer commute times, often by car.

To secure a better standard of living for workers, we recommend that the Government:

- Increase intervention into the cost of essential goods by exercising price control mechanisms and boosting the self-sufficiency of the agriculture and energy sectors by investing in high-intensity food production methods and renewable energy sources.
- Increase investment in transport infrastructure to reduce commuting times. Investment has been promised in the 2025 budget, but transportation to and from commuter towns and within rural areas must be a priority.

- Promote planning approaches that favour compact, high-density development to create walkable neighbourhoods that reduce the need for car travel.
- Promote flexible and sustainable work practices, including a four-day work week, for public and civil service workers and explore avenues for expanding remote work.

Climate action and a just transition for workers

The current climate emergency and necessary transition to a low-carbon economy will inevitably have significant impacts on the workforce, and it is imperative that it be a just transition for workers and wider society. While debate about climate action has often been framed as a conflict between jobs and the environment, progressive visions for a Green New Deal in recent years have demonstrated how the transition to a low-carbon economy can be achieved while creating decent, green jobs and a better quality of life. However, to achieve widespread community buy-in for such transformative climate action, the State must consider how to achieve the pace and scale of climate action required while simultaneously tackling inequality and addressing unique concerns across local areas, whether urban, rural, or semi-rural. To support workers and the general public in this transition, we recommend that:

- Increased and sustained investment is made to create jobs in new and emerging green occupations and training for upskilling transitioning occupations in line with current climate and biodiversity plans.
- An ambitious government-backed programme of paid training opportunities is developed for people to gain skills related to clean energy, conservation, circular economy, and climate resilience, ensuring well paid jobs in these sectors in the coming years and decades.
- A ‘community wealth building’ approach be adopted across Ireland to utilise climate action as a conduit for channelling the public spend away from centralised responses to climate change towards sustainable local development and employment opportunities.

Artificial intelligence and protecting workers in an era of digital growth

Artificial intelligence (AI) has experienced rapid development in the past few years. Today, it has the potential to disrupt existing patterns of labour and reshape our ideas of what skills are most required. The Irish Government is actively working to enact a digital transformation agenda, and AI could offer important organisational benefits to productivity. However, these new technologies present very real risks to the public, including algorithmic bias, inaccuracies, and a loss of transparency and accountability in governance. Furthermore, AI adoption could have a transformative effect on the Irish labour markets by replacing some occupations while augmenting the labour of others. Public sector workers will not be immune to this trend: as the skills needed within public services provision evolve in response to AI, workers will need to update their skills to adapt to a more digital government ecosystem. To this end, we recommend that:

- The Government should integrate complementarity into AI planning by identifying which AI applications are likely to augment or replace jobs and support policies that ensure workers benefit from AI’s introduction.
- The Government should collaborate with unions to expand access to upskilling programmes that target high-risk workers, focusing on skills less replaceable by AI, such as interpersonal communication and nuanced problem-solving, with on-the-job training to reduce time burdens.
- The Government should promote informed awareness by bridging knowledge gaps on workplace AI activities through training and information campaigns, helping workers understand AI’s benefits and risks for a smoother digital transition.





Introduction

Introduction

In February 2022, TASC and Fórsa published a report titled *The Irish State Post Pandemic*, which set out to examine the role of the State in Ireland in the wake of Covid-19, a crisis to which the State responded through an interventionist strategy to limit the health and economic costs of the pandemic. The report examined the scope for expanding State intervention in Ireland, especially in the areas of care (child and elder care), higher education, and renewable energy.

The report advocated for a new understanding of the role of the State in Ireland, which moves beyond reliance on a low corporate tax rate as a core tool of development, to focus on public investment in essential infrastructure and public services, the development of indigenous industry, management of the cost of living, and active intervention to reduce inequality and improve quality of life in society. It called for a more visionary state with a capacity to engage in strategic policymaking and investment to tackle structural social, economic, and environmental challenges.

The report presented evidence of an appetite amongst both the general public and policymakers for a more visionary, interventionist State in Ireland. Convincing the public to pay higher taxes, however, is an obstacle, as trust in public institutions is relatively low in Ireland¹. It was argued that it is of the utmost importance that high standards of governance accompany any expansion of public investment and public services, to ensure sustained (and increased) support for expanded public investment into the future. State action should have demonstrable benefits on people's lives.

This report is a follow-up report to *The Irish State Post Pandemic*, focusing on how the State could address critical issues that will affect the economy and Irish society in the short- and long-term, namely the cost of living, climate action, and artificial intelligence (AI). This report will join others – for example, Murphy (2023) – in articulating a new vision for the State in Ireland².

Importantly, public perceptions of declining living standards and a distant Government contrast with the optimistic rhetoric of Governments over the last decade. This has contributed to the rise of far-right political activism and likewise, demonstrated the need for a coherent, progressive path forward for the State that contains a vision of a flourishing society and greater social and economic equality³. Trade unions have a pivotal role to play in advocating for this vision, as they have an established record of representing the collective voice for workers' rights and public goods, and they depend upon solidarity and democratic action.

This report examines three interconnected issues with profound implications for the labour market, quality of life, social cohesion, and support for progressive policy agendas: climate action, artificial intelligence, and the cost of living. Each of these policy areas is vital for the State and will require collaboration with workers to ensure they create opportunities rather than job losses or barriers to employment, whether due to rising costs in transport, housing, or other essentials. The issues are also interrelated, providing an opening for unions to highlight how transformations in energy production, digitalisation (with its high energy demands), lifestyle shifts, and more frequent extreme weather events will impact work. Investment in resilient, affordable, and accessible infrastructure, in particular, can both attract job-creating investment and ensure that work remains feasible and sustainable.

¹ Shana Cohen and Robert Sweeney, "The Irish State Post Pandemic" 2022, <https://www.forsa.ie/wp-content/uploads/2022/02/2205-1-Tasc-Fórsa-Report.pdf>.

² Mary P. Murphy, "Creating an Ecosocial Welfare Future" (Bristol University Press, May 5, 2023).

³ B. Cannon et al., "Resisting the Far Right: Civil Society Strategies for Countering the Far Right in Ireland" (Maynooth University, 2022).

This report examines the significant challenges facing Ireland's labour market and social cohesion, focusing on the intersecting impacts of climate action, artificial intelligence, and the cost of living. These trends—rising flood risks, higher summer temperatures, and an ageing workforce—will shape the future for Irish workers and communities. Other influences include the high costs and limited availability of food due to insufficient diversification in agriculture⁴, the growing expense of energy as Ireland lags in renewable production and mounting competition in the workforce as digitalisation disrupts labour trends and the types of jobs available in the modern economy.

Writing for Eurofound, Irene Mandl emphasises the need for accessible education and re-skilling opportunities, noting that certain jobs, like lower-level administrative roles, are particularly at risk of redundancy. She advocates for a proactive education system that collaborates with the business sector to adapt curricula and delivery methods to meet future skills needs⁵. Unions also play a crucial role, representing workers' perspectives on job evolution and skill development. For the State, this means prioritising lifelong learning, providing financial support, and, importantly, establishing a strategy for robust social safety nets that account for both an ageing population and the time needed for re-skilling.

These concerns are not new. ICTU's 2023 budget submission, titled *Raising Wages, Reducing Living Costs*, called for structural investment, upskilling, and wage increases tied to productivity. It advocated for expanding public services, bolstering the welfare state, and implementing measures like direct State provision of housing and childcare. ICTU proposed funding these initiatives through higher taxes on labour income, increased employer PRSI rates, a wealth tax for households with over €1 million in assets, and higher inheritance taxes.

Since then, housing access, cost of living, and productivity remain pressing issues. However, recent social and political changes complicate this landscape, with far-right rhetoric gaining traction and critiques of migration policy becoming more mainstream, despite labour shortages in sectors like healthcare and construction. Persistent infrastructure gaps and affordable housing shortages have strained social solidarity. In cities like Dublin, rising housing costs and lengthy commutes make urban employment challenging, if not prohibitive. In 2023, Eurostat reported that Ireland was among the EU's most expensive countries based on household consumption expenditure⁶.

Without stronger State intervention, staffing shortages in education, social work, healthcare, and administrative support will likely worsen. Long commutes are a burden to many current employees, eroding their sense of belonging and contributing to political disillusionment and alienation. This context calls for bold policy initiatives that connect societal well-being with State-led investment and innovation⁷. Unions, which unite material interests like wages with collective identity and action, will be essential. As the OECD observes, "Unions are central to the economic and social fabric of society, fostering social inclusion and ensuring equitable labour market outcomes by representing workers' interests on wages, working conditions, gender equality, and environmental protection⁸." Operating across local, national, and international levels, unions wield collective influence, mobilising resources and representing the voice of workers in policy and workplace change.

⁴ Joe McNamee, "Joe McNamee: Can We Fix Our Broken Food Chain?," Irish Examiner, April 6, 2024, <https://www.irishexaminer.com/news/spotlight/arid-41368258.html>.

⁵ Irene Mandl, "Employment Impact of Digitalisation | European Foundation for the Improvement of Living and Working Conditions," www.eurofound.europa.eu, 2020, <https://www.eurofound.europa.eu/en/employment-impact-digitalisation>

⁶ Eurostat, "Household Consumption: Price Levels in 2023," Eurostat (Eurostat, June 20, 2024), <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240620-2>.

⁷ Eoin Burke-Kennedy, "Irish Productivity Levels Inflated by Multinationals, CSO Figures Show," The Irish Times, December 21, 2023, <https://www.irishtimes.com/business/2023/12/21/irish-productivity-levels-inflated-by-multinationals-cso-figures-show/>.

⁸ Veronica Nilsson and David A. Millahueique, "Democracy at Work and Beyond: The Role of Trade Unions in Strengthening Citizens' Participation and Trust in Public Institutions," OECD, 2024, <https://www.oecd.org/en/blogs/2024/09/democracy-at-work-and-beyond-the-role-of-trade-unions-in-strengthening-citizens-participation-and-trust-in-public-institutions.html>.

This report analyses trends in public expenditure, income, cost of living, carbon emissions, and digital technology adaptation to illustrate how working conditions in Ireland are evolving. In particular, the sections on AI and cost of living include results from a Fórsa survey conducted in summer 2024. With this context in mind, the report examines innovative State-led approaches from other countries, demonstrating how Ireland could address its critical challenges to create quality jobs and expand life opportunities, with positive implications for participatory democracy and public trust. The first section outlines economic trends in growth, public spending, revenue, and employment. Subsequent sections explore how the cost of living, climate action, and AI influence Ireland's job market, and discuss innovative responses adopted elsewhere to address these impacts.



Economic context: public finances and demographic trends



Economic context: public finances and demographic trends

The Irish economy is strong, and the exchequer is healthy. However, looking down the track, Ireland and the Irish economy face several major challenges. Addressing these will require significant investment. This section of the report considers the state of the economy, the challenges it faces and argues that, rather than delay investment, it makes prudent fiscal sense to invest now to prepare for Ireland's future challenges.

Though the economy is now strong, the last 15 years have been tumultuous. Coming out of the financial crisis and the Great Recession, Ireland was quickly faced with the challenge of Brexit, followed by the catastrophe of the Covid-19 pandemic, which in turn was followed by the cost of living crisis arising from the war in Ukraine. Despite that, there are currently high levels of growth, demand and employment, and low levels of inflation and unemployment. The series of economic shocks in recent years should, however, warn us against assuming that this positive situation will continue. For example, when the previous TASC/Fórsa report was published in 2022, no one expected Russia's invasion of Ukraine or the high levels of inflation it would cause.

The Irish economy today

The measurements used to assess the Irish economy, though they indicate a strong performance, need to be considered carefully. For instance, GDP declined by 5.5% in 2023, driven by a contraction in the multinational sector, with net exports falling by 22.1%. This fluctuation reinforces a now widely held belief that GDP figures are not a reliable indicator of the health of the Irish economy⁹. Because of the problems associated with using headline national accounts indicators such as gross domestic product (GDP), gross national product (GNP) and gross national income (GNI) to measure and represent economic activity in Ireland, the Economic Statistics Review Group produced a report in 2016¹⁰ recommending the calculation of a supplementary indicator, Modified Gross National Income (GNI*), which would be designed to exclude globalisation effects that are disproportionately impacting the measurement of the size of the Irish economy.

Figure 1 below shows the development of GDP, GNI, and GNI* over the last couple of decades. As can be seen, since the recession, GDP and GNI have grown at a pace far exceeding growth in Modified Gross National Income (GNI*). This reflects the large impact of a globalised multinational sector which moves significant amounts of money through Ireland that does not reflect actual economic activity.

⁹ "What's Weird about Ireland's GDP?," The Economist, October 31, 2023, <https://www.economist.com/the-economist-explains/2023/10/31/whats-weird-about-irelands-gdp>.

For the work that has been done to address the problems with Ireland's GDP figures, see:

Central Statistics Office, "National Accounts: Problems and Possible Solutions,"

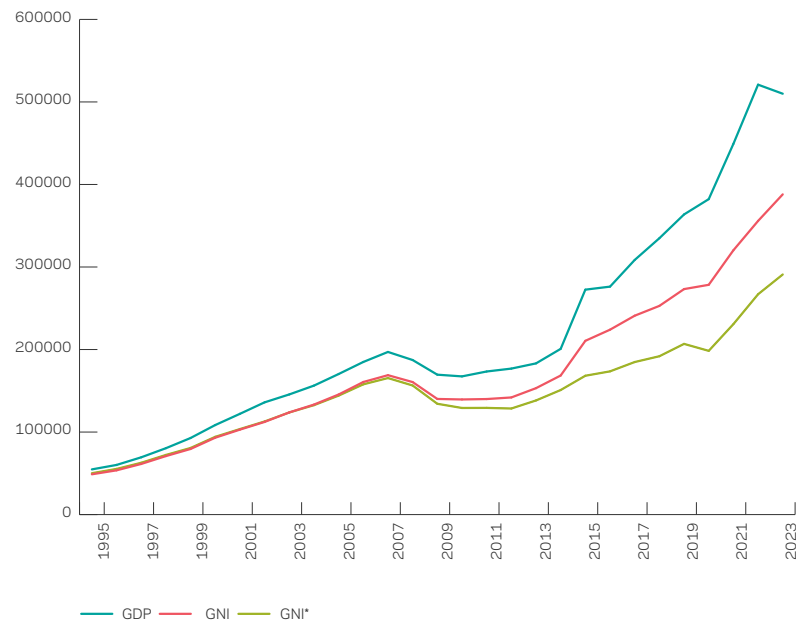
https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/National_Accounts_-_problems_and_possible_solutions.pdf.

FitzGerald, John, et al. "Quarterly Economic Commentary Summer 2018." Economic and Social Research Institute, https://www.esri.ie/system/files/publications/QEC2018SUM_SA_FitzGerald.pdf.

¹⁰ Economic Statistics Review Group (ESRG), Report of the Economic Statistics Review Group (ESRG), December 2016,

[https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic_Statistics_Review_\(ESRG\)_Report_Dec_2016.pdf](https://www.cso.ie/en/media/csoie/newsevents/documents/reportoftheeconomicstatisticsreviewgroup/Economic_Statistics_Review_(ESRG)_Report_Dec_2016.pdf).

Figure 1. National income indicators (1995-2023)



Source: Central Statistics Office - NA001

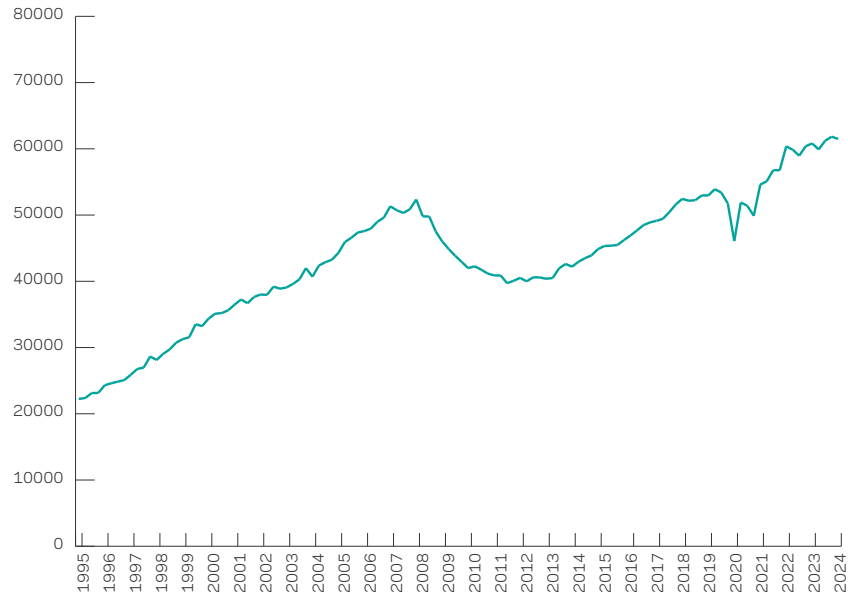
However, even if we put aside GDP and GNI, and focus exclusively on GNI*, recent years have seen remarkable growth rates. The annual growth rate in GNI* reached highs of 16.3% and 15.7% in 2021 and 2022. It grew by 9.0% in 2023. These are extremely high growth rates, and it is questionable whether these figures are also simply reflecting anomalous developments in the multinational sector.

To respond to these questions, in recent years, many Irish institutions, including the Economic and Social Research Institute (ESRI), the Department of Finance, and the Central Bank of Ireland, have begun to highlight yet another metric: Modified Domestic Demand (MDD). The Minister of Finance referred to MDD as “the preferred metric of domestic economic activity¹¹.” The standard basic approach to calculating domestic demand is to add up consumer spending, government spending and investment. A key difference between domestic demand and total national income is that it excludes net exports (i.e. exports minus imports). Ireland produces a “modified” domestic demand measure by excluding investment in foreign-owned intangible assets (i.e. imported R&D and intellectual property) and leased aircraft.

Figure 2 below shows the development of MDD over the last couple of decades. As can be seen, it gives a very different story to the national income figures in Figure 1. While in Figure 1, national income had recovered to pre-crash levels by 2014/2015, Figure 2 suggests that the economy had not fully recovered until 2018/19 and that, at the end of the Covid-19 pandemic, modified domestic demand was still at a comparable level to 2007. Figure 2 also indicates that the economy has recovered from the Covid-19 pandemic and returned to the healthy growth trajectory it has been on since 2013.

¹¹ Department of Finance, “Minister McGrath Welcomes Strong Start to Year for Domestic Economy,” [www.gov.ie](https://www.gov.ie/en/press-release/ac252-minister-mcgrath-welcomes-strong-start-to-year-for-domestic-economy/), June 2, 2023, <https://www.gov.ie/en/press-release/ac252-minister-mcgrath-welcomes-strong-start-to-year-for-domestic-economy/>.

Figure 2. Modified final domestic demand (1995-2024)



Source: Central Statistics Office - NA005

Yet, while the headline GDP growth figures for Ireland massively overstate how well the Irish economy is doing, there is no avoiding the fact that the Irish economy has for the last few years performed very well. This is despite the impact of Brexit, the pandemic, and the war in Ukraine.

Forecasts from the Department of Finance indicate that the Irish economy is also expected to perform well in the future. GDP and GNP are both expected to have average real growth rates of over 3% over the next four years. GNI* is expected to grow at a slower, but still impressive, real rate of between 1.9% and 2.4%. Most remarkably, MDD is expected to grow by close to 3% in coming years.

Table 1: Department of Finance growth forecasts (percentage)

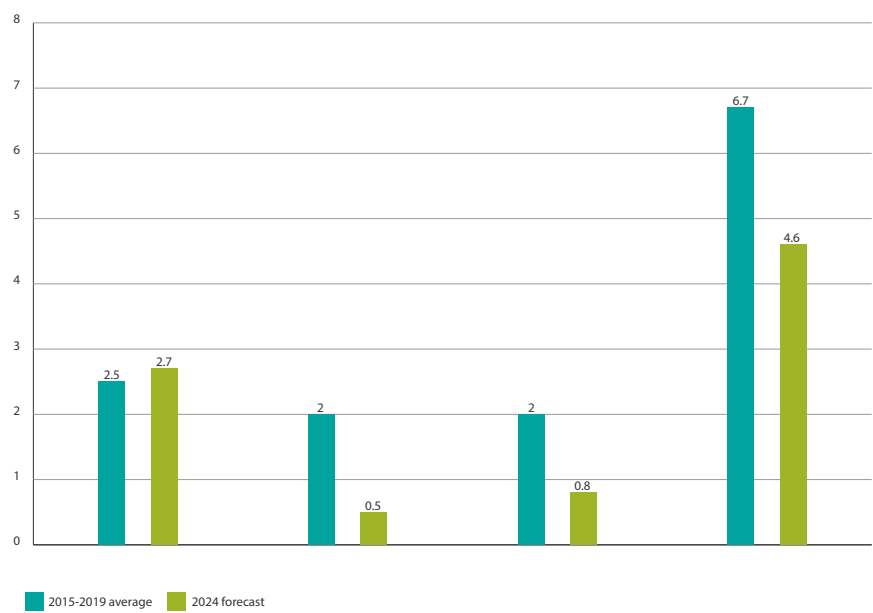
	2024	2025	2026	2027
Real GDP	2.6	3.9	3.5	3.6
Real GNP	2.1	3.5	3	3.1
Real GNI*	2.0	1.9	2.4	2.4
Modified Domestic Demand	1.9	2.3	2.9	2.9

Source: Stability Programme Update 2024¹²

These forecasts are therefore pointing to a very positive economic position for Ireland, which notably contrasts with the economic forecasts for other advanced economies.

¹² Department of Finance. "Stability Programme Update." Department of Finance's Spring Forecasts, April 2024. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/291737/0161375f-f66b-4b38-9b38-f044ac083f9c.pdf#page=null>.

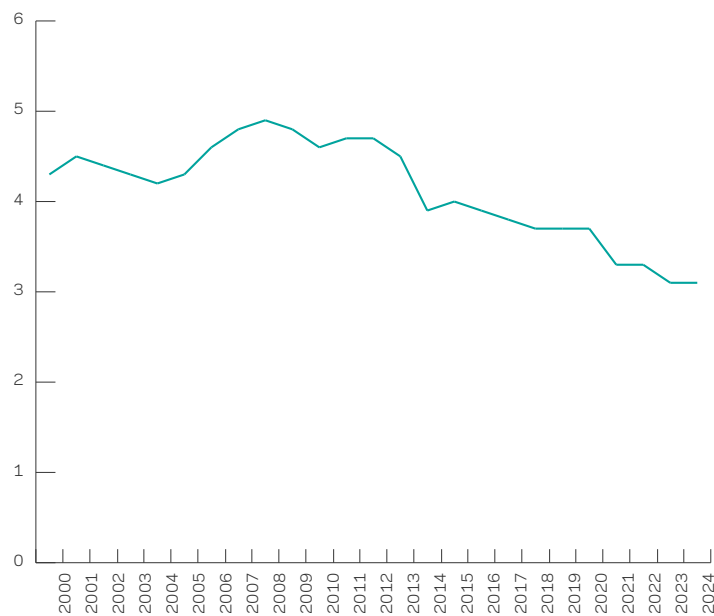
Figure 3. IMF growth forecasts for 2024 (percentage)



Source: Summer Economic Statement¹³

The IMF is forecasting quite poor levels of growth of less than 1% growth in GDP for the UK and Euro area (EA) for 2024. This would be a significant underperformance relative to their pre-pandemic economic performance, when GDP grew on average by 2.0% in both regions. Indeed, the IMF’s forecast for global growth has been steadily declining over the last 15 years, from 5% to 3%.

Figure 4. IMF global five-year ahead forecasts - World economic outlook (percentage)



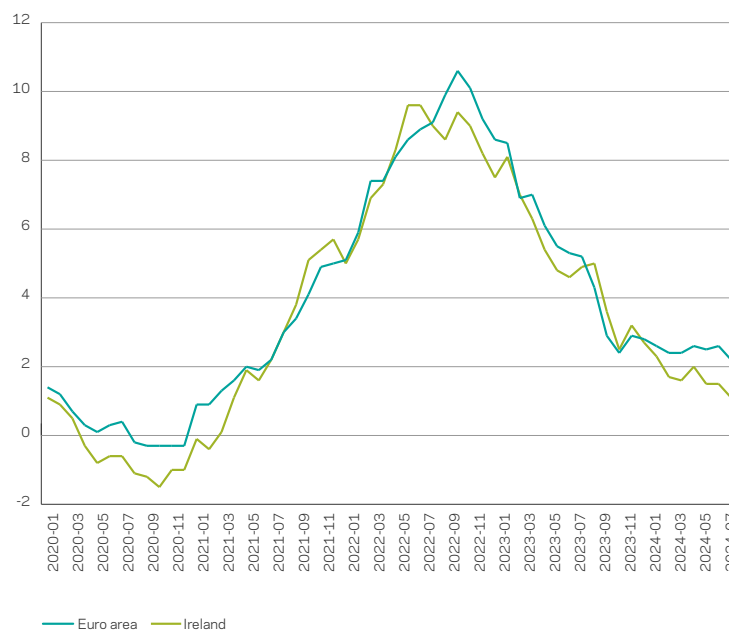
Source: Summer Economic Statement¹⁴

¹³ Government of Ireland. “Summer Economic Statement,” July 2024.
¹⁴ Government of Ireland. “Summer Economic Statement,” July 2024.

The economic decline in other regions is important for Ireland because of its dependence on international demand for Irish exports. Reduced demand for Irish exports may pose a real challenge to the Irish economy in the coming years.

Domestically, the inflation crisis arising from Russia's invasion of Ukraine is, for now, essentially over. Figure 5 shows inflation in Ireland and the Eurozone since January 2020. As can be seen, inflation began to rise above the 2% target in late 2021, and by the end of 2022, it had risen to close to 10%. However, over the last year and a half, inflation has fallen steadily and is now once again below 2%, the target inflation rate.

Figure 5. Inflation in Ireland and the Euro area (percentage)

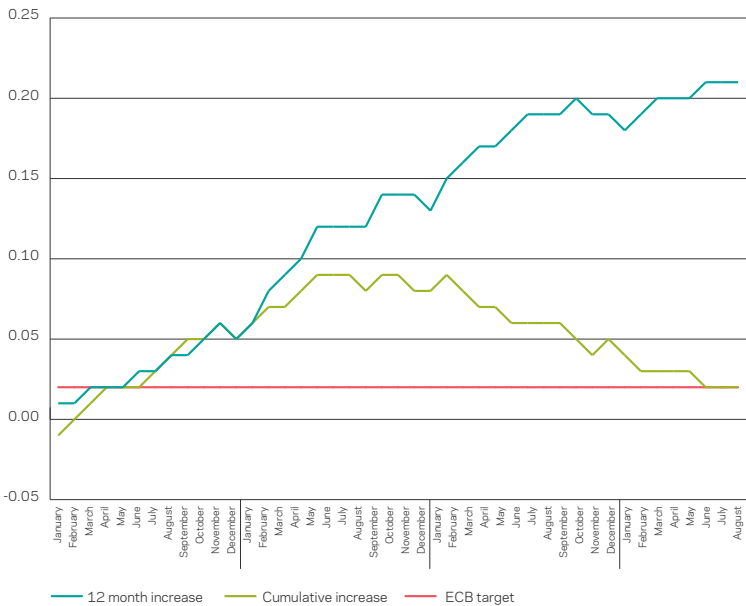


Source: European Central Bank¹⁵

However, this does not mean that prices have lowered, and the cost of living has not returned to pre-pandemic levels. As Figure 6 shows, following an extended period between 2021 and 2024 when inflation remained above the ECB target of 2%, there has been a 21% cumulative increase in the Consumer Price Index (CPI) since January 2021, a significant increase in the cost of everyday goods.

¹⁵ European Central Bank, "Inflation and Consumer Prices." European Central Bank, August 1, 2024. https://www.ecb.europa.eu/stats/macroeconomic_and_sectoral/hicp/html/index.en.html.

Figure 6. CPI percentage change over 12 months, 2021-2024



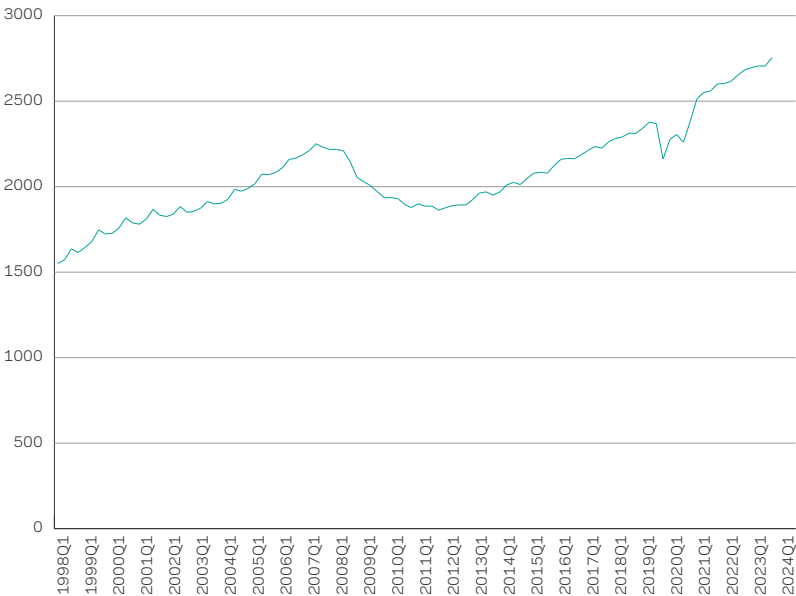
Source: Central Statistics Office

Ireland’s labour market

The strong performance of Ireland’s economy can also be seen in Ireland’s labour market.

Figure 7 shows the number of people in employment in the Irish economy. Employment growth has been steady since around 2012. The impact of the Covid-19 pandemic was temporary, and the Irish labour market quickly recovered, returning to its pre-pandemic path. By Q2 2024, 2,754,000 people were in employment in Ireland, a record number.

Figure 7. Number of people in employment (in thousands)



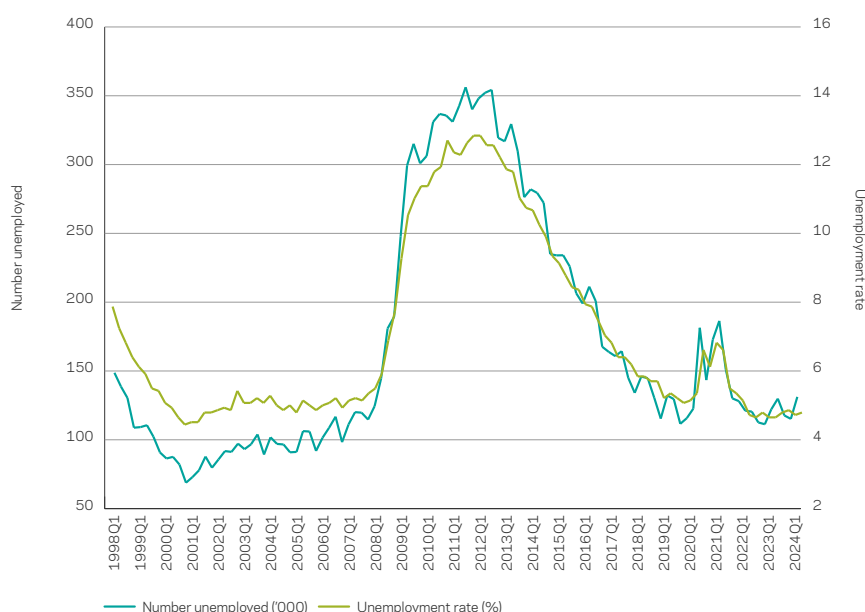
Source: Central Statistics Office¹⁶

¹⁶ Central Statistics Office. “Persons aged 15 years and over” Data.cso.ie, August 22, 2024. <https://data.cso.ie/table/QLF01>.

With this strong employment growth, unemployment has also come down. Figure 8 shows the development of unemployment over the last couple of decades. On the left-hand axis, it shows the unemployment rate, and on the right-hand side, it shows the actual number unemployed.

During the Celtic Tiger, the unemployment rate averaged around 4.5% when the economy was at or near full employment. However, with the financial crisis, unemployment surged to 16%. Since then, it has declined, and we once again find ourselves at or near full employment. For the last two years, the unemployment rate has been between 4.0% and 4.5%. Long term unemployment has also fallen to below 1%, the lowest level since this data series began in 1998¹⁷.

Figure 8.
Unemployment
rate and number
of unemployed



Source: Central Statistics Office¹⁸

We have also seen a clear fall in the number of unemployed. However, it is worth noting that this remains higher than when the economy was last at or near full employment. While by Q2 2024 the number of long term unemployed has fallen to 26,900, the lowest level in over twenty years, the total number of unemployed, 131,200, is higher than the levels seen when in the 2000-2006 period, when the number unemployed was between 65 - 105,000¹⁹.

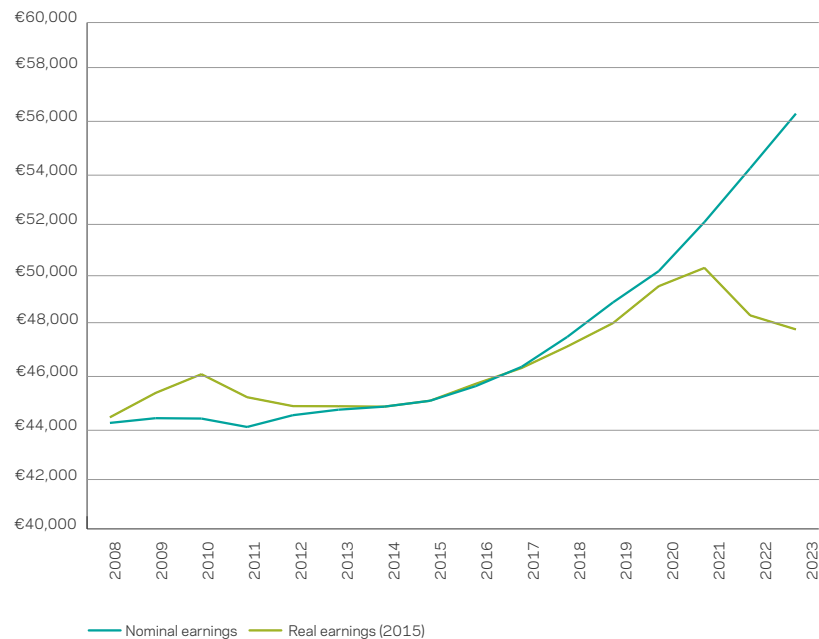
The impact of a tight labour market has resulted in significant earnings growth. Figure 9 below shows the average annual earnings of a full-time employee, both in nominal terms (earnings in euros) and real terms (where, to account for inflation, the annual earnings figure is converted into 2015 terms).

¹⁷ Central Statistics Office, "Quarterly National Household Survey: QLF31," <https://data.cso.ie/table/QLF31>.

¹⁸ Central Statistics Office. "ILO Participation, Employment and Unemployment Characteristics." Data.cso.ie, August 22, 2024. <https://data.cso.ie/table/QLF31>.

¹⁹ Central Statistics Office, "Quarterly National Household Survey: QLF31," <https://data.cso.ie/table/QLF31>.

Figure 9. Average annual full-time earnings



Source: Nominal earnings - Central Statistics Office²⁰. Real earnings - Author's calculation

Between 2008 and 2015, average nominal earnings were remarkably stable, remaining at around €44,500 per year. Since 2015, they have increased significantly. In 2023, the average annual earnings of a full-time employee in Ireland were €56,402. However, significant inflation in recent years has eroded some of those income gains, and in 2023, real earnings were similar to their level in 2019.

That said, wage growth has continued in recent quarters. Q1 2024 saw the first quarter of real wage growth since Q3 2021²¹, and real wage growth is expected to continue. The Department of Finance is forecasting inflation of around 2% up to 2027, but growth in compensation per employee of over 4%²². Therefore, we are likely to continue to see significant real wage growth over the next few years.

Ireland's exchequer today – revenue

The impact of Ireland's relatively strong economic performance in recent years can also be seen in the health of the exchequer.

Tax receipts have been very strong. This year receipts up to the end of August are €6.7 billion (12.6%) above last year's figures. The bulk of that tax take came from income tax and VAT, but, as in recent years, receipts from corporation tax were also very high. Corporation tax accounted for 24% of tax receipts up to the end of August this year, compared to 27% at this time last year²³.

²⁰ Central Statistics Office. "Average Annual Earnings and Other Labour Costs." Data.cso.ie, June 25, 2024. <https://data.cso.ie/>.

²¹ Michael Flanagan, "Recent Economic Developments and Outlook," presentation to the Tax Strategy Group, Economics Division, Department of Finance, July 9, 2024, <https://assets.gov.ie/299827/f62ed235-de5f-43f4-9c99-047e40368137.pdf>.

²² Government of Ireland. (2024). Stability Programmeme Update 2024, p. 55. Available at: <https://www.gov.ie/en/campaigns/e1e94-stability-programmeme-update-2024/>.

²³ Department of Finance, "Fiscal Monitor: August 2024," <https://www.gov.ie/en/publication/d22ea-fiscal-monitor-august-2024/>.

Table 2: Analysis of taxation receipts – end August 2024				
Year-on-Year Performance - Cumulative				
Exchequer Tax Receipts	End-August 2024 Outturn €m	End-August 2023 Outturn €m	Y-on-Y Change €m	Y-on-Y Change %
Income Tax (including USC)	22,170	20,736	1,434	6.90%
VAT	14,527	13,517	1,010	7.50%
Corporation Tax	16,258	12,661	3,597	28.40%
Excise	4,084	3,581	503	14.00%
Stamps	978	911	67	7.30%
Capital Gains Tax	393	410	-18	-4.30%
Capital Acquisitions Tax	208	182	26	14.40%
Customs	370	360	9	2.60%
Levies	0	0	0	-
Motor Tax	657	648	9	1.40%
Unallocated Tax Deposits	119	88	30	-
Other Property Related Taxes	1	0	1	-
Total	59,763	53,094	6,668	12.60%

Source: Department of Finance²⁴

These high levels of tax receipts have meant that Ireland has consistently run substantial budget surpluses in recent years. In the 12 months up to August 2024, the exchequer recorded a €5.3bn surplus²⁵.

While much of this high tax take is explained by elevated corporation tax receipts, Ireland has also seen significant increases in tax receipts from income tax and VAT, the two largest sources of tax revenue (See Table 2).

²⁴ Economic Division Department of Finance. "Fiscal Monitor August 2024." Department of Finance, September 4, 2024. <https://www.gov.ie/en/publication/d22ea-fiscal-monitor-august-2024/>.

²⁵ Department of Finance, "Fiscal Monitor: August 2024," <https://www.gov.ie/en/publication/d22ea-fiscal-monitor-august-2024/>.

Figure 10. Tax receipts 2015-2024 (€ billion)



Source: Department of Finance²⁶

However, while the headline figures for the exchequer are unquestionably healthy, there are grounds for concern. Firstly, many, including the Irish Fiscal Advisory Council (IFAC), have expressed concerns that Ireland's very high corporation tax receipts are a temporary "windfall" and will not be sustained in the future. Using the Department of Finance's figures, IFAC has performed an exercise to discount the "windfall" element of Irish corporation tax receipts. It estimated this at €11.2 billion in 2023, which, when subtracted from the budget surplus of €8.3 billion, results in an underlying deficit of €2.9 billion. They forecast that this "underlying deficit" will continue up to 2027²⁷.

Table 3: SPU 2024 fiscal forecasts, with breakdown of Government revenue (€ billions)

	2023	2024	2025	2026	2027
General Government Revenue	123.7	130.2	137.3	141.9	148.7
Income tax	32.9	34.8	36.9	39	41
VAT	20.3	21.3	22.8	23.9	25.1
Corporation tax	23.8	24.5	25.6	24.7	25.8
<i>of which excess</i>	11.2	11.2	11.5	9.9	10.3
PRSI	15.5	16.8	18.1	19.5	21
Excise	5.6	6.2	6.7	7.1	7.4
Stamp duties	1.8	1.7	1.7	1.8	1.9
Other General Government Revenue	12.5	13.7	13.9	15.9	16.1
General Government Expenditure	115.4	121.6	127.5	133.1	137.9

Source: Irish Fiscal Advisory Council²⁸

²⁶ Economic Division Department of Finance. "Fiscal Monitor August 2024." Department of Finance, September 4, 2024. <https://www.gov.ie/en/publication/d22ea-fiscal-monitor-august-2024/>.

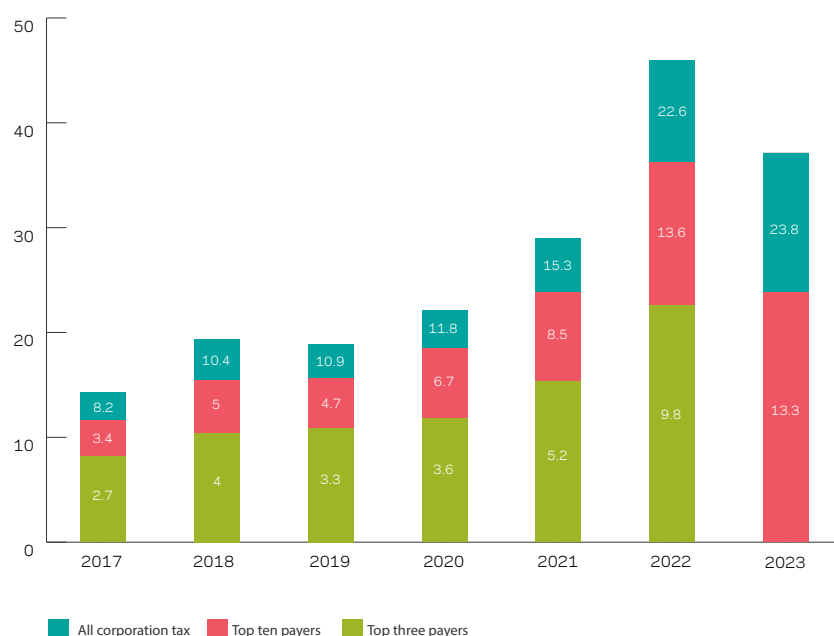
²⁷ Irish Fiscal Advisory Council, "Fiscal Assessment Report: June 2024," <https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

²⁸ Irish Fiscal Advisory Council. "Fiscal Assessment Report, June 2024." Irish Fiscal Advisory Council, June 4, 2024. <https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

A further concern relating to Ireland's corporation tax receipts is their high levels of concentration.

For example, in 2022, of the €22.6 billion collected in corporation tax, €13.6 billion (60%) came from just 10 corporations, while €9.8 billion (43%) came from just three corporations. The heavy concentration of exchequer receipts in just three companies puts the State in a precarious position²⁹.

Figure 11.
Corporation tax
receipts (€ billion)



Source: Irish Fiscal Advisory Council³⁰

The risk is not limited to corporation tax. As the IFAC observes: "This concentration risk is evident more broadly as multinational companies also generate a significant proportion of other tax receipts, including 40 per cent of income tax in 2022 and just under 40 per cent of VAT revenue³¹."

This high level of tax concentration makes Ireland highly vulnerable to the private business decisions of a small number of (non-Irish) firms.

Ireland's exchequer today – expenditure

Turning from revenue to expenditure, there are also grounds for concern. While Government spending has increased dramatically in recent years, this increase has been driven almost entirely by spending on the current account³². Ireland faces significant infrastructure constraints, particularly in housing, healthcare, transport, and sustainable energy generation. This is a challenge not only for people who live in Ireland but also in terms of attracting investment. For example, in the most recent IMD World Competitiveness Report, Ireland was ranked as the fourth most competitive economy globally. However, Ireland ranked much lower with regard infrastructure - between 17th and 23rd globally in recent years³³.

²⁹ Irish Fiscal Advisory Council, "Pre-Budget Statement: Budget 2025," <https://www.fiscalcouncil.ie/pre-budget-statement-budget-2025-2/>.

³⁰ Irish Fiscal Advisory Council. "Pre-Budget Statement Budget 2025." Irish Fiscal Advisory Council, September 2024. <https://www.fiscalcouncil.ie/pre-budget-statement-budget-2025-2/>.

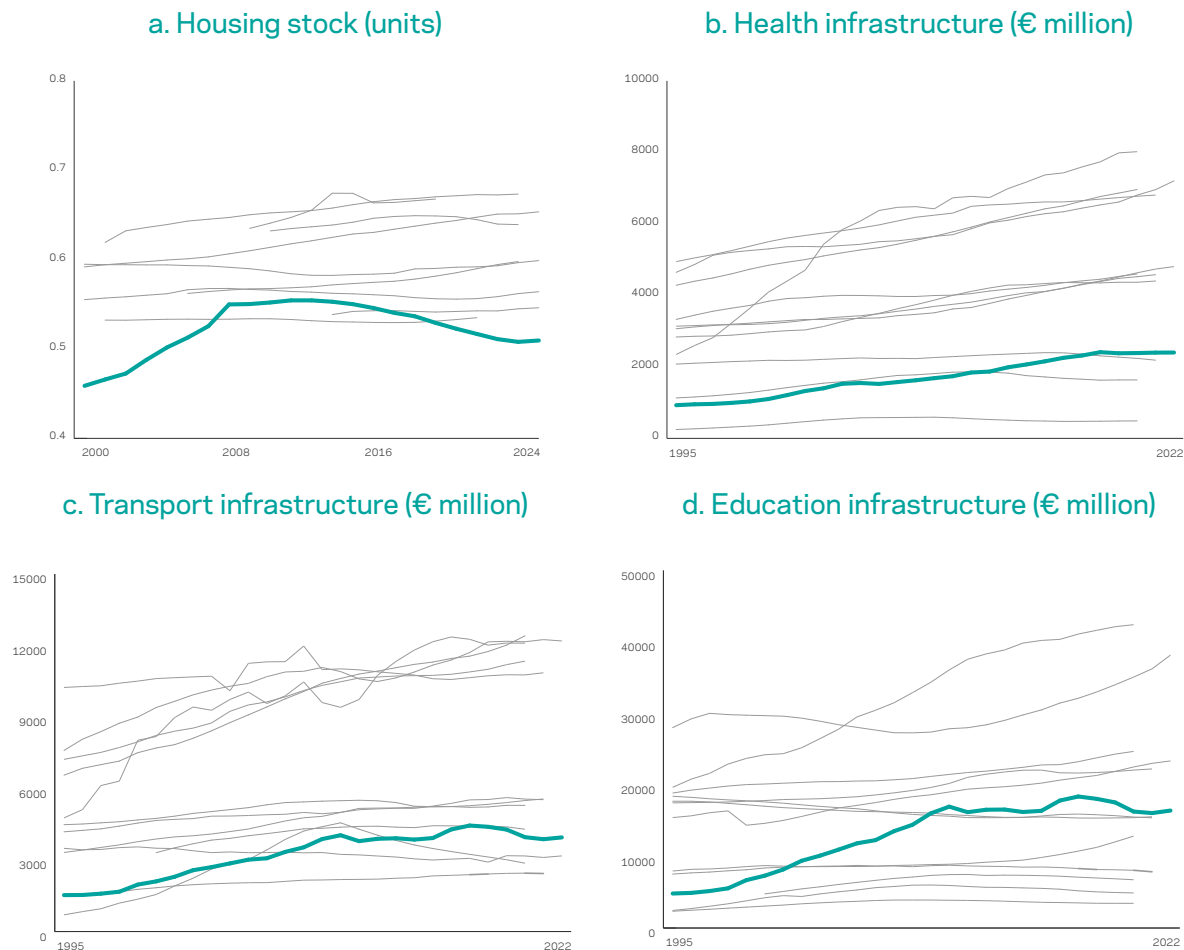
³¹ Irish Fiscal Advisory Council, "Fiscal Assessment Report: June 2024," p. 11, <https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

³² Ibid.

³³ IMD World Competitiveness Center, "Ireland," https://www.imd.org/entity-profile/ireland-wcr/#_yearbook_Economic%20Performance.

In 2023, the Irish Fiscal Advisory Council compared Ireland's capital stock with other EU 15 member States. It found that in terms of housing stock, health infrastructure and transport infrastructure Ireland is low compared to the other, similarly high-income EU States. In terms of education infrastructure, it described Ireland as "middling"³⁴.

Figure 12a. Ireland's capital stock compared with other EU 15 member states (per person aged (15+))



Source: Irish Fiscal Advisory Council³⁵

The Government has made significant commitments under *Project Ireland 2040* and the *National Development Plan (2021-2030)* to invest in public infrastructure. For example, the NDP projected that public investment would increase to 5% of Modified Gross National Income (GNI*) by 2024, implying a doubling of investment as a share of GNI* since 2017³⁶. However, these targets have not been met. While current expenditure has increased substantially, capital expenditure has fallen short of its targets.

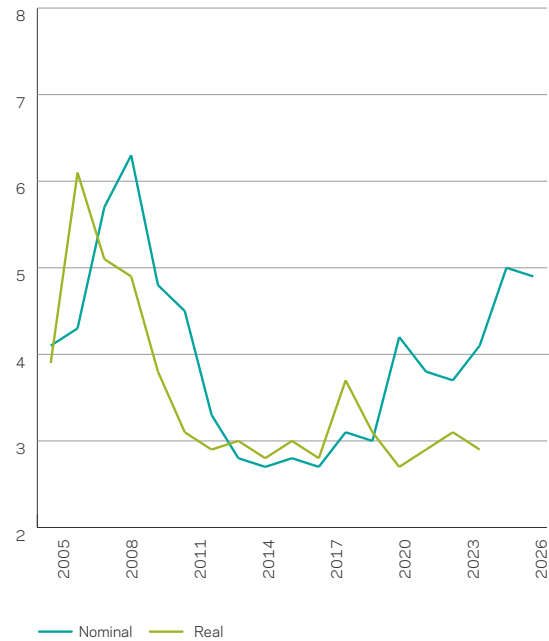
Recent Department of Finance projections estimate that Ireland will reach the 5% target. However, estimates by the Central Bank of Ireland (CBI) suggest that higher inflation will keep public investment as a share of output close to 3% in real terms over the forecast period.

³⁴ Irish Fiscal Advisory Council, "Fiscal Assessment Report: December 2023," <https://www.fiscalcouncil.ie/fiscal-assessment-report-december-2023/>, pp. 28-29.

³⁵ Irish Fiscal Advisory Council. "Fiscal Assessment Report, December 2023." Irish Fiscal Advisory Council, December 2023. <https://www.fiscalcouncil.ie/fiscal-assessment-report-december-2023/>.

³⁶ Central Bank of Ireland, "Fiscal Priorities for Short and Medium Term," *Quarterly Bulletin*, p.22: <https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/quarterly-bulletin-signed-articles/fiscal-priorities-for-short-and-medium-term.pdf>.

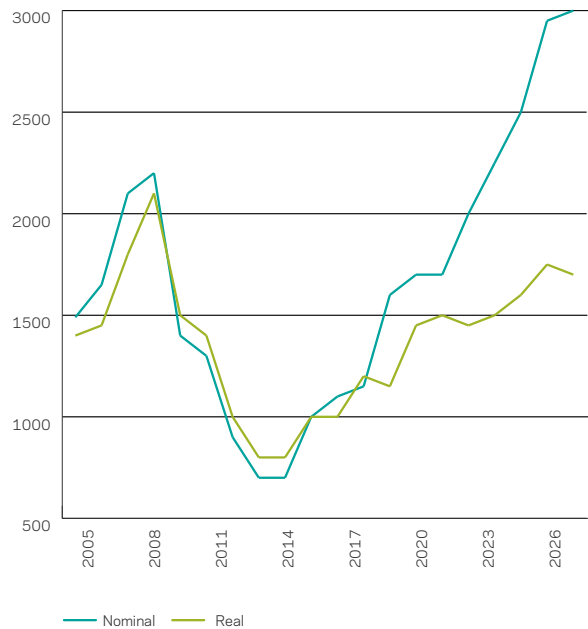
Figure 12b. Public investment as percentage of GNI*



Source: Central Bank of Ireland³⁷

Indeed, the same CBI report estimates that in real per capita terms, public investment will remain below its pre-crash 2008 levels. This is due to sustained underinvestment in Ireland's public infrastructure for decades, but particularly over the last fifteen years.

Figure 13. Investment per capita (€)



Source: Central Bank of Ireland³⁸

³⁷ Conefrey, Thomas, Rónán Hickey, Matija Lozej, Niall McNerney, David Staunton, and Graeme Walsh. "Fiscal Priorities for the Short and Medium Term." Central Bank of Ireland, June 2024. <https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/quarterly-bulletin-signed-articles/fiscal-priorities-for-short-and-medium-term.pdf>.

³⁸ Conefrey, Thomas, Rónán Hickey, Matija Lozej, Niall McNerney, David Staunton, and Graeme Walsh. "Fiscal Priorities for the Short and Medium Term." Central Bank of Ireland, June 2024. <https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/quarterly-bulletin-signed-articles/fiscal-priorities-for-short-and-medium-term.pdf>.

While capital investment remains low, Ireland's current account expenditure has recently grown at a remarkable rate. One area where this is most visible is the health sector. Public sector health expenditure has grown from around €13 billion in 2013 to €24 billion in 2022³⁹. This increase in spending is almost entirely attributable to increased current spending, not capital spending⁴⁰. The Irish Fiscal Advisory Council speculates on the causes of this spending increase:

"Part of the problem seems to be that hospital and primary care budgets are often set very tight, maybe with the expectation that efficiencies will be generated. This might be credible if it had a record of producing savings or preventing overruns. Instead, this seems to have led to what economists call a 'soft budget constraint', where managers know that overruns will be financed and so there is little incentive to stick to ceilings and create efficiencies. As a result, there is limited/no incentive to produce savings or prevent overruns. Instead, providing limited budget increases in big spending areas appears to have set the scene for spending overruns. This points to a failure of planning⁴¹."

Perhaps even more remarkable is that while core capital spending has not been revised up in response to recent inflation, and while there are large and persistent infrastructural deficits, planned tax deductions have more than doubled, from €0.5bn to €1.1 billion per year⁴². In the 2025 budget, the €1.4 billion tax cut was even above this forecast⁴³.

Thus, while the exchequer is in an overall healthy position, the State faces several questions regarding revenue and expenditure. Firstly, Irish tax receipts are excessively concentrated, particularly with regards to corporation tax. Secondly, there are persistent infrastructure inadequacies and there is persistent underinvestment to address these inadequacies. Finally, some aspects of current account spending are poorly planned and, in certain instances—particularly in the health sector—appear to be poorly managed.

Looking forward

The future of the Irish economy looks quite like its current position: a strong economy, a robust labour market, reliance on a small number of corporations, and continued underinvestment in infrastructure.

Looking at GNI* per hour worked as a measure of productivity, Ireland has seen strong productivity growth in recent years. Although the Department of Finance forecasts low productivity growth for the 2022-2025 period, with growth expected to rise to 1.5% during the 2028-2030 period, this forecast is optimistic and depends on increased investment in infrastructure. As the Irish Fiscal Advisory Council observes: "Infrastructure and the capital stock will likely influence this transition and productivity growth more generally. If Ireland's capital stock and infrastructure remain stretched, the economy may struggle to have a high productivity transition to its medium-term trajectory⁴⁴."

³⁹ Department of Public Expenditure and Reform, "Gross Public Service Expenditure," <https://databank.per.gov.ie/Expenditure.aspx?rep=GrossVH>.

⁴⁰ Irish Fiscal Advisory Council, "The Path for Ireland's Health Budget," p.16, p.16 & https://data.oireachtas.ie/ie/oireachtas/parliamentaryBudgetOffice/2023/2023-08-15_health-spending-in-ireland-2015-2023_en.pdf p.3
<https://www.fiscalcouncil.ie/wp-content/uploads/2021/11/The-path-for-Irelands-health-budget.pdf> & Parliamentary Budget Office, "Health Spending in Ireland 2015-2023," p.3,
https://data.oireachtas.ie/ie/oireachtas/parliamentaryBudgetOffice/2023/2023-08-15_health-spending-in-ireland-2015-2023_en.pdf.

⁴¹ Irish Fiscal Advisory Council, "Fiscal Assessment Report: June 2024," Pp. 35-36,
<https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

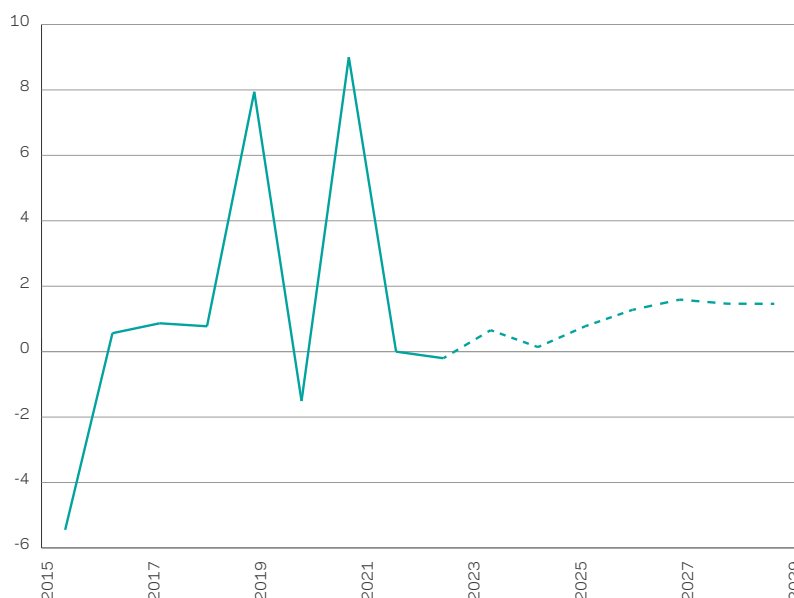
⁴² Irish Fiscal Advisory Council, "Fiscal Assessment Report: June 2024," Pp. 49,
<https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

⁴³ Irish Fiscal Advisory Council, "Budget 2025 Flash Release," October 2024 <https://www.fiscalcouncil.ie/wp-content/uploads/2024/10/Budget-2025-Flash-Release-Fiscal-Council-October-2024-1.pdf>.

⁴⁴ Irish Fiscal Advisory Council, "Budget 2025 Flash Release," October 2024 P.20 <https://www.fiscalcouncil.ie/wp-content/uploads/2024/10/Budget-2025-Flash-Release-Fiscal-Council-October-2024-1.pdf>.

And while “the overall capital stock is driven not just by government capital spending, but also by private sector firms and households,” “some of the most acute shortages in Ireland’s infrastructure are in areas that are predominantly publicly funded (transport and health⁴⁵).”

Figure 14. Real GNI* per hour worked, percentage growth



Source: Irish Fiscal Advisory Council⁴⁶

If we compare economic forecasts for 2024 and 2025 from the Department of Finance⁴⁷, the Central Bank of Ireland, the ESRI and the European Commission, we can see that all forecasts are fairly positive. Growth and demand forecasts are nearly all between 2-3%. The forecasts also predict strong wage growth and low unemployment, inflation and government debt. Employment growth is forecast at between 1.5%-1.9% over the next two years. And (not included in Table 4) both the Department of Finance and the Central Bank predict this employment growth continuing at 1.5% in 2026.

⁴⁵ Irish Fiscal Advisory Council, “Budget 2025 Flash Release,” October 2024 P.22 <https://www.fiscalcouncil.ie/wp-content/uploads/2024/10/Budget-2025-Flash-Release-Fiscal-Council-October-2024-1.pdf>.

⁴⁶ Irish Fiscal Advisory Council, “Fiscal Assessment Report: June 2024,” p. 11, <https://www.fiscalcouncil.ie/2024/06/fiscal-assessment-report-june-2024/>.

⁴⁷ The Department of Finance growth and demand forecast through to 2027 have already been presented and discussed in Table 1 above. Table 4 reproduces those forecasts for 2024 and 2025.

Table 4: Comparing economic forecasts				
	Department of Finance	Central Bank of Ireland	ESRI	European Commission
2024				
GDP	2.6	1.8	2.5	1.2
GNP	2.1		5.4	
MDD	1.9	2.1	2.2	
Consumption	2.4	2.7	2.6	2.3
Employment	1.9	1.6		1.6
Unemployment	4.6	4.5	4.1	4.4
Compensation per employee	6.7	5.6		4.4
Inflation	2.1	1.7	2	
GG Balance	2.8	2.8	1.6	1.3
GG Debt (% of GDP/GNI)		42.3/73.8		42.5
2025				
GDP	3.9	4.4	3.2	3.6
GNP	3.5		3.1	
MDD	2.3	2.5	2.9	
Consumption	3.1	3	3.1	3.1
Employment	1.5	1.5		1.5
Unemployment	4.7	4.5	4	4.4
Compensation per Employee	6.3	4.8		4.1
Inflation	2.1	2	2	
GG Balance	3	2.8	1.8	1.2
GG Debt (% of GDP/GNI)		40.3/71.2		41.3

Source: Various Sources⁴⁸

⁴⁸ Thanks to Shane Laird for help producing this table.
 Department of Finance, July 2024, Summer Economic Statement, <https://www.gov.ie/pdf/?file=https://assets.gov.ie/291737/0161375f-f66b-4b38-9b38-f044ac083f9c.pdf#page=null>
 Central Bank of Ireland, 2024, Quarterly Bulletin Q2 https://www.centralbank.ie/docs/default-source/publications/quarterly-bulletins/qb-archive/2024/quarterly-bulletin-q2-2024.pdf?sfvrsn=49e4601a_6.
 Economic and Social Research Institute (ESRI), 2024, Quarterly Economic Commentary Summer 2024 <https://www.esri.ie/system/files/publications/QEC2024SUM.pdf>
 European Commission, European Economic Forecast: Summer 2024, https://economy-finance.ec.europa.eu/document/download/c63e0da2-c6d6-4d13-8dcb-646b0d1927a4_en?filename=ip286_en.pdf.

Long-term challenges

Ireland's persistent infrastructural deficits put the country in a challenging position when considering longer-term structural issues.

The Government has identified four major long-term structural challenges, known as the 4Ds: demographics, decarbonisation, digitalisation, and de-globalisation⁴⁹. The Department of Finance observes: "The population is ageing (demographics), there is a need to transition to carbon neutrality (decarbonisation), the roll-out of artificial intelligence (digitalisation) is proceeding apace and the global economy is fragmenting around different geopolitical blocs (de-globalisation⁵⁰). It further points out that "The annual budgetary cycle cannot be divorced from these longer-term structural trends⁵¹" and argues that budgetary policy should be "guided by the need to begin planning for the inevitable fiscal costs arising from major structural economic changes in the years ahead⁵²."

Demographics

Compared with other EU member States, Ireland has a relatively young population with a large proportion of working-age individuals. However, this will change over the coming decades as the population ages, life expectancy increases, and fertility remains low relative to historical levels. This will result in an increasing old-age dependency ratio, which is calculated as the population aged 65 and above divided by the population aged 20-64. Currently, this ratio stands at 0.257 in Ireland. According to forecasts in the European Commission's 2024 Ageing Report this ratio is expected to rise to 0.301 by 2030, 0.370 by 2040, and 0.477 by 2050⁵³. In other words, while there are currently four people aged 20-64 for every person aged 65 or over, this ratio is expected to shift to only two people aged 20-64 for every person aged 65 or over by 2050⁵⁴.

The budgetary impact is significant. It is projected that, "On current demographic trends, age-related expenditure is set to be somewhere in the region of €16 billion (in 2022 prices) higher by the mid-point of the century just to maintain existing levels of service⁵⁵."

Table 5: Long-term spending projections, per cent of GNI*

	2022	2030	2040	2050	Δ2022-2050
Total age-related expenditure	22	22.7	24.9	28	6
Total pension expenditure	7	7.6	9.3	11	4
State pension	5.4	6	7.4	9.2	3.8
Public sector pension	1.6	1.6	1.9	1.8	0.2
Health care	7.6	8	8.7	9.3	1.7
Long term care	2.3	2.5	3	3.6	1.3
Education	5.2	4.5	4	4.2	-1

Source: Stability Programme Update 2024

⁴⁹ Government of Ireland, The Irish Economy in 2030 – Enabling a Sustainable Future for All, in Summer Economic Statement 2023, 26–33, <https://www.gov.ie/en/publication/cfde8-summer-economic-statement-2023/>.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Government of Ireland. (2024). *Stability Programme Update 2024*, p. 2. Available at: <https://www.gov.ie/en/campaigns/e1e94-stability-programme-update-2024/>.

⁵³ European Commission. (2024). 2024 Ageing Report: Underlying Assumptions and Projection Methodologies. Available at: https://economy-finance.ec.europa.eu/publications/2024-ageing-report-underlying-assumptions-and-projectionmethodologies_en.

⁵⁴ Government of Ireland. (2024). *Stability Programme Update 2024*, p. 46–48. Available at: <https://www.gov.ie/en/campaigns/e1e94-stability-programme-update-2024/>.

⁵⁵ Government of Ireland. (2024). *Summer Economic Statement 2024*, p. 13. Available at: <https://www.gov.ie/en/publication/ee21b-summer-economic-statement-2024/>.

As shown in Table 5, total age-related expenditure as a percentage of GNI* is expected to increase by 6 percentage points between 2022 and 2050. This includes a 4-percentage point increase due to higher spending on pensions and an additional 3 percentage points for health care and long-term care. Although the shifting population composition is anticipated to result in savings of 1 percentage point of GNI* due to reduced education spending, overall GNI* growth is expected to slow due to the declining proportion of the working-age population⁵⁶.

De-carbonisation

Ireland is committed to reaching 'net zero' emissions by 2050 and reducing emissions by 51% by 2030 relative to 2018 levels.

This represents a major challenge, and currently, Ireland is off track to meet its 2030 target. Casey and Carroll (2023⁵⁷) report that we are on pace for a reduction of only 29% by 2030. Failure to meet these targets would incur compliance costs, estimated at an average of €0.35 billion annually until 2030, rising to €0.7 billion (0.2% of GNI*) thereafter.

Further fiscal challenges arise from transition costs and the impact of extreme weather events. Casey and Carroll estimate that the decline in tax revenues from carbon-intensive activities could reduce tax receipts by 0.9% of GNI* (€2.5 billion in today's terms) per annum by 2030, potentially increasing to 1.6% of GNI* (€4.4 billion) annually in the long term. They also estimate that government support for the transition could range from 0.6% to 1.1% of GNI* (€1.6 billion to €3.0 billion) per annum from 2026 to 2030, with long-term costs averaging between 0.4% and 0.7% of GNI* (€1.1 billion to €1.9 billion) from 2031 to 2050. Additionally, the costs associated with extreme weather events could reach approximately 0.2% of GNI* (about €0.5 billion). Mitigating these risks may necessitate further adaptation costs beyond the €0.1 billion per annum allocated for flood defences in the National Development Plan⁵⁸.

Finally, they estimate that the costs associated with extreme weather events could be in the region of 0.2% of GNI* (about €0.5 billion in today's money). Limiting these risks could require further adaptation costs beyond the €0.1 billion per annum allocated for flood defences in the National Development Plan⁵⁹.

Further challenges include the impact of the green transition on the labour market. As noted by the Department of Finance, "the green transition will involve job destruction in 'brown sectors' alongside job creation in 'green sectors.' Policies will therefore be required to smooth the reallocation of workers within the economy – via upskilling and re-skilling – to align the skills of workers (labour supply) with the needs of employers (labour demand) to avoid mismatches⁶⁰."

Digitalisation

Advances in digital technology present both challenges and opportunities. The Department of Finance identifies several key areas, including "automation, robotics, artificial intelligence, nanotechnology, quantum computing, and algorithmic (machine) learning." The impact of these technologies on economic development and workplace practices is uncertain and may result in a destabilising transformation. The Government is examining these issues⁶¹, and how Ireland navigates these challenges will be crucial for its future economic development. A key factor will be the promotion of lifelong learning to support the acquisition of skills that enhance productivity⁶².

⁵⁶ Government of Ireland. (2024). *Summer Economic Statement 2024*, p. 10 Available at: <https://www.gov.ie/en/publication/ee21b-summer-economic-statement-2024/>.

⁵⁷ Eddie Casey and Killian Carroll, What Climate Change Means for Ireland's Public Finances, Long-term Sustainability Report: Supporting Research Series, no. 1 (October 2023), pp <https://www.fiscalcouncil.ie/climate-change/>

⁵⁸ Eddie Casey and Killian Carroll, What Climate Change Means for Ireland's Public Finances, Long-term Sustainability Report: Supporting Research Series, no. 1 (October 2023), pp.4 <https://www.fiscalcouncil.ie/climate-change/>

⁵⁹ Eddie Casey and Killian Carroll, What Climate Change Means for Ireland's Public Finances, Long-term Sustainability Report: Supporting Research Series, no. 1 (October 2023), pp.5 <https://www.fiscalcouncil.ie/climate-change/>

⁶⁰ Government of Ireland. (2024). *Stability Programme Update 2024*, p. 20. Available at: <https://www.gov.ie/en/campaigns/e1e94-stability-programme-update-2024/>.

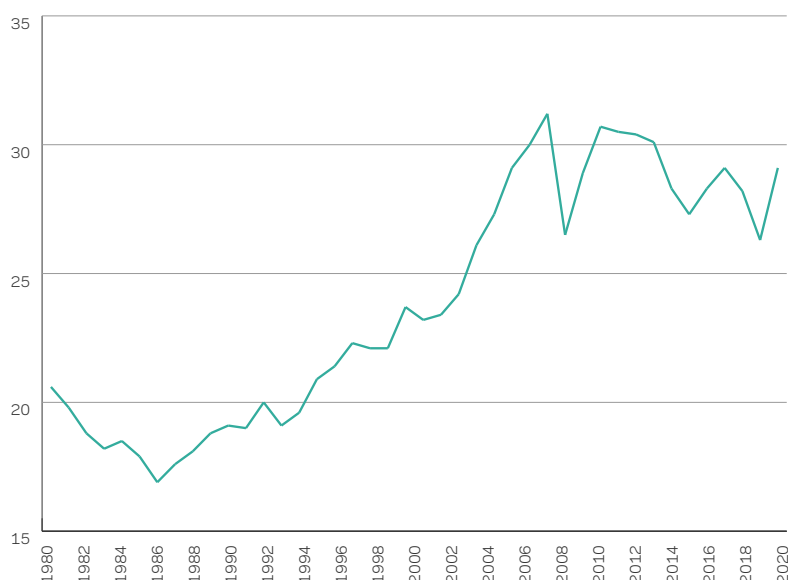
⁶¹ Department of Finance. See Artificial Intelligence: Friend or Foe? <https://www.gov.ie/en/publication/6538e-artificial-intelligence-friend-or-foe/>.

⁶² Government of Ireland. (2024). *Summer Economic Statement 2024*, p. 27. Available at: <https://www.gov.ie/en/publication/ee21b-summer-economic-statement-2024/>.

De-globalisation

In the two decades following the end of the Cold War, global trade expanded rapidly, rising from less than 20% of global GDP to over 30% within a relatively short period. However, since the global financial crisis, global trade has stabilised around 30%. This has led to concerns that we may have reached "peak globalisation" and could be entering a period of de-globalisation⁶³.

Figure 15. World trade as a percentage of world GDP



Source: Summer Economic Statement

As a highly export-oriented economy, Ireland is particularly exposed to this risk. Disruptions to international trade, such as Brexit, Covid-19, the war in Ukraine, and trade disputes between China and the U.S., have demonstrated how vulnerable the Irish economy is to global trade fluctuations.

Major challenges


What is clear from the above is that Ireland faces significant economic challenges, which are exacerbated by persistent underinvestment in public infrastructure. The prudent approach to these challenges is not to delay public investment merely to achieve larger temporary budget surpluses. Instead, the prudent course is to avoid unnecessary tax cuts, ensure that current expenditures are used efficiently, and increase investment in public infrastructure and other areas crucial for preparing Ireland for future economic challenges.

It is only by investing today that we can ensure a fiscally sustainable future.

In the upcoming chapters, we will explore how investment can be leveraged to address the challenges that will shape the future of life, work, and governance in Ireland, including climate action and artificial intelligence (AI). An interventionist approach that leverages data-informed decision making to generate proactive policy solutions will ensure that people across Ireland will be able to thrive in today's complicated economic environment. The next section examines how the lack of investment in infrastructure and State capacity have translated into practice. The following two sections then look at how the State should invest and plan for climate action and AI.

⁶³ Government of Ireland, "The Irish Economy in 2030 – Enabling a Sustainable Future for All," in *Summer Economic Statement 2023*, 32, <https://www.gov.ie/en/publication/cfde8-summer-economic-statement-2023/>.





The cost of living for workers: making it more affordable to live and work

The cost of living for workers: making it more affordable to live and work

A survey conducted by Amárach Research this year found that one in five Fórsa members are dissatisfied in their role and that a similar proportion anticipate a decline in job satisfaction in the coming year. Pessimism about the future went beyond work, with one in five expecting their quality of life to disimprove in the coming year, a sentiment that was particularly prevalent among younger workers, rising to one in four respondents aged 45 and under. It is worrying that despite the strong outlook for the economy, as evidenced in the previous chapter, a significant number of workers feel that things will get worse for them instead of better. It is relevant that those most likely to hold this view about their future were those who were dissatisfied with their current role (36%).

This chapter examines how a lack of investment in infrastructure and State capacity are contributing to a growing number of everyday challenges for workers, fuelling growing dissatisfaction among workers and pessimism about the future. A refusal by government to address the immediate impacts of the cost of living crisis is putting extra pressure on workers and worsening existing staffing crises across vital public services. A lack of investment in public transport infrastructure has led to rising commute times, while many workers in public-facing roles have not benefitted from the increased flexibility brought by the widespread adoption of remote work.

Our analysis of survey data from Fórsa members, and broader research on the impact of continued gaps, indicate an urgent need for long-term investment and planning. We examine the Irish Government's approach to address these challenges, along with policy solutions adopted internationally, to find avenues where the State should prioritise investment to improve conditions for workers.

The cost of living crisis continues to impact household budgets

As discussed in the first chapter of this report, though inflation has slowed to normal levels and real wages have begun to rise, prices have not returned to pre-pandemic levels and for now workers will continue to experience the effects on their household budgets.

Real wages in Ireland remain below 2019 levels – a trend that persists across OECD countries⁶⁴. Living Wage for Ireland Foundation calculates that an hourly wage of €14.80 is needed to afford a decent standard of living in 2024⁶⁵. This marks an increase of €2.50 per hour from what was calculated for 2019/20 and €1.30 per hour more than the minimum wage following increases announced as part of Budget 2025 for people aged 18+⁶⁶.

Cumulative rises in food prices since 2020 are strongly evident in the price of a weekly household shop, with meat and vegetables all costing more in 2024 than they did in 2020. The Vincentian MESL Research Centre calculates that household food costs have increased across this interval by 17.8% for rural household and by 23.1% for urban households⁶⁷. The cost of

⁶⁴ OECD (2024), "Steady as we go: Treading the tightrope of wage recovery as labour markets remain resilient", in *OECD Employment Outlook 2024: The Net-Zero Transition and the Labour Market*, OECD Publishing, Paris, <https://doi.org/10.1787/0ea4644c-en>.

⁶⁵ Living Wage Ireland. "Living Wage for Ireland." Living Wage Ireland, August 10, 2009. <https://www.livingwage.ie>.

⁶⁶ Government of Ireland. "Your Guide to Budget 2025," October 1, 2024. <https://www.gov.ie/en/publication/cb193-your-guide-to-budget-2025/#expenditure-measures>.

⁶⁷ Vincentian MESL Research Centre: Annual Update 2024." 2023. June 2023. https://www.budgeting.ie/download/pdf/mesl_2023_-_annual_update_report.pdf.

food disproportionately affects lower income households, who spend a greater proportion of their monthly budget on food and other essentials than those in higher wage brackets who have more disposable income. For some households, the cost of a healthy food basket now makes up 45% of household income. A nationally representative survey of parents with children carried out in April by polling firm Amárach Research, on behalf of Barnardos, found that 20% of respondents had to cut down on food due to cost-of-living increases (up from 16% in 2022⁶⁸).

The surge in fuel prices has been a key driver of the cost-of-living crisis, with a more severe impact on lower-income households, reversing the pre-2020 trend of declining fuel poverty. ESRI researchers have credited previous success in reducing fuel poverty to a policy approach targeting older people living in energy inefficient houses⁶⁹. However, fuel poverty now threatens a broader section of society and workers.

As is the case with food spending, lower-income households spend a larger proportion of their income on heating despite spending less overall than wealthier households. ESRI research shows that while lower-income households will see smaller absolute increases in spending due to rising energy prices, the impact on their available income will be disproportionately higher⁷⁰.

For younger workers in particular, the high cost of housing in Ireland is likely to be a factor impacting the amount of disposable income they have. The Amárach Research survey of Fórsa workers found that those aged 45 and younger were more likely to report that they spend a higher proportion of their wages on housing while also tending to report that they spend a lower proportion of their wages on other living expenses, such as bills, food, transport or clothing.

At the peak of the cost of living crisis in 2022, there was widespread concern in Ireland and other OECD countries that the pressure of inflation on workers would drive demand for higher wages, leading to an upward wage-price spiral that would further increase inflation. These predictions have not materialised and – despite some wage growth in Ireland in 2021 – workers' overall spending power is diminished.

Recruitment and retention in public services

Cost of living has been flagged as a key factor affecting recruitment and retention challenges across sectors staffed by civil and public service workers. These sectors employ many low-paid workers, with roles like healthcare assistants, personal care workers, and other hospital support staff making up a large share. However, dissatisfaction with pay and conditions extends beyond low-paid workers, affecting other professionals as well. This discontent, coupled with high living costs, is worsening recruitment and retention issues and straining vital public services⁷¹.

Fórsa recently surveyed its members working in the health sector, in administrative roles and health and social care professionals (HSCPs). 88% of nearly 4,000 respondents reported vacancies in their department since December 2023, with a further 42% reporting that these had risen in this time. In 2023, Health and Social Care Professionals for the second year in a row accounted for the highest level of turnover in HSE roles, with a turnover rate of 10.9%⁷². HSCPs will play a key role in the Sláintecare strategy for moving toward a more community-centred model of care provision.

⁶⁸ Barnardos. "Cost of Living Crisis: Impact on Children 2024," May 29, 2024. <https://www.barnardos.ie/wp-content/uploads/2024/05/Cost-of-Living-Report-May-24.pdf>.

⁶⁹ Pillaiya, Arya, Miguel Angel Tovar Reaños, and John A Curtis. "Fuel Poverty in Ireland: An Analysis of Trends and Profiles." ESRI Working Paper, 2022.

⁷⁰ ESRI, Michelle Barrett, Niall Farrell, ESRI, Barra Roantree, and ESRI. "Energy Poverty and Deprivation in Ireland." ESRI, June 16, 2022. <https://doi.org/10.26504/rs144>.

⁷¹ Redmond, Paul, and Seamus McGuinness. "Essential Employees during the Covid-19 Crisis." ESRI, April 3, 2020. <https://doi.org/10.26504/sustat85.pdf>.

⁷² HSE. "Health Sector Workforce Report: 2023 Annual Turnover Rates," 2023. <https://www.hse.ie/eng/staff/resources/our-workforce/workforce-reporting/2023-workforce-report-turnover.pdf>.

However, retention was flagged as a key challenge to advancing this in the Strategic Guidance Framework for Health and Social Care Professions 2021 - 2024⁷³ commissioned as part of the 2023 Sláintecare action plan⁷⁴. As a result of this and a growing and ageing population in Ireland with growing healthcare needs, the ESRI projects a need for greater numbers of healthcare workers by 2035, with the largest increases expected to be needed of HSCPs. According to this analysis, the number of full-time roles or their equivalent will need an average annual increase of between 2.1% and 3.3% for HSCPs, including dietitians, occupational therapists, physiotherapists, speech and language therapists, and social workers for each year between 2019 and 2035⁷⁵. HSCPs recently joined other HSE staff in protesting the Government's current "Pay and Numbers" strategy, which involves abolishing 2,000 funded vacant posts, something professionals feel will have a negative impact on staff capacity and ability to deliver much-needed services⁷⁶. A survey conducted by Social Care Ireland in 2021 found that pay and conditions were felt to be the largest contributing factors to retention and recruitment problems by over 30% of respondents⁷⁷.

Similar challenges are evident in the education sector, where 39% of Special Needs Assistants (SNAs) surveyed by the Department of Education reported being very stressed in their role and a further 46% reporting that their job was fairly stressful. 36% reported that they are currently supporting 6-10 students⁷⁸. Focus groups with school leaders conducted as part of the same review found retaining experienced and trained SNAs was a challenge for schools as well as a lack of gender diversity among staff (women currently account for 94% of SNAs). School leaders felt that poor pay, a lack of career progression and job insecurity were barriers to recruiting a more diverse workforce of SNAs and retaining experienced staff in the role⁷⁹.

These findings mirror a pattern of vacancies across the health and education sectors in Ireland, which have been identified as leading to worse outcomes and even unsafe conditions for service users⁸⁰ as well as worsening conditions for staff and leading to a vicious circle whereby staff are disincentivised from staying in post.

Public service workers and commuting

In the survey of Fórsa members, 63% of respondents reported that they commute at least four days a week, and over half (51%) commute all five days. Those working in civil and public service roles are often required to be on-site at unsociable hours for work that can be physically demanding, involve long shifts, and be performed in high-stress situations. Commuting adds to the stress and fatigue experienced by these workers and reduces their incentive to continue staffing roles in high-cost urban centres⁸¹. Across Europe, longer

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- ⁷³ HSE. "A Strategic Guidance Framework for Health & Social Care Professions," 2021. <https://www.hse.ie/eng/about/who/health-and-social-care-professionals/hscp-strategic-framework/hscp-deliver-a-strategic-guidance-framework-for-hscp-2021-2026.pdf>.
- ⁷⁴ Government of Ireland. "Sláintecare. Right Care. Right Place. Right Time. Sláintecare Action Plan 2023." Accessed October 23, 2024. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/251347/e0cc4c23-ce8a-49f0-9ffc-d9220000bbcb.pdf#page=null>.
- ⁷⁵ ESRI, Conor Keegan, ESRI, Aoife Brick, Abian Garcia Rodriguez, ESRI, and Leonie Hill. "Projections of Workforce Requirements for Public Acute Hospitals in Ireland, 2019-2035: A Regional Analysis Based on the Hippocrates Model." ESRI, July 26, 2022. <https://doi.org/10.26504/rs147>.
- ⁷⁶ Wall. "HSE Staffing Strategy Will See 2,000 Posts Abolished and Affect Patient Safety, Unions Say." The Irish Times. Accessed October 23, 2024. <https://www.irishtimes.com/ireland/2024/07/22/hse-staffing-strategy-will-see-2000-posts-abolished-and-affect-patient-safety-unions-say/>.
- ⁷⁷ Power, Martin, and Charlotte Burke. "Recruitment and Retention in Social Care Work in Ireland: A Social Care Ireland Survey." Social Care Ireland. Accessed August 20, 2024. <https://socialcareireland.ie/wp-content/uploads/2021/12/Recruitment-and-retention-report-SCI.pdf>.
- ⁷⁸ Department of Education. "Report on National Survey of Special Needs Assistants: 6 February - 5 March 2024," May 2024. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/296146/5654de73-ff09-442a-aeac-b3c9264947af.pdf>.
- ⁷⁹ Department of Education. "The Role of Special Needs Assistants: Report on Focus Groups with School Leaders: January - February 2024," July 2024. <https://assets.gov.ie/297487/76aceae9-bf7b-40b7-929c-7aa47c44f1fb.pdf>.
- ⁸⁰ Eilis O'Regan "Irish Doctors Warn Staff Shortages Pose 'Significant Threat' to Patient Safety." Irish Independent, December 20, 2023. <https://www.independent.ie/irish-news/irish-doctors-warn-staff-shortages-pose-significant-threat-to-patient-safety/a530974749.html>.
- ⁸¹ Gilbert, Catherine, Zahra Nasreen, and Nicole Gurran. "Housing Key Workers: Scoping Challenges, Aspirations, and Policy Responses for Australian Cities." *AHURI Final Report*, no. 355 (July 29, 2021). <https://doi.org/10.18408/ahuri7323901>.

commutes are consistently negatively associated with wellbeing measures that combine fatigue, as well as physical and mental wellbeing⁸². Longer commute times are contributing to poor work-life balance, and in 2018 a poll of 80,000 Fórsa members, 40% reported that their work-life balance was unsatisfactory or “a major issue” for them⁸³.

Centralisation and longer commutes

The centralisation of jobs in Dublin has resulted in longer commutes. Ireland has one of the most centralised economies in Europe and, according to Labour Force Survey data from 2019, compares poorly with other European countries for the number of people who have commutes of an hour or more⁸⁴. According to 2022 census figures, predictions of an exodus of workers from Dublin following Covid-19 have not come to pass. Rather, these figures show the areas that have experienced the highest population growth in recent years are Kildare and Meath, now home to growing numbers of commuters who travel daily to Dublin for work. This is borne out by polling of Fórsa members, which found that 27% of those surveyed in Dublin and 26% in Leinster had commutes of at least 45 minutes. Leinster had the highest proportion (12%) of those who reported commutes of over an hour. Longer commute times reported by younger members, strengthen this picture of younger workers forced by housing costs to live further from their workplaces.

Lack of public transport alternatives

The current National Sustainable Mobility Policy⁸⁵ is based on an Avoid-Shift-Improve approach to improve sustainability of transport in Ireland by reducing trip frequency and distance (Avoid), encouraging eco-friendly transport modes like walking and cycling (Shift), and advancing fuel and vehicle efficiency (Improve). Though a key aim of this policy is to reduce the proportion of journeys that are taken by car, the strategy itself acknowledges that efforts to encourage greater use of public transport and active travel are insufficient where those transport options do not exist. This is especially true for those in rural areas where public transport options are even more limited and where a more dispersed population means that journey distances will be longer in most cases. Residents of rural areas are more likely to commute longer distances, due to the relative low density of people and services. The areas where people travel the longest distances to work are Laois (24.4km), Leitrim (23.7km), Roscommon (22.4km) and Galway County (22.0km), according to 2022 census data.

Consequently, levels of car use have remained relatively static in recent decades, indicating that that centring policy on active travel and promoting electric vehicles has been insufficient to reduce dependency on cars. As James Wickham, writing for the TASC blog notes, “However desirable cycling may be, in terms of emissions what matters is not the absolute growth in cycle journeys, but the extent to which they replace car journeys. There is very little evidence that this is happening⁸⁶.”

Over-reliance on cars

The survey of Fórsa members conducted by Amárach Research found that 81% of respondents commute by car, while only 16% use public transport, and 15% opt for active travel (11% walking, 4% cycling). This aligns with census data showing high car use, especially among workers in education, health, and social care, where 78.8% rely on cars compared to 59% of the general workforce⁸⁷.

⁸² Zijlstra, Toon, and Ann Verhetsel. “The Commuters’ Burden: The Relationship between Commuting and Wellbeing in Europe.” *Travel Behaviour and Society* 23 (April 2021): 108–19. <https://doi.org/10.1016/j.tbs.2020.12.007>.

⁸³ Gilmore, Oisín. “A 4-Day Week for Ireland? A Report on the Feasibility of a Four-Day Working Week in Ireland.” Accessed October 22, 2024. <https://fourdayweek.ie/wp-content/uploads/2019/09/4DayWeek.pdf>.

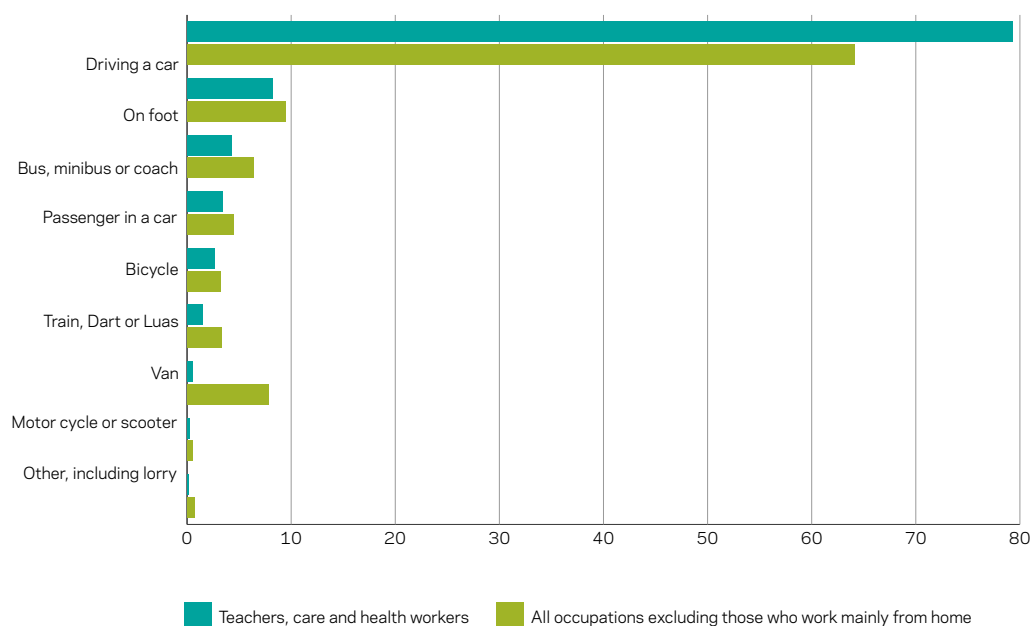
⁸⁴ Central Statistics Office. “Labour Force Survey Bulletin: Main Place of Work and Commuting Time in 2019.” CSO, October 15, 2020. <https://www.cso.ie/en/releasesandpublications/br/b-lfstb/labourforcesurveybulletinmainplaceofworkandcommutingtimein2019/>.

⁸⁵ Department of Transport. “National Sustainable Mobility Policy,” April 2022.

⁸⁶ Wickham, James. “Cycling to Carmageddon.” *Progressive Economy*, December 13, 2016. <https://www.tasc.ie/blog/2022/12/11/cycling-to-carmageddon/>.

⁸⁷ According to data requested from CSO, based on 2022 Census data.

Figure 16.
Mode of
travelling
to work



Source: CSO

The Fórsa membership survey found that half of car commuters reported they had no other way to access their workplace, and only one in four public transport users found it reliable. Public transport options are even more limited for those civil and public sector workers in public facing roles which may require them to commute at unsociable hours, and the inability to work during car commutes adds to their reduced flexibility compared to sectors with widespread remote work options. Moreover, across Europe, high levels of motorisation tend to correlate with longer journey times and improving transport for commuters should help ameliorate this situation⁸⁸.

Safety concerns

Given the higher proportion of women working in public-facing roles like the health and education sector, safety concerns are a significant factor in transport mode choice. 55% of women report an unwillingness to use public transport after dark, compared to 35% of men⁸⁹. For those whose role requires commuting during unsociable hours, public transport is perceived to be less safe due to longer wait times, fewer staff or other passengers, and the greater likelihood of encountering rowdy groups of passengers⁹⁰. Given the elevated levels of stress that many of these workers experience in their roles, it is understandable that many do not wish to travel on public transport if it is perceived of as inconvenient and dangerous.

⁸⁸ Giménez-Nadal, José Ignacio, José Alberto Molina, and Jorge Velilla. "Trends in Commuting Time of European Workers: A Cross-Country Analysis." *Transport Policy* 116 (February 2022): 327-42. <https://doi.org/10.1016/j.tranpol.2021.12.016>.

⁸⁹ Cahill, R. "Travelling in a Woman's Shoes: Understanding Women's Travel Needs in Ireland to Inform the Future of Sustainable Transport Policy and Design." *Transport Infrastructure Ireland*. Available from https://www.tii.ie/technical-services/research/TII-Travelling-in-a-Womans-Shoes-Report_Issue.pdf (2020).

⁹⁰ National Transport Authority. "Public Transport Passenger Personal Security Report," March 2024.

Government response: temporary reliefs from an ongoing crisis

The Government's efforts to address the cost-of-living crisis have been centred on the 2023–2025 budgets and a February 2023 spending package. Like other Western European countries, the Irish Government's approach has been modest. The budget response to the cost of living crisis has been focused on one-off social transfers like lump-sum benefits and energy bill payments⁹¹.

Around €2.7 billion was allocated to offset the cost of living crisis, including €1 billion for transfers, €1.2 billion for electricity credits, and €0.5 billion for tax supports. Additional measures, such as expanding free school meals in DEIS schools and cancelling the 2024 Leaving Certificate fee, fall short of a comprehensive solution.

Budget 2025 demonstrates a similar focus on one-off lump-sum payments:	
2025 Budget social transfers	Payment type
€300 cost-of-living lump sum payment to all households getting Fuel Allowance	Lump sum
€200 cost-of-living lump sum payment for pensioners and people with a disability getting the Living Alone Increase	Lump sum
€400 cost-of-living lump sum payment to all families getting the Working Family Payment to be paid in November 2024	Lump sum
Double payment of Child Benefit to be paid in both November and December 2024 to support all families with children	Welfare payment
€400 cost-of-living lump sum payment for people getting the following supports: Carer's Support Grant, Disability Allowance, Blind pension, Invalidity Pension and Domiciliary Care Allowance (one payment per individual)	Lump sum
€100 cost-of-living lump sum payment for people getting a Child Support Payment (previously known as Increase for a Qualified Child) to be paid for each qualified child in November 2024	Lump sum
October cost-of-living bonus will be paid on the same basis as the Christmas bonus to groups including pensioners, carers, lone parents, people on disability payment, long-term jobseeker recipients	Welfare payment
Christmas bonus will be paid to 1.3 million social welfare recipients	Welfare payment
€250 electricity credits (2 x €125)	Electricity credit
125 Increase in the Main Tax Credits	Tax credits
€2,000 Increase in the Standard Rate Cut-off Point	Tax credits
€150 Increase in the Home Carer Tax Credit	Tax credits
€150 Increase in the Single Child Carer Credit	Tax credits
€300 Increase in the Incapacitated Child Tax Credit	Tax credits
€300 Increase in the Blind person Credit	Tax credits
Increase in the USC middle threshold by €1,622	Tax credits

Source: Your Guide to Budget 2025⁹²

⁹¹ Prasad, Mona, et al., 2023. EU Regular Economic Report Nine : Energizing Europe - Part 1 : Inclusive Growth - Inflation Chipping Away Income Gains (English), World Bank Group. United States of America. Retrieved from <https://policycommons.net/artifacts/3843211/eu-regular-economic-report-nine/4649166/> on 06 Aug 2024. CID: 20.500.12592/0mq3tz.

⁹² Government of Ireland. "Your Guide to Budget 2025," October 1, 2024. <https://www.gov.ie/en/publication/cb193-your-guide-to-budget-2025/#expenditure-measures>.

TASC's annual report on inequality, *The State We Are In: Inequality in Ireland 2024*, shows that government interventions have helped reduce poverty risk, especially for those aged 65+, during the peak of the crisis⁹³. However, these are temporary measures, and the long-term impact of their withdrawal on poverty levels remains unclear. Permanent changes, such as adjustments to welfare payments and tax credits, have largely benefited higher-income households, according to Social Justice Ireland⁹⁴.

More broadly, the Government's response fails to address the cost-of-living crisis as part of a larger issue affecting working conditions for civil and public service workers, especially in lower-paid roles. Inflation, the recruitment and retention crisis, and transport policy are treated in isolation, with little coordinated action, particularly in tackling workforce challenges.

Energy credits

To address rising energy prices, the Government has implemented direct social transfers and VAT reductions, including €450 in electricity credits for each household, distributed in €150 instalments over three billing periods.

However, the effectiveness of credits as a policy tool has been debated. Critics argue that issuing credits without adequate price controls primarily benefits suppliers. For example, Lorcan Sirr of TU Dublin has criticised the Government's reliance on Housing Assistance Payments as a long-term solution for the social housing deficit, suggesting that such policies may allow landlords to absorb benefits and contribute to rising rental prices⁹⁵.

Lack of urgency in development of public transport infrastructure

Years of underinvestment in public transport has left existing infrastructure in urgent need of improvement to make commuting practical for many public and civil service workers. The All-Island Strategic Rail Review concluded that a step-change in additional frequency will require additional capacity upgrades to infrastructure including adding track, junctions and platform capacity⁹⁶. The report highlighted that this applied most to areas with high levels of conflict between intercity, freight and local commuter rail services and was 'particularly relevant' on busy sections approaching Dublin and Belfast and on single-tracked sections of the national network. The addition to the schedule of a morning service from Belfast to Dublin required an overhaul of the existing timetable. The new timetable resulted in widespread delays and congestion that forced Irish rail to revert to the original timetable⁹⁷ with the Irish Times commenting that the situation illustrated the challenges of attempting to add existing capacity to a suburban rail network that has seen little infrastructural upgrade since the DART began running in 1984⁹⁸. As suburbs expand and create regional commuter hubs, existing infrastructure struggles to keep pace.

⁹³ Prasad, Mona, et al., 2023. EU Regular Economic Report Nine: Energizing Europe - Part 1: Inclusive Growth - Inflation Chipping Away Income Gains (English), World Bank Group. United States of America. Retrieved from <https://policycommons.net/artifacts/3843211/eu-regular-economic-report-nine/4649166/> on 06 Aug 2024. CID: 20.500.12592/0mq3tz.

⁹⁴ Gilmore, Oisín. 2024. "The State We Are In: Inequality in Ireland 2024." https://www.tasc.ie/assets/files/pdf/tasc_inequality_report_2024_final.pdf.

⁹⁵ McGowan, Sharon. "Experts Blame 'illogical' Housing Assistance Payment Scheme for Driving up Rents," February 18, 2022. <https://extra.ie/2022/02/18/news/irish-news/experts-blame-hap-driving-up-rents>.

⁹⁶ Department of Transport and Department for Infrastructure. "All-Island Strategic Rail Review Final Report," July 31, 2024.

⁹⁷ Hickey, Emma. "Irish Rail Reverting to Its Old Timetable Today Following Controversy." TheJournal.ie, October 14, 2024. <https://www.thejournal.ie/irish-rail-back-to-old-timetable-6512424-Oct2024/>.

⁹⁸ The Irish Times. "The Irish Times View on Dublin's Commuter Rail Problems: Decades of Underinvestment Finally Catching up with Us." The Irish Times. Accessed October 29, 2024. <https://www.irishtimes.com/opinion/editorials/2024/10/06/the-irish-times-view-on-dublins-commuter-rail-problems-decades-of-underinvestment-finally-catching-up-with-us/>.

This strains the network, forcing service cuts for some users⁹⁹ while large towns that have grown into commuter hubs continue to lack access to crucial rail services entirely¹⁰⁰.

Given this, large infrastructure measures are needed to address transport needs for workers. However, the rate of implementing these large projects has been very slow and typified by protracted planning processes¹⁰¹. Despite being first announced in 2001, MetroLink underground rail connecting Dublin Airport to the city centre only submitted a Railway Order application to An Bord Pleanála (ABP) in 2022, following multiple iterations. Several Railway Order applications have also been submitted as part of the Dart+ Project, which plans to upgrade and expand existing rail infrastructure around Dublin to provide a workable commuter rail infrastructure from the suburbs and surrounding counties into the city centre. The first of these to be submitted (Dart+ West) was considered for over 180 days by ABP before they rejected a key element of the development that consisted of a depot building required for the expanded fleet. Similarly, ABP have extended the consultation for the MetroLink application, reopening a period of public consultation that had concluded in May 2024 and is now expected to conclude in October 2024. The most recently stated completion date of 2035 is considered "probably optimistic"¹⁰².

The lack of momentum on large public transport projects is especially frustrating given the popularity of those that have been completed. Despite Covid-19 causing Luas ridership figures to collapse, usage has since recovered and surpassed pre-Covid levels, resulting in reports of overcrowding at peak times¹⁰³.

Example of how to address the cost of living from Europe and beyond

This section explores various interventionist strategies, drawing from examples in other European countries, to address the ongoing cost of living crisis and reverse growing pessimism about the future of work, particularly among younger workers and those in public service roles.

We argue that joined-up thinking focused on the outlook for workers is crucial to improving job satisfaction. This involves addressing cost of living challenges, improving public transport infrastructure, better planning to reduce journey times, and innovative solutions to enhance flexibility for those in public service roles, such as exploring the potential of a four-day work week and improved access to and protection of existing remote working arrangements.

⁹⁹ Burke, Sarah. "Direct Dart to Howth 'Could Be Curtailed at Peak Times' in Future." Irish Independent, September 2, 2024. <https://www.independent.ie/regionals/dublin/dublin-news/direct-dart-to-howth-could-be-curtailed-at-peak-times-in-future/a258638378.html>.

¹⁰⁰ Wilson, Jade. "Navan Train Line Reopening Moves One Step Closer with Plans to Appoint Consultants." The Irish Times, September 25, 2023. <https://www.irishtimes.com/transport/2023/09/25/navan-train-line-reopening-moves-one-step-closer-with-plans-to-appoint-consultants/>.

¹⁰¹ Wickham, James. "Cycling to Carmageddon." Progressive Economy, December 13, 2016. <https://www.tasc.ie/blog/2022/12/11/cycling-to-carmageddon/>.

¹⁰² McGreevey, Ronan. "Dublin MetroLink to Be Delayed until 2035 at the Earliest." The Irish Times. Accessed October 10, 2024. <https://www.irishtimes.com/news/ireland/irish-news/dublin-metrolink-to-be-delayed-until-2035-at-the-earliest-1.4792827>.

¹⁰³ Tranum, Sam. "As Overcrowding Puts Some Passengers off the Luas, NTA Says Plans Are Afoot to Address the Problem." Dublin Inquirer, December 13, 2023. <http://dublininquirer.com/2023/12/13/as-overcrowding-puts-some-passengers-off-the-luas-nta-says-plans-are-afoot-to-address-the-problem/>.

Price caps

Some countries have implemented price caps to curb rising costs of essential goods like food and energy. Croatia, Hungary, and France have introduced food price caps, with Italy and Belgium considering similar measures. Ireland has not pursued this approach, perhaps aligning with the Competition and Consumer Protection Commission's view that such measures have not effectively reduced prices for consumers¹⁰⁴, referencing negative outcomes in Croatia and Hungary^{105 106} while overlooking France's success in leveraging the food industry to pledge 5,000 price cuts¹⁰⁷.

Several countries have also used fuel price caps with varying results. In the UK, energy price caps based on wholesale energy prices were introduced in 2019, before Covid-19 and the cost-of-living crisis. The cap proved ineffective at shielding consumers from price increases, rising from £1,277 for the period 1st October 2021 to 31st March 2022, to a peak of £4,279 one year later. Austria's energy price cap, based on average usage, faced criticism for favouring smaller households over larger families¹⁰⁸. In contrast, France has seen success with energy price caps due to its substantial domestic energy industry and lower reliance on imported gas, producing 70% of its electricity from nuclear energy¹⁰⁹.

Businesses with dominant market positions may breach competition law by engaging in "excessive pricing." Under Section 61 of the Irish Consumer Protection Act 2007, the government can set maximum prices for a product for up to 18 months during a "state of emergency" if it believes that 'abnormal circumstances' affect the supply of that product¹¹⁰. Efforts by countries to regulate prices within the EU may face legal challenges from firms. The European Court of Justice has previously ruled that certain price regulations can impede "the free formation of prices," which is essential to the principle of free movement of goods in a competitive market¹¹¹.

Increasing domestic food production

Ireland increasingly relies on imported food, which now makes up a larger share of our consumption as domestic production declines. Though Ireland is currently ranked second globally for food security, according to the Global Food Security Index¹¹², this ranking does not give a complete picture. The UCD Institute of Food and Health estimates that the proportion of food that comes from imports has increased by 42% since 1992¹¹³. This growing dependence raises concerns about supply chain vulnerabilities and price shocks, particularly as 22% of the food we consume is imported from countries facing moderate to high climate insecurity. A sustainable approach to addressing price stability in Ireland is investing in more intensive and more varied farming.

¹⁰⁴ Competition and Consumer Protection Commission. "FAQ: Price Controls in Ireland." Accessed August 14, 2024. <https://www.ccpc.ie/consumers/2023/05/16/faq-price-controls-in-ireland/>.

¹⁰⁵ Croatia Week. "Croatia Caps Prices of 30 Supermarket Products," September 14, 2023. <https://www.croatiaweek.com/croatia-caps-prices-of-30-supermarket-products/>.

¹⁰⁶ Johnston, Ian, and Marton Dunai. "Europe's Politicians Impose Price Caps to Address Soaring Food Costs." Accessed August 14, 2024. <https://www.ft.com/content/133ca49d-b25a-47ee-9bfa-d8c2f62a5f3b>.

¹⁰⁷ Hamaide, Sybille De La. "Explainer: How France Secured a Fall in Food Prices." Reuters, June 12, 2023, sec. European Markets. <https://www.reuters.com/markets/europe/how-france-secured-fall-food-prices-2023-06-12/>.

¹⁰⁸ Kabelka, Laura. "Austria Adopts 'Socially Unfair' Electricity Price Cap." www.euractiv.com, September 8, 2022. <https://www.euractiv.com/section/energy-environment/news/austria-adopts-socially-unfair-electricity-price-cap/>.

¹⁰⁹ Energy Information Administration. "Nuclear Power Plants Generated 68% of France's Electricity in 2021." Accessed August 19, 2024. <https://www.eia.gov/todayinenergy/detail.php?id=55259>.

¹¹⁰ A&L Goodbody. "COVID-19: Use of Competition Law to Tackle Price Gouging in an Emergency Environment." Accessed August 20, 2024. <https://www.algoodbody.com/insights-publications/covid-19-use-of-competition-law-to-tackle-price-gouging-in-an-emergency-environment>.

¹¹¹ Dunne, Niamh. "Price regulation in the social market economy." (2017).

¹¹² Economist Impact. "Global Food Security Index (GFSI)." Global Food Security Index (GFSI), August 19, 2024. <https://impact.economist.com/sustainability/project/food-security-index>.

¹¹³ Stanley, Isobel, Dr Owen Doyle, Dr Caroline Elliott-Kingston, Dr Breige McNulty, and Dr Celine Murrin. "The Irish Fruit And Vegetable System: A Summary Of Production, Trade And Consumption,." n.d.

The experience of the Netherlands illustrates what is possible, having invested in research and development of commercial agriculture to grow diverse produce and livestock using efficient methods that incorporate by-products into the supply chain¹¹⁴. This has enabled the Netherlands to become the largest food exporter in Europe¹¹⁵.

Free and subsidised fares for public service workers

Some countries have implemented free and subsidised transport to encourage public transport use, particularly among civil and public service workers. Since 2020, Luxembourg has offered free public transport for all users, including tourists¹¹⁶, and Tallinn, Estonia has offered free public transport to all residents since 2013¹¹⁷. These initiatives aim to increase ridership and reduce costs associated with ticketing and fare enforcement, which is particularly relevant given the delays in Dublin's commuter fare-reduction programme due to issues with new ticketing structures.

Although discussions around these schemes often focus on their impact on car usage, future evaluations should consider their benefits for lower-income commuters and assess whether free public transport enhances accessibility for those who find it unaffordable. Ireland introduced temporary fare reductions as part of the 2023 Budget, extended through to Budget 2025. However, targeted fare reductions for commuters in Greater Dublin and surrounding areas have faced delays. A planned programme expected to maintain or lower 80% of fares and reduce season ticket prices by up to €500 has been postponed until next year due to contractor issues with implementing the new fare structure¹¹⁸.

Case Study: Free fares for civil and public sector workers in Hesse, Germany

Hesse, Germany made public transport free for all State employees as part of a 2018 negotiated pay agreement. This programme marked an expansion of an existing offer that discounted public transport for public service employees, which had already resulted in greater use of public transport for commuting. The resulting measures increased use of public transport, and evaluation of the outcome suggests the benefit was mostly felt by low-income employees, women and older employees¹¹⁹.

Better planning to reduce journey times

More integrated planning approaches that create more mixed development and reduce the need for travelling to avail of amenities are increasingly being explored by countries to reduce commute times for workers. Research by Curtis and Kelly on Galway's urban development suggests that concentrating new development in the urban core can lower emissions, reduce congestion, and decrease fuel costs¹²⁰. This is already provided for within policy frameworks in Ireland. The National Development plan 2021-2030 includes ten National Strategic Outcomes, the first of which (NSO 1) is 'Compact Growth', and which specifies that capital investment

¹¹⁴ Reiley, Laura. "Cutting-Edge Tech Made This Tiny Country a Major Exporter of Food." Washington Post. Accessed August 19, 2024. <https://www.washingtonpost.com/business/interactive/2022/netherlands-agriculture-technology/>.

¹¹⁵ Torrella, Kenny. "How Will We Feed Earth's Rising Population? Ask the Dutch." Vox, March 13, 2023. <https://www.vox.com/the-highlight/23627509/netherlands-dairy-cow-protests-seeds-farming-agriculture-climate>.

¹¹⁶ Government of Luxembourg. "Public Transport," January 25, 2024. <http://luxembourg.public.lu/en/living/mobility/public-transport.html>.

¹¹⁷ Shearlaw, Maeve. "The Tallinn Experiment: What Happens When a City Makes Public Transport Free?" The Guardian, October 11, 2016, sec. Cities. <https://www.theguardian.com/cities/2016/oct/11/tallinn-experiment-estonia-public-transport-free-cities>.

¹¹⁸ Ronan McGreevey. "Tens of Thousands of Dublin Commuters Affected as Long-Awaited Proposal to Reduce Fares Is Postponed." The Irish Times. Accessed August 20, 2024. <https://www.irishtimes.com/transport/2024/07/10/tens-of-thousands-of-dublin-commuters-affected-as-long-awaited-proposal-to-reduce-fares-is-postponed/>.

¹¹⁹ Busch-Geertsema, Annika, Martin Lanzendorf, and Nora Klinner. "Making Public Transport Irresistible? The Introduction of a Free Public Transport Ticket for State Employees and Its Effects on Mode Use." *Transport Policy* 106 (June 2021): 249-61. <https://doi.org/10.1016/j.tranpol.2021.04.007>.

¹²⁰ Curtis, John, and Elish Kelly. "Population Growth: Implications for Commuting." *The Economic and Social Review* 54, no. 1, Spring (2023): 101-21.

must privilege a 'pattern of housing development [that] underpins the development of more compact higher-density cities, towns and other areas'¹²¹ and this is mirrored in the National Planning Framework. The principle of compact growth is further reinforced through the Climate Action Plan 2021 which promotes among other things, the prioritisation of brownfield and compact development. An emphasis on urban density as a means of reducing frequency and length of journeys is in line with international policy initiatives based on the '15-Minute City' principles for urban planning, promoting reduced journey times by planning for convenient, walkable neighbourhoods¹²².

Upgrading rail infrastructure

Ireland should follow the example of other EU countries that have significantly improved commuter rail services through ambitious and well-managed infrastructure upgrades. The All-Island Strategic Rail Review Final Report highlights Denmark as an example of how Ireland could bring about major improvements to the rail network in a short space of time¹²³. Denmark is similar in size and population to Ireland and is also very centred politically and economically on its capital city. The report identifies how the challenges facing Ireland's rail infrastructure are like the ones that Denmark has successfully overcome in recent years, including low levels of electrification, capacity constraints and conflict between different types of services. At a national level Denmark's Togfonden rail plan, and local light rail projects such as the Aarhus Letbane¹²⁴, illustrate the potential for a transformed rail network.

Greater flexibility for public and civil service workers

Many desk-based workers transitioned to remote work—either temporarily or permanently—during the peak of the Covid-19 pandemic, an event accelerated by recent advances in connectivity and office technology that allowed employees to effectively work from home. This shift has reimagined work for many, with a staggering 173% increase in people working from home between the 2016 and 2022 censuses¹²⁵. Ireland recorded the fastest adoption of remote work in the EU¹²⁶ and the government has made gains to formalise remote working practices, through the implementation of the Work Life Balance and Miscellaneous Provisions Act, 2023, which gives workers the right to request flexible and remote working. A trial of a four-day work week conducted in Ireland was successful, with companies who took part rating their experience on average as 9.2 out of 10. 100% of staff wanted to continue with a reduced schedule at the end of the trial, with participants self-reporting improved productivity and wellbeing¹²⁷.

¹²¹ Project Ireland 2040. "National Development Plan 2021-2030." Accessed August 20, 2024. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/200358/a36dd274-736c-4d04-8879-b158e8b95029.pdf#page=null>.

¹²² Gongadze, Salome, and Anne Maassen. "Paris' Vision for a '15-Minute City' Sparks a Global Movement," January 25, 2023. <https://www.wri.org/insights/paris-15-minute-city>.

¹²³ Department of Transport and Department for Infrastructure. "All-Island Strategic Rail Review Final Report," July 31, 2024.

¹²⁴ An ambitious light rail project announced in 2012 and successfully completed in 2022, the Aarhus Letbane's initial phase consists of 14.5 km double-track lines covering 26 stations and there are already plans in development for further extensions. Metro Report International. "Celebrations as Odense Tramway Opens." Railway Gazette International, May 31, 2022. <https://www.railwaygazette.com/light-rail-and-tram/celebrations-as-odense-tramway-opens/61734.article>.

¹²⁵ Walsh, Emer. "Despite a Worker-Led Labour Market, Employers Are Winning the Remote-Working Battle." Irish Examiner, April 6, 2024. <https://www.irishexaminer.com/business/companies/arid-41368270.html>.

¹²⁶ Mangan, Joanne. "Remote Working: 'It Has the Potential to End the Commute, Which Is Getting Worse.'" TheJournal.ie, December 29, 2023. <https://www.thejournal.ie/readme/remote-working-ireland-3-6256634-Dec2023/>.

¹²⁷ Kelly, Orla, Juliet Schor, Wen Fan, Tatiana Bezdenzhnykh, Guolin Gu, and Niamh Bridson Hubbard. "The Four Day Week: Assessing Global Trials of Reduced Work Time with No Reduction in Pay: Evidence from Ireland." University College Dublin, 2022.

Reducing the overall number of commuters has benefits for those who must travel to work, easing the strain on infrastructure, including roads and public transport. However, there has been limited exploration of how to enhance flexibility and remote work options for public and civil service workers. For example, while healthcare typically requires face-to-face interaction between patients and clinicians, the expansion of telemedicine during this period has demonstrated how it can alleviate pressure on the health service¹²⁸ and provide greater flexibility for some health workers. A four-day week would also reduce the number of commuters and in the trial cited above, one outcome of a reduced working week was workers adopting active-travel modes of commuting in greater numbers. Over the course of the trial, the number of workers travelling by car fell from 31.03% to 27.59%¹²⁹.

¹²⁸ Walley, David, Geoff McCombe, John Broughan, Conor O'Shea, Des Crowley, Diarmuid Quinlan, Catherine Wann, Tadhg Crowley, and Walter Cullen. "Use of Telemedicine in General Practice in Europe since the COVID-19 Pandemic: A Scoping Review of Patient and Practitioner Perspectives." *PLOS Digital Health* 3, no. 2 (2024): e0000427.

¹²⁹ Kelly, Orla, Juliet Schor, Wen Fan, Tatiana Bezdenezhnykh, Guolin Gu, and Niamh Bridson Hubbard. "The Four Day Week: Assessing Global Trials of Reduced Work Time with No Reduction in Pay: Evidence from Ireland." University College Dublin, 2022.





Climate action and work

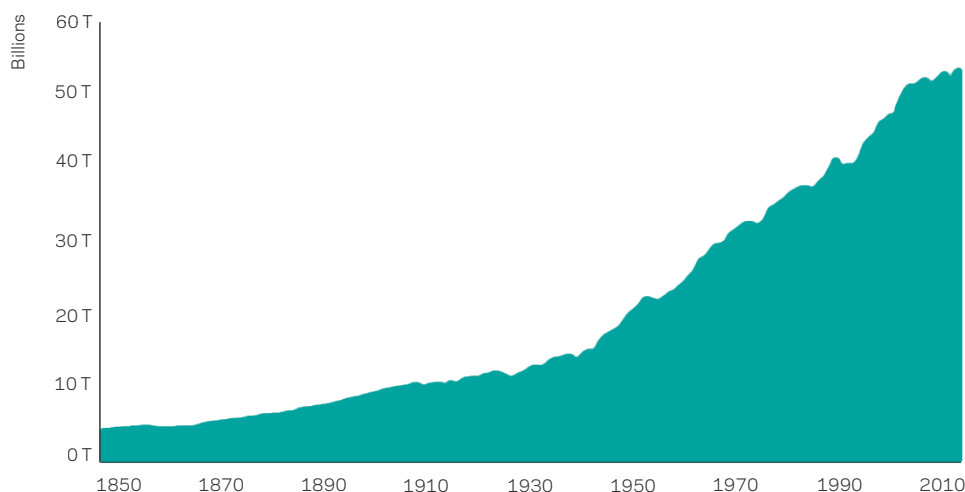
Climate action and work

This section of the report considers how climate change and climate action will affect the nature of work and the labour market.

Global greenhouse gas emissions

As Figure 17 illustrates, greenhouse gas emissions have accelerated globally since the middle of the 19th century, but the pace of acceleration has intensified from the middle of the 20th century, as part of what has been called the Great Acceleration. Greenhouse gas emissions reached record levels in 2022. They have not yet started to decline, despite repeated pledges from government leaders worldwide to tackle greenhouse gas emissions, especially during the last ten years. The Intergovernmental Panel on Climate Change (IPCC) has declared that “Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020¹³⁰.” The current scientific consensus is that we need to radically decrease CO₂ emissions in order to stay below 1.5 degrees Celsius warming of global ambient temperatures if we are to stand any chance of avoiding a catastrophic tipping point leading to climate change advancing exponentially, with subsequent impacts such as mass starvation, disease, flooding, storm destruction, forced migration, and war (many of which are already observable globally). However, the IPCC calculates that currently agreed international pledges and targets will still produce a 3.2-degree Celsius median global temperature increase by 2100 (which will result in the previously mentioned catastrophic consequences mentioned above), and as Climate Action Tracker confirms: “there remains a substantial gap between what governments have promised to do and the total level of actions they have undertaken to date¹³¹.”

Figure 17.
Global
greenhouse
gas emissions



Source: Jones et. al.¹³²

Note: Greenhouse gas emissions include carbon dioxide, methane and nitrous oxide from all sources, including land-use change. They are measured in tonnes of carbon dioxide-equivalents over a 100-year timescale. Land-use change emissions can be negative.

¹³⁰ IPCC. 2023. "Summary for Policymakers." In Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II, and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, edited by H. Lee and J. Romero, 1-34. (Geneva, Switzerland: IPCC), 4. <https://doi.org/10.59327/IPCC/AR6-9789291691647.001>.

¹³¹ Climate Action Tracker, Climate Target Update Tracker 2022, <https://climateactiontracker.org/climate-target-update-tracker-2022/>.

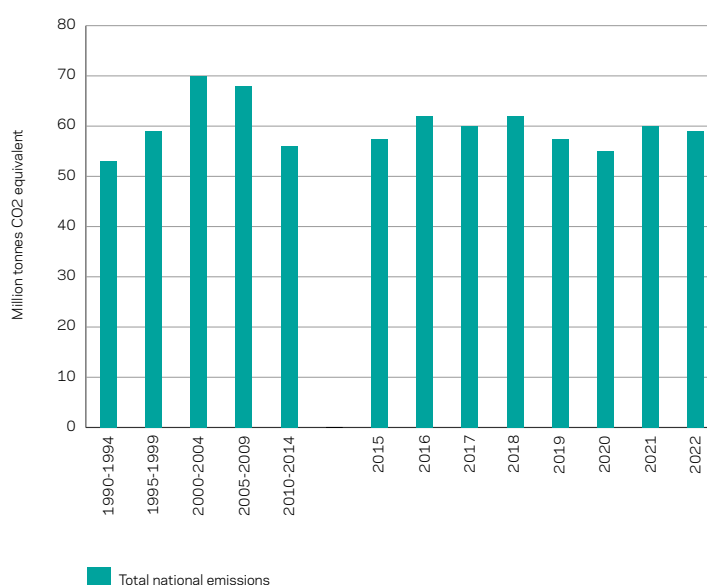
¹³² Jones et al. (2024) – with major processing by Our World in Data. "Annual CO₂ emissions" [dataset]. Jones et al., "National contributions to climate change 2024.1" [original data].

Ireland's carbon footprint

The Irish State has committed to cutting greenhouse gas emissions by 51% by 2030 and to be climate neutral by 2050. As can be seen in Figure 18 below, Ireland's greenhouse gas emissions are lower than they were at their peak in 2000 – 2004, but they are not declining at the rate the State has legislatively committed to achieving. There are signs of improvement, however, as greenhouse gas emissions decreased by 6.8% in 2023 and greenhouse gas emissions per capita decreased from 11.4 tonnes to 10.4 tonnes of CO₂ equivalent per person¹³³. According to the Environmental Protection Agency however, Ireland is still on course to miss its carbon budgets and overshoot the 2030 emission reduction targets.

The transition to a low-carbon economy will inevitably have significant impacts on the workforce, and it is imperative that the transition is a *just transition* for workers and wider society. While debate about climate action has often been framed as a conflict between jobs and the environment, progressive visions for a Green New Deal in recent years have demonstrated how the transition to a low-carbon economy can be achieved while creating decent, green jobs and public abundance for all¹³⁴. A rapid transition to a low-carbon economy will only be politically possible if workers and the general public are assured that the transition will be implemented in a way that makes their lives better, not worse.

Figure 18. Irish greenhouse gas emissions, 1990-2022



Source: Environmental Protection Agency

Note: Greenhouse gas emissions include carbon dioxide, methane and nitrous oxide from all sources, including land-use change. They are measured in tonnes of carbon dioxide-equivalents over a 100-year timescale.

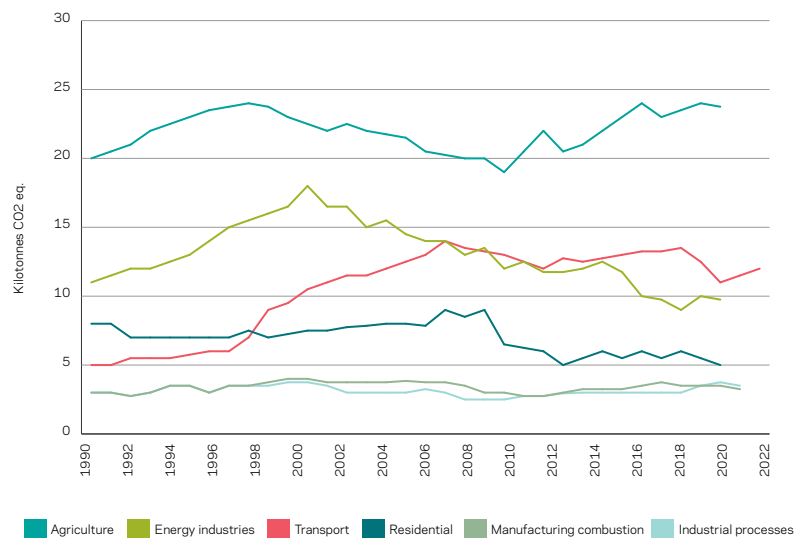
Sector breakdown

The sectors that account for the vast majority of Ireland's greenhouse gas emissions are the agriculture, transport, energy, and residential sectors. The State must take a lead in transforming these sectors to drastically reduce greenhouse gas emissions in the coming years and decades. As discussed in the previous chapter, greenhouse gas emissions in the agriculture sector will have to be reduced in the coming years and this can be done through supporting farmers to diversify forms of food production and land-use.

¹³³ Aine Quinn, "Ireland's Greenhouse Gas Emissions in 2023 Reach Lowest in Three Decades," The Irish Times, July 9, 2024 <https://www.irishtimes.com/environment/climate-crisis/2024/07/09/irelands-greenhouse-gas-emissions-in-2023-reach-lowest-in-three-decades/>

¹³⁴ Aronoff, K., A. Battistoni, D. A. Cohen, and T. Riafrancos. 2019. A Planet to Win: Why We Need a Green New Deal. London and New York: Verso.

Figure 19. Greenhouse gas emissions by sector, Ireland



Source: Environmental Protection Agency

Towards a greener future

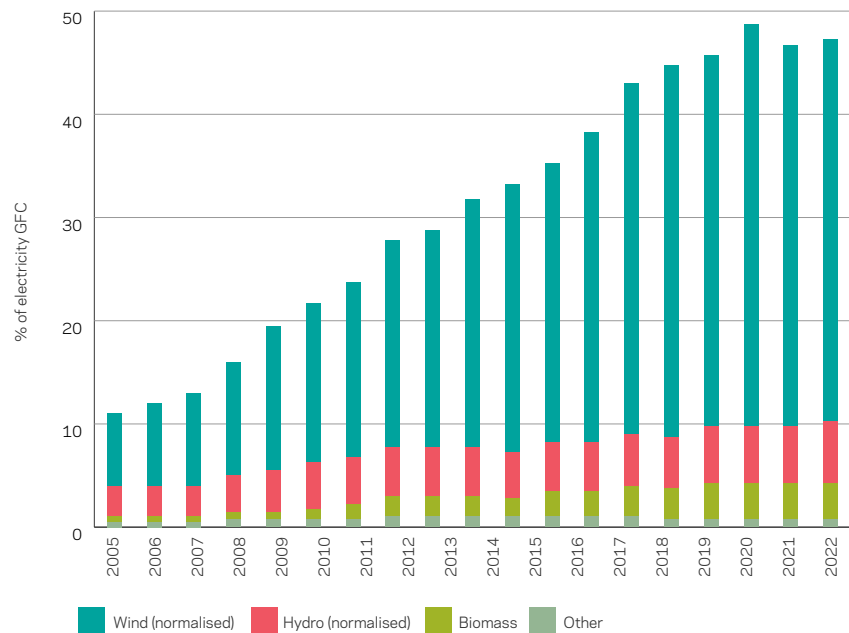
The transformation of Ireland's energy and transport systems is underway already. As can be seen below, the share of electricity generated in Ireland that comes from wind energy has increased considerably since 2005. Ireland ranks just below the EU-27 average in terms of the share of gross final electricity consumption that is generated from renewable sources, at 36.4% in 2021¹³⁵. It should be noted, however, that Ireland's share of renewable energy in final energy consumption stood at 5% in 2021, which is the joint lowest in the EU-27, alongside Luxembourg and the Netherlands¹³⁶. The scale of transformation required to eradicate fossil fuels from final energy consumption in Ireland should not be underestimated. In Ireland, transport accounted for 41.7% of final energy demand in 2022; residential accounted for 22.5%; industry for 17.8%; services by 15.5%; and agriculture and fisheries for 2.7%¹³⁷. As can be seen from these figures, transforming the transport system and residential energy will go a long way towards reducing Ireland's dependence on fossil fuels for energy consumption. In this sense, our report will pay particular interest to public transport, capacity and skills in the construction sector, and capacity and skills in the renewable energy sector. We will make the case for a Green New Deal scale of ambition when it comes to State planning and State investment in these sectors.

¹³⁵ Central Statistics Office. *Residential Property Price Index February 2024*. Central Statistics Office, 2024. Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-rppi/residentialpropertypriceindexfebruary2024/> (accessed May 1, 2024).

¹³⁶ Central Statistics Office. 2023. *Environmental Indicators Ireland 2023*. Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-eii/environmentalindicatorsireland2023/energy/> (accessed May 24, 2024).

¹³⁷ SEAI. "Energy Statistics In Ireland." Accessed October 11, 2024. <https://www.seai.ie/data-and-insights/seai-statistics/energy-use-overview>.

Figure 20.
Share of
electricity
generated in
Ireland by
source



Source: SEAI

Following the vision for a radical Green New Deal outlined by Aronoff et al.¹³⁸, the transformation in Ireland's energy use in the coming years and decades is going to require substantial public investment and popular mobilisation by trade unions and social movements. Aronoff et al.¹³⁹ argue for a "Last Stimulus" of green economic development in the short term to build landscapes of public affluence, develop new political-economic models, jump off the growth treadmill, break with capital, and settle into a slower groove.' The concept of public affluence is an important one insofar as it emphasises the value of public over private goods and the need for equality in the transition to a low-carbon path of development. Public affluence can be understood as high-quality, accessible public transport, beautiful green spaces in cities and in rural areas, universal access to education and healthcare, universal access to sufficient energy and comfortable homes, and so on. To prioritise public affluence over private accumulation is to challenge the foundational assumptions of mainstream climate action policy that often centres on individual behaviour change through market mechanisms.

Green jobs in Ireland

Conceptualising and defining 'green' jobs is not straightforward. There are different approaches and methodologies in the literature which vary in how 'green' jobs are defined and conceptualised, which could affect policy and decision-making in different ways. The Nevin Economic Research Institute (NERI) describes two basic approaches to defining green jobs. The first is a top-down approach, looking at economic sectors and their production of either environmental goods and services for environmental protection or resource management, or by the emissions they generate per person employed¹⁴⁰. From this perspective, certain industries such as financial and insurance activities, information and communication, professional, scientific and technical activities, human health and social work activities, and education are relatively 'green' compared to the rest of the economy. Energy supply, agriculture, and transportation are however particularly emissions intensive. According to NERI's analysis, this creates a stark regional disparity where the share of employment dedicated to such emissions intensive work will likely impact a large number of jobs. Picking the top five polluting sectors,

¹³⁸ Aronoff, K., A. Battistoni, D. A. Cohen, and T. Riafrancos. 2019. *A Planet to Win: Why We Need a Green New Deal*. London and New York: Verso.

¹³⁹ Ibid.

¹⁴⁰ De Vita, Niccolo, Paul Goldrick-Kelly, Seamus McCaul, and Chris Smart. "Measuring 'Green' Jobs in the Republic of Ireland." NERI Report Series. Nevin Economic Research Institute, n.d.

for instance, and looking at the share of employment in each county in these sectors, it is clear that some counties (Cavan, Clare, Longford, Monaghan, Tipperary) have 30% or higher of their workers in emissions intensive sectors. This compares to 13% in Dublin or 17% in Wicklow.

The second perspective is the bottom-up approach which looks across the board at green occupations or the time spent on green tasks within the labour market. Even deciding on a definition of a green occupation can be contentious here, leading to several different classifications or approaches which produce very different quantifications of green jobs. Here, NERI breaks green jobs into three categories:

- **New and emerging:** Jobs created by the 'greening' of the economy. For example, a New and Emerging green occupation could be a wind energy engineer or solar panel installer¹⁴¹.
- **Enhanced skills:** Jobs which are subject to changes in how they are carried out to meet the needs of a greener economy. For example, an operations manager in charge of bringing in greener practices, or a construction worker or farmer that must adapt their working practices to reduce emissions.
- **Increased demand:** Jobs which do not necessarily need to change but are in increased demand as the economy becomes greener. For example, industrial production manager or those in welding trades that help to produce or maintain our new energy infrastructure.

The green sector expanded steadily overall between 2011 and 2022, growing by over 34% over the period. This exceeds overall labour market growth of just over 28%, resulting in an increase in the share of 'green jobs' in the economy from 26.1% of employment in 2011 to 27.4% in 2022. This was led by jobs in the Green Increased Demand subcategory, which grew by close to 45%. However, the largest proportional increase was attributable to Green New and Emerging occupations, which grew by more than 67% over the same period¹⁴². In New and Emerging green occupations, individuals were on average younger, more likely to have tertiary education, more likely to be in roles with a higher skill requirement, and more likely to be in Dublin or the Greater Dublin Area. Looking at Enhanced Skills green occupations however, these workers were on average older, with lower levels of education and in roles with lower skills requirements, and typically located in more rural areas. This is very important because these are roles that require change to adapt to the green transition. Furthermore, the location of these workers aligns with the areas where more emission intensive jobs are located, and so ensuring that these individuals and regions that require enhanced skills are supported will be essential to avoid reinforcing those regional inequalities.

The policy landscape for green skills development in Ireland

The Climate Action Plan 2024 outlines certain commitments towards the development of green skills in Ireland. For example, there are commitments to "Develop the green skills and capacities required for a net-zero economy through Education and Training Boards," as well as Springboard+ and Human Capital Initiative Pillar 1. Furthermore, the Climate Action Plan 2024 commits to "Support and accelerate the design, development and implementation of apprenticeships meeting green skills needs for the future¹⁴³." It should be noted that these actions are high-level and unspecific – they do not set out evidence and targets in terms of what skills ought to be developed and in what numbers. Nevertheless, they are important commitments made as part of the State's climate policy.

In 2021, the Expert Group on Future Skills Needs published Skills for Zero Carbon: The Demand for Renewable Energy, Residential Retrofit and Electric Vehicle Deployment Skills to 2030.²⁸ These three sectors have been identified as of particular significance for Ireland's transition to a low-carbon economy. Of course, this ignores other important sectors, such as agriculture and food, but this is an important report, nevertheless. The report outlined 30

¹⁴¹ solar-energy-in-ireland, <https://harmonysolar.ie/2016/06/22/isea-solar-for-ireland/>, <https://consult.fingal.ie/en/system/files/materials/1155/1325/JOB%20in%20Solar%20PV%20Fact%20Sheet%202.pdf>.

¹⁴² De Vita, Niccolo, Paul Goldrick-Kelly, Seamus McCaul, and Chris Smart. "Measuring 'Green' Jobs in the Republic of Ireland." NERI Report Series. Nevin Economic Research Institute, n.d., p.12.

¹⁴³ Department of the Environment, Climate and Communications. "Climate Action Plan 2024," December 20, 2023.

recommendations, the most relevant of which for this report include: coordinate planning for training and upskilling within the renewable energy sector; promotion of and improving accessibility of apprenticeships to young people, including their role in addressing climate action; promotion of career opportunities and training in low carbon economy skills to young people, especially women, career guidance for professionals and parents; provide work experience to young people in low carbon economic activities. Importantly, the report recommended: “Given the urgency of meeting Ireland’s climate action goals, it is crucial that these recommendations are prioritised within national skills, labour activation and inward migration policy, and be centrally driven by Government, through a High-Level Implementation Group, working in close collaboration with industry and the education and training system in the years ahead¹⁴⁴.”

SOLAS is the State agency with responsibility for developing Further Education and Training (FET) in Ireland. In October 2024, SOLAS published *Green Skills 2030 – The First National Further Education & Training (FET) Strategy for the Green Transition*¹⁴⁵, which outlines a strategic direction for the FET sector in Ireland in terms of developing the skills needs of the green economy. This is an important document, as no other State agency in Ireland has developed a ‘green skills’ strategy. Indeed, thinking is moving away from thinking about ‘green skills’ towards thinking about whole-of-economy transitions. SOLAS emphasise the importance of recognising the need for ‘green jobs’ and ‘green sectors’ but also of ‘greening’ existing jobs and sectors. There are challenges in Ireland with regard to channelling more people into ‘green jobs’, including the bias towards higher education in society, the slow development of sectors like offshore wind energy in Ireland, and a slow recovery in the apprenticeship system after the 2008 crash in the construction industry.

We cannot think about the development of skills in isolation from the need for much more ambitious, strategic direction from the State which involves substantial public investment, the creation of decent work, and the mobilisation of society for a rapid transformation towards a low carbon, just path of development. For Aronoff et al.¹⁴⁶, the concept of a job guarantee is central to their Green New Deal, which would provide “low-carbon, socially valuable work¹⁴⁷” for anyone who is looking for a job. For them, ‘green jobs’ are not limited to what would traditionally be defined as a ‘green job’, but also include low-carbon ways of “caring for people and earth¹⁴⁸.” The essential point is that the transition towards a sustainable and equitable society is going to require work in a vast array of areas from energy production to teaching and caring to food production, and opportunities for that work ought to be accessible to all and provide a sufficient quality of life. Enabling the scale and pace of change required for such a transition is going to require great ambition and creative, solutions-focused thinking. To illustrate a progressive approach in action, the following section will present a case study on the American Climate Corps and their leading role in shaping the bold Green New Deal.

Case study: The American Climate Corps

“Picture workers around the country, their arms and legs crisscrossed by thin red scrapes and studded with mosquito bites, planting trees in degraded forests alongside seed-dropping drones buzzing above; restoring the wetlands on delicate coasts; building green infrastructure by roadways and streams to help cities absorb floodwaters and keep their sewage systems clean. As they work, they see turbine blades turning in the wind and photovoltaic cells glinting in the sunlight.” - Aronoff et al. (2019: 82)

The above quote presents the idea of a Civilian Conservation Corps in the United States at the heart of a proposal for a radical Green New Deal. This quote has taken on a new resonance with the launch of the American Climate Corps (ACC), which signals a scaling up of State-led climate action in the United States. The ACC was launched by President Joe Biden in September

¹⁴⁴ Ibid, 7.

¹⁴⁵ SOLAS, *Green skills 2030: The 1st National Further Education & Training (FET) Strategy for the Green Transition* (Dublin: Government of Ireland, 2024).

¹⁴⁶ Aronoff, K., A. Battistoni, D. A. Cohen, and T. Riafrancos. 2019. *A Planet to Win: Why We Need a Green New Deal*. London and New York: Verso.

¹⁴⁷ Ibid, 41.

¹⁴⁸ Ibid, 40.

2023¹⁴⁹. It is anticipated to train 20,000 young people in skills related to clean energy, conservation, and climate resilience, through paid training programmes, in its first year. The aim of the ACC is to provide work and create career pathways in these sectors so that young people can find well-paid green jobs in the public and private sectors in the coming years and decades.

The ACC was the result of years of campaigning by the environmental movement in the US, and there were already climate corps programmes at a state level in California, Colorado, Maine, Michigan, and Washington before it was launched¹⁵⁰. The first statewide climate corps in the US was established in 2020 in California¹⁵¹. The scale of the ACC is far smaller than what activists were struggling for, but it is an example of an experimental policy that could be expanded in the future in the right political circumstances, if it is successful.

The ACC and state-level climate corps operate through AmeriCorps. AmeriCorps is the federal agency for national service and volunteering in the US. It provides opportunities for American citizens from all backgrounds to engage in national service and volunteering. AmeriCorps currently distributes more than \$800m in funding annually, and it engages 200,000 members and volunteers in national service and volunteering roles¹⁵². As a member of AmeriCorps, you are entitled to a living allowance to cover basic expenses during service, financial benefits for college and trade school, childcare benefit, amongst other benefits¹⁵³.

Colorado Climate Corps

The Colorado Climate Corps was launched in 2022. It was initially funded with \$1.7m from the state, and it deployed over 600 AmeriCorps workers across the state to help with wildfire mitigation, improve trails, and improve the energy efficiency of homes¹⁵⁴. The Colorado Climate Corps is part of a wider network of conservation corps in Colorado, of which there are six. The wider conservation corps work includes trails, national and state forests, wildfire management, and energy and water projects (including in low-income communities). The Colorado Climate Corps has a specific focus on green energy projects and providing entry pathways into 'green jobs.' There are three prongs: conservation (trails, fires); education (ecological education with schoolchildren and communities); and policy (working with local government on climate plans), which includes outreach, needs assessment, and writing plans. This work, which is of great value from an environmental and social perspective, requires public investment and ought to be understood within the wider context of Green New Deal thinking. Of course, in a volatile political context where climate action has become a bitterly divisive issue between political parties and within public opinion, the future of these initiatives is uncertain.

While it is too early to evaluate the impact of the climate corps initiatives at a state and federal level in the US, they do provide an example of what ambitious State policymaking might look like in the area of climate action, especially from the perspective of young people and workers. What relevance might it have for the Irish context?

The establishment of something like a climate corps is not currently on the agenda in Ireland. The Further Education and Training (FET) sector has, in many respects, been taking a lead on

¹⁴⁹ The White House. "Biden-Harris Administration Launches American Climate Corps." The White House, September 21, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/21/what-they-are-saying-biden-harris-administration-launches-american-climate-corps/>.

¹⁵⁰ The White House. "FACT SHEET: Biden-Harris Administration Launches American Climate Corps to Train Young People in Clean Energy, Conservation, and Climate Resilience Skills, Create Good-Paying Jobs and Tackle the Climate Crisis." The White House, September 20, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/20/fact-sheet-biden-harris-administration-launches-american-climate-corps-to-train-young-people-in-clean-energy-conservation-and-climate-resilience-skills-create-good-paying-jobs-and-tackle-the-climate/>.

¹⁵¹ California Climate Action Corps. "California Climate Action Corps." Accessed October 11, 2024. <https://www.californiavolunteersfund.org/our-programmes/climate-action-corps>.

¹⁵² Aine Quinn, "Ireland's Greenhouse Gas Emissions in 2023 Reach Lowest in Three Decades," The Irish Times, July 9, 2024 <https://www.irishtimes.com/environment/climate-crisis/2024/07/09/irelands-greenhouse-gas-emissions-in-2023-reach-lowest-in-three-decades/>

¹⁵³ AmeriCorps. "Your Benefits." AmeriCorps. <https://americorps.gov/members-volunteers/your-benefits>.

¹⁵⁴ Jason Blevins, "Colorado Climate Corps the Seed for President Biden's New American Climate Corps Plan," The Colorado Sun, September 21, 2023, <https://coloradosun.com/2023/09/21/american-climate-corps/> <https://coloradosun.com/2023/09/21/american-climate-corps/>.

the development of green skills nationally. There are over 50 FET programmes with a focus on green skills in Ireland. These include Nearly Zero Energy Building and retrofit, renewable energy upskilling/reskilling, apprenticeships, green skills micro-qualifications, and general 'green skills' courses. The Expert Group on Future Skills Needs¹⁵⁵ highlighted the need to promote training, education, and career opportunities in green skills, and to provide relevant work experience to young people in these areas. The ACC indicates the value of a model in which the State takes a more strategic and leading role in the development of training and work opportunities in low-carbon economic activities, which connect different levels of government with the education sector, industry, and local communities, and most of all provides decent work opportunities. In Ireland, while there is strategic planning within the FET sector, which involves industry stakeholders, strategic direction and ambition from central government is lacking.

Community wealth building

If Ireland is going to achieve widespread community buy-in for transformative climate action towards the kind of radical Green New Deal previously discussed, the conundrum remains as to how we can achieve the pace and scale of change required while simultaneously tackling inequality and addressing the unique local development priorities in a way that is climate-smart. Coined by The Democracy Collaborative in 2005¹⁵⁶, Community Wealth Building (CWB) is a place-based, practical systems approach to economic development, built on local roots and plurality of ownership¹⁵⁷. The pillars, or strategies, utilised by CWB models differ depending on the needs of the local community. CWB is a partnership between anchor institutions, which would include union branches representing local workers, communities (whose members may be represented by unions) and businesses.

CWB aims to create strong, sustainable local economies that support fair work, encourage local spending and use public land and property for the common good. Crucially, social and environmental gains are included as an intentional function of the economy in a CWB model. Harnessing the capital and influence of anchor institutions, CWB aims to develop resilient, inclusive local economies, with high levels of local employment and a diverse business base, ensuring that wealth is locally owned and benefits local people¹⁵⁸. In such initiatives which aim to produce fair working conditions and growth in local 'green jobs', the Government should engage with trade unions who represent workers in the development of such initiatives.

In Preston, UK, perhaps the best-known example of an area adopting a CWB approach to date, the impacts have been significant. Before implementing CWB, £458m was leaking out of the Lancashire economy each year, however, a 2016/17 spend analysis found that the procurement spend retained within Preston was £112.3m, a rise of £74m from 2012/13. Within the wider Lancashire economy (including Preston) £488.7m of spend had been retained, a rise of £200million from the baseline analysis¹⁵⁹. As a result of this process Preston moved out of top 20% most deprived local authority areas in the UK¹⁶⁰, unemployment reduced from 6.5% in 2014 to 3.1% in 2017 (compared to UK average of 4.6% in 2017¹⁶¹), there was a 10% rise in 16-24 year olds in Preston receiving at least an NVQ Level 3 qualification from 2014-2017, and 4000 extra employees receiving the Real Living Wage during the same period¹⁶².

¹⁵⁵ Expert Group on Future Skills Need. "Skills for Zero Carbon: The Demand for Renewable Energy, Residential Retrofit and Electric Vehicle Deployment Skills to 2030," November 2021. https://www.skillsireland.ie/all-publications/2021/5119-dete-egfsn-skills-for-zero-carbon-web_.pdf.

¹⁵⁶ J. Guinan and M. O'Neill, *From Community Wealth Building to System Change* (London: IPPR, 2019).

¹⁵⁷ N. McNroy, "Wealth for All: Building New Local Economies," *Local Economy* 33, no. 6 (2018): 678-687, <https://doi.org/10.1177/0269094218803084>.

¹⁵⁸ North Ayrshire Council, (2020). 'Community Wealth Building Strategy Brochure 2020-2025,' available at <https://www.north-ayrshire.gov.uk/Document-library/cwb-strategy-brochure.pdf>.

¹⁵⁹ Centre for Local Economic Strategies, *How we built community wealth in Preston: Achievements and lessons* (CLES and Preston City Council, 2019)

¹⁶⁰ UK Office for National Statistics Indices of Multiple Deprivation. English indices of deprivation 2019 - GOV.UK

¹⁶¹ Centre for Local Economic Strategies, *How we built community wealth in Preston: Achievements and lessons* (CLES and Preston City Council, 2019)

¹⁶² Ibid.

When adopting the model, a community engagement process allows for the identification of relevant, site-specific goals that represent the needs of a locality and its residents and consider the resources and skills already available. To ensure that wealth is locally owned and locally retained, CWB employs the following strategies:

- Engaging the community in planning and sustainable development
- Mobilising the financial power of the local public sector through progressive procurement practices: local purchasing, hiring, investment
- Plural ownership of the economy: encouraging and enabling the effective development of cooperatives, community supported agriculture and local food systems
- Harnessing land and assets: using publicly owned land for the common good

Examples of mechanisms to deliver local wealth building include:

- Community development financial Institutions
- Community land trusts
- Community-owned energy production
- Cooperatives
- Community-supported connectivity

With regards to a just transition to net zero, it is evident that such a model could utilise climate action itself as an anchor institution to channel public expenditure from national responses to climate change into sustainable local development and employment opportunities.



Artificial Intelligence and its impact on public sector workers



Artificial Intelligence and its impact on public sector workers

Artificial intelligence (AI) is transforming public sector services in Ireland, offering opportunities for increased efficiency, innovation, and service delivery. However, this transformation also poses significant challenges for public sector workers. AI-driven automation threatens to disrupt established job roles, requiring careful attention from policymakers to balance technological progress with the welfare and interests of the workforce. This policy brief explores how AI is being integrated into Ireland's public sector, the benefits and risks for workers, and the broader implications for the future of public administration.

Technological overview

The field of artificial intelligence is experiencing particularly rapid growth and development. As computer processing becomes more sophisticated and data more accessible, AI has evolved from a laboratory novelty to a household tool. Governments are leveraging these advancements to improve public operations, benefiting from the technical growth of AI. These technologies are revolutionising how public institutions process information, interact with the public, and make data-driven decisions.

Core AI technologies

AI technologies use algorithms to enable machines to perceive, interpret, act, and learn in order to simulate human cognition¹⁶³. Earlier versions of AI depended heavily on human developers who programmed deterministic rules and subject matter content. Such systems facilitated automation, but early versions could not address situations for which they had not been specifically programmed. Machine Learning (ML) enables financial firms to develop predictive models, automate complex processes, and enhance decision-making capabilities. According to some experts, most applications of AI are now ML, underscoring its critical role in the ongoing digital transformation of the public services sector¹⁶⁴.

The rise of Generative AI

Generative AI, particularly large language models (LLMs), has captured public and governmental attention due to its powerful language processing abilities and potential to shift economic and labour trends¹⁶⁵. LLMs are capable of understanding, generating, and summarising complex text, making them useful for automating tasks previously thought to require human oversight. Public sector applications include automated responses to public queries, real-time data analysis, and even drafting policy suggestions.

¹⁶³ Mauro Cazzaniga et al., "Gen-AI: Artificial Intelligence and the Future of Work," IMF, January 14, 2024. <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2024/01/14/Gen-AI-Artificial-Intelligence-and-the-Future-of-Work-542379>

¹⁶⁴ Phillip Tierno, Artificial Intelligence and Machine Learning in Financial Services (Congressional Research Service, 2024), <https://crsreports.congress.gov/product/pdf/R/R47997>.

¹⁶⁵ Council of the European Union General Secretariat. 2023. "ChatGPT in the Public Sector – Overhyped or Overlooked?" European Union. Available at: https://www.consilium.europa.eu/media/63818/art-paper-chatgpt-in-the-public-sector-overhyped-or-overlooked-24-april-2023_ext.pdf.

The linguistic and large data processing capacities of LLMs has expanded the application of AI to include more textual-based tasks. Key public sector applications of LLMs include:

- **Chatbots and virtual assistants:** 24/7 availability improves the timeliness of public service and can address basic issues without the need for human intervention – a self-sufficiency that will also free up public and civil servants' time.
- **Text analysis:** LLMs can be trained to identify key information in complex documents, which could reduce the need for time-consuming human reading processes.
- **Decision-making processes:** LLM's ability to quickly and accurately process data could support decision-making processes such as grant evaluation.

Despite the enormous potential of LLMs, their use in public services is not without risks. These models can sometimes produce biased, misleading, or nonsensical results. Additionally, LLMs struggle with nuance, emotion, and moral judgement, necessitating human oversight in tasks like legal interpretation, welfare decisions, or healthcare administration.

Ireland's digital transformation and AI integration

The push towards digitalisation

The Irish Government has initiated a comprehensive e-transformation programme to modernise public services using digital technologies, spurred by initiatives like Connecting Government 2030, which aims to have 90% of applicable services online by the decade's end¹⁶⁶. Since 2022, the Government has introduced several cross-departmental frameworks, such as the Digital Ireland Framework, designed to modernise public administration. As of 2023, 81.2% of public services were available digitally, slightly surpassing the EU average of 79.44%. This shift, accelerated by the Covid-19 pandemic, has laid the groundwork for AI integration across public administration.

The role of AI in public administration

Artificial intelligence has become a cornerstone of modern digital government strategies, revolutionising how public institutions process information, interact with the public, and make data-driven decisions. At the core of AI's function in public administration are machine learning (ML) algorithms, which enable systems to adapt and improve through data analysis. More recently, generative AI (GenAI) and large language models (LLMs) have demonstrated their capacity to revolutionise public service delivery by automating tasks like document review, grant evaluation, and citizen interactions.

Ireland's 2021 *National AI Strategy: AI – Here for Good* set the stage for adopting AI in public administration. This strategy outlines the Government's commitment to a human-centred approach, ensuring AI tools enhance rather than replace human roles. It emphasises good governance, trust, and innovation while acknowledging the ethical and social challenges associated with AI implementation.

By 2027, the share of global government tasks operated by machines is expected to jump from 33% to 41%¹⁶⁷. Large language models (LLMs) are expected to further contribute to this trend: a 2023 Accenture report finds that 39% of public sector working hours could be impacted by LLMs¹⁶⁸.

¹⁶⁶ Department of Public Expenditure, NDP Delivery and Reform, 2022 "Connecting Government 2030 - A Digital and ICT Strategy for Ireland's Public Service", [www.gov.ie](https://www.gov.ie/en/publication/136b9-connecting-government-2030-a-digital-and-ict-strategy-for-irelands-public-service/) <https://www.gov.ie/en/publication/136b9-connecting-government-2030-a-digital-and-ict-strategy-for-irelands-public-service/>.

¹⁶⁷ World Economic Forum. 2023a. *Future of Jobs Report 2023*. World Economic Forum. Available at: <https://www.weforum.org/publications/the-future-of-jobs-report-2023/>.

¹⁶⁸ According to the same Accenture report, AI could impact 90% of working hours in banking and 67% of working hours in communications (Daugherty et. al., 2023). Daugherty et. al., "AI in Banking and Communications: Impacts on Working Hours." Accenture, 2023.

While public workers will likely feel the impacts of AI, many public sector employees are unsure of how AI is currently being used in their workplace. According to a recent Fórsa survey of its members, 38% of respondents don't know how or if AI affects their current role and 36% don't know how it will affect their role going forward.

Key considerations for public sector AI adoption in Ireland

Governments must prioritise the wellbeing of the public when integrating AI into e-government agendas. While AI can boost productivity and benefit the public, it also poses risks to equity, privacy, and human rights (see Table 6). Achieving a balance between these advantages and risks requires ongoing evaluation and interdisciplinary collaboration. Human judgment remains critical in public service, limiting the potential for full automation¹⁶⁹. Additionally, the public sector's guiding principles differ significantly from those of private industries, meaning the Irish Government's duty of care may complicate AI integration.

Table 6: Summarizing opportunities and risks of AI use in the public sector		
Application	Opportunities	Risks
Political and Economic	Growth of productivity	Job displacement
	Automating repetitive tasks	Energy consumption
	Digital assistance	Loss of human expertise
	Content creation	Reduced accountability and transparency
	Real time process monitoring	Replacing creative industries
Policymaking	Faster decision-making	Biased training data leading to biased decision-making
	Improved information extraction	Flawed reinforcement loops
	Reduce human error	Invading privacy
	Inclusive decision-making	Non-explainability
	Faster response	Lack of accountability
	Information summaries	Lack of transparency
	Constant availability	Data governance

Source: Mellouli et. al., 2024

Intended outcomes

The goal of digital transformation efforts is to streamline public administration tasks, reduce bureaucratic overhead, and improve policymaking (See Table 6). AI is an exceptionally useful tool to address language barriers, accelerate the delivery of public services, reduce waiting periods, and streamline caseloads¹⁷⁰.

¹⁶⁹ Bonomi Savignon, A., et al. 2023. "Automation in Public Sector Jobs and Services: A Framework to Analyze Public Digital Transformation's Impact in a Data-Constrained Environment." *Transforming Government: People, Process and Policy* 18 (1): 49–70. <https://doi.org/10.1108/tg-04-2023-0044>.
¹⁷⁰ Alhosani, K., and S. M. Alhashmi. 2024. "Opportunities, Challenges, and Benefits of AI Innovation in Government Services: A Review." *Discover Artificial Intelligence* 4 (1). <https://doi.org/10.1007/s44163-024-00111-w>.

- **Efficiency:** The goal of digital transformation efforts is to streamline public administration tasks and reduce bureaucratic overhead. Automation through digital transformation can support public service workers' decision-making processes by applying rules to existing data¹⁷¹. A 2024 analysis of the UK Government by the Turing Institute found that 84% of the most complex but repetitive transactions could easily be automated¹⁷². The ability to offload time-intensive tasks is expected to improve productivity, freeing up nearly one-third of public servants' time to focus on higher-value work¹⁷³.

Despite these findings, Fórsa members are sceptical of the productivity benefits of AI. Just 18% of respondents to a recent survey believe that AI will reduce menial or repetitive tasks and 12% believe that AI will boost productivity. Outlooks are generally more optimistic amongst higher earners: 28% of respondents making over €80,000 per year say that AI will improve productivity, compared to just 6% of workers making up to €35,000 and 8% making below €50,000.

- **Improved Policymaking:** Early research also suggests that AI's data analytics capacities could enhance government programmes, policies, and operations by applying rules to existing data¹⁷⁴ ¹⁷⁵. However, other findings suggest that AI is best used as a complement to human analysis rather than a substitute.

Social and ethical considerations

The Irish Government places a strong emphasis on ethical considerations in the public sector's use of AI¹⁷⁶. The *Interim Guidelines for Use of AI in the Public Service*, released in February 2024, outline key ethical and risk assessments that public agencies must conduct before adopting AI¹⁷⁷. All AI tools used by the public sector are required to comply with the European Commission's *High-Level Expert Group on AI's Guidelines for Trustworthy AI*¹⁷⁸. These guidelines include principles such as:

- Human agency and oversight
- Technical robustness and safety
- Privacy and data governance
- Transparency
- Diversity, non-discrimination and fairness
- Societal and environmental well-being
- Accountability

In summary, the Irish Government's approach to AI adoption in the public sector is framed by a

¹⁷¹ Bonomi Savignon, A., et al. 2023. "Automation in Public Sector Jobs and Services: A Framework to Analyze Public Digital Transformation's Impact in a Data-Constrained Environment." *Transforming Government: People, Process and Policy* 18 (1): 49–70. <https://doi.org/10.1108/tg-04-2023-0044>.

¹⁷² Straub, Vincent J, Youmna Hashem, Jonathan Bright, Satyam Bhagwanani, Deborah Morgan, John Francis, Saba Esnaashari, and Helen Margetts. "AI for Bureaucratic Productivity: Measuring the Potential of AI to Help Automate 143 Million UK Government Transactions." *The Alan Turing Institute*, March 18, 2024. <https://doi.org/https://www.turing.ac.uk/news/publications/ai-bureaucratic-productivity-measuring-potential-ai-help-automate-143-million-uk>.

¹⁷³ Berryhill, J., et al. 2019. "Hello, World." *OECD Working Papers on Public Governance* [Preprint]. <https://doi.org/10.1787/726fd39d-en>.

¹⁷⁴ Bonomi Savignon, A., et al. 2023. "Automation in Public Sector Jobs and Services: A Framework to Analyze Public Digital Transformation's Impact in a Data-Constrained Environment." *Transforming Government: People, Process and Policy* 18 (1): 49–70. <https://doi.org/10.1108/tg-04-2023-0044>.

¹⁷⁵ Manyika, J., M. Chui, M. Miremadi, J. Bughin, K. George, P. Willmott, and M. Dewhurst. 2017. *A Future That Works: AI, Automation, Employment, and Productivity*. McKinsey Global Institute Research, Tech. Rep, 60.

¹⁷⁶ European Union. "Ireland: Public Sector Dimension of AI Strategy." *AI Watch*, June 1, 2022. <https://ai-watch.ec.europa.eu/topics/public-sector/public-sector-dimension-ai-national-strategies/ireland-public-sector-dimension-ai-strategy.en>.

¹⁷⁷ Department of Public Expenditure, NDP Delivery and Reform. 2024. *Interim Guidelines for Use of AI*. Available at: <https://www.gov.ie/en/publication/2127d-interim-guidelines-for-use-of-ai/> (accessed June 4, 2024).

¹⁷⁸ Department of Enterprise, Trade and Employment. 2023. *Progress Report on Implementation of the National AI Strategy: AI - Here for Good*. Available at: <https://enterprise.gov.ie/en/publications/progress-report-national-ai-strategy.html>.

commitment to ethical governance and secure, efficient service delivery. While the focus has been on building the infrastructure and skills necessary for AI implementation, the broader effects on the public sector workforce and the ongoing need for ethical oversight remain important considerations as AI continues to evolve.

Ongoing risks

Critics of government automation claim that automating public services can create negative outcomes for the public. Key issues include lack of transparency, shifting accountability to technology, and the tendency of AI to replicate or exacerbate biases – all of which could undermine the European Commission’s High Level Expert Group on AI’s Guidelines for Trustworthy AI¹⁷⁹.

- **Bias:** One of the key ethical issues surrounding AI in the public sector is algorithmic bias. AI systems are trained on vast amounts of historical data, which often reflect existing societal biases, especially against marginalised groups. This can lead to decisions that disproportionately harm certain populations, undermining democratic principles of fairness and equality.

For instance, AI applications in welfare fraud detection systems have been criticised for unfairly targeting lower-income and minority groups, as seen in cases across Europe, including the Netherlands. An AI system used by the Dutch Government to identify welfare and tax fraud was found to have developed patterns of bias against those from lower-income background, immigrants, and ethnic minorities¹⁸⁰. Facial recognition technologies – which are in use across European nations – also face significant bias challenges¹⁸¹. Ireland must take active steps to ensure that AI systems used in public administration are designed and monitored for fairness. This requires implementing bias mitigation strategies such as algorithmic audits, diverse data sources, and transparency in decision-making processes.

- **Lack of transparency:** AI’s “black box” nature — the difficulty in understanding how AI systems reach their conclusions — is a significant concern in public administration. Public sector decisions often have far-reaching consequences, and lack of transparency can erode trust between the government and the public. To address this, policymakers must ensure that AI systems used in public services are explainable and subject to regular audits. AI-driven decisions should remain accountable to human oversight, particularly in sensitive areas such as justice, welfare, and healthcare¹⁸².
- **Inaccuracies:** AI models can produce flawed outputs or nonsensical responses. Poor training data, biased information, or bad model design can all result in incorrect outputs. LLMs are known to produce “hallucinations,” answers that seem plausible but are in fact wrong. In February 2024, Air Canada was ordered to pay damages after its virtual assistant gave a customer false information regarding bereavement fare policies¹⁸³.
- **Environmental toll:** The significant energy resources needed to build and run AI tools are further exacerbating the ongoing climate crisis. Fresh water is then used to cool these processors, adding to the environmental toll. Data centres use 21% of Ireland’s metred electricity, an increase from 18% in 2022 and 5% in 2015. By 2026, data centres are expected to consume one-third of Ireland’s electricity¹⁸⁴. Even as Ireland expands its

¹⁷⁹ Mellouli, S., M. Janssen, and A. Ojo. 2024. "Introduction to the Issue on Artificial Intelligence in the Public Sector: Risks and Benefits of AI for Governments." *Digital Government: Research and Practice* 5 (1): 1–6. <https://doi.org/10.1145/3636550>.

¹⁸⁰ Cetina Presuel, R., and J. M. Martinez Sierra. 2024. "The Adoption of Artificial Intelligence in Bureaucratic Decision-Making: A Weberian Perspective." *Digital Government: Research and Practice* 5 (1): 1–20. <https://doi.org/10.1145/3609861>.

¹⁸¹ Ibid.

¹⁸² Council of the European Union General Secretariat, 2023. "ChatGPT in the Public Sector – Overhyped or Overlooked?" European Union. Available at: https://www.consilium.europa.eu/media/63818/art-paper-chatgpt-in-the-public-sector-overhyped-or-overlooked-24-april-2023_ext.pdf.

¹⁸³ Yagoda, M. 2024. "Airline Held Liable for Its Chatbot Giving Passenger Bad Advice – What This Means for Travellers." *BBC News*. Available at: <https://www.bbc.com/travel/article/20240222-air-canada-chatbot-misinformation-what-travellers-should-know>.

¹⁸⁴ Vish Gain, "Data Centres Now Consume 21pc of Ireland’s Electricity," *Silicon Republic*, July 23, 2024,

resource of renewable energy over the coming years, growth in energy consumption from data centres poses a risk to Ireland's climate commitments. There are many sectors in Ireland that need to transition to renewable energy, including the residential, transport, industry and services, and growth in energy demand from data centres means that the latter is competing with other critical sectors for scarce energy resources. There are serious contradictions between Ireland's economic policy of attracting data centre developments and Ireland's climate policy which need to be better examined by policymakers.

Irish Government adoption of AI

A hub for European digital innovation, Ireland is the home to several firms developing groundbreaking artificial intelligence technologies. Despite its proximity to leaders in tech innovation, the Irish State's adoption of AI has been relatively uneven. Government leaders have taken steps to introduce greater automation into government services, but barriers remain to broad integration.

The State's first major step in AI adoption came in 2018, when the Office of Revenue Commissioners partnered with Accenture to launch a voicebot to answer citizen queries about taxation. The Virtual Digital Agent (VDA) used advanced AI technologies to focus on calls related to tax clearance. Most of these calls are repetitive and the knowledge needed to answer these questions is well established. Programmers used integrated technologies like speech-to-text, Natural Language Processing (NLP), and text-to-speech to create a fully automated voicebot, delivering an efficient and effective customer experience. Up to 50% of calls were handled in their entirety by a voicebot and only 10% of calls were transferred due to a failure to understand¹⁸⁵.

More significant progress came in July 2021 with the launch of the *National AI Strategy: AI - Here for Good* by the Department of Enterprise, Trade, and Employment. This document laid out the Government's plan to develop a trustworthy ecosystem that fostered responsible AI innovation. This strategy is built on three core principles: maintaining a human-centred approach to AI, staying open to innovation, and ensuring good governance. To achieve these goals, the strategy emphasizes the importance of securing data infrastructure and preparing the workforce for AI integration.

While the bulk of this strategy focused on private sector concerns, policymakers discussed ways in which the public sector could accelerate AI adoption. The Government's primary goal is to enhance public service delivery through AI, identifying key areas like healthcare, criminal justice, agriculture, revenue, and operations as sectors poised for substantial benefits¹⁸⁶.

Since the 2021 strategy launch, the Government has made strides in advancing its adoption of AI across the Irish business ecosystem. Key accomplishments have included the appointment of Dr. Patricia Scanlon as AI Ambassador, the designation of CeADAR as Ireland's National AI Hub, and various activities intended to solidify Ireland's reputation as an innovation hub. The Government has also taken steps to advance the Public Sector's AI competency, including:

- **Working group on trustworthy AI:** A working group cochaired by the Department of Public Expenditure, NDP Delivery and Reform (DPENDR), and the Department of Enterprise, Trade and Employment has convened to develop principles for trustworthy AI for the public service. Supported by an AI expert commissioned through SFI's Public Service Fellowship Scheme, the group aims to establish accessible principles to ensure secure and ethical AI deployment in the public sector.

<https://www.siliconrepublic.com/enterprise/data-centres-electricity-consumption-ireland-cso-stats-pressure-grid>

¹⁸⁵ Department of Enterprise, Trade and Employment. 2021. *AI - Here for Good*. Available at:

<https://enterprise.gov.ie/en/publications/publication-files/national-ai-strategy.pdf>.

¹⁸⁶ Ibid.

- **Upskilling public workers:** Efforts are underway to develop AI talent within the Public Service. DPENDR manages a Foundation Certificate in AI for public servants, accredited by Technological University Dublin, to equip them with skills for AI-driven service improvements. OneLearning, the Civil Service Learning and Development Centre, introduced three new courses in 2023 to support AI adoption: “Awareness of Emerging Technologies,” “Innovation for the Civil Service,” and “Basic Concepts of Design/System Thinking”¹⁸⁷.
- **Information networks:** DPENDR maintains several networks to foster opportunities for knowledge-sharing and collaboration among civil and public servants. One such group is The Emerging Technology Network, which encourages the adoption of technologies such as Robotic Process Automation (RPA) and AI in the delivery of public services. DPENDR also maintains The Innovation Network, which supports a culture of innovation across the public service by communicating key innovation messages, knowledge-sharing, building skills in innovation, and providing resources to members¹⁸⁸.
- **Cyber protection:** The National Cyber Security Centre provides crucial guidance on the cybersecurity risks and safe use of generative AI in the public sector, particularly concerning the handling of sensitive or confidential data¹⁸⁹.
- **Project acceleration:** DPENDR is collaborating with CeADAR – an Enterprise Ireland and IDA funded centre for AI in Ireland – to identify and develop AI projects led by upskilled public servants for implementation and testing in the public service¹⁹⁰.

While these projects illustrate the Government’s interest in modernization, there are concerns that investments may be waning. Budget 2025 does not contain new funding for government digital transformation or AI-related upskilling initiatives¹⁹¹. Furthermore, as previously mentioned, recent survey findings showed that 38% of Fórsa members don’t know how or if AI affects their current role.

The impact of AI on employment in Ireland’s public sector

Throughout the history of technology, invention has ushered in fears of job loss. AI adoption has grown exponentially during what is already a period of social, political, and economic instability. Worker anxiety associated with automation and job displacement is deepening an already pervasive feeling of precariousness. As GenAI expands the scope of AI capabilities, the likelihood of disruption is increasingly probable.

Technology’s disruptive impact on traditional employment patterns is hardly a new phenomenon. In examining previous waves of technological disruption, economists broadly agree that the loss of routine jobs were at least partially offset by gains in roles supporting automated technologies or in other industries. Consequently, automation reduced middle-income jobs while increasing the proportion of high- and low-paying jobs¹⁹². Recent advancements in AI/ML, including LLMs, are expanding the types of work affected by automation beyond routine jobs and manual labour. This wave of “collar blind automation” will disrupt previously stable jobs, including those in the public sector¹⁹³.

¹⁸⁷ Department of Enterprise, Trade and Employment, *Progress Report on the Implementation of the National AI Strategy: AI - Here for Good* (Government of Ireland, 2023), <https://enterprise.gov.ie/en/publications/publication-files/progress-report-national-ai-strategy-ai-here-for-good.pdf>.

¹⁸⁸ Department of Public Expenditure, NDP Delivery and Reform. “Better Public Services: Networks.” gov, August 14, 2024. <https://www.gov.ie/en/publication/66c4c-better-public-services-networks/#emerging-technology-network>.

¹⁸⁹ Department of Enterprise, Trade and Employment, *Progress Report on the Implementation of the National AI Strategy: AI - Here for Good* (Government of Ireland, 2023), <https://enterprise.gov.ie/en/publications/publication-files/progress-report-national-ai-strategy-ai-here-for-good.pdf>.

¹⁹⁰ Ibid.

¹⁹¹ *The Irish Times*. “Budget 2025 Had More to Say About AIB Than AI.” October 6, 2024. Available at: <https://www.irishtimes.com/business/2024/10/06/budget-2025-had-more-to-say-about-aib-than-ai/> RTÉ News, “€1.5 Billion Boost for National Training Fund,” RTE.ie, October 2024, <https://www.rte.ie/news/business/2024/1001/1473014-national-training-fund/>.

¹⁹² Tierno, P. 2024. *Artificial Intelligence and Machine Learning in Financial Services*. Congressional Research Service. Available at: <https://crsreports.congress.gov/product/pdf/R/R47997>.

¹⁹³ Ibid.

These anxieties are impacting a large share of workers in Ireland: 26% of Irish employees think AI will impact or replace their job in the future. Employers in the public sector are unable to provide their workers with clarity as 35% aren't sure if AI will impact or replace their jobs in the future¹⁹⁴.

The concept of job exposure vs. complementarity

AI/ML will reshape the labour market by boosting the productivity of certain workers and by directly competing with others¹⁹⁵. As AI continues to integrate into public sector roles, the impact on jobs can be described through two key concepts: exposure (AIOE) and complementarity (θ)¹⁹⁶. Exposure refers to the overlap between AI capabilities and the human skills needed for a given task¹⁹⁷ while complementarity describes the potential for AI to assist human workers, enhancing rather than replacing their roles. Together, exposure adjusted for complementarity determine the risk of displacement¹⁹⁸. The extent to which AI will serve as a replacement or assistant will vary based on occupational characteristics and the necessity of human interaction¹⁹⁹.

- **High exposure, low complementarity jobs:** These roles are at the highest risk of displacement. Tasks that are repetitive, data-driven, and require minimal human discretion are particularly vulnerable. For example, administrative positions that involve routine data entry, file processing, or basic communications are more easily automated²⁰⁰. Of the over 400 occupations evaluated by the Department of Finance, 72 occupations in Ireland are considered to be in a relatively "at risk" position²⁰¹.
- **High exposure, high complementarity jobs:** Some roles may be exposed to AI, but the human element remains essential. Public service jobs like healthcare providers, social workers, and education professionals involve high levels of interpersonal interaction, empathy, and decision-making, making them difficult to fully automate. AI can assist these roles by providing decision support, automating paperwork, or analysing patient data, freeing up time for workers to focus on more complex tasks. Of the over 400 occupations evaluated by the Department of Finance, 102 occupations in Ireland are considered to be in a relatively "high gain" position²⁰².
- **Low exposure, low complementarity jobs:** Certain jobs, particularly those involving manual labour or physical tasks, are less likely to be impacted by AI. In the public sector, these may include positions such as maintenance or transportation services, where automation technologies have not yet advanced to the point of full replacement²⁰³.

¹⁹⁴ FRS Recruitment. 2023. *FRS Recruitment Employment Insights Report 2023*. FRS Recruitment. Available at: <https://blog.frsrecruitment.com/articles/frs-recruitment-employment-insights-report-2023>.

¹⁹⁵ Cazzaniga, M., et al. 2024. "Gen-AI: Artificial Intelligence and the Future of Work." *International Monetary Fund* 142024 (001): 1. <https://doi.org/10.5089/9798400262548.006>.

¹⁹⁶ The median values for AIOE and θ across all US SOC-201015 occupations are 6.002 and 0.576 respectively (Williamson et. al, 2024). Jobs with scores above those medians are considered "High Exposure" and "High Complementarity."

¹⁹⁷ Exposure is calculated using $AIOE_k = \sqrt{\sum_{j=1}^{52} A_{ij} \times L_{jk} \times I_{jk}} / \sqrt{\sum_{j=1}^{52} L_{jk} \times I_{jk}}$

¹⁹⁸ Complementarity is determined using $C-AIOE_i = AIOE_i (1 - (\theta_{(1)} - \theta_{MIN}))$

¹⁹⁹ Ibid.

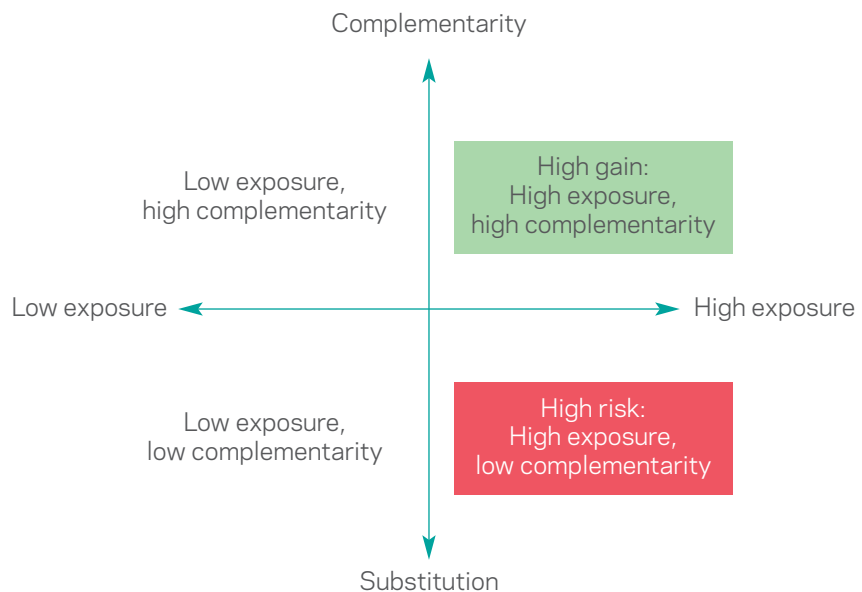
²⁰⁰ Ibid.

²⁰¹ Williamson, Harry, Neil Gannon, and Kevin Daly (Department of Finance), and Dr. Keith Fitzgerald, and Dr. Dermot Coates (Department of Enterprise, Trade and Employment). *Artificial Intelligence: Friend or Foe? A Review of How AI Could Impact Ireland's Economy*. June 2024. <https://www.gov.ie/en/publication/6538e-artificial-intelligence-friend-or-foe/>.

²⁰² Ibid.

²⁰³ Ibid.

Figure 21.
Conceptual
framework of
exposure and
complementarity
as a measure of
risk vs. gain



The scale of AI disruption in Ireland

Globally, AI is expected to affect 40% of jobs, with higher rates of 60% anticipated in advanced economies where cognitive-task-oriented jobs are prevalent^{204 205}. In Ireland, 63% of jobs face some degree of exposure to AI. The United Kingdom is even higher at 70%²⁰⁶. While this figure may sound alarming, not all jobs exposed to AI will be replaced. The effect of AI will vary based on sector, job function, region, and education – creating a challenging dynamic of “winners and losers.”

Many will experience increased complementarity, where AI assists workers rather than displaces them. About 33% of jobs in Ireland, particularly in sectors like healthcare, education, and social services, are likely to see gains in productivity and job satisfaction as AI takes over time-consuming tasks, allowing workers to focus on more meaningful work²⁰⁷.

At the same time, approximately 30% of jobs in Ireland are at risk of displacement, primarily in sectors such as financial services and ICT, which have high exposure to AI and lower levels of complementarity. In these industries, many roles involve repetitive tasks that can be easily automated, posing a significant threat to job security²⁰⁸.

²⁰⁴ Global estimates vary based on methodology and year of research. Manyika et al (2017) predict as few as 15% of work activity hours will be automated by 2030.

²⁰⁵ James Manyika et al., *A Future That Works: AI, Automation, Employment, and Productivity* (McKinsey Global Institute, 2017), Tech. Rep., 60.

²⁰⁶ Williamson, Harry, Neil Gannon, and Kevin Daly (Department of Finance), and Dr. Keith Fitzgerald, and Dr. Dermot Coates (Department of Enterprise, Trade and Employment). *Artificial Intelligence: Friend or Foe? A Review of How AI Could Impact Ireland's Economy*. June 2024. <https://www.gov.ie/en/publication/6538e-artificial-intelligence-friend-or-foe/>.

²⁰⁷ Ibid.

²⁰⁸ Ibid.

Factors influencing exposure and complementarity in Ireland include:

- **Sector:** Industries with relatively high levels of information processing and lower levels of physical labour and human interaction are likely to feel the largest effects of AI. In Ireland, the “Financial and Insurance” and “Information and Communication” sectors face the largest exposure to AI with 97% and 94% high exposure, respectively. There is a distinct risk of employment loss in these sectors as most roles have low complementarity, making them relatively substitutable to AI. In contrast, AI exposure in the education sector is over 90%, but high levels of interpersonal interaction increase the complementarity of roles, reducing the likelihood of displacement. Net job loss is not certain: as companies invest in positions that support AI deployment, new roles are likely to emerge²⁰⁹.
- **Geography:** Ireland’s urban areas, including Dublin, Galway City and Cork City, are major hubs for financial services and ICT firms – economic engines that boost the cities’ overall exposure to AI. 71% of people in Dublin’s labour force work (or have worked) in high exposure roles – the highest rate in the country. Rural, agricultural counties are less likely to face disruption from AI, but these regions will not benefit from the economic benefits stemming from profitable high-exposure sectors²¹⁰.
- **Gender:** While early waves of automation had a disproportionate impact on workers in the male-dominated manufacturing industry, the ongoing digital transformation is disrupting gendered trends²¹¹. Within the Irish economy, women – who are more likely to work in administrative roles and customer service occupations – will face more significant AI disruption than men. 76% of women work in jobs with high AI exposure, and 38% of women work in the higher-risk high-exposure, low-complementarity group (Rates for men are 51% and 23%, respectively). The gender imbalance in Ireland is larger than in most advanced economies given the relatively high number of men working in the relatively protected agricultural sector²¹².
- **Education:** As educational attainment increases so too does an individual’s likely interaction with AI. Approximately 95% of persons with a Doctorate work (or have worked) in high exposure occupations, compared to just 26% of individuals with low educational attainment. Education also generally provides greater complementarity, reducing the likelihood of job loss. However, the individuals most vulnerable to negative impacts of AI have advanced levels of education: 38% of individuals with an honours bachelor’s degree fall into the most at-risk category²¹³.

²⁰⁹ Ibid.

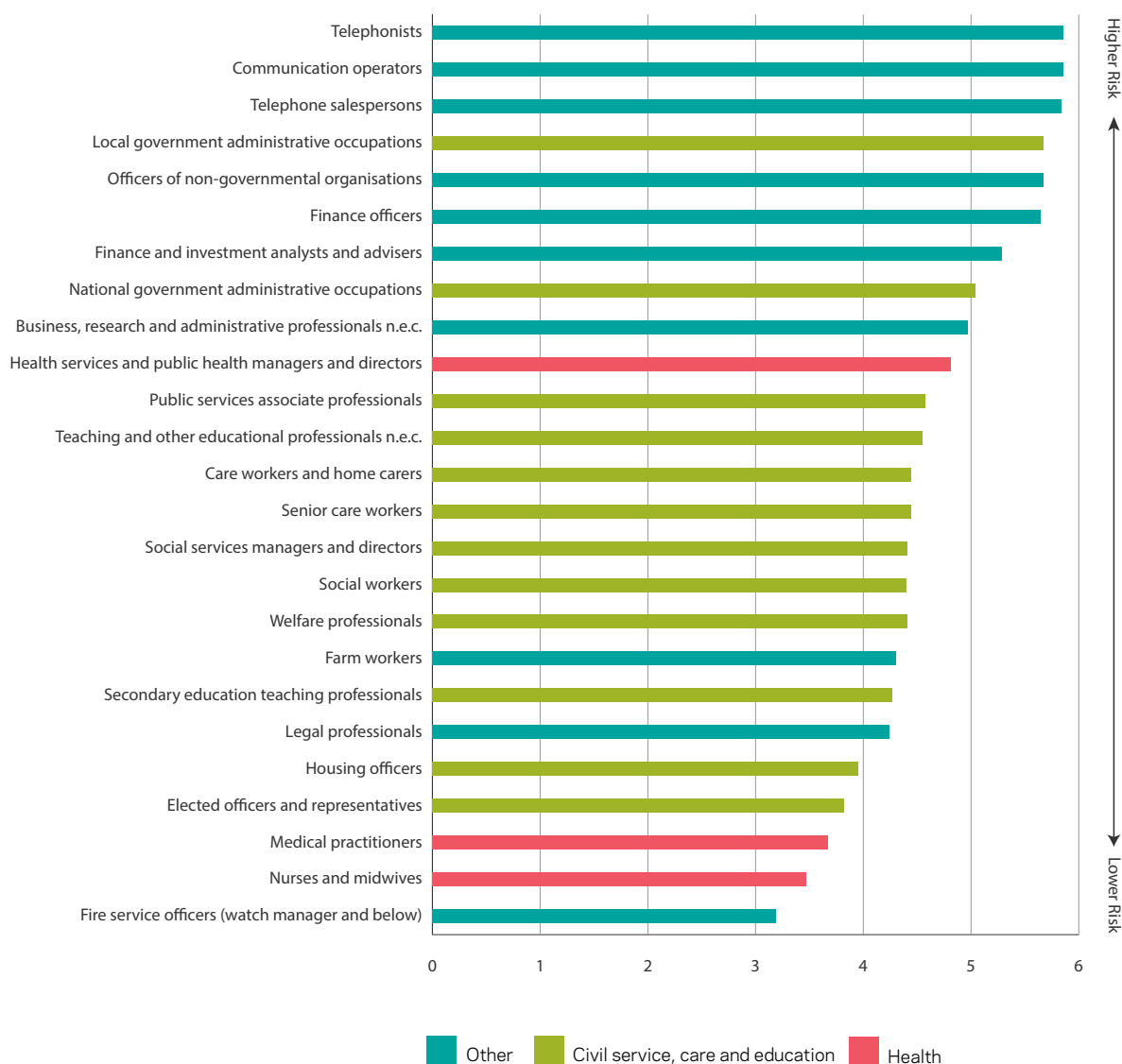
²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Ibid.

²¹³ Ibid.

Figure 22. Relative risk levels of selected occupations, as determined by C-AIOE



Note: Risk is determined using exposure adjusted for complementarity (C-AIOE). The Complementarity Adjusted AI Occupation Exposure (C-AIOE) index identifies the occupations that are i) most exposed to AI and ii) the extent to which AI is a substitute or complement for labour in those occupations. Higher C-AIOE are at a higher risk of displacement.

Public services employment outlook

Public service jobs will not be immune to AI-driven labour market changes. 70% of jobs in Ireland's public administration and defence sector are exposed to AI, and most of those jobs are at a higher risk of displacement²¹⁴. The public sector will inevitably experience workforce changes due to AI integration, but the extent of disruption will vary across occupations.

As is the case in other industries, occupations whose work could more easily be replaced by AI have a higher risk of job loss (See Table 7). These roles – which have high exposure and low complementarity – would fall into the bottom right of the conceptual framework (See Figure 21). Generally, public sector workers who regularly engage in elementary data processing or administration are at a relatively higher risk of displacement. According to the Department of Finance report, the public sector jobs with a relatively high risk of job displacement are Local Government Administrative Occupations (0.67% of total employment), National Government Administrative Occupations (1.67% of total employment), and Public Services Associate Professionals (0.27% of total employment²¹⁵).

Table 7: Civil service, health, and education jobs with high AI exposure and low complementarity

SOC Occupation	Complementarity	Exposure	C - AIOE
Local government administrative occupations	0.45	6.59	5.67
Health care practice managers	0.5	6.55	5.28
National government administrative occupations	0.53	6.46	5.04
Pharmaceutical technicians	0.53	6.04	4.68
Pharmacy and other dispensing assistants	0.53	6.03	4.69
Public services associate professionals	0.56	6.11	4.58
Inspectors of standards and regulations	0.56	6.11	4.58
Public services associate professionals	0.56	6.11	4.58
Inspectors of standards and regulations	0.56	6.11	4.58
Driving instructors	0.57	6.27	4.66

Note: The Complementarity Adjusted AI Occupation Exposure (C-AIOE) index identifies the occupations that are i) most exposed to AI and ii) the extent to which AI is a substitute or complement for labour in those occupations. The median values for AIOE and across all US SOC-201015 occupations are 6.002 and 0.576 respectively. Higher C-AIOE are at a higher risk of displacement.

²¹⁴ Ibid.

²¹⁵ Ibid.

Alternatively, many public jobs in the health care sector stand to gain significantly from AI integration. These roles – which have high exposure and high complementarity – would fall into the top right of the conceptual framework (See Table 8). High levels of personal interaction, emotional intelligence, and responsibility coupled with the push towards digitalisation make health care particularly well-positioned to leverage the productivity benefits of AI. Nurses and midwives, a female-driven occupation making up 2.90%% of total employment, have among the highest potential for AI gains²¹⁶. However, the quality of e-health in Ireland trails far behind the rest of the EU. This digital shortcoming could limit the ability of workers in Ireland’s health care sector to reap the benefits of AI²¹⁷.

High-gain public sector occupations outside of the medical field also reflect the importance of interpersonal interactions and responsibility. Elected officers and representatives, teaching professionals, housing officers, and social workers are all positioned to use AI to streamline time-intensive tasks, freeing up their time for more face-to-face work.

²¹⁶ Ibid.

²¹⁷ European Commission, *Ireland 2024 Digital Decade Country Report* (Brussels: European Commission, 2024), <https://digital-strategy.ec.europa.eu/en/factpages/ireland-2024-digital-decade-country-report> <https://digital-strategy.ec.europa.eu/en/factpages/ireland-2024-digital-decade-country-report>.

Table 8: Civil service, health, and education jobs with high AI exposure and high complementarity			
Occupation	Comp.	Exposure	C - AIOE
Medical practitioners	0.71	6.4	3.82
Nurses and midwives	0.71	6.13	3.67
Senior police officers	0.7	6.04	3.7
Elected officers and representatives	0.69	6.4	3.95
Senior professionals of educational establishments	0.68	6.47	4.09
Barristers and judges	0.67	6.63	4.27
Podiatrists	0.67	6.23	3.96
Health professionals n.e.c.	0.67	6.23	3.96
Occupational therapists	0.67	6.23	3.96
Education advisers and school inspectors	0.66	6.62	4.32
Primary and nursery education teaching professionals	0.66	6.52	4.27
Speech and language therapists	0.66	6.44	4.15
Secondary education teaching professionals	0.65	6.57	4.3
Further and higher education teaching professionals	0.65	6.39	4.21
Social services managers and directors	0.64	6.56	4.42
Residential, day and domiciliary care managers and proprietors	0.64	6.45	4.34
Nursery nurses and assistants	0.64	6.43	4.29
Teaching assistants	0.64	6.43	4.29
Educational support assistants	0.64	6.43	4.29
Social workers	0.63	6.44	4.4
Probation officers	0.63	6.44	4.4
Welfare professionals n.e.c.	0.63	6.44	4.4
Counsellors	0.63	6.44	4.4
Youth and community workers	0.63	6.24	4.24
Child and early years officers	0.63	6.24	4.24
Housing officers	0.63	6.24	4.24
Welfare and housing associate professionals n.e.c.	0.63	6.24	4.24
Psychologists	0.62	6.68	4.62
Therapy professionals n.e.c.	0.62	6.68	4.62
Teaching and other educational professionals n.e.c.	0.61	6.51	4.55
Careers advisers and vocational guidance specialists	0.6	6.61	4.7
Vocational and industrial trainers and instructors	0.59	6.57	4.7
Childminders and related occupations	0.59	6.05	4.34
Health services and public health managers and directors	0.58	6.6	4.81

Note: The Complementarity Adjusted AI Occupation Exposure (C-AIOE) index identifies the occupations that are i) most exposed to AI and ii) the extent to which AI is a substitute or complement for labour in those occupations. Higher C-AIOE are at a higher risk of displacement.

AI integration will create new needs within the government: 45% of the skills required by public sector workers are expected to change over the next five years²¹⁸. Despite these looming changes, public sector employees are less confident than private sector employees that their organisation will help workers develop new skills²¹⁹.

Ongoing efforts to support workers

Government efforts

The Irish Government is currently undergoing efforts to bolster technological capacity in the public sector. The Civil Service Renewal 2030 Strategy from the Department of Public Expenditure, NDP Delivery and Reform (DPENDR) calls for efforts to build up public sector digital skills to realise a “Digital First” culture. Along with existing professional and learning development programmes across public service organisations, DPENDR collaborated with Technological University Dublin to equip dozens of public servants with core AI skillsets through a certificate programme. OneLearning is also delivering courses to support AI adoption²²⁰. Programming is largely offered in classroom-based settings. This time-intensive approach is likely to be a substantial barrier to broad participation.

Ireland’s Budget 2025 acknowledges the need for expanded training opportunities, releasing €1.5 billion from the National Training Fund over six years to better fund research, further and higher education, skills development, and de-carbonisation. While it is likely that some of this funding will ultimately be used to further technological competencies in Ireland, the Budget does not directly address AI or digitisation²²¹.

Government officials in New South Wales have addressed the issue of time burdens by introducing on-job digital upskilling opportunities. Upskilling will be essential in ensuring that existing workers have the skills needed to thrive in the modern labour market. However, time constraints can limit participation. The regional Government of New South Wales addressed the challenge of time investment in AI-related upskilling by incorporating digital upskilling into on-the-job training programmes. The Digital Skills Program identified key skills required within Department of Regional New South Wales (DRNSW) roles and then used coaching and on-the-job upskilling modules to close gaps. Programme results were positive: over 90% of employees were satisfied and 85% reported improved applied skills²²².

Union activities

Since the Industrial Revolution, labour unions have advocated for protecting workers’ rights in the face of emerging technologies. The rapid introduction of GenAI promised to disrupt existing patterns of work across a broad range of industries, heightening anxiety and driving fears of job loss. As a result, workers and their unions have begun speaking out about their concerns about the future of employment²²³. This engagement is critical to the success of organisations undergoing digital transformation: A 2023 OECD survey of financial and manufacturing workers found that employers who consulted with workers or their representatives had smoother and more positive AI integration processes²²⁴. These findings illustrate the positive role of union advocacy in ensuring digital transformations.

²¹⁸ World Economic Forum. 2023a. *Future of Jobs Report 2023*. World Economic Forum. Available at: <https://www.weforum.org/publications/the-future-of-jobs-report-2023/>.

²¹⁹ PWC. 2023. *Global Workforce Hopes and Fears Survey 2023*. Available at: <https://www.pwc.com/gx/en/issues/workforce/hopes-and-fears.html>.

²²⁰ Department of Enterprise, Trade and Employment. 2023. *Progress Report on Implementation of the National AI Strategy: AI - Here for Good*. Available at: <https://enterprise.gov.ie/en/publications/progress-report-national-ai-strategy.html>.

²²¹ RTE News, “€1.5 Billion Boost for National Training Fund,” RTE.ie, October 2024, <https://www.rte.ie/news/business/2024/1001/1473014-national-training-fund/>

²²² Bradley, Chris, Jules Carrigan, Gurneet Singh Dandona, and Seckin Ungur. “Generative AI and the Future of Work in Australia.” McKinsey & Company, February 12, 2024. <https://www.mckinsey.com/industries/public-sector/our-insights/generative-ai-and-the-future-of-work-in-australia>.

²²³ Hoffman, Christy. “Why Empowered Workers Are Key for AI to Reach Its Full Potential.” World Economic Forum, January 11, 2024. <https://www.weforum.org/agenda/2024/01/unions-empowered-workers-ai-success/>.

²²⁴ Lane, Marguerita, Morgan Williams, and Stijn Broecke. “The Impact of AI on the Workplace: Main Findings from the OECD AI Surveys of Employers and Workers.” *OECD Social, Employment and Migration Working Papers*, March 27, 2023. <https://doi.org/10.1787/ea0a0fe1-en>.

In some industries where AI threatens to displace workers, unions are gaining control over the ways in which employers can deploy AI. In 2023, members of the UNI Global Union affiliate the Writers Guild of America (WGA) became the first workers to go on strike with GenAI as a central issue²²⁵. Members of Screen Actors Guild - American Federation of Television and Radio Artists (SAG-AFTRA) quickly went on strike as well. Like most public sector employees, WGA and SAG-AFTRA members were largely insulated from earlier waves of automation²²⁶. However, AI shifted this paradigm and prompted fears that studios could use AI to eliminate writing and acting jobs. Amidst these concerns, SAG-AFTRA and WGA secured historic victories over the studios intended to protect Hollywood jobs from GenAI²²⁷. The Culinary Workers Union representing Las Vegas casino workers won a contract offering a severance package of \$2,000 USD for each year of the employee's tenure if their role is eliminated due to "technology or AI"²²⁸.

Other unions are forging partnerships with major technology companies to influence the development of AI technologies. The AFL-CIO – the largest federation of unions in the United States made up of 60 unions representing about 12.5 million workers – reached an agreement with Microsoft by which the tech giant and major partner of OpenAI would develop AI in a manner that includes the voice of the workers. The partnership includes AI education initiatives, offering both formal learning opportunities and on-demand resources to help workers understand AI's evolving role. Additionally, the collaboration will focus on shaping AI and workforce-related policies, advocating for legislation that equips workers with the skills and support needed to succeed in an AI-powered economy²²⁹.

Recommendations

The Government has the opportunity to protect employees and promote a competitive modern economy through strategic workforce development activities. Targeted policy solutions include:

- **Incorporating the principle of complementarity into planning:** Policymakers can explore which AI applications are likely to augment or replace labour, and advocate for policies that complement workers to boost productivity while avoiding tools that replace human tasks.
- **Create upskilling programmes designed to boost worker complementarity:** The Government should collaborate with unions to broaden access to training programmes that help workers develop skills that are less easily replaced by AI, such as interpersonal communication and nuanced problem-solving. These programmes should be targeted specifically at high-risk workers—those whose roles face high exposure to AI automation and low complementarity with AI. Offering on-the-job training will further enhance accessibility by minimizing time burdens for participants.
- **Foster informed awareness:** Over one third of respondents to Fórsa's recent survey were unaware of the AI activities happening in their workplace. This information gap prevents workers from leveraging the benefits of AI and fosters unease with automated technologies. The Government can accelerate responsible digital transformation by increasing worker familiarity with AI best practices and risks through trainings and information campaigns.

²²⁵ Hoffman, Christy. "Why Empowered Workers Are Key for AI to Reach Its Full Potential." World Economic Forum, January 11, 2024. <https://www.weforum.org/agenda/2024/01/unions-empowered-workers-ai-success/>.

²²⁶ Scherer, M. 2024. "The SAG-AFTRA Strike Is Over, but the AI Fight in Hollywood Is Just Beginning." *Center for Democracy and Technology*. Available at: <https://cdt.org/insights/the-sag-aftra-strike-is-over-but-the-ai-fight-in-hollywood-is-just-beginning/> (accessed May 21, 2024).

²²⁷ Ibid.

²²⁸ Glass, A. 2024. "Unions Give Workers a Voice Over How AI Affects Their Jobs." *Center for American Progress*. Available at: <https://www.americanprogress.org/article/unions-give-workers-a-voice-over-how-ai-affects-their-jobs/>.

²²⁹ Romsey, Joseph. "Microsoft and AFL-CIO Partner on Developing AI." *Society for Human Resource Management*, January 22, 2024. <https://www.shrm.org/in/topics-tools/news/technology/ai-microsoft-unions-partnership>.



Conclusion



Conclusion

Throughout the history of the Irish State, unions have played a central role in guaranteeing fairness and protection for workers, while advocating more broadly for a fair and just society. Unions today continue to push for a more sustainable and equitable society centred on quality public services and a recognition of human rights. As the issues of climate action, AI, and the rising cost of living present new challenges and opportunities, unions must continue to be consulted in the process of creating jobs which promote fair and quality workers' rights and that foster social and economic resilience. Using analysis of ongoing policy debates and looking to examples of innovative international models, we have proposed the following recommendations:

Climate action

- **Major Government investment in green jobs:** Increased and sustained investment is made to create jobs in new and emerging green occupations and the provide upskilling for those transitioning occupations in line with current climate and biodiversity plans.
- **The development of Government-funded training to ensure skills for green energy and climate resilience:** An ambitious Government-backed programme of paid training opportunities is developed for people to gain skills related to clean energy, conservation, circular economy, and climate resilience, ensuring well paid jobs in these sectors in the coming years.
- **Putting local communities at the centre of just transition:** A 'community wealth building' approach be adopted across Ireland to utilise climate action as a conduit for channelling the public spend away from centralised responses to climate change towards sustainable local development and employment opportunities.

Artificial intelligence

- **Incorporating the principle of complementarity into planning:** Policymakers can explore which AI applications are most likely to augment or replace certain occupations, and advocate for policies that complement workers to boost productivity and ensure workers benefit from their introduction.
- **Create upskilling programmes designed to boost worker complementarity:** The Government should collaborate with unions to broaden access to training programmes that help workers develop skills that are less easily replaced by AI, such as interpersonal communication and nuanced problem-solving. These programmes should be targeted specifically at high-risk workers—those whose roles face high exposure to AI automation and low complementarity with AI. Offering on-the-job training will further enhance accessibility by minimizing time burdens for participants.
- **Foster informed awareness:** Over one-third of respondents to Fórsa's recent survey were unaware of the AI activities happening in their workplace. This information gap prevents workers from leveraging the benefits of AI and fosters unease with automated technologies. The Government can accelerate responsible digital transformation by increasing worker familiarity with AI best practices and risks through trainings and information campaigns.

Cost of living

- **Price control mechanisms for essential goods:** The Government should introduce a pilot programme to determine if price caps on essential items like food and energy would be viable in Ireland. This would involve careful monitoring and evaluation to understand the impact on affordability and competition and involve enforcement of existing competition laws to prevent 'excessive pricing' by companies with dominant market positions.
- **Invest in domestic food and renewable energy production:** Increase investment in domestic food and energy production. Reducing our reliance on imported food, especially from regions vulnerable to climate-related risks, will ensure greater sustainability, align with carbon-reduction targets, and limit exposure to future supply-chain shocks.
- **Expand free and subsidised transport initiatives:** Subsidise transport for civil and public service workers, exploring options for implementing free or reduced fares universally or targeted at public service workers. This could ease commuting costs for low-income workers and increase public transport accessibility, thus reducing congestion and environmental impact.
- **Accelerate public transport infrastructure upgrades through increased investment:** With a focus on expanding services to underserved areas surrounding urban centres, prioritise projects that will have a high impact on commuting times, such as Dart+ and MetroLink, to make public transport more viable for public service workers.
- **Enhance urban planning to reduce commuting times:** Pursue compact and high-density development, aligning new urban developments with Ireland's National Development Plan and Climate Action Plan, promoting higher-density growth in urban centres. This approach supports a '15-Minute City' model, reducing the environmental impact of commuting and creating walkable, convenient neighbourhoods.
- **Encourage remote work solutions:** Extend flexibility to civil and public service workers by enabling remote working where feasible. For example, telemedicine has demonstrated benefits in healthcare, suggesting similar innovations could be explored in other sectors.
- **Introduce a four-day work week:** A four-day work week would benefit workers by improving work-life balance. Findings from the Irish cohort of participants in a study exploring the impact of adopting a four-day work week show improvements in self-reported productivity and wellbeing as well as reductions in the levels of commuting done by car.

By supporting a more interventionist approach to public policy, unions can strengthen social solidarity and collective action—key components for navigating the challenges ahead. Unions' ability to mobilise at local, national, and international levels equips them to influence policies that address the pressing needs of workers today and situates them as vital to advancing long-term structural changes that anticipate challenges on the horizon. In this sense, unions are not only defenders of workers' rights but also advocates for a broader, more inclusive vision for the future of work, public goods, and society.



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