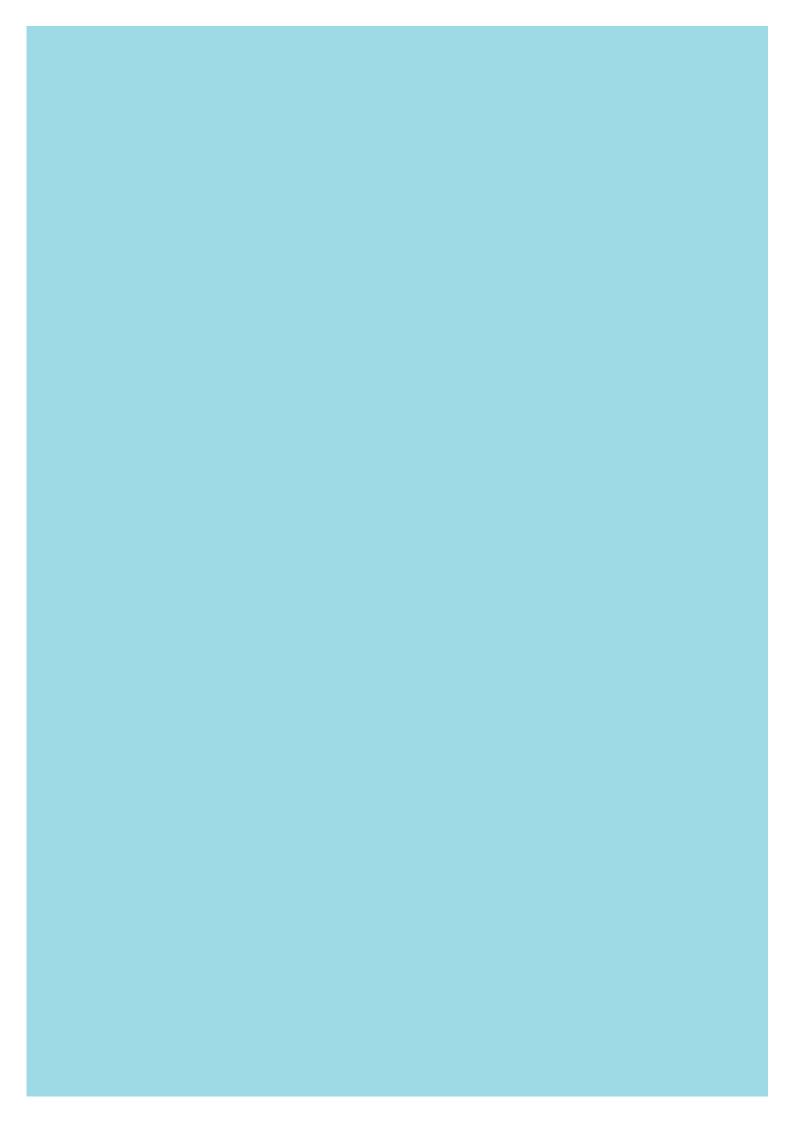


# **White Paper on Enterprise**

2022 - 2030





# Taoiseach's Foreword

The last few years, since the most recent review of national enterprise policy in 2018, have been eventful and challenging for many businesses. Brexit, the COVID-19 Pandemic, inflation and the re-emergence of war in Europe have presented new and difficult challenges for our economy. However, despite this turbulence, the Irish economy is in good health, with an enviable performance across a range of important measures.

Ireland has been the fastest growing economy in Europe over the past decade and the economy is forecast to outperform global GDP growth over the next two years. We have more people at work than ever before, low youth unemployment, and female labour market participation is at an all-time high.

Our economic model is founded on a well-established and successful pro-enterprise policy framework, providing a stable and sustainable regulatory and tax environment, with sound management of the public finances, and significant investment in the infrastructure and skills required to ensure our competitiveness. This approach has underpinned our success in providing jobs and opportunities, both by growing indigenous companies, and by ensuring we remain an attractive place for Foreign Direct Investment.

However, the pace and nature of change now underway globally, in multiple ways, means it is timely to review and refresh our approach, to take into account new and emerging risks, but also the very significant opportunities the coming years will bring. From strong foundations, our ambition is to ensure our future success is based on sustainability, innovation, and increased productivity. This will be especially true for our efforts to develop and grow our indigenous enterprises and take advantage of Irelands unique potential in the green and renewable technology sector.

In the coming years we will undertake a renewed drive to address core competitiveness issues such as infrastructure, housing, energy, innovation, talent and skills. To maintain Irelands attractiveness as a place to live, work, invest in and succeed internationally from, we will also remain adaptable and responsive to changing times while acknowledging and addressing our weaknesses.

Our renewed enterprise policy will allow us to build the resilience and sustainability of our economy as we engage with the two dominant trends of the twenty first century, decarbonisation and technological change. To meet the challenges, and ensure we are positioned to take advantage of the opportunities these will bring, we will support businesses to invest in these transitions, while also helping them broaden and deepen their innovation capacity.

Leis an bPáipéar Bán nua seo maidir le Beartas Fiontraíochta, tá treochlár soiléir á leagan amach ag an Rialtas chun a chinntiú go leanfar de rath a bheith ar an ngeilleagar le go ndéanfaidh sé fónamh do mhuintir na hÉireann, trí phoist a sholáthar agus caighdeáin mhaireachtála a fheabhsú, sna deicheanna de bhlianta atá amach romhainn.



Michael Martin

Micheál Martin TD, An Taoiseach

# Tánaiste's Foreword

Our long-established approach to enterprise policy has served us well. Our formula has been to invest in our people and to welcome talent to our shores; combined with a stable and attractive tax offering; political stability; a pro-business environment; and widespread public confidence and support for our economic model as an open, advanced economy at the heart of the European Union.

One of our strengths as a small nation is our agility and an ability to respond quickly to changing conditions. Given the global upheaval of the last number of years, it is timely to consider the relevance and efficacy of our enterprise strategy. The outcome, articulated in this White Paper, is one of adaption rather than a major departure from the proven and consistent approach we have pursued to date; it represents evolution rather than revolution.

Ireland's good track record as a great place to do business has provided the confidence business needs to invest and to create employment. Foreign Direct Investment (FDI) will remain a central element of our economic model. The recent performance of our FDI sector has exceeded all expectations, but we will not allow ourselves to become complacent, given increasingly challenging conditions globally. We will continue to attract and retain overseas investments by ensuring our value proposition is among the best in the world. Through our policy choices and investments, we will work with enterprises on the green transition and make Ireland a sustainable and environment-friendly location for FDI.

Ireland has a very open economy, enjoying a trade surplus with huge exports relative to our size, but we have relatively few large indigenous exporters compared to our peers. There are some extraordinary Irish-owned companies who are the best at what they do globally, but these are too few in number. A priority for Government, as set out in this White Paper, is to increase the number of Irish-owned firms that are succeeding on the world stage. This will require relentless focus and perseverance in the years ahead. Through interventions that facilitate enhanced management capabilities, provide access to competitive finance options and nurture strong sectoral and technological ecosystems, we will fuel entrepreneurship and enable companies to scale and succeed from Ireland.

We will also equip locally trading businesses with the know-how to fulfil their potential, assisting them to align their business models with the transition to a net zero economy and boost their productivity through innovation, digitalisation and skills development.

One of my priorities as Minister for Enterprise, Trade & Employment has been to create jobs in every part of the country and facilitate balanced regional development. Through Project Ireland 2040 and Housing for All, the Government will step up our investment to overcome bottlenecks that could hinder delivery of this White Paper. Effective use of clustering will strengthen linkages between companies of different sizes and stages of development, regionally, nationally and across the island, and enhance opportunities for Irish enterprise across industries and technologies. Dublin is the powerhouse of the economy, but we are committed to promoting policies that strengthen the enterprise potential of all parts of the country.

My special thanks to officials in the Department of Enterprise, Trade & Employment and its offices and agencies for all their work on this paper over the course of the year. I also appreciate the views of everyone who contributed as part of the public consultation and the input from the international advisory panel.

I believe our enterprise policy, as set out in this White Paper, will build on the strong foundations already in place and ensure businesses in Ireland are positioned to seize opportunities to grow and succeed. In implementing this approach, my colleagues and I will work across Government to strengthen national resilience and secure sustainable growth that will yield rewarding jobs and improved standards of living throughout the country.



Jes Vont

**Leo Varadkar TD**Tánaiste and Minister for Enterprise,
Trade and Employment

# Minister Ryan's Foreword

This White Paper places decarbonisation at the centre of enterprise policy. It recognises the opportunities that arise as we transition to a climate neutral, sustainable and digitally connected Ireland. We will be at the forefront of what is a global transition, maximising the potential in emerging technologies and markets, ensuring a strong reputation as a leading 'green' economy.

This approach is imperative in order to meet our emissions abatement and energy efficiency targets and to underpin our future competitiveness. Decarbonisation and energy efficiency requirements will require all business to take decisive and timely action. Reflecting this, enterprise policy will be orientated to assist firms in meeting the costs of decarbonisation and exploiting opportunities of the low carbon economy. Carbon abatement will become a core objective for our enterprise agencies. We will help businesses reduce their reliance on fossil fuels and invest in energy efficiency in the coming years through government supports including grants and loans.

This vision aligns with the EU Green Deal, which aims to "transform the EU into a fairer and more prosperous society, with a modern, resource-efficient and competitive economy, with no net emissions of greenhouse gases by mid-century". It also accords with the United Nation's Sustainable Development Goals (SDGs) which will be embedded in enterprise policy, supporting firms to apply their creativity and innovation to solving sustainable development challenges.

The White Paper builds upon the work of the Climate Action and Low Carbon Development (Amendment) Act 2021 and Sectoral Emissions Ceilings, requiring a 35% reduction in emissions arising in our manufacturing sectors. In addition, all businesses will need to reduce the environmental and energy impacts of their buildings, heating, transport and supply chains. While there will be costs, there will also be opportunities for efficiencies and creating new types of value for customers through 'circular' and decarbonised products and services.

Incredible opportunities are presented by this new economy. These include electricity generated by offshore wind, backed up by battery storage and interconnection, and of course, green hydrogen, leading to new enterprises and regional development such as developing our ports.

Digitalisation and innovation will be critical in decoupling economic growth from emissions. Digital transformation is opening up new opportunities in areas such as green technology, sustainable product design, green finance and digital services. These sectors contribute to both high quality employment and decarbonisation.

Sustained investment in digital infrastructure, including connectivity and cybersecurity, provide the foundations for this digital economy. We are delivering this connectivity through improved broadband capacity and backhaul networks.

Together with my colleagues across Government, I look forward to delivering on this transformative agenda, delivering enhanced competitiveness and decarbonisation across our economy.



Care by our

Eamonn Ryan TD Minister for the Environment, Climate and Communications

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# **Executive Summary**

### **Overview**

#### **2030 VISION**

Our vision is for Irish-based enterprise to succeed through competitive advantage founded on sustainability, innovation and productivity, delivering rewarding jobs and livelihoods.



Across Government, we will work to realise this vision by prioritising actions that enable strong, resilient growth and maintain full employment, consistent with achieving our net zero commitments. We will strive to ensure an attractive quality of life in all parts of Ireland with high productivity, well-paid jobs.

Our vision accords with the **EU Green Deal**, which aims to "transform the EU into a fairer and more prosperous society, with a modern, resource-efficient and competitive economy, with no net emissions of greenhouse gases by mid-century". Our overriding policy focus will be on transitioning to a low carbon, sustainable economic model both to meet our emissions abatement targets and to seize the economic opportunities arising. Decarbonisation will require businesses to take decisive and timely actions and will involve significant structural changes. We will

ensure that Ireland is at the forefront of this new industrial revolution, maximising its potential in emerging technologies and markets, with a strong reputation as a leading 'green' economy. This vision also aligns with the United Nation's Sustainable Development Goals (SDGs) which we will embed in enterprise policy, supporting firms to apply their creativity and innovation to solving sustainable development challenges.

As part of Government's **Shared Island initiative**, opportunities for North/South cooperation to enhance the investment proposition of the island as a whole and in border regions will continue to be pursued, including on research and innovation, skills, transport connectivity, renewable energy, and development of sectoral ecosystems across both jurisdictions.

#### **CONTEXT**

Project Ireland 2040, launched in 2018, set out an integrated spatial and investment strategy to accommodate population growth of approximately one million between 2016 and 2040, with some 660,000 additional people in employment. With our population now growing faster than anticipated, and as technology transforms the labour market, a responsive, well-resourced enterprise policy will ensure the maintenance of full employment over the period to 2030 and beyond.

Ireland's economic model continues to generate positive outcomes in terms of jobs, wealth-creation and improved living standards. Over many decades, consistency in our enterprise policy stance has provided the confidence for business to invest and create employment and the stability and transparency of our enterprise policy ecosystem has been a key strength. We have a diversified mix of innovative companies with a significant cohort of world leading businesses across the key sectors and technologies that underpin modern economies, such as in ICT, life sciences, medical technology, engineering, and international financial and business services. Ireland's strength in these highly productive sectors has served us well, with the economy remaining strong in the face of a range of challenges over the last decade.

#### THE DECADE AHEAD

Looking ahead, we will build on these advantages and enhance our economy's resilience by strengthening our Irish-owned exporting sector and equipping locally trading businesses with the know-how to fulfil their potential. Our track record for globally successful Irishfounded and located start-up businesses continues to improve, with several companies achieving unicorn status in recent years. However, both the pipeline of high-growth and population of scaled Irish firms need to be expanded. In the years ahead, we will match our ambition for continued strong FDI performance with a focus on strengthening Irish-owned firms. We will embed sustainable business models and boost productivity in these firms through investment in innovation, digitalisation and management capacity, leading to increased exports from Irish-owned companies and a more diversified and resilient trade portfolio. As part of this, we will encourage Irish businesses to take full advantage of the EU Single Market and to strike out for global markets fully utilising the extensive network of EU Free Trade Agreements (FTAs).

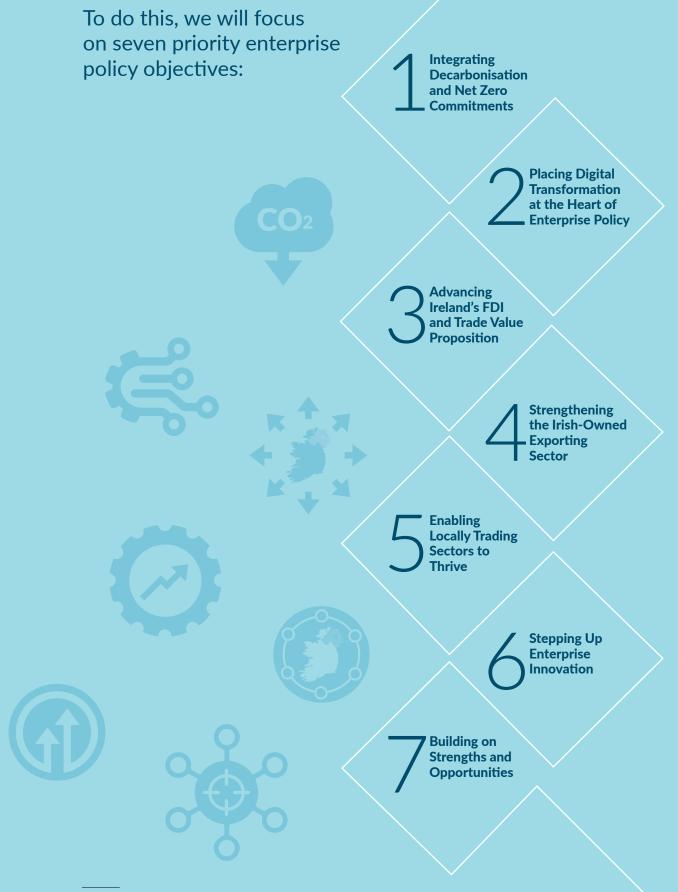
Building on our track record as a place to start and grow successful global enterprises, we will ensure our proposition for foreign investment stays best-in-class. As global competition for Foreign Direct Investment (FDI) intensifies, Ireland will need to stay agile and ambitious to win investment. Our exporting companies face increasing challenges in a fracturing trading landscape, characterised by geopolitical tensions, and risks of regionalisation of trade. We also need to increase the domestic value capture from our Irish-based multi-national enterprises (MNEs) by enhancing linkages and spillovers to Irish-owned firms.

#### **COMPETITIVE ENTERPRISE ENVIRONMENT**

To achieve these ambitious objectives, we will ensure that we stay competitive and that we have the right framework conditions for new firms to emerge and existing businesses to succeed. Through Project Ireland 2040 and Housing for All, the Government is committed to substantial investment to overcome constraints in areas such as transport infrastructure, energy, water, housing, and climate adaptation. Unless overcome, these bottlenecks could hinder delivery of Government objectives in enterprise policy, as well as in other areas, and the Government is committed to resolving planning-related and other obstacles. We will also ensure that we maintain an agile, efficient regulatory regime that promotes competition and avoids excessive costs for business. We will maintain and refine our competitive business taxation regime and ensure that Ireland continues to be an attractive destination for talent and that our education and training systems provide people with the skills to thrive in a low carbon and digitalised society. Innovation will remain a cornerstone of our enterprise policy and we will enhance our international reputation for research that supports globally competitive enterprises operating at the technological frontier.

We recognise that, as a small economy, sustaining and building competitive advantage in strategic areas requires deliberate policy choices. Our enterprise policy will build on the elements of the ecosystem that are working well, seize opportunities to underscore our competitiveness and resilience into the future, and make the structural changes required to offset risks and vulnerabilities and to deliver a sustainable, resilient Irish economy to 2030 and beyond.

# **Enterprise Policy Priorities to 2030**



# 1

Integrating
Decarbonisation
and Net Zero
Commitments



35% Emissions Reduction from Industry by 2030

45% Emissions Reduction from Commercial Built Environment by 2030

Placing Digital Transformation at the Heart of Enterprise Policy



Embedding decarbonisation into enterprise policy is no longer a choice but an environmental and economic imperative. Failing to do so would not only jeopardise our ability to meet our climate action commitments but would also be detrimental to our competitiveness.

Enterprise policy will be orientated to help firms meet the costs of decarbonisation and position them to exploit the opportunities of the low carbon economy. Carbon abatement will become a core objective for our enterprise agencies and new industrial development will be less reliant on fossil fuels.

We will take action to help Irish-based firms fully realise the potential of the global green economy by becoming leaders in related innovations and product and service developments. We will leverage the competitive advantage of Ireland's abundant renewable energy capability, particularly in offshore wind, to transform energy use by industry, provide greater energy security and price stability, generate energy exports and develop a domestic supply chain and exportable expertise in renewable energy.

To ensure competitiveness, drive productivity and enable a decoupling of economic growth from resource consumption, we will aggressively pursue our ambition to become a digital leader as set out in Harnessing Digital - the Digital Ireland Framework. Our enterprise agencies will act as advocates for digital transformation, with the agenda being integral to their engagement with business. We will accelerate adoption of digital technologies across enterprise through capital grants, training and consultancy. Increased investment in high-level digital skills, accompanied by efforts to boost digital education across the wider workforce, will complement this. We will continue to invest in digital infrastructure and progress digitalisation of the public service, using public procurement to support innovative digital Small and Medium Enterprises (SMEs). Building on existing strengths, we will position Ireland at the frontier of Advanced Manufacturing. We will continue to advocate for a digital trade approach that is open and fair, enabling Irish-based firms to avail of global digital opportunities.

# Advancing Ireland's FDI and Trade Value Proposition



20%
Increase in IDA
Client expenditure
in Ireland by 2024

At least half of all FDI investments between 2021 and 2024 to be located outside of Dublin

FDI and trade will remain central to our growth model and economic strategy. Our response to changing globalisation patterns and associated market and supply chain fragmentation will be flexible and agile while providing continuity and stability as an investment destination of choice.

We will leverage our green transition as a core component of our proposition to overseas investors by showcasing Ireland as a climate-friendly and sustainable business environment. We will strengthen linkages between foreign and Irish-owned firms, developing stronger ecosystems that will help local firms to embed themselves in value chains of FDI-intensive sectors and to benefit from positive spillovers.

4

Strengthening the Irish-Owned Exporting



2.5%
Average annual growth in Irish-owned enterprise

productivity by 2024

50%
Increase in the number of large Irish exporting companies by 2030

**2,000**Additional Irish-owned exporters by 2030

Over two-thirds of Enterprise Ireland assisted new jobs between 2022 and 2024 will be created outside of Dublin To attain sustainable, diversified growth, it is critical that we enable the Irish-owned exporting sector to fulfil its potential and build a strong domestic growth engine.

We will focus our efforts on enhancing productivity, particularly among medium-sized firms, increasing the start-up rate and the number of exporters.

Enterprise Ireland will support scaling, working with ambitious Irish companies to strengthen their leadership and management capabilities and skills. The Local Enterprise Offices (LEOs) will help smaller prospective exporters. Through coherent and sustained policy intervention, we will foster an environment where companies with global potential can scale and thrive here.

# 5

Enabling Locally Trading Sectors to Thrive



Average annual increase in multifactor productivity growth in domestic sectors of the economy by 2025

Given the importance of the locally trading sectors to employment, regional development and placemaking, the Local Enterprise Offices (LEOs) will continue to enhance their advisory services for locally trading firms, helping them to improve productivity through digitalisation and reducing energy and carbon emissions. Training, consultancy, and mentoring services will be made available to more locally trading business with over 10 and up to 50 employees. Given the number of enterprises, we will continue to use one-to-many models to engage with this cohort of firms.



Stepping Up Enterprise Innovation



Gross (public and private) Expenditure on R&D to

2.5% of GNI\* by 2030

Number of High-Potential Start-Ups increased by

**20%** by 2024

For an advanced economy like Ireland, innovation is the best way to generate sustainable, long-term productivity growth. Innovation is central to the creation of new products, services and firms and will be fundamental to our enterprise policy approach over the next decade. We will redouble our efforts to broaden and deepen innovation capability across enterprise and stimulate disruptive innovation to drive higher productivity and assist enterprises to enter new markets and avail of new opportunities. We will increase our overall expenditure on Research and Development (R&D) to 2.5% of GNI\* by 2030, with the ambition to position Ireland as an Innovation Leader. We will strengthen links and collaboration between our public and business researchers, and internationally, increasing entrepreneurship activity and encouraging innovative start-ups, with an ambition to achieve a 20% increase in the number of High-Potential Start-Ups by 2024.

# 7

# Building On Strengths and Opportunities



5 National cluster organisations funded under a new National Clustering Programme by 2025

Unemployment not to exceed one percentage point of national unemployment rate in any region

We will introduce a centrally coordinated, crossgovernment approach to clustering, with ministeriallevel sponsorship, aimed at sustaining and building competitive advantage in areas of strategic national priority and potential. We will encourage the formation and strengthening of national cluster organisations and maximise the scale, impact and international visibility of Irish clusters, leveraging the benefits of proximity and co-location to boost regional development. Cluster organisations will facilitate collaboration and collective action between related companies, nationally and across the island, and with Higher Education Institutions and other public sector bodies. By embedding firms as part of highly innovative globally leading clusters, we will help more companies to operate at technology frontiers. Accelerating decarbonisation and the net zero transition will be a core focus.

## **Implementation**

Implementation of this White Paper will be effected through a structured monitoring process and ongoing tracking of progress against identified targets and agreed deliverables. We will prioritise capital expenditure on enterprise to reflect our strategic objectives and ensure that the strategies and activities of the enterprise development agencies align with the vision for enterprise policy articulated here. We will utilise strategic foresight to facilitate an agile approach that enables us to adapt to new risks and opportunities as they emerge.

Achieving our ambition will require multi-stakeholder engagement, cross-government coordination, and significant capital investment as we look to build on existing foundations in a time of strong head winds.



# **1.0** International and Economic Context

### 1.1 Overview

Ireland's enterprise policy, pursued consistently for over half a century, has seen it develop into one of the foremost small advanced economies (SAE) globally. An approach predicated on participation in the global economy and attraction of inward investment by highly productive multinational enterprises (MNEs) in cutting edge sectors, has seen the Irish economic model deliver strongly for our society.

The most recent review of Ireland's enterprise policy – Enterprise 2025 Renewed<sup>1</sup> – was published in March 2018 with the aim of ensuring that enterprise policy remained robust in the face of then-emerging changes in the global landscape. Since then, Ireland's economy - and its enterprise sector - has continued to perform strongly. Enterprise 2025 Renewed set a target of having 2.3 million people at work by 2020. This was surpassed in mid-2019 and there are now more than 2.5 million people working in Ireland. This is reflected in the current low rate of unemployment (4.4% in November 2022), with the strategy's target of 5.5% by 2020 met by December 2018. The strategy set out a variety of other targets, such as regional unemployment rates being not higher than one percentage point above national unemployment rate by 2020, which has also since been achieved. While investment in RD&I (GERD<sup>2</sup>) reached €4.6 billion in 2020, it fell short of the target of 2.5% of GNP and stood at 1.6% of GNP (or 1.2% of GDP). In terms of GNI\*, this RD&I intensity rose to 2.2% by 20203. This performance took place against the backdrop of the disruptions caused by Brexit and COVID-19.

More recently, Russia's invasion of Ukraine has led to a further dislocation of international supply chains and levels of price inflation not seen in western economies for several decades. As such, there remains considerable uncertainty and, while Ireland's economy has proven resilient to recent external disruptions, it remains sensitive to global changes through numerous channels. Ireland is particularly exposed to developments in global value chains, given its comparatively high dependence on foreign produced inputs in the production of goods for exports.

More generally, any further shifts towards de-globalisation induced by the pandemic, or by geopolitical factors, represents a threat to Ireland's highly open export-oriented economic model. These risks are amplified by certain features of the Irish economy, including the high share of output and exports concentrated in a small number of heavily internationally orientated sectors.

<sup>1.</sup> Enterprise 2025 Renewed, 2018, Department of Enterprise Trade and Employment.

<sup>2.</sup> GERD is defined as the total expenditure (current and capital) on R&D carried out by all resident companies, research institutes, university and government laboratories, etc., in a country. It includes R&D funded from abroad but excludes domestic funds for R&D performed outside the domestic economy. See: Innovation - CSO - Central Statistics Office.

<sup>3.</sup> The strategy also sought to make Ireland one of the Top 5 most competitive small countries in the world by 2020. At the time of writing, the relevant rankings data has not yet been published.

#### **IRELAND: A SMALL ADVANCED ECONOMY MODEL**

Like other small advanced economies (SAEs), the open, rules-based economic and political system that has prevailed for several decades has played a critical role in the growth and prosperity of Ireland.

This highly favourable global environment, including our access to the European Single Market, has enabled Ireland, through a well-designed and executed policy stance, to position itself as an attractive destination for enterprise development.

Figure 1: Ireland's Global Rankings

Life Satisfaction 1st of 31

Digital Economy and Society 5th of 28

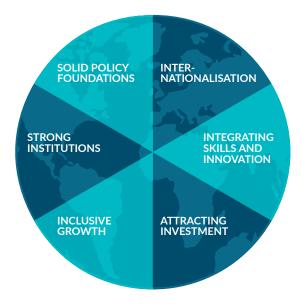
Human Development Index 8th of 191

Global Innovation Index 19th of 132

Country Competitiveness 11th of 63

Source: IMD Competitiveness Rankings, Global Innovation Index (GII) WIPO, Human Development Index UN, The Digital Economy, and Society Index (DESI), Eurostat The trend towards increasing globalisation witnessed over recent decades, underpinned through enhanced economic and political cooperation between countries and regions, has enabled SAEs such as Ireland to prosper. Whilst there is no single enterprise model that encompasses all SAEs, there is a series of common threads in terms of policy formulation and implementation. These include above average performance in the areas of internationalisation, skills and innovation, investment, inclusive growth, institutions, and policy foundations. Ireland, like other SAEs, typically out-performs larger economies in both economic performance (including competitiveness and innovation), as well as wider social outcomes for their respective populations (including educational attainment).

Figure 2: Key Features of the SAE Economic Model

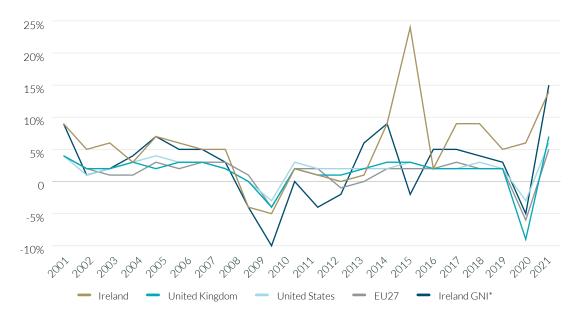


### 1.2 Economic Performance and Outlook

Ireland's economy and society has undergone a transformation over the past two decades. Preliminary Census 2022 estimates indicate a population of 5.1 million persons, the highest since the 19th century. Over the past 20 years, the population of Ireland has grown by 1.2 million people, an increase of 31% in a period when the population of other European countries stagnated or declined4. The size of the economy has also increased significantly over the past 20 years with real GDP increasing by 135% and real Modified Domestic Demand<sup>5</sup> by 56% between 2001 and 2021. In addition, the labour force has experienced significant growth, increasing by 37.8%, while the total numbers in employment increased by over onethird (37.3%) between 2001 Q4 and 2021 Q4 (from approximately 1.8 million to 2.5 million).

The Irish economic model, and the enterprise policy on which it is built, is undoubtedly performing well and Ireland has been the fastest growing European economy from 2013 to 2021. Looking ahead, Ireland is forecast to outperform global GDP across 2022 and 2023. Risks to the economic outlook have increased significantly over the course of 2022 as higher inflation, rising interest rates and lower confidence are likely to hold back consumer spending and business investment. Medium-term forecasts from the Department of Finance project real GNI\* growth of 2.5% in 2024 and 3.1% in 2025.

Figure 3: GDP Growth, 2000-2020



Source: OECD, CSO

<sup>4.</sup> The total population of current European Union Member States has only increased by 4% since 2001.

<sup>5.</sup> Modified (final) Domestic Demand, a proxy for the domestic economy, is the sum of personal and government consumption and investment, excluding investment in imported IP and aircraft for leasing. It also excludes changes in the value of stocks.



Figure 4: IMF and OECD Near-Term GDP Forecasts, 2021-2023

Source: OECD June 2022, IMF October 2022

The pandemic resulted in a significant economic shock to the Irish and wider global economies, as activity was disrupted to control the spread of the virus. The pandemic coincided with the economic and societal impacts of the UK's withdrawal from the EU. Despite this, economic activity rebounded strongly as the severity of the pandemic receded. However, the impact of the pandemic was uneven across business sectors. Sectors with higher shares of SMEs were among those worst affected by COVID-19 restrictions, and have recovered more slowly during 2022 than other, often multinational, dominated areas. As the economy recovered rapidly, new challenges have arisen. Demand has often outpaced supply and, combined with ongoing supply chain dislocation, has led to capacity constraints in parts of the economy, putting upward pressure on prices.

In recent quarters, the global economic outlook has become significantly more downbeat and uncertain, with lower confidence and rising inflation stifling the burgeoning recovery in the aftermath of COVID-19 related disruptions. In its World Economic Outlook Report October 2022<sup>6</sup>, the IMF revised its global growth forecast for 2023 downwards to 2.7%. The IMF noted that this is the weakest growth profile since 2001 (omitting the Global Financial Crisis and the acute phase of the COVID-19 pandemic). Inflationary

pressures have been mounting globally since the latter half of 2021, due to the rapid recovery in consumption in the aftermath of COVID-19, international supply chain bottlenecks, and base effects relating to weak price trends in 2020. The Russian invasion of Ukraine in February 2022 has put further strong upward pressure on global prices, particularly in energy and food markets, with many countries now recording the highest rates of inflation since the 1970s. The Department of Finance<sup>7</sup> has noted that the risks associated with 'stagflation' – weaker growth alongside higher inflation – are building within the economy.

More recent developments in the global tech sector underline the cyclical and variable nature of multinational performance, and are a reminder that Ireland is not immune – in terms of employment or revenue impacts – from changes in investor sentiment globally.

Finally, the impact of rising interest rates on future borrowing costs presents a prospective fiscal challenge. Ireland's national debt currently stands at €237 billion, equating to €47,250 per person. Whilst low average interest rates and long average maturities may provide some comfort in the short-term, there are longer-term risks associated with this level of indebtedness.

<sup>6.</sup> Countering the Cost-of-Living Crisis, 2022, International Monetary Fund.

<sup>7.</sup> Budget 2023: Economic and Fiscal Outlook, Department of Finance.

## 1.3 Ireland's Economic Strengths

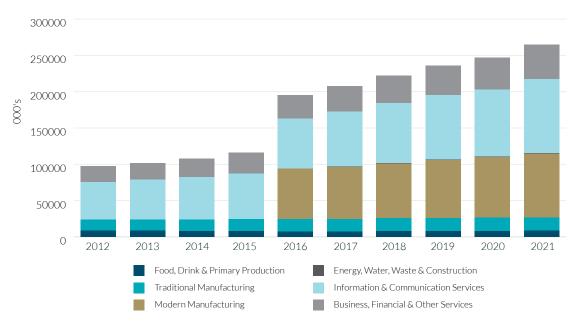
Ireland's success is based on a formula of trading goods and services internationally and on its attractiveness as a place to invest. Ireland enjoys some important economic advantages including a stable political system, policy consistency, our place as an English-speaking country within the European Union, a highly developed and internationally orientated MNE sector with a strong trading profile, alongside a young and highly skilled labour force. This has resulted in Ireland enjoying a comparative advantage in several areas with a rich ecosystem of multinational and Irish-owned companies alongside a strong research ecosystem.

# OPEN TO THE WORLD: THE ROLE OF TRADE AND FOREIGN DIRECT INVESTMENT

Ireland's economy is heavily internationalised. According to the Business in Ireland 2019 release from the CSO, foreign-owned MNEs accounted for around 73% of the Gross Value-Added (GVA) of the non-financial business economy in 2019. Foreign multinationals provide significant employment through affiliates in Ireland<sup>8</sup>. The scale of this employment makes an important contribution across the business economy, representing 45% of total industry employment and 22% of total employment in services<sup>9</sup>.

The contribution of FDI to the Irish economy is far reaching and it is estimated that 20% of all private sector employment in the State is directly or indirectly attributable to FDI<sup>10</sup>. This activity also contributes significantly to the Exchequer, generates other activity across the economy and helps to drive investment in research and innovation. In the years since the Financial Crisis, Ireland has remained a location of choice for multinational companies across several technologyintensive sectors. According to the Annual Employment Survey, which covers enterprise development agency client companies, full-time employment by foreignowned firms amounted to 265,000 in 2021, the highest employment level ever recorded 11. The majority of employment in foreign-owned firms is in the Services sector (56.3% share of total full-time employment), with the ICT, Modern Manufacturing (including pharmaceuticals), and Business, Financial & Other Services sectors showing significant growth over the past decade (see Figure 5).

Figure 5: Foreign-Owned Companies - Permanent, Full-time Employment by Sector, 2012-2021



Source: Annual Employment Survey 2021

<sup>8.</sup> The CSO Structural Business Statistics for 2020 indicates that foreign-owned enterprises had almost 452,000 persons engaged or 28.3% of the total number of persons engaged in the Structural Business Economy. However, these foreign-owned enterprises produced the vast majority of Gross Value Added at €201.0 billion or 72.8% of total GVA in 2020.

<sup>9.</sup> Multinationals: An Irish Perspective, Business in Ireland 2019, Central Statistics Office.

<sup>10.</sup> Foreign Direct Investment. Department of Enterprise, Trade and Employment.

 $<sup>11. \ \</sup>underline{\text{Annual Employment Survey 2021}}, \textbf{Department of Enterprise}, \textbf{Trade and Employment.}$ 

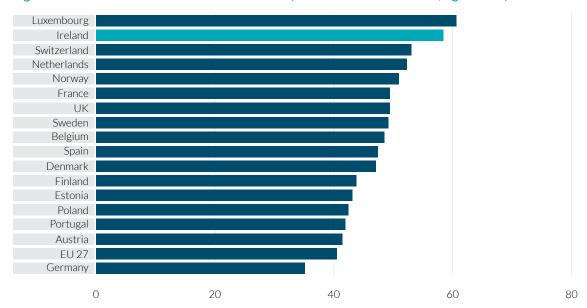


Figure 6: Third Level Educational Attainment % (Select Countries in 2020, age 25-34)

Source: Eurostat

As a small open economy, Ireland relies on trade as a principal source of economic growth, with our exports concentrated in several very important sectors. For instance, total service exports were  $\in\!244.1$  billion in 2020, with computer services exports accounting for 55%. Similarly, the value of goods exports from Ireland rose to  $\in\!165.2$  billion in 2021 – the highest level on record – with medical and pharmaceutical products accounting for 38% of all exported goods. Ireland is also exposed to a relatively high degree of export concentration by trading partner, product and exporting enterprise, with over a third of total exports accounted for by five firms .

Ireland is dependent on stable supply chains, ensuring the efficient movement of goods into the country. The recent tightening of supply chains in the wake of COVID-19 has highlighted the impact that supply chain dependencies can have on the price and availability of critical goods. Ireland cannot fully insulate itself from global trends and, for the green and digital transitions, access to critical raw materials will be increasingly important.

<sup>12.</sup> Value of exports by enterprise concentration, 2020, Eurostat.

Figure 7: Total Value of Irish Exports by Year (€M)

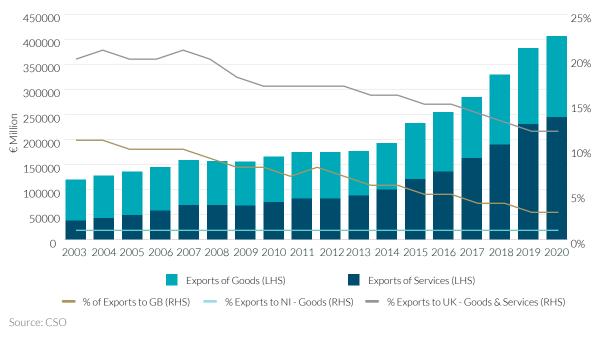
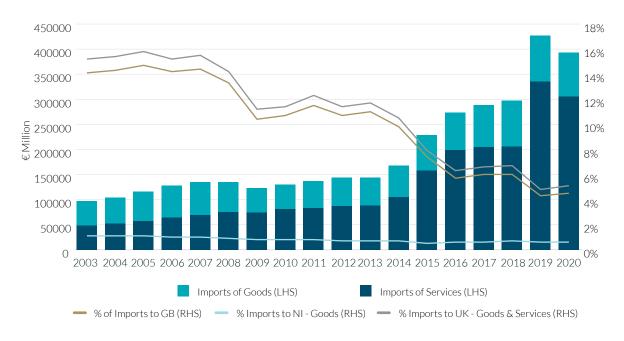


Figure 8: Total Value of Irish Imports by Year (€M)



Whist East-West trade between Ireland and the UK has declined in recent years, North-South trade on the island has increased, with imports from Northern Ireland increasing 23% between January and May 2022 compared with the same period in 2021, while exports to Northern Ireland jumped by 42% in the same comparative periods.

Source: CSO

#### A RESILIENT LABOUR MARKET

Ireland is renowned for developing and nurturing talent and is an attractive destination for internationally mobile, highly skilled people. Ireland's education system performs well on many dimensions, with a high percentage of 25–34-year-olds holding a third level qualification, while also currently ranking 3rd out of 63 countries for attracting and retaining talent. Ireland has a highly educated and skilled workforce with a strong output of Science, Technology, Engineering and Maths (STEM) graduates.

Prior to the onset of the COVID-19 pandemic, Ireland's labour market was close to full employment, but severe disruption was to follow over the course of three periods of lockdown, with the Government deploying supports on an unprecedented scale to protect both enterprises and workers. The labour market displayed remarkable resilience and has recovered rapidly. The Economic Recovery Plan, published in 2021, set a target to exceed pre-crisis employment levels by having 2.5 million people in work by 2024. This target was attained in the fourth quarter of 2021, three years ahead of schedule. By comparison, 1.8 million people were employed 20 years ago. Furthermore, the unemployment rate has fallen to 4.4%, levels last seen at the start of the century. This recovery has also been inclusive across demographics, with increased participation among women and younger workers, with an additional 118,000 women now part of the labour force compared with pre-pandemic levels.

This additional employment has been spread across multiple sectors, including information and communication, industry, education, human health and social work activities, and professional, scientific and technical activities. Other sectors such as agriculture, accommodation, food services, and administrative services have yet to return to pre-pandemic levels of employment. These recent dynamics reflect longerterm trends, with Ireland's labour market experiencing significant sectoral reallocation over the past decade. According to the Annual Employment Survey 2021<sup>13</sup>, employment in the Manufacturing sector fell from 56% in 2012 to 48% in 2021. In comparison, the Business, Financial and Other Services sector employment increased its share of total employment from 15.8% to 18.4%, while the Information, Communications and Computer Services sector increased its share from 23.9% in 2012 to 28.4% in 2021.

#### A VIBRANT INNOVATION HUB

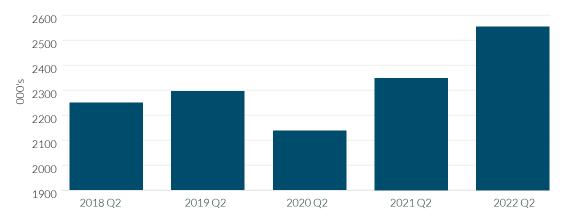
Over recent decades – through sustained investment in innovation, research, and development initiatives, talent and infrastructure – Ireland has emerged as an important innovation hub for several sectors, albeit there is clearly scope to do better economy-wide. Currently, large enterprises account for the vast majority of business R&D spend. The largest 100 enterprises accounted for almost €2.7 billion, or 81.8%, of the total R&D expenditure in 2019. Of these top 100 enterprises, 78.1% of the spend can be attributed to foreign-owned enterprises.

By 2020, Ireland had 1,800 R&D active enterprises spending over €3.4 billion a year on research and development¹⁴. Ireland is one of the EU's 'strong innovators' and has strengthened its position to sixth place on the overall European Innovation Scorecard in 2022. Recent, novel RD&I grant initiatives, such as the Disruptive Technologies Innovation Fund, have added to our innovation toolkit, with high levels of uptake. However, failing to keep pace with other small advanced economies in terms of public investment in RD&I would pose a significant risk to the competitiveness of our economy and to the ambitions set out in Impact 2030: Ireland's Research and Innovation Strategy.

<sup>13. &</sup>lt;u>Annual Employment Survey 2021</u>, Department of Enterprise, Trade and Employment. (Note: this data relates to employment only within IDA, EI and UnaG client companies).

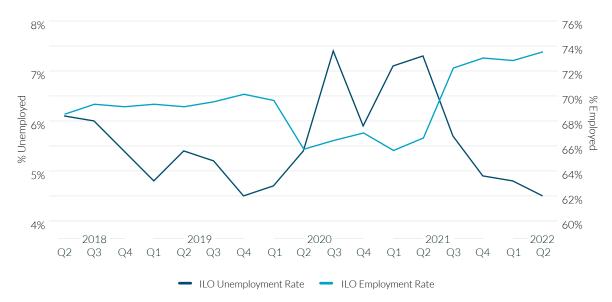
<sup>14.</sup> Business Expenditure on Research & Development 2019 - 2020, Central Statistics Office.

Figure 9: Total People Employed in Ireland, 2018 Q2 - 2022 Q2



Source: CSO Labour Force Survey

Figure 10: Employment and Unemployment Rate in Ireland, 2018 Q2 - 2022 Q2



Source: CSO Labour Force Survey

## 1.4 Enhancing Resilience and Capacity

#### **UNDERSTANDING VULNERABILITIES**

As discussed above, FDI is a core element of Ireland's economic model and has contributed to substantial economic progress over the past number of decades. However, success in attracting investment can also bring its own vulnerabilities. Ireland's strong FDI base is responsible for significant levels of economic activity and employment, but the high share of foreign-owned MNEs presents a potential concentration risk and a concern that this employment could crowd out Irish-

owned firms. In addition, the globally connected nature of Ireland's trade means it is always open to external shocks, such as a downturn in global trade, or as witnessed over recent months, supply chain tightness and high logistics costs in the wake of the recovery from COVID-19. The concentrated nature of Ireland's exports in terms of a narrow group of commodities and sectors and firms – and the associated large share of the country's value-added in these exporting sectors – increases our exposure to these external shocks.

Figure 11: Gross Value Added (GVA)

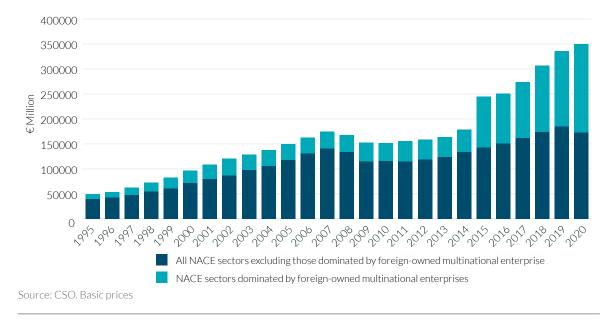
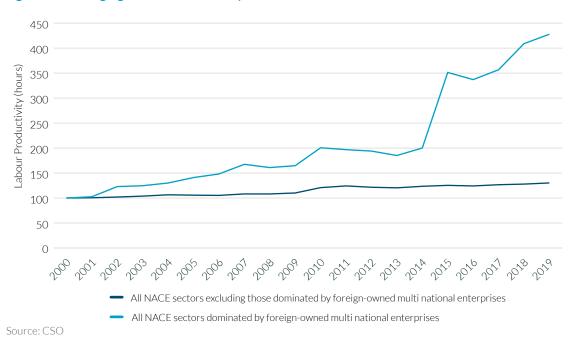


Figure 12: Diverging Labour Productivity



Ireland's productivity performance is comparatively strong but driven by a narrow base of enterprises, disguising the majority of firms where productivity growth is stagnant or falling. According to the most recent CSO data, there has been a growing divergence in labour productivity between sectors dominated by foreign-owned multinational enterprises and all other sectors, particularly since 2015. This is also reflected in data on value added, as shown in Figure 11 above, with approximately half of the GVA in 2020 coming from firms in sectors dominated by foreignowned multinational enterprises. It is important, however, not to conceive of the 'domestic sectors' as a monolith. Within this cohort, there are exportoriented enterprises which perform better in terms of productivity than non-exporters.

Previous research has noted a negative productivity gap between Ireland and the euro area in several domestic sectors such as agriculture, construction and domestic services (wholesale, retail, transportation, accommodation)<sup>15</sup>. Looking at 2020<sup>16</sup>, the latest year for which granular data is available, productivity in the total economy rose by 14.1%, with productivity in the Foreign sector up 18.2% and contributing 12.2 percentage points to the total economy labour productivity growth<sup>17</sup>. Meanwhile, productivity in the Domestic and Other<sup>18</sup> sector increased by 0.7% in 2020 and contributed only 1.9 percentage points to total productivity growth, highlighting the two-speed nature of the productivity performance of the economy.

The OECD has identified the need to improve the productivity of SMEs in Ireland. In 2019, it highlighted that there was a relatively long tail of low-productivity firms at the bottom end of the productivity distribution<sup>19</sup>, suggesting that there is scope for Ireland to boost its productivity by enhancing the diffusion of best practices to these less productive SMEs. The OECD identifies the causes of low SME productivity as the prolonged use of low-productivity techniques, poor management practices, and the need to modernise to prepare for challenges such as the digital revolution and entry into export markets. Ireland must work to enhance productivity growth in smaller Irish firms across a wider range of sectors and ensure that lower productivity firms can benefit from spillovers from highproductivity firms.

As digital technologies become increasingly important for productivity, it is important that firms are prepared for these changes. European Investment Bank research has established that Irish firms are below the EU average for the 'use of advanced digital technologies' and 'strategic business monitoring'. The research also demonstrated that those firms who embraced digital technologies were better able to adapt to the disruptions arising from COVID-19. Forthcoming research from the Economic and Social Research Institute (ESRI) has found that smaller Irish enterprises are less prepared for the climate transition – for instance, 83% of micro firms have no climate plan in place – whilst also tending to be less prepared for the digital transition (see Figures 13 and 14).

<sup>15.</sup> Patterns of Firm Level Productivity in Ireland. Papa et al., 2018, IGEES, Department of Finance.

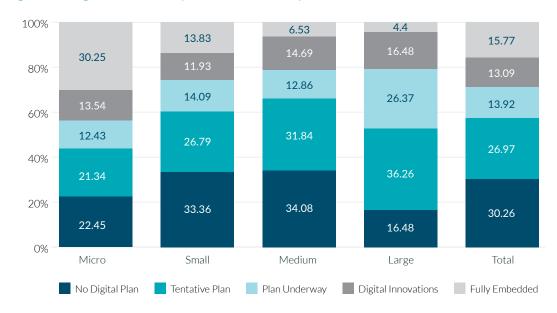
<sup>16.</sup> Productivity in Ireland, 2020, Central Statistics Office.

<sup>17.</sup> Foreign-owned Multinational Enterprise (MNE) dominated NACE sectors occur where MNE turnover on average exceeds 85% of the sector total. These sectors are Chemicals and Chemical products (NACE 20), Software and Communications sectors (NACE 58-63) and Reproduction of recorded media, Basic pharmaceutical products and pharmaceutical preparations, Computer, electronic and optical products, Electrical equipment, Medical and dental instruments and supplies.

<sup>18.</sup> The Domestic and Other category includes all sectors excluding those listed as part of the Foreign-owned Multinational Enterprise (MNE) dominated sectors. These include the Wholesale and Retail sector including the sale and repair of motor vehicles; Administrative and support service activities; Construction; Accommodation and food services; and the Manufacture of Food, beverages and tobacco.

<sup>19.</sup> SME Productivity in Ireland. SME and Entrepreneurship Policy in Ireland, 2019, OECD.

Figure 13: Digital Readiness by Firm Size (% of responses)



Source: ESRI

Figure 14: Business Climate Action Plan by Firm Size (% of responses)



Source: ESRI

Corporation tax revenue has made up a growing share of Ireland's total tax revenue, rising from €4.2 billion (11.2% of total tax revenue) in 2013 to €15.3 billion (22.4%) in 2021. There are concerns relating to the windfall nature of a portion of this revenue as well as its concentration. The ten largest corporation taxpayers accounted for €8.2 billion (53%) of net receipts in 2021. This proportion has increased significantly over the last two years, compared to the period 2013 to 2019, when the top ten corporation taxpayers accounted for between 36% and 45% of net receipts. Returns from foreign-owned multinationals represent the largest share (80%) of corporation tax receipts²0.

The effect of international tax policy changes may lead to a reduction in revenues from this source in the future. One way of ameliorating these risks over the longer term is by building Irish firms of scale.

#### **CURRENT AND EMERGING CHALLENGES**

The UK's exit from the EU and the single market continues to present challenges for Ireland's economy. Increasingly, we are seeing the impact of Brexit on the UK's economy, and this will unavoidably have consequences for Irish exporting enterprises given that the UK is still one of Ireland's largest trading partners. The overall UK share of total imports and exports has fallen over the past twenty years (see Figures 7 and 8 in Section 1.3). Analysis<sup>21</sup> by the ESRI found that Ireland stands out as having had a particularly large reduction in imports from the UK relative to its other international trade partners. On the other hand, exports from Ireland to the UK continue to perform in line with those of other markets with no notable impact to date of Brexit. The ESRI noted that the data for the UK suggests that increased trade between Ireland and Northern Ireland may play a role in this outcome.

We must also be cognisant of a series of labour market challenges. The strong recovery of employment in the aftermath of COVID-19 disruption has led to tightening labour market conditions, which are exacerbating skills shortages. In addition, at a sectoral level, the strong rebound in employment is unevenly distributed. There are risks of some scarring effects in the sectors that were most impacted by COVID-19 restrictions, such as retail, hospitality, and support services. In these sectors, employment is still below pre-pandemic levels. In contrast, ICT, Financial Services, Industry, Pharmaceuticals and Public Administration all show a strong recovery, with more people now employed in these sectors in Q2 2022 than pre-pandemic (Q2 2019). These tighter labour market conditions are evident in the high numbers of unfilled vacancies. According to the CSO, the job vacancy rate at the end of Q1 2022 was 1.6%<sup>22</sup> although Ireland is still well below the euro area average of 3.2% for Q2 2022<sup>23</sup>. Vacancies are highest in the Retail, Financial Services and Public Administration and Defence sectors (see Figure 16). An important element for ensuring that the Irish labour market is equipped with the appropriate skills is the adoption of more widespread lifelong learning. Lifelong learning participation rates in Ireland stood at 13% in 2021<sup>24</sup>, significantly below the participation rates of those best in class: Denmark (20%), Finland (27.3%) and Sweden (28.6%).

<sup>20.</sup> Corporation Tax - 2021 Payments and 2020 Returns, Revenue.

<sup>21.</sup> How has Brexit changes EU-UK Trade Flows? ESRI Working Paper No. 735, Janez Kren & Martina Lawless, 2022, ESRI

<sup>22.</sup> The ratio of unemployed to job vacancies in Ireland has fallen to 3:1 in 2022 Q2, from 7:1 in 2019 Q2 (pre-pandemic).

<sup>23.</sup> Euro area job vacancy rate at 3.2%, 2022, Eurostat.

<sup>24.</sup> Lifelong Learning among adults in Ireland, Q4 2021, SOLAS.

70 % Change in Job listings since 01 Feb 2020 50 30 10 -10

21/2/1022 01/03/1022 01/05/1022 21/07/1022

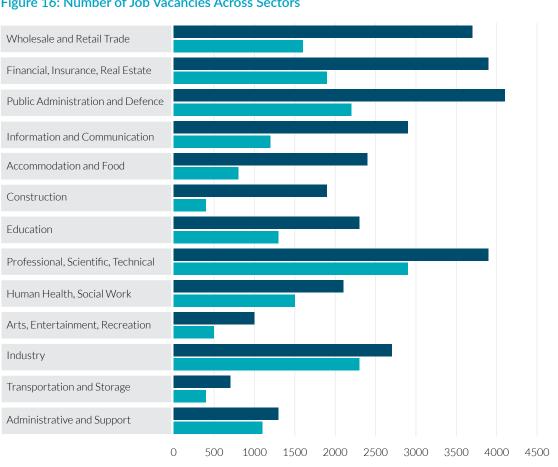
Figure 15: Percentage Change in Total Job Listing, Ireland

Source: Indeed

-30

-50

-70



2019Q4

2022Q1

Figure 16: Number of Job Vacancies Across Sectors

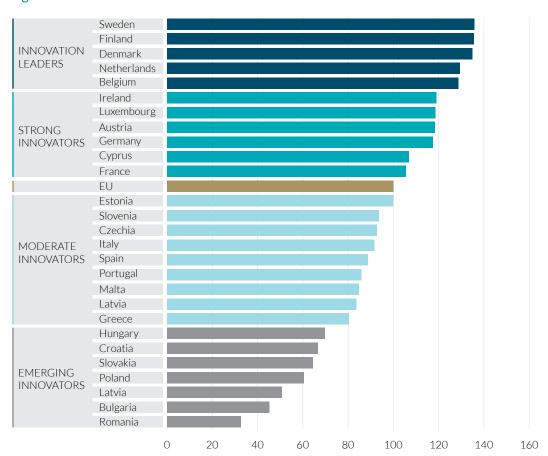
Source: Central Statistics Office

The increased demand for mobile workers internationally, especially across the EU, may lead to migrants choosing other countries over Ireland to live and work given the lack of availability of affordable housing and a relatively high cost of living. We are competing with these other EU countries for skilled labour which are also experiencing tightening labour market conditions.

Other risks to Ireland's enterprise model relate to areas such as innovation intensity and high emissions levels. Overall R&D spending at just 1.2% is well below

the 2.7% of GDP average amongst similar advanced economies (albeit that it is a higher proportion of GNI\*). Ireland has underperformed in relation to global innovation indices since the turn of the century, including the IMD, Work Bank and World Economic Forum rankings. On emissions, Ireland ranks significantly behind the EU average on carbon dioxide equivalent per capita, averaging 11.8 tonnes per head against the EU average of 7.5 tonnes (Figure 18), whilst at an enterprise level just 17% of Irish firms are implementing green management practices, against an EU average of 42%.

Figure 17: EU Innovation Scorecard



Source: Eurostat

Luxembourg Iceland Ireland Czechia Cyprus Poland Netherlands Belgium Norway Germany\* Finland Estonia Austria Slovenia EU Lithuania Denmark Bulgaria Greece Slovakia Hungary Italy Türkiye Croatia France Spain Romania Portugal Latvia Switzerland Sweden Malta 5 0 10 15 20

Figure 18: Greenhouse Gas Emissions per Capita 2020

Source: Eurostat

\*Until 1990 former territory of the FRG

#### **EXTERNAL RISKS AND VULNERABILITIES**

SAEs such as Ireland are highly integrated with, and impacted by, wider economic and geopolitical developments, driven by a strong degree of openness and dependency on international markets. It is possible to identify five distinct "vectors" of global change that are relevant to small advanced economies such as Ireland. These include: (i) shifting patterns of globalisation; (ii) technological developments and new business models; (iii) the net zero transition; (iv) the ongoing evolution of macroeconomic policies and the role of the State; and (v) changes in economic geography which influence the decisions as to where people live and work.

There is scope for Ireland's external exposures to be exacerbated by ongoing challenges in global flows and supply chains alongside technological advancements, evolving consumer preferences, changes in international business operating models and multilateral policy choices, including on taxation policy. The Irish economy is deeply embedded in Global Value Chains (GVCs) and our success in attracting

FDI and exporting to global markets is built on agility and a flexibility to responding to changing global circumstances. The current geopolitical environment, coupled with the impacts of COVID-19 and the twin green and digital transitions, has seen increased international attention on the future of global supply and value chains, with policy in the US, China and the EU increasingly motivated by industrial policy concerns relating to strategic autonomy, national security considerations and a desire for self-reliance for key technology inputs such as semiconductors. At EU level and other international fora, Ireland is contributing to this policy debate, robustly arguing for an approach based on open, strategic autonomy and against protectionism. We will also need to remain vigilant in identifying risks and opportunities in our supply chain environment, including in terms of access to critical raw materials.

A waning commitment to multilateralism is also of concern. Ireland is heavily invested in a fully functioning multilateral trading system with the WTO at its centre. We recognise the important role that the WTO plays

in supporting small member countries, like Ireland, to trade globally on the basis of a level playing field where the rules of engagement are applied equally. The pace of reform in the WTO, including restoration of its key dispute settlement system, is accordingly a risk factor that Ireland and our EU partners are keen to address.

Ireland has a particular exposure to the global business cycle, with growth sensitive to variations in world GDP and trade growth but also to sector-specific shocks. Recent events have demonstrated the extent to which a 'reset' in a large, externally orientated sector such as ICT have implications for Ireland not only in terms of direct employment but also in generating uncertainty.

#### **POTENTIAL OPPORTUNITIES**

Beyond challenges and vulnerabilities, other profound shifts will shape Ireland's economy for the coming decades. Two major global transformations are currently underway: the move towards a climateneutral society by 2050, with net-zero greenhouse gas emissions; and the digitalisation of the economy. The socalled 'twin transitions' generate burdens of adjustment (involving new investments and costs), but they can also provide major opportunities for new firms to emerge and for existing Irish firms to gain market share in new technologies and industries. This White Paper aims to better position Irish enterprises to embrace the opportunities arising from both the urgent need to decarbonise and the changes underway with regard to technology and economic geography. An important aspect of this will be identifying and understanding

the opportunities presented by a global low carbon economy, including how to best develop Ireland's renewable energy sector as a basis of competitive advantage.

Digital technologies are increasingly becoming an integral part of business activities, interactions with government, and our every-day lives. The digital transformation of our economy and society has the potential to bring new opportunities for individuals and enterprises. It will give rise to opportunities in green technology, sustainable product design, green finance and digital services, which can offer high quality employment while contributing to the decarbonisation of the economy. However, it is important that groups which are unprepared for these changes and are vulnerable to their effects are protected and assisted.

As noted above, early evidence suggests that many Irish enterprises, especially micro, small and medium size firms, are not yet prepared to begin their climate and digital transitions. Government supports will be required, including through the extant suite of interventions: Climate Toolkit 4 Business, the Green Transition Fund, Grow Digital and the Digital Transition Fund. As part of the EU Recovery and Resilience Fund, Ireland is dedicating 42% of our funding allocation to measures contributing to climate objectives and 32% to digital objectives. Significant investment in skills and training will also be necessary as well as in research, development and innovation.

### 1.5 Conclusion

Ireland's open, export-orientated economic model has allowed us to develop into one of the foremost small advanced economies globally. Ireland's strengths, including our attractiveness as a place to invest and our skilled labour market, has helped Ireland weather recent disruptions presented by Brexit and COVID-19. However, challenges and vulnerabilities persist, most evidently our exposure to global shocks which is tied with our success as an FDI hub, a vulnerability that coexists with low domestic productivity growth, particularly in the non-exporting economy. We must

also be cognisant of ongoing geopolitical developments, supply chain dislocation and changing patterns of globalisation. Preparing for future shocks as well as emerging global megatrends and embedding resilience into Ireland's businesses requires re-examining broader enterprise policy to ensure it is prioritising the actions that need to be taken to deliver growth and prosperity. Enterprise, workers and society must be supported to adapt and grow within the wider context of a swiftly changing world. We must therefore continue to reevaluate what we do well and where we can improve.



# 2.0 Competitive Enterprise Environment

Successful enterprise policy requires an integrated approach. There are a series of cross-cutting horizontal issues that can only be addressed on a whole-of-government basis to position Ireland for the challenges and opportunities ahead, ranging from infrastructural investment and taxation to regulation and talent. We need to get these right as they are essential framework conditions for future progress. Addressing these infrastructure and 'ecosystem' challenges is also a priority under the Trade and Investment Strategy 2022-2026: Value for Ireland, Values for the World.

A key consideration here is the 'carrying capacity' of the State and the economy more generally. This concept covers not just the adequacy of physical infrastructure such as transport, housing, energy and water/wastewater but also essential social services and an efficient and responsive system of regulation.

Through **Project Ireland 2040, Housing for All** and other Government initiatives, we will ensure that sufficient capacity is provided to meet these needs and that planning for expanded capacity takes full account of enterprise policy requirements.

### 2.1 Infrastructure

Quality physical infrastructure is essential to ensure the economy has the capacity to achieve sustainable long-term growth and plays a key role in boosting productivity and creating high value employment. The IMF, the OECD and the G20 have all highlighted the importance of investment in high-quality, productive infrastructure for economic and social development. When infrastructure gaps arise, they can act as a constraint on future growth, limiting the economy's ability to attract and retain investment and skilled workers.

Strategic investments in infrastructure lower the costs of doing business for enterprises, resulting in more efficient firms better able to compete internationally. Careful planning and delivery of infrastructure can improve the quality of life for workers and families, when housing and job opportunities are located close to a host of ancillary social infrastructures, including childcare facilities, healthcare services, schools, and transport links. These are crucial services that contribute greatly to overall wellbeing, and the productivity of the Irish workforce.

The revised National Development Plan (NDP) incorporates an investment package of €165 billion over the years 2021-2030<sup>25</sup> with a commitment to maintain capital expenditure at an average level of 5% of GNI\* over the period to 2030. In Budget 2023, the Government provided €12.4 billion for capital spending on vital infrastructure which will help reduce supplyside bottlenecks and boost the productive capacity of the economy. Capital expenditure is projected to rise to €16.5 billion by 2025. This will see continued growth in investment across housing, health, and transport, as well as a major step-up in climate related investment.

The availability of affordable housing is especially important for the continued attraction of skilled workers, both domestic and international, to urban centres where such skills can drive productivity growth. Difficulties in attracting staff due to housing costs indirectly add to the costs of doing business, in terms of increased job search and pressure on staff compensation. Public resourcing for housing has increased significantly in recent years, with over €20 billion in capital funding allocated out to 2025 and the Government is continuing to step up efforts to deliver on the ambitious targets to 2030 set out in Housing for All<sup>26</sup>.

<sup>25.</sup> National Development Plan 2021-2030, Department of Public Expenditure and Reform.

<sup>26.</sup> Housing for all - A new Housing Plan for Ireland, 2021, Department of Housing, Local Government and Heritage.

Significant investment in energy infrastructure will also be required in the coming years for Ireland to reach its target of generating 80% of its electricity supply from renewable sources. This will be a critical step in reducing emissions, alongside investments made at individual firm level to reduce emissions along supply chains. Indeed, such investment will be vital to ensuring security of energy supply in underpinning the needs of Irish enterprises and promoting Ireland as a base for future inward investment.

A greater focus on quality of life and work-life balance has been one of the positive legacies of the pandemic. Coupled with developments in our digital infrastructure and national remote working policies, this will assist in transforming enterprise and workforce adaptability. In particular, the opportunity to live and work outside of traditional urban centres represents significant potential for regional development.

Consistent with Government policy over many years, the enterprise agencies, LEOs and Regional Enterprise Plans play a significant role in strengthening the enterprise ecosystem right across Ireland, positively contributing to placemaking in our communities. This enables entrepreneurs, microenterprises, SMEs and FDI to prosper in all regions.

## 2.2 Cost of Doing Business

As an open small economy, Ireland is effectively a price taker for many goods and services so many of the drivers of Irish inflation are outside the Government's control. Inflationary pressures have been increasing across the majority of advanced economies over recent months, and Ireland is not unique in experiencing a steep increase in the price of energy, food, and other commodities. The Russian invasion of Ukraine in February 2022 has exacerbated the global cost of living crisis and placed significant upward pressure on energy prices. Ireland is heavily exposed to the changing price of energy on world markets with the majority of energy needs being met from imports.

In recent years, the National Competitiveness and Productivity Council (NCPC)<sup>27</sup> has highlighted the impact that higher business costs, in particular in the areas of insurance costs, legal costs, and the cost of credit, have on the competitiveness of Irish businesses, especially SMEs. A lack of competition in key sectors results in higher costs for enterprise and consumers. For example, the Central Bank has noted that the lack

of competition in the lending market is one of the major reasons for higher interest rates in Ireland compared to the eurozone and the NCPC has pointed to the need to address the lack of competition in the Irish insurance market to support a reduction in insurance premium costs<sup>28</sup>. Addressing the lack of competition in sectors such as banking and insurance is key to reducing high costs to business, thereby increasing Ireland's competitiveness and productivity. The Government is committed to implementing domestic reforms to increase competition, boost productivity and reduce costs where possible. To help combat the growing costs of insurance, the Action Plan for Insurance Reform published in December 2020 set out 66 actions to make Ireland's insurance sector more competitive and consumer-friendly, supporting enterprise and job creation. By March 2022, approximately 80% of actions in the Plan had been delivered, including the introduction of the Personal Injuries Guidelines and the establishment of an office to promote competition in the insurance market. The Government's focus is now firmly on completing the reform agenda.

<sup>27.</sup> Ireland's Competitiveness Challenge 2019-2022, The National Competitiveness and Productivity Council.

<sup>28.</sup> Monetary Policy and Interest Rates in Ireland, 2020, Central Bank of Ireland.

## 2.3 Skills, Talent and Workforce Development

Skills, talent and workforce development are essential to the success of all sectors of the economy and will be a critical enabler of the ambitions articulated in this White Paper. Even before the pandemic, there was a degree of skills mismatch within Ireland's labour market, with some workers either under- or over-qualified for their occupations. This mismatch has been reinforced by the structural shifts and scale of the ambitions generated by the digital and green transitions, which are transforming business models, job roles, and creating a demand for continuous upskilling and reskilling on a scale that far exceeds anything experienced in recent decades.

With skills emerging as a key competitiveness differentiator, success will create a virtuous circle, helping to maintain Ireland's attractiveness to and anchoring of FDI and drive the scaling and internationalisation of Irish-owned enterprise. The pace of evolution and scale of the demand for skills in the coming years will require an even more responsive, timely, collaborative and properly resourced approach to identifying and addressing priority skills needs. This will build upon the existing close collaboration between Government, industry, the Higher Education and Further Education and Training sectors, and Skillnet Ireland's enterprise networks on workforce development initiatives.

An ongoing OECD review will assess whether the National Skills Strategy 2025 requires adaption to deliver on its objectives and identify skills policy priorities for Ireland in the context of the challenges and opportunities we face. Mechanisms for maximising enterprise involvement in programme design and delivery formats will be strengthened to ensure alignment with fast changing industry trends. Enterprise will also have a key role to play in a strengthened, lifelong guidance system, which will aim to address mismatches by raising awareness of training and career opportunities in areas of priority skills needs.

Research has shown that firms which invest in management development grow faster, survive longer and innovate more effectively, and improving management skills is seen by the OECD as a key lever in improving Irish SMEs productivity performance. While flexibility is important for busy SME owners and managers, the evidence points to the value of formal training for driving real innovation and performance outcomes for firms. The promotion of continuous improvement of leadership and strategic management capability within enterprises will be a key priority. Such improvements will make firms more capable of harnessing the potential of digital and green technologies to drive productivity and sustainability, and of identifying the strategic skills required to realise this potential.

As well as embedding digital skills as a core competency, other transversal skills, such as critical thinking, problem solving, communication and adaptability, will also need to be embedded across school, tertiary level education and training provision. Indeed, upskilling and training are not of value solely to new entrants to the labour market but should be considered as part of a wider workforce development agenda. Ensuring a stable pipeline of research talent will be an important factor in driving enterprise innovation and transformation, and the creation of new high performing start-ups.

We will need to maintain and enhance Ireland's attractiveness to international talent, through concerted global messaging around our employment opportunities, and the operation of an efficient employment permits and visa regime, which will continue to be targeted at high skilled, in-demand workers. We will also aim to activate groups currently underrepresented or underemployed in the labour market, such as those with caring duties, persons with disabilities, as well as other marginalised groups facing barriers to labour market integration. These efforts involve the tackling of barriers to labour force participation, such as the full implementation of measures to enhance access to childcare, continued support for flexible working practices and measures to make work pay and incentivise workforce participation.



## 2.4 Access to Finance

If we are to succeed in our ambition to grow the number of 'at scale' Irish firms and enable the emergence of new firms, we need to ensure businesses have access to finance at each stage of the lifecycle to succeed.

Microenterprises, in particular start-up businesses, often lack credit history and cannot access finance from the market. Even for SMEs with a credit history, accessing unsecured loans can be a significant barrier, and interest rates are significantly higher than in other EU markets. Furthermore, at times of economic disruption the lending market becomes more risk averse, making credit access more difficult for SMEs. These factors have led to many SMEs relying on internal cash generation for their investment needs which can act as a drag on their growth potential.

The Government established Microfinance Ireland (MFI), a State financed credit provider that provides unsecured business loans of up to €25,000 for microenterprises, particularly start-ups, that cannot access bank loans. Mentoring support from an

experienced business mentor on the LEO Mentor Panel is also provided. This is an important intervention that helps early-stage enterprises to build their businesses and establish a credit track record. We will continue to build the presence of Microfinance Ireland and strengthen its networks in the start-up ecosystem.

The Government also established the Strategic Banking Corporation of Ireland (SBCI). The SBCI provides and promotes the provision of credit through low-cost liquidity and risk-sharing or guarantee schemes via market providers (bank and non-bank). Since inception, it has supported credit advances worth over €3 billion to over 50,000 SMEs to fund working capital and investment needs of SMEs, incentivising investment in growth and productive long-term assets. We will build on this success and prioritise access to finance to SMEs for green and digital investments. It takes time to realise the productivity benefits arising from such strategic investments, and unlocking low cost, unsecured long-term financing will act as an important incentive.

#### 2.5 Taxation

Ireland's taxation regime has been a key feature in the transformation of our economy over the last 70 years, as noted in the recent Report of the Commission on Taxation and Welfare<sup>29</sup>. Ireland continues to offer a competitive taxation regime with a range of targeted incentives and expenditures aimed at attracting inward investment, encouraging R&D, entrepreneurship and investment in scalable enterprises.

Over the last 20 years, our corporation tax regime has been characterised by a single low rate of taxation applied to a broad base of corporate income. In addition to the attractive rate, the certainty offered by our regime over this period has been hailed as a major strength and these have strongly contributed to the growth in high value FDI in Ireland over the last two decades.

The OECD/G20 Inclusive Framework on Base Erosion & Profit Sharing (BEPS) represents the most significant changes to corporation tax internationally in decades and Ireland will continue to engage constructively in the implementation process. Nevertheless, the changes will mean that our ability to compete on taxation will be reduced and we must ensure that other aspects of our regime do not reduce our competitive advantage.

Continual benchmarking of our offering against key competitor jurisdictions will allow us to identify opportunities to enhance our system which are within our control. Ensuring that compliance with our regime is straightforward, transparent and imposes minimal cost and administrative burdens will also be an important factor for competitiveness. Commentators have noted the complexity of our taxation legislation and, in line with the recommendation from the recent Commission on Taxation and Welfare Report, our main taxation legislation, the Taxes Consolidation Act 1997 will be reviewed periodically, with particular consideration given to simplifying our tax code<sup>29</sup>.

Reducing the compliance burden benefits all enterprises, and there are particular opportunities to further enhance the tax landscape for our SMEs. Ireland offers a broad range of tax incentives designed to support enterprise development. These include universally available incentives such as the R&D tax credit. Other more targeted tax measures are available to small enterprises and individuals and generally aim to support investment, to encourage entrepreneurial behaviours and to reward and retain staff. There is scope to develop these further to increase take-up and improve impact by ensuring that schemes are not too restrictive or costly and to address the severity of penalties applied, even for small transgressions.

We will examine the Commission on Taxation and Welfare's recommendation that the Office of the Revenue Commissioners, the Department of Enterprise Trade and Employment and the enterprise agencies develop a mechanism which can provide the necessary assurance and comfort for small enterprises that they are eligible for tax incentives, particularly in respect of the R&D tax credit, the Key Employee Engagement Programme (KEEP) and the Employment and Investment Incentive Scheme (EIIS).

Our Capital Gains Tax (CGT) regime for those investing in unquoted enterprises will be reviewed, including consideration of the need to reflect the risk premium involved versus investment in other assets. This will make an important contribution to ensuring our entrepreneurship and angel investment landscape is competitive.

Other features of our taxation system which are of importance to enterprise are our personal taxation rates and our social insurance rates. The Government will ensure that our personal taxation offering does not act as a disincentive to work and is competitive while maintaining a broad tax base. In the midst of intense global competition and major developments, including Brexit and the recent changes to the OECD framework, the competition for highly sought-after mobile talent has also intensified. Our personal tax regime needs to be conducive to attracting and retaining skilled individuals; this is important for both Irish-owned and foreign-owned FDI companies assessing Ireland as an investment location.

### 2.6 Regulation

A well-functioning regulatory environment is an essential condition, underpinning a competitive and productive economy. Ireland has long been considered a conducive environment for enterprise to develop and grow and we continue to perform well across a range of indicators for the business and regulatory environment.

A modern and responsive business regulatory environment, which reflects international best practice, will ensure that Ireland stays attractive as a place to do business. This will require ongoing focus on the development of evidence-based policy, supported by the use of tools such as Regulatory Impact Analysis, the SME Test<sup>30</sup> and stakeholder consultation.

Effective engagement at EU level and internationally will be critically important, with the building and strengthening of alliances and networks, to ensure that we retain influence in the development of policies and regulations that impact Ireland's economic and business environment. This is particularly important as the EU is effectively a regulatory superpower with the capacity to significantly influence and/or take the initiative in relation to regulatory developments in a broader international context (sometimes known as the 'Brussels Effect'). As much of our regulation originates at EU level, this helps to position Ireland, along with other Member States, at the forefront of regulatory developments and with the potential to avail of "first mover" advantage in areas such as digital, personal data and responsible business matters.

The importance of a modern, cohesive and wellresourced digital regulatory framework, as a prerequisite to our ambition to be a leading digital economy, cannot be overstated. Ireland is the lead regulator of the global technology companies headquartered here for the purposes of major EU digital regulations, including the Digital Services Act and the General Data Protection Regulation. This is an invaluable opportunity to demonstrate Ireland's digital leadership on the EU and global stage, and strong execution is essential. Our experience in this space adds weight to Ireland's influencing power on digital regulatory matters in the EU, and in international fora, and we will continue to act as strong advocates for an ethical and human-centric approach to the development and adoption of digital technologies.

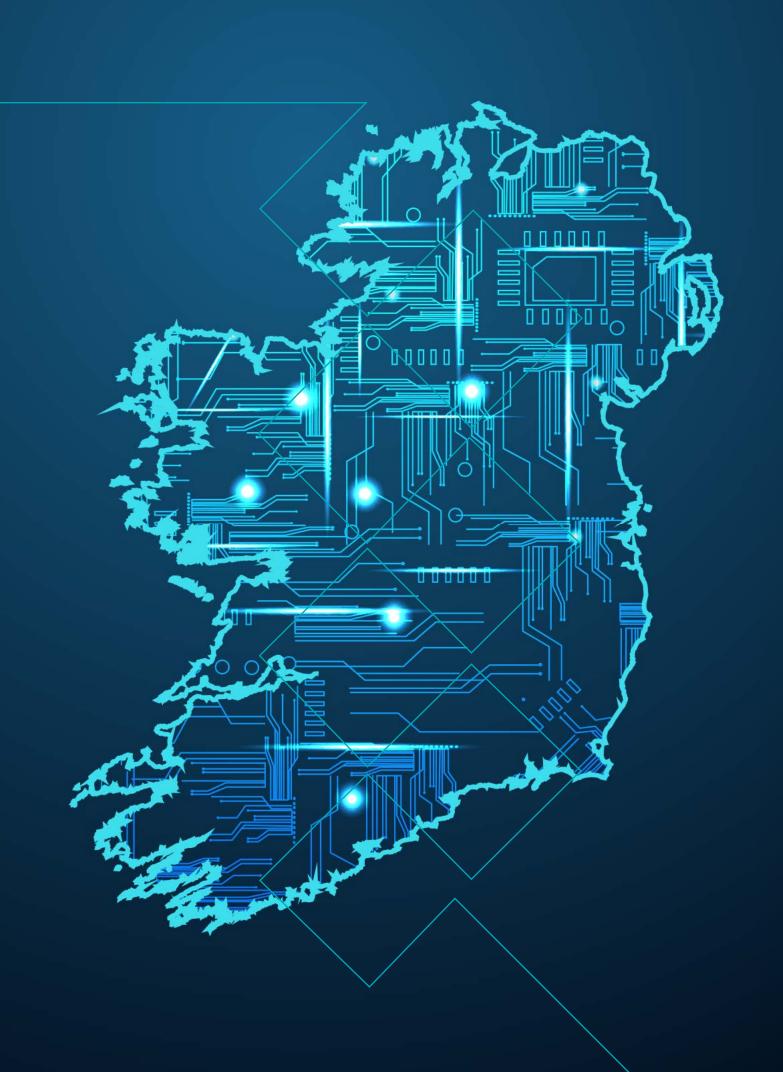
Ireland will continue to be vigilant in advocating for the benefits of the country-of-origin principle – which provides that regulated enterprises must comply with just the one legal regime of the Member States in which they are established, as opposed to the laws of every Member States into which they sell, when it comes to cross-border services such as digital. This is essential to the effective functioning of the single market.

Some of the most important enterprise policy priorities, including climate action and sustainability, digital transformation, and such innovative sectors as medical devices and construction are strongly supported by a modern, internationally recognised standards and certification regime. The validation provided by adherence to the highest safety and manufacturing standards, internationally recognised through certification, will continue to support global market access and progression to higher points in the value chain for Irish-based enterprise.

Ireland's planning system is a key component of the broader regulatory environment and planning delays, including those arising from legal proceedings, have been highlighted as a key barrier to the timely delivery of essential infrastructure, including housing, transport and energy. These delays pose a serious risk to the achievement of targets across various areas, most notably in housing and energy. Any undue delays can impose further costs on both enterprises and households in the form of time lost and opportunities foregone. The planning system is currently being reviewed and overhauled to reduce delays in the provision of energy infrastructure, housing and other essential investments. This includes a review of the Planning and Development Act, including the legal definitions of strategic infrastructure. This will simplify the process by which strategic projects can apply directly to An Bord Pleanála for planning permission.

A balanced and appropriately regulated workplace – from employment rights to workplace health and safety – provides important rights for workers and creates a level playing field between firms. It also encourages labour market participation and the development of talent and skills in an attractive labour market which values its workers. The Government has legislated for a statutory sick pay scheme for all employees and is introducing a living wage and an auto-enrolment retirement savings system. We will ensure Ireland continues to be rated amongst the best countries in the world in terms of the development and implementation of employment rights, <sup>31</sup> which are critical to promoting quality jobs and building an inclusive economy that is attractive to highly mobile labour and skills.

The Responsible Business agenda is very broad and evolving rapidly. It spans a variety of policy areas (trade, investment, employment rights, company law, climate action etc) and has several drivers including the UN (Sustainable Development Goals), OECD (Guidelines for Multinational Enterprises) and the European Union (a wide variety of legislative proposals including in the areas of forced labour, corporate due diligence and corporate sustainability reporting). This agenda also dovetails, to a significant extent, with the Environment, Social, and Governance (ESG) agenda which is increasingly to the fore among activist and ethical investors and corporations. Ireland will continue to be supportive of proposals that promote responsible business conduct and will seek to ensure that proposals strike the right balance by providing effective protections, whilst ensuring that the measures to be implemented by business are clear, proportionate, and enforceable. If progressed and embraced in a proactive manner, Responsible Business can become a further competitive advantage and distinguishing feature of Irish enterprise.



## 3.0 Future Policy Direction

Our enterprise policies continue to succeed. However, it is imperative that we continuously review and adapt our policy stance to respond to the evolving global business environment; but this is a case of evolution rather than revolution.

The next phase of Ireland's enterprise development will be defined by the net zero and digital transitions. These transitions are mutually reinforcing; technology and data will play a key role in achieving sustainability goals while the sustainability imperative will unlock new opportunities and markets. Embracing a twin transition strategy offers significant benefits in terms of efficiencies and productivity, transforming business models, and creating new opportunities for innovation and jobs.

Future policy will build on the elements of the ecosystem that are working well, seize opportunities to underscore our competitiveness and resilience into the future and make the structural changes required to offset risks and vulnerabilities and to deliver a sustainable, resilient Irish economy to 2030 and beyond.

Our vision is for Irish-based enterprise to succeed through competitive advantage founded on sustainability, innovation and productivity, delivering rewarding jobs and livelihoods.

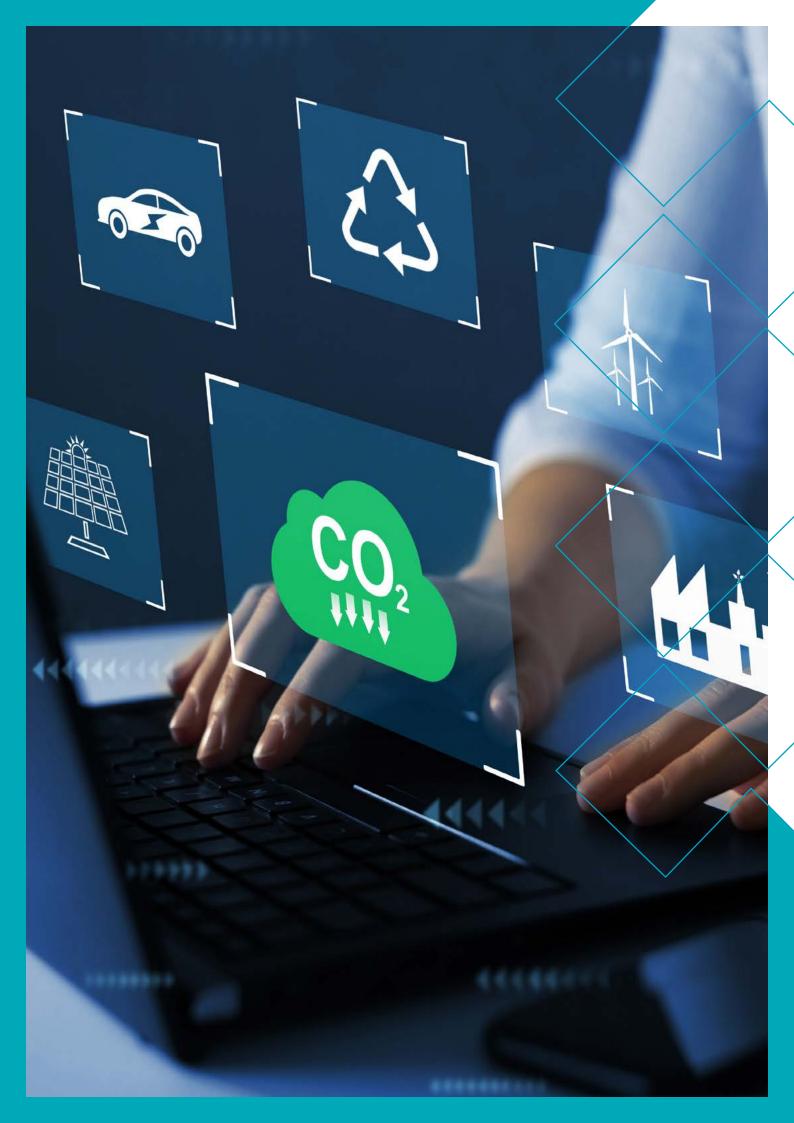
Our ambition is for a vibrant, resilient, regionally balanced and sustainable economy made up of a diversified mix of leading global companies, internationally competitive Irish enterprises and thriving local businesses.

## To do this, we will focus on seven priority enterprise policy objectives:

- 1. Integrating decarbonisation and net zero commitments
- 2. Placing digital transformation at the heart of enterprise policy
- 3. Advancing Ireland's FDI and trade value proposition
- 4. Strengthening the Irish-owned exporting sector
- 5. Enabling locally trading sectors to thrive
- 6. Stepping up enterprise innovation
- 7. Building on strengths and opportunities

Over the coming years we will support our existing foreign owned companies and continue to actively pursue foreign direct investment in sustainable and emerging growth areas, positioning Ireland as a location for green investment. We will prioritise growth in Irish-owned enterprises across the regions, encouraging entrepreneurship and high potential start-up companies. We will assist companies to scale and internationalise from Ireland, increase our export intensity and number of exporting companies, and support productivity improvements across all enterprises, including in our locally traded sectors.

Achieving our ambition will require prioritisation of our activities and alignment of enterprise policy budgets with these objectives.



## 3.1 Integrating Decarbonisation and Net Zero Commitments

Decarbonisation is now an environmental and economic imperative. It is not a threat to our competitiveness; the risk now lies in not embedding it in our enterprise policy. Consumers - both businesses and individuals are becoming more conscious of the provenance and impacts of their purchases. Financial and insurance markets are increasingly reflecting these demands and, for Irish businesses to be competitive and resilient, they will need to respond to consumer preferences in support of sustainable production and services. In many global value chains in which Ireland is embedded - food, pharmaceuticals, chemicals, technology, data services - there are clear signals that decarbonised, sustainable inputs will be a fundamental driver of competitiveness in the coming decade. Through investment and an ambitious energy sector transformation, Ireland can compete globally in these new markets.

The Climate Action and Low Carbon Development (Amendment) Act 2021 establishes legally binding emission targets and defines the level of emissions abatement needed to be achieved by different sectors of our economy. The Government has agreed a Sectoral Emissions Ceiling requiring a 35% reduction in emissions arising in our manufacturing sectors, while all businesses will need to reduce the environmental impacts of their buildings, heating, transport and supply chains. While this transformation will have associated costs, there will also be opportunities for efficiencies and creating new types of value for customers through 'circular' and decarbonised products and services.

The agreed ambition to decarbonise our economy is transformative and will require significant investment and adoption of low and no carbon technologies across all sectors. In addition, enterprise policy will respond to the resilience, risk exposure and adaptability of Irish-based firms to a changed climate, which will have less stable environmental conditions and be more prone to extreme weather events such as flooding, heat waves and drought.

We will focus on business model transformation and resource circularity to reduce costs, increase sustainability and enable enterprises based in Ireland to compete on quality, reliability, value-added and customer service. This will enable and incentivise SMEs, start-ups and entrepreneurial facilitators / incubators to design business models that thrive in a sustainable and net zero business environment.

These considerations require significant changes to enterprise policy. Policy will be oriented to helping existing firms meet the costs of decarbonisation and positioning them to exploit the opportunities of a low carbon economy. The increasing economic cost of carbon is such that aid for 'greenfield' industrial

development will be restricted to investments that align with decarbonisation objectives. To give effect to this, our enterprise development agencies – IDA Ireland, Enterprise Ireland, LEOs and other sectoral agencies – will incorporate carbon abatement as an objective equal to and alongside employment and value-added. This will require significant changes to agency priorities and activities including the setting of explicit emissions reductions targets for their client base and the incorporation of the cost of carbon into project evaluation. These changes will mean new industrial development will be less reliant on fossil fuels and therefore more resilient.

The role of the Sustainable Energy Authority of Ireland (SEAI) will also have to change to support the alignment of enterprise policy with environment policy objectives. The SEAI will work alongside the enterprise development agencies, leading on areas such as commercial premises retrofit and developing sector specific emissions reduction roadmaps. Sectoral agencies, such as Fáilte Ireland and Bord Bia, will also have a role to play in influencing, enabling and supporting firms in their sectors to invest in the required adjustments.

Sectors, such as agri-food and cement, require fundamental transformation to transition to low carbon business models and prepare for net zero production. We will design and implement specific sectoral policy interventions where Ireland will aim to be a leader rather than a follower in innovation, R&D and new product development in these sectors, building on the Food Vision 2030 for agri-food, in order to access a transforming global market. This proactive approach will open significant new opportunities, whereas delayed investment and transformation would represent a significant resilience and viability risk to Irish enterprises.

The scale of our offshore wind potential, when coupled with hydrogen production, offers a 'once in a century' industrial development opportunity as well as a highvalue export capability. It will not be simple to deliver but with the right policies, and industry buy-in, it has the potential to transform Ireland's economy. A proactive, positive industrial energy development approach will meet the needs of a rapidly evolving energy sector and the transformation of energy use by industry broadly. This will include developing a domestic supply chain and exportable expertise in renewable energy opportunities, including offshore wind and hydrogen. For example, Ireland could lead globally on the design, build and remote monitoring of floating offshore platforms and monitoring technology. It will also include a dynamic bioeconomy that can help the resilience of our argifood and forestry sectors while providing renewable

energy through biomass and biomethane. Our approach will ensure that industry can leverage the competitive advantages of Ireland's abundant renewable energy capability, while positioning the country strategically

for future opportunities in decarbonised manufacturing and digital services sectors.

# 3.2 Placing Digital Transformation at the Heart of Enterprise Policy

Digital technologies will play a major role in shaping global competitiveness and productivity over the coming decades, and Ireland has set out its ambition to be a digital leader at the heart of European and global digital developments in Harnessing Digital – the Digital Ireland Framework, launched in 2022. It is complemented by the AI – Here for Good strategy, launched in 2021. Digital technologies are also essential drivers in decoupling economic growth from resource consumption and can help the transition toward a more sustainable growth model.

## Ireland's digital strategy for enterprise has four objectives:

- sustaining Ireland's attractiveness as a location of choice for cutting edge global technology businesses.
- driving a step change in digital adoption across enterprise.
- nurturing digital start-ups; and
- ensuring a modern, cohesive and well-resourced regulatory framework for digital.

Ireland has been very successful as a location for strategic activities of large technology companies, and technology now accounts for c.60% of our exports and 6% of employment.

There is a huge opportunity for a productivity dividend from an uptake in digital adoption across Irish enterprise. Our objective is that at least 90% of our SMEs will reach at least a basic level of digital intensity by 2030. Digital technologies also present unprecedented opportunities for small business to overcome size related barriers to innovation, going global and growing, but many SMEs lack the capacity to undertake digital transformation without government intervention, with a third of SMEs having no digital plans in place.

#### DIGITAL TRANSFORMATION OF ENTERPRISE

Our enterprise agencies and the LEO network will embed digital transformation in their engagements with businesses – as an important enabler for better, leaner processes, innovation, growth, sustainability and competitiveness. We will incentivise accelerated adoption of digital across enterprise through capital grants, training and consultancy supports. This will be complemented by a network of European Digital Innovation hubs, which will act as one-stop shops for expertise, advice, and opportunities to test out technologies before investing. In addition, we will prioritise advisory and awareness initiatives using available channels including the enterprise agencies and roll out a Digital Portal to demystify digital and support businesses on the digital adoption journey.

To be successful, digital transition requires not just the adoption of technology, but changes in culture, leadership, skills and processes. We will increase investment in delivering high level digital skills and programmes to equip the entire workforce with the necessary digital and transversal skills.

Sustained investment in digital infrastructure, including connectivity and cybersecurity, is a prerequisite for a strong digital economy. Connectivity includes not just broadband capacity throughout the country but also backhaul networks for data. Significant progress on digitisation of the public service will be achieved, and we will use the public procurement process to support innovative digital SMEs.

#### **DIGITALISATION OF MANUFACTURING**

Digital transformation and technology adoption is an imperative for manufacturing operations to stay competitive. The shift to digitisation in manufacturing is often referred to as Industry 4.0, signifying the fourth industrial revolution. Progress across the manufacturing sector, in terms of adoption and deployment of technologies, has been mixed. This reflects varied levels of capacity and capabilities in terms of innovation strategy, financing, and workforce development, all of which facilitate effective digital transformation in a rapidly evolving technology landscape.

We will enable assessment of digital capabilities, support development of strategic technology roadmaps, and facilitate workforce development that aligns with the deployment of digital technologies. We will coordinate state resources across enterprise agencies, training, and skills development providers as well as amongst the network of technical RD&I centres and institutes.

Effective management and coordination of state-funded resources will deliver on the aspiration of the 2020 Industry 4.0 Strategy to become a world leading hub at the frontier of Advanced Manufacturing. This will enable manufacturing in Ireland to transition to a carbon neutral, fully digitally enabled and sustainable position.

#### **DIGITAL TRADE**

A growing proportion of international trade is in digital services; data flows are increasingly the lifeblood of global commerce; and issues of consumer protection, data privacy and cyber-security are ever-more critical to maintain trust and confidence in e-commerce. Success in driving forward the digital trade agenda will complement investment by Irish enterprise in digital transformation.

At EU level and in the WTO. Ireland is a firm advocate for innovation and ambition in promoting digital trade, ensuring that we avoid erecting new barriers and that Ireland's digitally aware and innovative enterprise sector can avail of opportunities as they emerge. In particular, it is important that Ireland and the EU are 'rule-makers' rather than 'rule-takers' in this dynamic new environment, as digital trade features to an increasing extent in bilateral and plurilateral trade agreements. We will work, through the EU and at the WTO eCommerce negotiations, to ensure that the global moratorium on introducing new tariffs on digital transactions stays in place. These negotiations also seek to make progress on upgrading customs processes for the digital era including streamlining inward and outward trade flows by replacing traditional paperbased customs clearance with digital trade facilitation standards, which Ireland fully supports.

## 3.3 Advancing Ireland's FDI and Trade Value Proposition

As noted earlier, Ireland, as a small open economy, relies on international trade as a principal source of economic growth and improvement in living standards. Given our small domestic market, Irish-based enterprises must look to international markets, facilitated by our access to the EU network of Free Trade Agreements, to expand and realise economies of scale and associated productivity gains.

Ireland's openness to trade, investment and technology flows has allowed for a diversification of the economy into sectors that have made the economy more resilient in the face of internal and external shocks, as evidenced by the recoveries from the 2008/09 financial crisis and the more recent COVID-19 pandemic. Our high levels of trade and investment have also been enabled by our membership of the European Union and the Single Market. A European Commission report, **Trade and Jobs Report 2021**, highlighted that international trade and investment supports 1.3 million jobs in Ireland.

In 2022, the Government approved Ireland's Trade and Investment Strategy 2022-2026: Value for Ireland, Values for the World. The overarching goal of the

strategy is to see Ireland grow sustainably, diversify our export markets, and support continued prosperity and higher living standards, in the context of changing geopolitics, deglobalisation or increased unilateralism and the attendant questioning of the open free trade model. The Strategy complements this White Paper and complements other Government strategies such as Global Ireland 2025 and the Shared Island initiative.

EU Industrial Policy, underpinned by the transformative ambitions of the EU Green Deal, continues to develop and Ireland will continue to make its voice heard in the evolving policy debate. A strong focus is being placed at EU level on specific sectors and ecosystems. These include sectors where Ireland has strengths such as semiconductors, life sciences, space and defence, and technologies like 5G/6G, cloud, edge computing and AI, supported by initiatives in the fields of Strategic Value Chains, Industrial Alliances and Transition Pathways. Ireland is also actively engaged in European innovation and frontier technology initiatives including Horizon Europe and Important Projects of Common European Interest (IPCEIs). Ireland will continue to participate in these initiatives particularly in sectors or technologies

where we can leverage an existing strong enterprise presence or emerging potential, with a specific focus on supporting SME engagement.

FDI and trade will remain central to our growth model and economic strategy. Even against the backdrop of recent headwinds, Ireland has performed strongly with investment, employment and exports continuing to grow. In an increasingly competitive global environment, we will continue to position Ireland as a location of choice for overseas investment, guarding against complacency by continually adapting and evolving our FDI value proposition. Our approach to FDI attraction will evolve to reflect our net zero ambitions and exploit emerging opportunities, having regard to the carrying capacity of the economy. We will target at least half of all FDI investments from 2021-2024 to locations outside of Dublin.

The global environment in which Ireland competes for FDI and trade is constantly evolving. Political decision-making and national security considerations are emerging as key factors in the global business landscape, as tensions previously focused on trade flows widen to issues of technology transfer, intellectual property and strategic autonomy. As outlined earlier, globalisation patterns are evolving, and associated market and supply chain fragmentation may lead to the reorganisation of MNEs' operations. These developments could potentially alter the highly integrated global environment for trade and investment and lead to increased levels of regionalisation.

These geopolitical considerations coincide with acceleration of technology adoption – embracing digitisation, automation and AI – which will substantially alter the nature of work and the needs of MNEs seeking to establish new bases. This changing global environment requires a flexible, agile approach, and policy will evolve to take advantage of the new opportunities this transformation will bring, whilst also providing continuity as an investment destination.

As MNEs enhance their focus on climate adaptation and mitigation, there is an opportunity for Ireland to benefit and, as articulated above, we will place sustainability at the core of our enterprise model. We will leverage our green transition as a core component of our proposition to overseas investors by showcasing Ireland as a climate-friendly and sustainable business environment in which to base ongoing operations and new investments.

We also need to strengthen linkages between our foreign-owned MNEs and between MNEs and SMEs by developing ecosystems and mentoring which can help local firms, including High Potential Start Ups (HPSUs), to become embedded in the value chains of FDI-intensive sectors. This will lead to higher domestic value-capture and enable our SMEs and domestic economy to benefit from positive spillovers.

## 3.4 Strengthening the Irish-owned Exporting Sector

SMEs and entrepreneurship are central to our objective of diversified, sustainable growth. Ireland has long targeted programmes at indigenous firms in the manufacturing and internationally traded services sectors, with a particular focus on growing exports. The rationale for this is clear: exporters have been shown to be larger, more productive, more skill- and capital-intensive, and to pay higher wages than non-exporting firms.

We will continue to prioritise direct financial assistance to exporting firms who contribute significant value to the economy. We will broaden the number of exporters, particularly from the existing large cohort of non-exporting SMEs.

The OECD Review of SME and Entrepreneurship Policy in Ireland concluded that the business environment is generally favourable and that there are many best practice programmes for supporting high potential SMEs and entrepreneurs with strong co-ordination across Government. However, the review found areas

where policy could be improved, which have been subsequently identified as priorities under the SME and Entrepreneurship Growth Plan. These include growing productivity, particularly among medium-sized firms, increasing the start-up rate and the number of exporters, and fostering enterprise networks and clusters

An analysis of the productivity performance of the SME population shows that, while the performance of micro firms is in line with the OECD average, there is a challenge among medium-sized enterprises, which show lower aggregate rates of productivity and lower growth in productivity, relative to other OECD countries. The OECD analysis identified several underlying factors behind this, including managerial skills, lack of policy focus, relatively low investment levels and low number of exporters (Ireland has one of the lowest ratios of exporters to total enterprises, employer enterprises, and population, in the EU). Our ambition is to increase the average annual growth in productivity in Irishowned enterprise by 2.5% by 2024.

We will focus our efforts on developing an integrated system wide approach to create an ecosystem that accelerates start-up growth and scaling, that includes access to funding both public and private; investments in R&D and innovation; access to skills; and an appropriate regulatory environment as well as a tax system that encourages investment in start-ups and scaling. Our objective is to increase by 50% the number of large Irish exporting companies.

Enterprise Ireland's recently published three-year strategy, **Leading in a Changing World**, focuses on creating a regionally balanced enterprise ecosystem for entrepreneurs to thrive, with a target that over two-thirds (30,000) of new jobs created will be outside Dublin. It also sets out an agenda to support scaling by empowering Ireland's most ambitious companies to access funding and expertise, to strengthen their leadership and management capabilities and skills, and to foster diversity.

Exposure to, and mentoring in, the dynamics of high-performance growth and leadership business strategies are important enablers for many leadership teams of SMEs as they look to take their enterprise to the next stage. We will continue to provide best-in-class financial aid and advisory services to entrepreneurs, HPSUs and scaling firms as appropriate to their size and potential. We will also provide opportunities for IP-intensive start-ups and scaling firms to work with public bodies to test and validate their products and services.

The Enterprise Ireland strategy commits to ensuring a continuation of support for enterprises that have grown to ten or more employees, as appropriate to their stage of development and growth ambition. Working with the LEOs, Enterprise Ireland will ensure that companies of all sizes in the manufacturing and internationally traded services sectors are assisted on their development journey. The extension of the LEO mandate to work with prospective exporters that have grown to over 10 and up to 50 employees will strengthen the pipeline of exporters and contribute to the Government's target of an additional 2,000 exporters.

Innovative businesses need risk capital (i.e., equity) to fund their growth. While the private equity investment market in Ireland has grown significantly over the last decade, there are sections of the market that still require intervention, primarily seed/start-up and scale-up finance. Access to appropriate financing for scaling investment is one of the largest gaps currently in the Irish market and is also recognised as a pressing issue across Europe.

Enterprise Ireland is Ireland's main provider of public equity finance. By acting as an anchor investor, Enterprise Ireland has successfully crowded in private capital to seed and venture capital funds, which provide

vital risk capital and related soft supports to early-stage innovative Irish businesses. The discipline and market focus that is brought by the private investors is critical to overall success. At the more developed end of the market, the Ireland Strategic Investment Fund (ISIF) invests in Irish-owned firms through its sovereign funds, but its mandate focuses on interventions at larger scale firms, with investments starting at the €10 million range.

However, there is a gap in the supply of equity investments from the market at the €3-€10 million level, which would meet the scaling needs of high potential Irish businesses. This absence leads to quality businesses seeking investment from outside the jurisdiction and, more often than not, outside the EU. This gives rise to the risk that Ireland (and the EU as a whole) becomes an incubator for other world regions and misses out on exceptional ventures, leading to technologies, knowledge and jobs relocated elsewhere.

We will foster a sustainable ecosystem of private investment for scaling so that companies with global potential can scale and thrive here in Ireland. This needs coherent and sustained policy intervention to attract and retain private capital. Moreover, it is important that public bodies can act as patient investors, reducing the pressure on achieving returns in the short-term. The Department of Enterprise, Trade and Employment is examining this issue and will publish a Strategic Plan on the use of finance as a catalyst to develop a scaling ecosystem in 2023.

A central component of our approach is to support balanced regional economic and enterprise development. The enterprise agencies and LEOs will continue to strengthen the enterprise ecosystem, providing opportunities for communities and businesses across Ireland. Regional Enterprise Plans, which are driven by regional stakeholders, complement the work of the enterprise agencies in championing initiatives where that region has a competitive advantage consistent with Smart Specialisation principles. Balanced economic growth is also a core objective of Ireland's National Rural Development Policy, **Our Rural Future: Rural Development Policy 2021-2025**.

Experience internationally suggests that there is scope for the co-operative model to play a greater role in the Irish enterprise landscape. We will consolidate and modernise existing legislative provisions and introduce modern corporate governance, financial reporting, and compliance requirements, thereby making co-operatives more attractive to investors. This legislation will position the co-operative model more favourably as an alternative to the company model for entrepreneurs and for social and community activities.

## 3.5 Enabling Locally Trading Sectors to Thrive

Locally trading sectors such as retail, construction, accommodation, arts, leisure, entertainment and food account for a significant number of the total number of firms in Ireland and, importantly, for a high proportion of employment. Employment in these sectors is broadly based across all regions. They play an important role in placemaking, contributing to the economic and social fabric of towns and villages across Ireland. As highlighted during the pandemic, these sectors also provide vital services and are critical to ensuring the security of supply of essential products and services.

Over the last number of years, the Government has responded quickly and effectively through the existing state bodies to the challenges faced by domestically focused firms, whether it is access to finance, supporting firms through COVID-19 or helping firms to navigate the twin transitions of climate action and digitalisation, particularly through Trading Online vouchers and Green for Micro, etc.

In terms of direct interventions, the LEOs provide various training and advisory programmes to small businesses, as well as acting as a 'first stop shop', providing signposting for all firms to find out about resources and programmes available from government departments and agencies. To support accessibility and efficiency, the LEO network will map and clearly communicate the broad range of government programmes and advisory services available for firms, including locally trading firms.

The LEOs will continue to enhance their advisory services for locally trading firms to improve productivity, particularly around digitalisation and reducing energy and carbon emissions, which will have positive spillover effects on the wider economy. We will make training, consultancy, and mentoring services available to more locally trading business with over 10 and up to 50 employees. The LEOs will pilot opportunities to subsidise implementation costs for digitalisation and green initiatives that assist this cohort of firms to engage in the twin transition. However, direct financial assistance for expansion or growth activities for those who plan to only trade locally will not feature due to the risk of excessive deadweight, displacement and significant administrative costs.

Given the breadth of enterprises in the locally traded sectors, the Department of Enterprise, Trade and Employment will also examine alternative mechanisms, such as one-to-many models, that could be leveraged to engage with this cohort of firms.

Social Enterprises, mostly micro-enterprises or SMEs, are an important and growing part of Ireland's entrepreneurship ecosystem, creating jobs and stimulating local economic activity, and are recognised as an integral part of Ireland's broad enterprise policy landscape. For example, social enterprises are already actively supporting the green transition through many circular economy initiatives and the EU's Industrial Strategy recognises the Proximity and Social Economy as one of the 14 key industrial ecosystems<sup>32</sup> to support the twin transition to a green and digital economy as well as contributing to recovery and resilience. A forthcoming OECD review of the Social Enterprise ecosystem in Ireland will allow Government to set out the next phase in the development of the sector.

## 3.6 Stepping up Enterprise Innovation

Innovation is an essential productivity driver for enterprises and the economy and, more broadly, innovative enterprises are important actors in addressing societal challenges and driving societal transformation. Innovative businesses were critical in helping our economy and society to continue to function during the pandemic, and they continue to play a central role in the diffusion of new research and knowledge.

Many Irish firms are driving the emergence of new and often disruptive products, services and business models, in areas such as nutrition and genetics, microelectronics, advanced manufacturing, deep-tech, and data analytics. Innovation-driven start-ups are delivering solutions to national and global challenges and opportunities across diverse areas from financial services to healthcare and education.

Ireland is one of the EU's 'strong innovators' and has strengthened its position from eleventh to sixth place on the overall European Innovation Scorecard in 2022. However, Ireland lags on several important innovation indicators, including overall investment in R&D. The persistent innovation gap between the higher R&D performing foreign owned cohort and Irish-owned SMEs is also an ongoing challenge.

Our ambition is to consolidate and build on the progress we have made and redouble our efforts to broaden and deepen innovation capability across the enterprise sector, in particular, the innovation performance of our SMEs, embedding a culture of continuous innovation.

Impact 2030 sets out how we will boost our enterprise innovation performance in the coming years, including ambitions that by 2030 Ireland will:

- occupy and maintain 'Innovation Leader' position on the European Innovation Scoreboard;
- achieve a doubling of business expenditure on R&D (BERD):
- grow the number of researchers per 1,000 in the labour force to 15 from just over nine per 1,000;
- double the number of high performing start-ups from research.
- accelerate Irish-owned enterprise productivity growth from 1.95% to 2.5% per annum; and
- achieve €1.5 billion of participation and impact within Horizon Europe.

Working with partners across the R&I ecosystem, we will foster disruptive innovation, development of RD&I capability and talent, supporting enterprises to enter new markets and respond to new growth sectors and encouraging innovative start-ups, including fostering good design as an integral part of bringing new products and services to market. Our approach

will be to ensure that the right enabling environment is in place to support an innovation economy and that Irish-based enterprises are embedded in frontier technology ecosystems. We will focus on strengthening links and collaboration between our public and business researchers, accelerating the commercialisation and use of new knowledge and new ideas.

Leveraging highly impactful approaches, such as the Disruptive Technologies Innovation Fund, we will align investment with excellence in sectors where we are already strong, such as nutrition and genetics, microelectronics, and data analytics, and take advantage of new technological opportunities.

Through Ireland's **Smart Specialisation Strategy**, **2022 - 2027**, we will drive increased levels of innovation performance in enterprise across our regions and maximise opportunities for innovation diffusion across regions and sectors. A strengthened national approach to clustering will be an enabling factor in encouraging collaborative research and innovation and collective action amongst firms.

Strengthening and coordinating our network of research and development centres and facilities will be a core focus, including in the areas of advanced manufacturing, life sciences and bioprocessing, digital and ICT and food and agri-tech. We will drive innovation and transformation opportunities that are needed in sectors such as construction through the newly established ConstructInnovate Technology Centre.

Integral to stepping up innovation in enterprise is a focus on the broader enabling RD&I environment, continuing to invest in frontier research and a well-equipped research environment; exploring new loan and grant initiatives to encourage business research and innovation; a supportive Intellectual Property regime to encourage collaborative research; engagement in standards development; and delivering a competitive, SME-friendly R&D tax offering.

Finally, Ireland's relationships and engagements internationally, including on a shared island basis, are crucial in driving Ireland's enterprise innovation performance and impacts. We will continue to increase participation by Irish-based enterprises in international research collaborations and ecosystems, as envisaged in the new EU semiconductors initiatives, and benefit from additional sources of funding for research and innovation, such as European Framework Programmes and the European Innovation Council.

## 3.7 Building on Strengths and Opportunities

Technological change is blurring sectoral boundaries and driving the emergence of new frontiers for innovation and new business models, in turn, giving rise to new growth sectors as well as new sources of competition. Many small advanced economies, operating close to the innovation frontier, have demonstrated an agility and ability to deploy new technologies and business models effectively. However, small economies tend to develop distinctive competitive advantage in a limited number of areas. Resource constraints are such that small economies must make choices.

By building on existing capabilities and strengths in global markets and positioning Ireland at the frontier of emerging opportunities, we will underpin Ireland's resilience in the face of disruption and transition. Sustaining and building competitive advantage in areas of strategic national priority and potential for Ireland requires deliberate and strategic policy choices.

Competitive advantage is often associated with pronounced clusters of related firms, higher education institutes and research performing organisations organised around areas of national strengths and capabilities. Across small advanced economies, international engagement and productivity performance comes disproportionately from enterprises in clusters<sup>33</sup>. These clusters provide difficult-to-replicate ecosystems that drive innovation and knowledge transfer, attract investment and talent, and promote value capture in the domestic economy through supply chain linkages and spill overs.

Ireland has developed strengths in a range of frontier technologies and strong clusters, with notable geographical concentrations of firms, including in technology, life sciences and financial services. As a small country, Ireland has also benefitted from the power of localised connections and geographical proximity of companies and third level organisations, leading to the emergence of local specialisations which are being further developed though implementation of Ireland's Smart Specialisation Strategy 2022 – 2027.

There are also numerous local networks of companies working together to share knowledge and cooperate to compete in international markets.

Ireland has a nascent, but developing, landscape of formal cluster organisations seeded through Enterprise Ireland's Regional Technology Clustering Fund (RTCF), the Regional Enterprise Development Fund (REDF) and through investments by IDA Ireland as well as through other funds and investments including the rural regeneration funds and the **Shared Island initiative**. Cluster organisations provide a formal mechanism to enable member firms, Research Performing Organisations, and other stakeholders to work collectively to drive better business performance and to enhance the business environment or ecosystem for a technology, sector or industry.

#### NATIONAL CLUSTERING APPROACH

We will build on this cluster landscape to sustain and develop competitive advantage in areas of strategic importance and potential. Through a coordinated national approach to clustering, we will strengthen ecosystems in both areas of existing strength and potential.

By reinforcing clustering as a tool of enterprise policy, we will strengthen linkages and synergies between companies of different sizes and stages of development, regionally, nationally and across the island, and facilitate collaboration with the higher education institutes as anchor institutions and other public sector bodies. We will also encourage collaboration across clusters and ecosystems to leverage new emerging opportunities for Irish enterprise.

Identification of priority areas for enhanced clustering will be underpinned by an assessment of competitive strengths and potential opportunity against a range of factors, including the scale of potential impact; innovation intensity and research capability; and market direction, informed by horizon scanning and strategic foresight.

A stronger clustering approach can serve a number of important enterprise policy objectives:

- accelerate decarbonisation and the net zero transition:
- drive productivity by facilitating more companies to operate at technology frontiers as part of highly innovative globally leading clusters; and
- improve our capacity to respond to opportunities or challenges.

<sup>33.</sup> Review of Industrial & Enterprise Policy in Small Advanced Economies and Implications for Irish Enterprise Policy, Dr David Skilling, 2022, Landfall Strategy Group, Report to the Department of Enterprise, Trade and Employment.

By adopting a more coordinated national approach to clustering, we aim to maximise the scale, impact and international visibility of Irish clusters and cluster organisations, while simultaneously leveraging the benefits of proximity and co-location to boost regional and rural economic development outcomes. Furthermore, building collaborative cross border linkages through a shared island approach to clustering offers potential to harness synergies and opportunities across the island, that can result in economic benefits both North and South, in line with the Shared Island vision.

Effective clustering could provide a platform to facilitate greater engagement with EU industrial ecosystems, industrial alliances, Strategic Value Chains and Important Projects of Common European Interest (IPCEI), where Irish-based enterprises have a strong European and, indeed, global leadership.

We will develop a National Clustering Programme to encourage the formation and strengthening of cluster organisations to accelerate cluster development. The Programme will take a medium- to long-term funding view for established clusters to allow time and confidence to build relationships and maximise the performance of the cluster and the associated ecosystem. The clustering programme and cluster organisations will be subject to regular review to ensure they are delivering value to their members and contributing to strategic enterprise policy direction.

Implementation of the National Clustering Programme will be delivered through a central coordination mechanism, with ministerial-level sponsorship, crossgovernment engagement and involvement of the enterprise development agencies. This coordination structure will have responsibility for administration of the National Clustering Programme and for developing and supporting a focused portfolio of cluster organisations, including provision of advice, technical support and facilitating training. The remit of this central function will go beyond funding administration as it will also be tasked with enabling strategic dialogue between stakeholders and it will play a central role in ecosystem strengthening and development, ensuring cross-government coordination and action to maximise the potential and impact of clustering at individual enterprise and sectoral or national levels.



## 4.0 Implementation

This White Paper provides the framework for enterprise policy for the period to 2030. Our activities and interventions will be designed to achieve our vision as set out above.

Implementation of the White Paper will be overseen by the Cabinet Committee on Economic Recovery and Investment. The Department of Enterprise, Trade and Employment will lead on developing consecutive two-year programmes of cross-government activity. These programmes will commit relevant Government Departments, agencies and offices to timetabled deliverables. Programme progress will be reported on biannually to the Cabinet Committee and monitored on an ongoing basis via the associated Senior Officials Group. The first programme of activity will be prepared by the Department of Enterprise, Trade and Employment, in consultation with relevant actors, in Q1 2023 and will cover the period to Q4 2024. We will monitor performance across the overarching metrics in Appendix I that align with our strategic policy objectives. Reflecting the interconnectedness of the enterprise ecosystem, several of the selected metrics are also utilised in other Government strategies. Updates on these measures will be included in programme progress reports.

We will prioritise the Department of Enterprise, Trade and Employment's capital budget to reflect the ambition set out in this paper, focusing on no-regret investments that generate spillovers, enhance productivity and help firms navigate the twin transitions. To maximise impact, we will streamline the portfolio of enterprise supports, making them easier for businesses to navigate and facilitating more insightful evaluations. These will provide an objective evidence base to inform the adjustment or design of initiatives to effectively target desired outcomes. We will utilise the Department of Enterprise, Trade and Employment's Capital Expenditure Review 2006-2020 and the Analysis of the Distribution of Enterprise Supports 2020 as a baseline to monitor the reallocation of funds to reflect our medium-term strategic focus.

The Enterprise Development Agencies will reflect the policy direction articulated in this White Paper in new or updated strategies and ensure their activities are fully aligned with our seven identified enterprise policy priorities.

To support policy resilience and agility, we will utilise and further develop strategic foresight skills. This will build on ongoing activities in parts of the policy system, for example the forward-looking assessments embedded in the National Risk Assessment exercise and the NCPC's annual Competitiveness Challenge.

Strategic foresight helps to strengthen policymaking by providing early signalling of oncoming disruptive change, broadening the scope of what is considered relevant to policymaking and enabling the stress-testing of plans against various scenarios. We will gain from the experience of other small advanced economies that are identified leaders of institutional capabilities in this area

Our strengthened, structured anticipatory approach will be applied systematically to identify and assess signals for change, and to consider the implications for this White Paper and other national policies. This will require a cross-government effort, as issues that emerge will require consideration both as standalone opportunities and risks, as well as in the context of the wider ecosystem of Ireland's enterprise sector, and indeed our society as a whole.

# Appendix: Metrics and Targets

Target 2030	Parent Strategy	Metric	Baseline	Source		
Employment						
Maintain full employment (unemployment below 5%)		Standard measure of monthly unemployment (persons aged 15-74 years)	4.4% (October 2022)	CSO Labour Force Survey		
Integrating Decarbonisation and Net Zero Commitments						
35% Emissions reductions from Industry by 2030	Climate Action Plan	Million Tonnes CO2 equivalent	7.014 MtCO2eq. (2018)	EPA (2022) Final Emissions Data 1990 – 2021		
45% emissions reductions from Commercial Built Environment by 2030	Climate Action Plan	Million Tonnes CO2 equivalent	1.5 MtCO2eq. (2018)	EPA (2022) Final Emissions Data 1990 – 2021		
Placing Digital Transformation at the Heart of Enterprise Policy						
90% of SMEs at basic digital intensity by 2030	Harnessing Digital: The Digital Ireland Framework	SMEs with at least a basic level of digital intensity	64% (2021)	Digital Economy and Society Index 2022 Ireland		
Advancing Ireland's FDI and Trade Value Proposition						
20% increase in IDA client expenditure in Ireland by 2024*	IDA Ireland Strategy 2021-2024	Direct Economy Expenditure by Foreign owned firms	€27.9 billion (2020)	DETE Annual Business Survey of Economic Impact **		
At least half of all FDI investments (400+) from 2021- 2024 to locations outside of Dublin	IDA Ireland Strategy 2021-2024	FDI Investment in regional locations		IDA Ireland		
Strengthening the Irish-owned Exporting Sector						
2.5% average annual growth in Irish-owned enterprise productivity by 2024*	Enterprise Ireland Strategy 2022-2024	Value added per person employed	3.6% average annual increase (2014-2019)	DETE Annual Business Survey of Economic Impact **		
50% Increase in the number of large Irish exporting companies (150 companies) by 2030		Number of large Irish exporting companies (250+ employees)	104 Companies (2021) (Enterprise Ireland Annual Business Review)	DETE Annual Business Survey of Economic Impact **		
2,000 additional Irish- owned exporters by 2030	SME & Entrepreneurship Growth Plan	Number of large Irish exporting companies (250+ employees)	9,167 (2017)	CSO		
Over two-thirds (30,000) of new jobs created in Enterprise Ireland assisted firms will be outside of Dublin	Enterprise Ireland Strategy 2022-2024	Employment in Enterprise Ireland Supported firms outside Dublin		Enterprise Ireland Annual Business Review		

Target 2030	Parent Strategy	Metric	Baseline	Source		
Enabling Locally Trading Sectors to Thrive						
1% average annual increase in multifactor productivity growth in domestic sectors of the economy by 2025*	Future Jobs Ireland 2019	Multifactor productivity growth	-0.6% average annual rate (2016-2019)	CSO		
Stepping Up Enterprise Innovation						
Gross (public and private) Expenditure on R&D 2.5% of GNI* by 2030	Impact 2030	GERD as a % of GNI*	2.21 as a % GNI* (2020)	DFHERIS Research and Development Budget		
20% Increase in the number of High-Potential Start-Ups (HPSUs) supported by 2024*	El Strategy 2022-2024	High Potential Start-Ups supported	82 HPSUs (2021)	Enterprise Ireland Annual Business Review		
Building on Strengths and Opportunities						
Five National Cluster Organisations funded under a new National Clustering Programme by 2025		National Cluster Organisations funded under a new National Cluster Programme	National Cluster Programme to be established 2023	National coordination body		
Regional employment – Unemployment not to exceed one percentage point above national unemployment rate in any region		Standard measure of monthly unemployment (persons aged 15-74 years)	Less than 1% above national average in every region (October 2022)	CSO Labour Force Survey		

<sup>\*</sup>Target to be reviewed in 2024/2025 \*\*Enterprise Agency Clients

