

The background of the slide is a dark blue map of Ireland. Overlaid on the map are numerous thin, light blue contour lines that represent topographical features. A prominent, thicker, bright green line runs diagonally across the center of the map, possibly indicating a specific geographical feature or a data path. The IRDG logo is positioned in the top left corner.

IRDG

Pre-Budget Submission

June 2025

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IRDG Pre-Budget Submission on Innovation

Dear Ministers and Secretaries General,

On behalf of the Industry Research and Development Group (IRDG), I am pleased to submit our pre-budget recommendations aimed at enhancing Ireland's Research, Development, and Innovation (RDI) ecosystem and underpinning Irish growth and prosperity.

Ireland is at a critical juncture, with unique opportunities to bolster our global competitiveness, drive sustainable economic growth, and address pressing societal challenges. Our submission outlines a strategic framework grounded in robust data and extensive consultation with hundreds of RDI performing companies.

We recommend targeted actions including enhancing the R&D Tax Credit, simplifying SME access to innovation funding, piloting a new Innovation Tax Credit, and significantly increasing public R&D investment. Collectively, these measures will drive innovation-led growth, foster high-quality employment, and advance Ireland's leadership in green and digital transformations.

We appreciate your consideration and look forward to engaging further to support Ireland's ambitious innovation agenda.

Yours sincerely,



Dermot Casey
Chief Executive Officer
Industry Research & Development Group (IRDG)



**DRIVING IRISH
INNOVATION**

Executive Overview: Unleashing Ireland's Innovation Potential

Ireland stands at a pivotal moment for innovation, for our economy and for our future. Our economy's resilience and future prosperity will be built on *Research, Development, and Innovation (RDI)* – the engine that turns new ideas into high-value jobs, competitive industries, and solutions to societal challenges. Thanks to decades of enterprise and state support, Ireland today boasts considerable innovation strengths. World-leading companies conduct cutting-edge R&D here, and a dynamic indigenous sector is growing. **The R&D Tax Credit**, introduced in 2004, has been a cornerstone of this success, incentivising high-value investment and anchoring tens of thousands of skilled jobs in Ireland's economy. Industry engagement remains strong: in a recent *Ireland's Innovation Index 2025* survey, 65% of firms reported increasing their R&D spending over the past three years and 71% plan to further increase RDI investment in the next three. These are foundations to build upon – a talent-rich, globally connected innovation base poised for expansion.

Yet we must also confront our vulnerabilities with clear eyes. **Ireland's public investment in R&D is chronically low**, leaving us over-reliant on foreign multinationals and private sector funding. Government R&D spending (GBARD) is just **0.43% of GNI*** – barely one-third of the EU's recommended level (1.34%) – and has fallen from 0.65% in 2010. Overall R&D intensity languishes near **at roughly half the EU average** placing us well behind innovation leaders investing who are investing 3–4% of GDP. This underinvestment is a strategic risk: it means **87.5% of Ireland's R&D expenditure now comes from business, compared to ~65% in typical advanced economies**. In short, the state is not pulling its weight in fuelling innovation – and when global firms weigh where to place their next R&D project, such signals matter.

At the same time, those on the frontlines of innovation – our companies and researchers – warn of persistent barriers that slow them down. Despite improvements, **administrative complexity and delays in accessing R&D supports remain a major obstacle**. Claiming tax credits or grants can be cumbersome, especially for time-pressed smaller firms. Cash flow is another critical pain point. Under the current system, an SME might wait **up to three years for R&D tax credit refunds** – **“turning the credit into a promissory note, not capital,”** as one respondent starkly noted. In IRDG's 2025 survey, **41% of companies (and a majority of SMEs) cited slow refunds as a significant hindrance** to their R&D efforts. Simply put, *the tools we have are not yet as agile, timely, or SME-friendly as they need to be*. Ireland's innovation system is strong, but it is not firing on all cylinders – a reality we must address with urgency.

Why act boldly now? Because the world is not standing still. **Global competition for innovation investment is intensifying amid economic uncertainty and technological change**. The United States, China, and a newly ambitious European Union are each pouring resources into R&D, green tech, and digital leadership. New international tax rules (OECD Pillar Two) threaten to erode the effectiveness of our tax credit if we don't respond creatively. Meanwhile, the challenges that demand innovation are pressing: the *climate crisis* is upon us, the *digital revolution* (from AI to advanced manufacturing) is accelerating, and issues of *security and public trust* in technology are front and centre. Ireland faces these forces from a position of relative strength, but we cannot afford complacency. **Bold, immediate policy action is needed** to shore up our weaknesses and propel our innovation capacity to the next level, or we risk falling behind our peers and missing out on the opportunities of this decade.

With the right vision and investments, Ireland can seize a **strategic opportunity to lead globally in responsible innovation**. What does this mean? It means focusing our innovation agenda on areas that marry economic opportunity with societal value – *pioneering the solutions for a sustainable, digital and inclusive future*. We can become a flagship location for **green technology** innovation, leveraging our deep research talent to drive breakthroughs in renewable energy, agri-food sustainability, and climate resilience (and in doing so, meet our Climate Action Plan targets). We can position Ireland as a hub for **digital transformation** that is guided by ethics and trust – for example, through AI and data-driven innovation that carries a reputation for safety, accountability and human-centric design. And critically, we can pursue **inclusive R&D** by expanding innovation supports beyond an elite cohort, ensuring that SMEs, startups, regional enterprises, and new voices (including women and minority innovators) are all part of Ireland’s innovation story. In a world wary of tech for tech’s sake, Ireland’s can drive *innovation with purpose*– the kind that not only delivers commercial returns, but also earns public trust by solving real problems in people’s lives. We have the creative minds and industrial base to do this. What we need is the political will to back this ambition, now.

The role of the state in this innovation leap cannot be overstated. Strategic public investment and smart policy signals are the catalysts that can unlock private ingenuity at scale. The impact of a well-designed incentive is proven – recall that the **R&D Tax Credit scheme has been “critical” to Ireland’s high-value R&D growth to date**. To amplify our innovation performance, IRDG recommends a package of measures that will dramatically strengthen Ireland’s RDI ecosystem. These measures directly address the gaps identified by industry and researchers, from funding to process simplification, and will translate vision into action. They range from **boosting the value of core R&D incentives and simplifying their use, to launching a new Innovation Tax Credit for emerging areas, to significantly increasing public R&D funding** in line with our European peers. Together, these steps will send a clear signal that Ireland is serious about becoming a global innovation leader. They will spur **greater private R&D investment, job creation, and collaboration**, and ensure that our national strategies – from the Climate Action Plan to **Impact 2030** (Ireland’s research and innovation strategy) – are achieved on schedule. Most importantly, these actions will future-proof Ireland’s economy. By investing boldly in innovation now, we can build an engine of sustainable growth that secures our competitiveness and well-being for decades to come.

In summary, Ireland has a unique window of opportunity to re-invent our future through innovation, to reinvigorate our economy with new discoveries, to solve big challenges, and to inspire the next generation of innovators. We urge the Department of Finance and D/PER to embrace this opportunity in the upcoming budget.

The following are **key policy recommendations** to strengthen Ireland’s innovation ecosystem and unlock our full potential:

- **Increase the R&D Tax Credit rate to 35%**– Raise the headline RDTC from 30% to 35% for the first **€25 million** of qualifying R&D expenditure, sharpening Ireland’s competitive edge. This targeted increase will especially benefit SMEs (reducing their net R&D cost from €70 to €65 per €100 spent) and align Ireland’s incentive level more closely with leading innovation economies. It is a high-impact, fiscally manageable step to stimulate additional private RDI investment.
- **Simplify and accelerate R&D Tax Credit refunds for SMEs**– Institute **immediate, upfront refund payments up to €300,000** in year one for compliant claimants, rather than forcing small firms to wait over multiple years. This cash-flow boost, combined with streamlined claim processing (e.g. automating small claims), will remove a major barrier to SME innovation growth. It directly addresses the finding that slow refunds hinder 41% of companies’ R&D efforts, turning the credit into real working capital when it’s needed most.

- **Pilot a 50% “Green R&D Super-Credit”**– Launch a time-bound (e.g. 5-year) enhanced tax credit of **50%** for R&D projects that deliver substantial environmental benefits – such as significant emissions reductions, clean energy breakthroughs, or circular economy solutions. This bold incentive will **catalyse a surge in green innovation**, aligning financial rewards with Ireland’s climate goals. Survey data shows **roughly 78% of firms would significantly boost low-carbon R&D investment if a 50% credit were available**, indicating enormous pent-up innovation potential. To ensure accessibility, the green super-credit should offer rapid refundability for SMEs and clear criteria for qualifying projects (so that public support is tied to verified climate impacts). This measure positions Ireland at the forefront of EU climate-tech leadership and directly supports the Climate Action Plan’s innovation mandate.
- ****Introduce a new Innovation Tax Credit (ITC)**– Develop a complementary tax credit to support **high-risk, high-value innovation activities beyond traditional R&D**. This scheme would target areas like digital transformation, advanced process innovation, design and other forms of innovation not fully covered under the current R&D definition. **Eligibility should be clearly defined using international best practices (e.g. the OECD’s Oslo Manual guidelines)** to ensure compliance with state-aid rules. To promote accountability and excellence, the ITC can be tied to the adoption of **ISO 56000/56001 innovation management standards** – for example, firms could be required to attain ISO 56001 certification within a certain timeframe to continue claiming the credit. By anchoring the incentive in a globally recognised innovation framework, Ireland would blaze a trail in rewarding systematic, well-governed innovation. This ITC will fill critical gaps in our support system, **encouraging investment in design-led, digital and sustainable innovations** that are vital for Ireland’s future competitiveness.
- **Reward best-in-class innovation management** : As a related measure, provide an additional **tax credit uplift (e.g. +5%)** on R&D or innovation credit claims for companies that achieve **ISO 56001 certification** (or whose lead innovation professionals are ISO 56002 certified). This modest bonus will incentivise firms to adopt robust innovation management practices, which in turn improves the effectiveness and audibility of RDI spending. By tying incentives to international standards, Ireland can drive a culture of *responsible innovation* and attract R&D-intensive companies that value operating in a rigorous, quality-assured environment.
- **Double public R&D investment by 2030** : Commit to a multi-year funding plan that **substantially increases Ireland’s public R&D expenditure (GBARD)** from its current low base. As a minimum, target **1% of GNI*** for public R&D by 2028 and **1.34% by 2030**, in line with the EU average and the ambitions of *Impact 2030*. Hitting these targets (which equate to roughly an extra €1.2 billion per year in R&D funding) will be transformative: it will expand capacity in our universities and institutes, seed more high-impact research (especially in climate and digital domains), and attract further industry R&D investment to Ireland’s shores. Simply put, Ireland must put its money where its mouth is – joining the ranks of countries that make bold public investments in innovation to drive long-term growth.
- **Streamline innovation supports and governance: Reduce the administrative burdens** that deter especially smaller companies from engaging fully in RDI. In practice, this means implementing the recent **TALC** recommendations on simplifying R&D tax claims, establishing a dedicated **R&D Tax Credit unit within Revenue** to provide expert guidance and consistent claim processing, and expanding user-friendly grant schemes. Ireland should also raise the cap on outsourcing R&D to public research organizations (to facilitate industry-academia collaboration) and consider new innovation vouchers or challenge-based funding to ignite SME participation. By cutting red tape and actively supporting collaborations, we will ensure the innovation ecosystem is accessible, inclusive, and efficient for firms of all sizes.

Each of these recommendations is **ambitious yet achievable**. Taken together, they form a coherent strategy to strengthen Ireland’s innovation ecosystem – boosting investment, enhancing our competitive offerings, and aligning innovation activity with national needs. Ireland can lead in the new era of responsible, mission-driven innovation, but the time to act is now. This pre-budget submission therefore urges the Government to embrace these bold measures. By doing so, **the Department of Finance and D/PER will empower Ireland to not only meet the targets of the Climate Action Plan and Impact 2030, but to surpass them – securing Ireland’s position as a global innovation leader for the benefit of all its people.**

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1 Introduction

1.1 About IRDG

The Industry Research & Development Group (IRDG) is a non-profit, business-led, innovation network and representative group for companies and third level institutions engaged in research, development and innovation (RDI). Founded in 1992, IRDG's mission is to drive excellence in innovation within Ireland's industry to create growth, jobs and prosperity.

IRDG is unique as the only business organisation in Ireland wholly focused on business RDI. IRDG has over 300 member organisations with membership evenly distributed between foreign direct investment and indigenous firms ranging in size from start-ups to the largest companies in Ireland.

A key differentiating factor of IRDG as an industry body is the diversity of membership across all sectors of industry, including engineering, food & beverage, healthcare, ICT, medical devices, pharmaceuticals, software, technology, agriculture, construction, and utilities. In addition, IRDG membership includes most of the third-level colleges, institutes, and R&D centres. This creates a uniquely experienced cross-sectoral group.

Representation has been a core activity since the establishment of IRDG. IRDG is the respected voice of industry on RDI matters and over many years the views of IRDG members have been invaluable in informing and shaping RDI schemes and incentives available to industry. IRDG has extensive exposure to industry wide RDI within the SME and large company sectors through our work and dialogue with members. We actively support members to better understand, prepare and manage R&D tax credit claims through our seminars and nationwide clinics.

We run bimonthly Research and Development (R&D) tax credit series, attended by hundreds of companies across the year, as well as the annual National R&D Tax Forum together with research collaboration events with Industry and Research Centres. These events provide guidance to members on the details of the scheme and equally provide opportunities for people to share experiences and engage in constructive discussions around it. IRDG with KPMG runs Ireland's Innovation Index, the national benchmark survey on Innovation and R&D in Industry with over 550 respondents annually. IRDG is also actively engaged in training companies through the IRDG Innovation Skillnet training over 1,000 people each year in various aspects of innovation.

IRDG is therefore uniquely positioned to provide insights into the experience of companies with the R&D tax credit, and the broader question of innovation and to highlight opportunities for improvement that will achieve stated government policy objectives.

1.2 Inputs to this submission

This submission has been informed by ongoing work with our members since the last review of the R&D Tax Credit Scheme (RDTC) in 2022. As part of this submission IRDG engaged through regular roundtables, formal and informal events, surveys, and direct one-to-one conversations and emails with our members and wider network. We have solicited views directly from members through 43 individual company conversations, dozens of email comments, and two group consultations one of ten companies representing SMEs, and a second group of ten companies representing Larger Enterprises directly with the Department.

In addition, IRDG has been carrying out our annual survey of companies (Ireland's Innovation Index) for the past three years (Index 2023, Index 2024, Index 2025). This survey has received responses

from 396 companies in 2023, 496 companies in 2024, 515 responses to a second 2024 pulse survey and 556 replies to our most recent survey which concluded at the end of April and overlapped with the consultation period, making it the most comprehensive and longitudinal of its kind on Irish Innovation. This survey is conducted with KPMG, with 90% of replies from IRDG members and IRDG's wider network.

In addition, our team carried out extensive additional desk research looking at government and EU policy and statistics, other international data sets and reports. All sources used as input are listed in the references section at the end of this document with links where available. Quotations used are drawn from the index survey and other comments provided directly to IRDG. We don't disclose individual or company names.

1.3 Purpose and Scope of this Submission

This submission is structured into clear sections designed to build Ireland's innovation capacity and drive sustained economic growth. Appendix 1 covers details on the companies who responded to the Innovation Index survey – section 1 pt 1 of 6.1. Chapter 2 articulates our overarching vision: transforming Ireland's respectable innovation status into genuine global leadership. Chapter 2 presents an ambitious vision for R&D and Innovation to 2035. We review existing supports in Chapter 3. Chapter 4 deals *detailed feedback from the SME sector*". Chapter 5 looks specifically at the MNCs perspective and challenges not covered earlier.

Chapter 6 looks at sustainability a key aim of Government policy with decarbonisation targets enshrined in law and potential large fines for the exchequer if Ireland does not decarbonise at a faster rate to hit our 2030 targets. Chapter 7 is a detailed look questions on Innovation and explicitly calls for an approach to create an **Innovation Tax Credit** with strong definitions, that will not encounter issues of state aid and can be piloted and then scaled or changed based on the results of the pilot. We address why this new credit is needed and how it can deliver additionality to the exchequer and delivery on government policy. Chapter 8 summaries and pulls together the key elements into an integrated policy framework.

1.4 What the evidence tells us about Ireland

Ireland is often praised as one of Europe's strong innovators, yet recent data from the 2024 European Innovation Scoreboard (EU Scoreboard 2024) shows Ireland has stalled at a composite score of 113% of the EU-27 average—still significantly below the ambitious 125% target set by the Government under Impact 2030, Ireland's National Research & Innovation Strategy (Impact 2030). The international landscape is rapidly evolving, with the US, China, and a revitalised EU deploying substantial subsidies and protective trade policies aimed at capturing strategic industries.

Company Comment

"Ireland invests just 1.1% of GDP in R&D—far below the EU average of 2.3% and well behind leaders like Sweden, 3.6%, Belgium, 3.3%, and Germany, 3.1%. Outside the EU, countries like the U.S., at 3.6%, and Japan, at 3.4%, continue to invest well above the EU average. South Korea, investing 4.9% of GDP in R&D, stands out globally, demonstrating the economic power of sustained research development and an innovation-centric culture. When I visited South Korea in 2022, I saw for myself how deeply integrated R&D is across sectors. The Irish Government's own long-standing target is 2.5% of GNP, but current levels fall well short".

The Innovation Index evidence highlights several critical issues including (Index, 2025):

Budget constraints: Despite 74% of firms increasing R&D spend over the past three years, 60% still report “lack of budget” as their primary obstacle underpinning the value and urgency of cash through the scheme.

Administrative complexity: 41% find the grant draw-down process too burdensome, and 40% cite the complexity of grant applications as significant barriers.

SME frustration: Nearly a quarter of SMEs spend less than €100,000 annually on R&D, feeling rules are 'written for multinationals', limiting SME participation (Revenue, 2024).

Missing Green-tech opportunities 78% would significantly increase investment if a 50% tax credit for low-carbon R&D were introduced, yet fewer than 20% currently have dedicated green-R&D programmes.

Ireland’s R&D Tax Credit has been best in class for many years, and the Department has taken significant steps to ensure its continued value including with BEPS II process and 2022 US Tax Legislation changes. And competition is increasing, together with supply chain issues, economic turbulence, climate crisis, protectionism, a renewed focus on EU Industrial policy in the Draghi report (Draghi, 2024), and the continued war in Ukraine. This requires a rethink and a reset to ensure the credit continues to be a world class incentive.

1.5 Effective Low-Cost High Impact Solutions

There are several low-cost and high-impact solutions that will be effective changes that will radically improve the value and impact of the scheme.

Lift the effective headline rate to 35% for the first €25 million of qualifying spend

Increasing the headline R&D tax credit rate from 30% to 35% for the first €25 million of qualifying expenditure is strategically significant. It reduces net costs for SMEs from €70,000 per €100,000 spent to €65,000, aligning Ireland more closely with competitor nations like the Netherlands and Denmark, both ranked higher in the 2024 European Innovation Scoreboard (Eurostat, 2024). With 81% of existing claimants spending under €1 million annually, the targeted fiscal impact is both manageable and highly effective (CSO, 2021, 2023). While this increases the credit cost, it prevents far larger losses of investment due to Pillar Two, effectively paying for itself in retained economic activity preventing tax leakage to other jurisdictions.

Pay refunds upfront—€300,000 in year one for compliant taxpayers.

Liquidity, rather than tax capacity, is often the critical bottleneck for SME innovation. As one Cork-based SME respondent succinctly put it: *'Waiting three years turns the credit into a promissory note, not capital'* (Index, 2025). Many SMEs echo this: in our 2025 Index survey, 41% cited slow refunds as a major obstacle with only 45% of all companies, 32% of SMEs being satisfied with prompt payment. IRDG recommends immediate first-year payments up to €300,000 upon submission of a valid claim, emulating the UK's 2023 reform of its SME payable credit system. Preliminary modelling indicates this could inject an additional €110 million of immediate liquidity to SMEs annually, greatly enhancing their ability to invest and innovate. This is a remarkable low fiscal cost for high liquidity gain. This modest uplift to the existing scheme is effectively the same as creating a €150M seed fund (larger than most exiting Irish seed funds) but avoids the dilution of equity in Irish companies

allowing the more time and space to scale and preserving their ownership and long-term value in the Irish economy.

Automate refunds below a €300,000 threshold

Currently, even compliant small claims face unnecessary delays, with some SMEs reporting waits of up to 27 weeks (Innovation Index, 2025). IRDG has seen cases where companies have made staff redundant and rescinded job offers because of delays in R&D refunds. Automating payments for verified claims below €300,000, with audits retained as a backstop measure, would significantly improve SME cash flow and eliminate administrative delays—addressing one of the top two barriers identified by respondents.

Establish a specialist R&D Credit Unit within Revenue

The TALC simplification report highlights inconsistent interpretation of R&D guidelines across Revenue divisions as problematic for medium-sized firms (TALC, 2024). Establishing a single specialist R&D Credit Unit would consolidate expertise, ensure consistent interpretation, speed up processing, and encourage proactive dialogue, directly addressing TALC’s recommendations for improved communications and interpretation clarity.

Modernise the definition of qualifying activity

Current legislation remains rooted in outdated concepts of R&D, inadequately capturing modern innovations like artificial intelligence, machine learning, and circular economy solutions. IRDG advocates explicitly including these and other frontier technologies in the statutory language of section 766 TCA, updated annually via ministerial order. This ensures clarity, encourages uptake, and aligns with contemporary R&D practice (IRDG Pre-budget Submission, 2025).

Increase the outsourcing ceiling to 25% or €250,000, whichever is greater

The OECD previously highlighted Ireland’s restrictive outsourcing cap as a barrier to collaboration (OECD, 2019). Increasing this cap to 25% or €250,000 better aligns with real-world practices where SMEs frequently rely on external expertise, including universities and specialised research facilities, facilitating more effective and extensive R&D collaborations.

2 A Vision for Research, Development & Innovation to 2035

Any future strategy for R&D and innovation must focus on retaining the gains of the system so far not just on looking to future gains. Enterprise investment comes in waves and missing a single investment wave would undermine decades of growth and progress in the economy. Our vision for the future of the R&D tax credit regime is anchored in positioning Ireland as a global innovation leader, particularly in achieving net-zero and digital economic transformations. Aligning closely with national strategies such as Impact 2030, Ireland aims to achieve 125% of the EU average innovation performance by 2030.

IRDG's strategic framework for enhancing the R&D regime is guided by four principles:

Ambition: Setting bold targets to elevate Ireland's global innovation standing.

Accessibility: Simplifying procedures to ensure broader SME participation, as recommended by the OECD (2019) and TALC (2024), addressing a consistent request from SMEs to reduce administrative complexity.

Agility: Quickly adapting incentives and piloting new schemes to respond effectively to emerging technological and market opportunities.

Accountability: Establishing clear KPIs for transparency and evaluation, resourcing Revenue adequately to expedite decision-making and credit delivery.

This approach is strategically aligned with EU Innovation Strategy, OECD guidelines, and Impact 2030, fostering coherence and international collaboration.

Critically, Ireland must significantly enhance public R&D investment. Government Budget Allocations for R&D (termed GBARD) currently stand at just 0.43% of GNI*¹ (GNI* is the modified version of GDP – see footnote below), far below the 2010 level of 0.65% and the EU's recommended 1.34% (Eurostat, 2024). Increasing public investment to the 1.34% of GNI*—an injection of approximately €1.2 billion annually—would be transformative, with the EU's 1.34% target as a baseline rather than an aspirational ceiling.

Ireland's innovation ecosystem can function as a dynamic, reinforcing 'flywheel', involving:

World-class R&D Incentives: Enhancing tax credits to retain multinational investment and empower SMEs, simplifying administration in line with TALC (2024) recommendations.

Agile Grant Architecture: Designing responsive grant structures that leverage private investment efficiently.

STEM Talent Pipelines: Addressing skill gaps in high-demand sectors like AI, Biotechnology, and Green Technologies, building upon Ireland's robust STEM graduate output (35% compared to the EU average of 26%, SOLAS, 2023).

¹ **Modified gross national income** (also **Modified GNI** or **GNI***) is a metric used by the [Central Statistics Office \(Ireland\)](#) to measure the Irish economy rather than [GNI](#) or GDP. GNI* is GNI minus the depreciation on Intellectual Property, depreciation on leased aircraft and the net factor income of redomiciled PLCs.

Research Infrastructure: Investing strategically in testbeds such as the Shannon Estuary and advanced 6G telecommunications laboratories to anchor high-value investments.

Regulatory Excellence: Promoting adoption of international standards like ISO 56001 and regulatory sandboxes to expedite innovation deployment.

Meeting the ambitious Climate Action Plan targets demands substantial investment in innovation. To attract climate-tech R&D, we propose implementing a targeted 50% green R&D super-credit with immediate refundability for SMEs (up to €300,000), significantly enhancing Ireland's competitive edge.

Urgency is critical. Ireland's Programme for Government (Programme 2025) targets global leadership in innovation, particularly in digitalisation and AI. However, international regulatory changes, notably the OECD's Pillar Two framework, threaten traditional competitive advantages. A multinational respondent starkly noted: *"Half of our global R&D would leave Ireland tomorrow if the credit disappeared; we simply cannot justify the cost otherwise"* (Index 2025).

Immediate policy interventions must include increasing public R&D investment to 1.34% in two steps, an immediate increase to 0.8% of GNI* then to 1.34% over three budgets, enhancing R&D credits to 35% (and 50% for Green Technologies), and substantially streamlining administrative procedures for SMEs.

Actionable recommendations include:

Doubling Public R&D Investment: Targeting GBARD at 0.8% of GNI* by 2027, and 1.34% by 2030 looking to exceed the original Impact 2030 targets.

ISO 56001 Adoption: Providing SMEs grants covering 80% of ISO 56001 implementation costs. This is tied to consideration of the introduction of an Innovation Tax Credit detailed in Chapter 7.

Expanded STEM Funding: Increasing Higher Education Authority STEM block-grants by 20%, directed towards industry collaboration and infrastructure upgrades.

Green-Tech Super-Credit: Establishing a 50% targeted R&D credit for green-tech projects, which our surveys indicate would substantially influence investment decisions for 78% of companies.

Adopting these targeted enhancements will secure Ireland's economic resilience, foster sustained employment, and ensure continued attractiveness as a leading global innovation hub.

3 Reviewing existing Supports

3.1 Section 1: Impact of Recent Finance Acts on R&D Spending

Companies strongly support recent legislative improvements, particularly highlighting accelerated refunds introduced by the Finance Act 2022 as beneficial for cash flow and enabling greater investment in R&D. However, administrative complexity remained a consistent theme.

Company Comments

"Recent incremental support has empowered us to scale projects ambitiously."

"Accelerated repayments significantly boosted our investment capacity."

The Innovation Index and direct consultation with companies by IRDG again highlights broad positivity regarding the recent Finance Acts (2022, No.2 Act 2023, and 2024). Survey comments indicate these financial incentives are strongly beneficial, allowing increased investment confidence. One example comes from a technology company stating that recent enhancements have directly facilitated strategic investments, particularly in highly specialised R&D areas like advanced optics and engineering. Similar feedback emerges from pharmaceutical companies emphasising how policy changes have increased their competitive standing globally, particularly against regions like Asia.

Company Comment

"The incremental increase in support via recent acts has given us greater confidence to scale our projects more ambitively (sic) and strategically."

"The recent increase [to 30%] has been highly beneficial."

"The accelerated repayments have definitely helped."

"This acceleration over time has been highly beneficial; it gives us the confidence and firepower to invest more aggressively."

Challenges

Respondents consistently expressed concerns about persistent administrative complexities and delays when dealing with Revenue, despite financial improvements. Streamlining processes remains a significant unmet need.

Company Comment

"Persistent administrative complexity remains a barrier despite improvements in financial terms."

3.1.1. The R&D outlook over the short to medium term?

Looking at the R&D outlook for companies over the short to medium term, and what are key challenges?

Section 1: Short- to Medium-Term Outlook and Challenges

Survey data reveal robust optimism among companies, with 70% of companies expecting increased R&D spending over the next three years, up from 65% previously (Index 2025). Companies underscore R&D's vital role in maintaining global competitiveness, with many planning substantial investments exceeding one million euros annually.

In the coming 3 financial years, do you expect your overall Research and Innovation spend to...

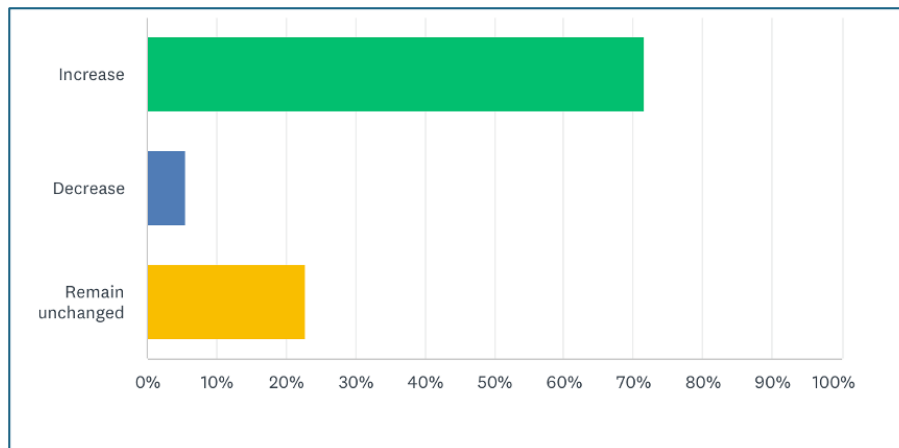


Fig 3.1 Investment Expectations short to medium term. Source Index 2025

Over the last 3 financial years, has your overall Research and Innovation spend...

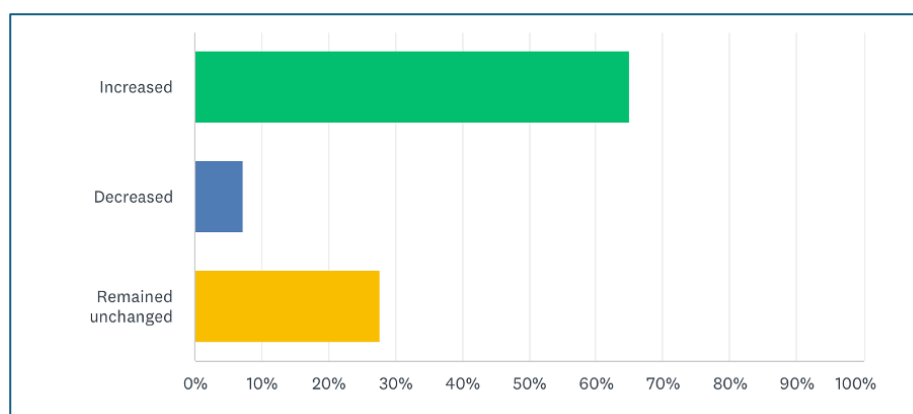


Fig 3.2 Investment growth previous three years. Source Index 2025

Company Comment

"We're investing heavily; we've planned to invest over a million this year."

"R&D is critical for our company's competitiveness globally; the challenge is maintaining speed and scale."

"We need faster approvals from Revenue; waiting two years for refunds significantly impacts our cash flow and capacity to reinvest."

Key Challenges Highlighted:

- Administrative complexity and slow audit processes.

- Ambiguity surrounding qualifying R&D activities.
- Rising global competitive pressures, including Singapore and Malaysia.

Both the Index and direct consultations reveal companies are optimistic and committed to increasing their R&D spend in the short to medium term. Yet, the qualitative feedback from the survey aligns closely with the conversations: key challenges such as bureaucratic delays, slow reimbursement processes from Revenue, and uncertainty around qualifying criteria significantly affect this optimistic outlook.

A common theme from the Innovation Index participant is the request for streamlined processes to mitigate administrative burdens, echoing concerns clearly articulated in company discussions. Companies stress the importance of speed and clarity to ensure continued investment in R&D.

Company Comments

"Our ability to grow our R&D substantially hinges on quicker turnaround times and clarity on qualifying expenditure."

"Faster turnaround and clear definitions are critical for scaling our R&D."

"Delays significantly impair our ability to reinvest."

3.1.2. Is R&D a continuing activity or intermittent?

Most respondents indicated R&D as a continuous annual activity, highlighting its integral role in their operations. Continuous innovation is core to maintaining competitive advantage, particularly in sectors such as life sciences, software, and advanced manufacturing. Comments strongly emphasise that innovation and R&D are integral to daily operations, essential for competitive advantage, and critical for long-term sustainability. Comments from sectors such as software, engineering, and pharmaceuticals all point towards sustained annual R&D engagement, viewing innovation not as episodic but embedded in corporate strategy.

Company Comments

"R&D is central to our business—every year is an R&D year."

"Without continuous R&D, we can't stay competitive internationally."

"R&D is at the core of what we do annually—stopping or even reducing is not an option."

The significant and long term nature of the spend on R&D is reflected in the Innovation Index survey with 28% of companies reporting that over 25% of their total expenditure is on R&D and a further 24% spending between 11% and 25% of all expenditure on R&D.

What percentage of your organisation's overall expenditure is research, development and innovation related?

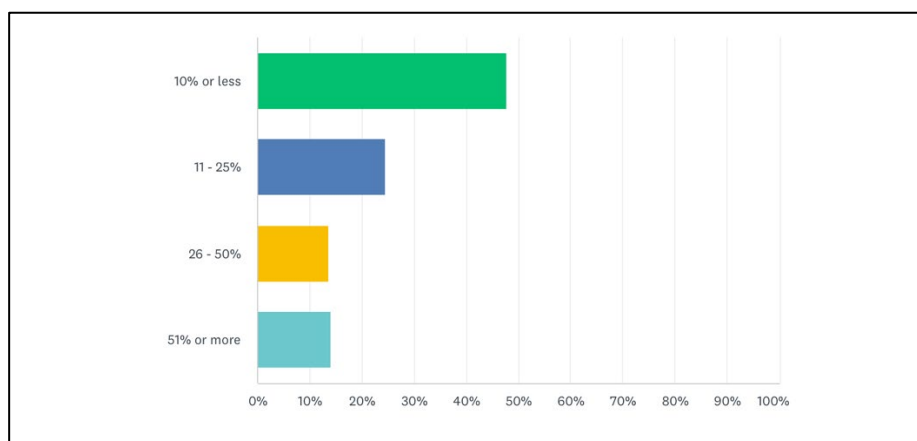


Fig 3.3 Percentage of companies spend on R&D. Source Index 2025

3.1.3. Who are companies undertaking R&D activity for

Are companies undertaking R&D activity for the benefit of their own company or an unconnected third-party?

The vast majority of companies in our survey undertake R&D primarily for their direct benefit. Both the survey and conversations with IRDG Members show R&D is predominantly internal-focused, intended to maintain competitive differentiation and operational efficiency. However, substantial collaboration with third-party institutions (especially academic and research institutes) is commonplace, as noted explicitly in both survey comments and conversations.

Many respondents suggest an enhancement of policies to better support collaboration, emphasising that restrictive limits on claiming third-party spend reduce incentives to collaborate more extensively, thus limiting broader economic spillovers.

Company Comments

"We primarily innovate internally, but our collaborations are critical. Current limitations on external spending claims restrict broader innovation benefits."

"Primarily our R&D is for internal benefit, but we heavily collaborate with universities, which indirectly benefits the broader ecosystem."

"Collaboration is vital, but restrictions on claiming for third-party spending limits our potential."

"Collaboration & external partnerships are essential for safeguarding existing products and processes and exploring new market opportunities."

3.1.4. Instances where a claim has not been submitted?

The Innovation Index complements earlier conversations by confirming administrative complexity and definitional uncertainty as primary deterrents for claims submission. Smaller-scale projects particularly suffer as companies perceive the administrative cost outweighs potential benefits.

Several companies indicated they frequently forego claims due to uncertainty around qualifying criteria and significant administrative burdens. Smaller-scale or borderline projects often aren't claimed as the cost of administration outweighs perceived benefits.

Respondents frequently mention confusion around eligibility, particularly related to collaborative or border-line innovative activities, highlighting the need for clearer guidance or more streamlined processes.

Company Comments

“We often forego smaller claims due to the heavy administrative burden and uncertainty around eligibility.”

“We don't include smaller projects—it's just not worth the administrative hassle.”

“There's confusion around qualifying research, particularly when collaborating externally.”

“Our industry is constantly innovating – from developing more sustainable processing methods to creating value-added products and reducing waste – but much of this applied, sector-specific innovation doesn't fit neatly within the current R&D tax credit definitions. I would like to encourage a broader, more inclusive view of R&D that better reflects sectors like seafood, agri-food, and the marine economy. Clarity in guidance, examples from our sectors, and support for collaborative or sustainability-focused projects would help unlock a lot more potential.”

3.1.5. Loss of R&D Activity without the Credit

What proportion of R&D activity would occur without the R&D tax credit? (Additionality)

Insights from both the survey and conversations underscore that Ireland's R&D tax credit is pivotal. Survey respondents provide striking affirmations of additionality, aligning with comments from conversations: the absence of the credit would dramatically reduce domestic R&D, causing a significant shift of investment elsewhere.

The R&D tax credit is overwhelmingly identified as pivotal to Ireland's R&D landscape. Companies indicated that without this incentive, 50%-90% of their R&D would relocate internationally or cease altogether, severely affecting domestic employment and competitiveness.

If you are an MNC, in the absence of the R&D Tax Credit, can you say what proportion of your R&D would take place in Ireland?

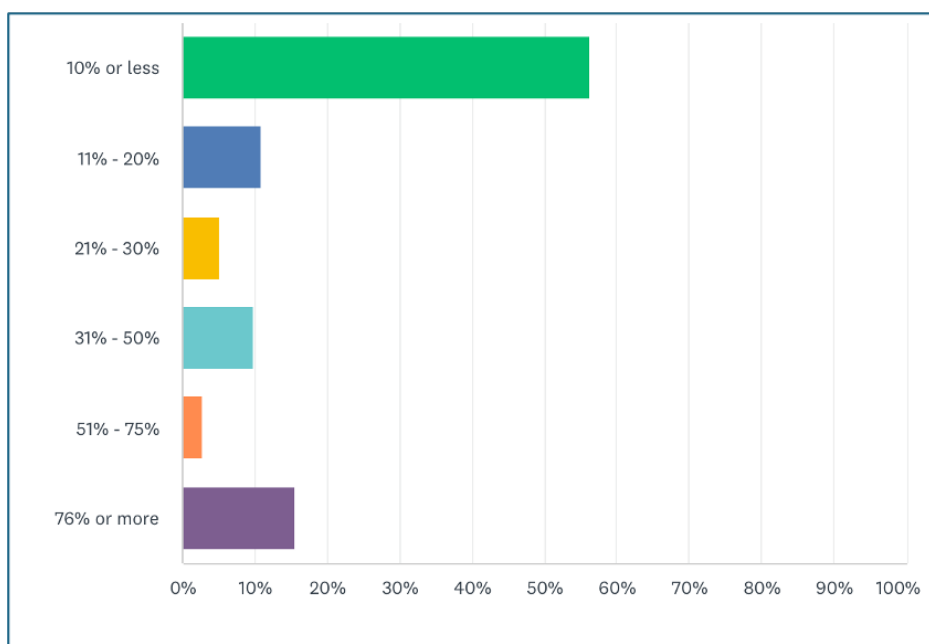


Fig 3.4 Loss of R&D without R&D Tax Credit. Source Index 2025

Company Comment

“Without the R&D tax credit, we’d probably do less than 10% of our current R&D in Ireland.”

“It’s absolutely vital; without it, we wouldn’t survive as a business.”

“The tax credit is crucial for keeping R&D jobs in Ireland—otherwise, these jobs and the associated intellectual property would move to more competitive jurisdictions.”

“Without the R&D credit, much of our investment would shift to other jurisdictions, severely impacting our innovation strategy and domestic employment.”

The feedback illustrates clearly that recent legislative enhancements have positively impacted companies' willingness and capacity to invest in R&D in Ireland. However, fundamental challenges around administrative complexity and definitional clarity persistently undermine the full potential of these policy measures.

From a strategic perspective, it’s clear the R&D tax credit continues to be a critical driver of competitiveness for Ireland, especially given the heightened international competition for R&D investments. Ensuring prompt administrative processes, simplification of claims, and expanding definitions to encompass broader innovative activities are vital improvements needed to sustain Ireland’s attractiveness as an innovation hub.

It's equally clear that the R&D tax credit significantly underpins the retention and creation of high-quality jobs, a critical consideration for policymakers when assessing the overall economic impact of the scheme.

Given these points, addressing administrative efficiency and clarity, alongside judicious policy enhancements, could unlock further substantial benefits from Ireland's R&D tax credit regime.

3.2 Section 2: Subcontracted R&D to Universities

Looking at subcontracted R&D activities where to a university or institute of higher education

Increase in STEM Headcount: Companies reported substantial growth in STEM-qualified employees as a direct consequence of their R&D activities, notably in fields such as engineering, biotechnology, pharmaceuticals, data science, and software development. For instance a number of companies both indigenous and MNC highlighted their employment of numerous PhD-qualified staff explicitly driven by R&D expansion.

Company Comment

“We hire around 30 PhD-qualified people every year...we're heavily involved in supporting academic research to meet our future staffing needs”

Outsourcing Considerations: Collaboration with universities was primarily driven by the need to access specialised expertise and state-of-the-art facilities not internally available. These collaborations frequently evolve from initial standalone projects into sustained, long-term relationships fostering ongoing knowledge exchange.

Company Comment

“Collaboration & external partnerships are essential to protect existing products and explore new market opportunities.”

“Academic collaboration is crucial as we often cannot internally replicate the depth of expertise or infrastructure provided by universities.”

Impact of Current Cap on Collaboration: The cap on allowable external R&D spend (15% or €100,000) has notably limited companies' ability to engage extensively with universities. Numerous firms mentioned this constraint as a significant barrier, causing potential research collaborations to remain unexplored or reduced in scale.

Company Comments

“We constantly have to explain to corporate leaders why we've maxed out our external R&D cap early in the year, significantly limiting further collaborations with universities”

“The current restriction severely limits our ability to engage fully with external experts, especially universities.”

Other Relevant Factors Encouraging Collaboration: Besides the financial cap, administrative complexity and uncertainty about qualifying activities were repeatedly identified as barriers to university collaborations. Simplifying administrative processes and providing clearer definitions and guidelines could significantly encourage further collaboration.

3.3 Section 3: Spill-Over effects

Looking at the Spill-Over effects of collaboration with university or institute of higher education

Engagement Beyond R&D Outsourcing: Many companies maintain active engagement with universities beyond direct R&D activities, including offering student placements, influencing curriculum development, and sponsoring PhD programs. These interactions significantly contribute to building a robust, skilled workforce aligned closely with industry needs.

Company Comment

“Our company actively engages with universities, providing regular work placements, inputting directly into curriculum design, and sponsoring graduate and postgraduate programs.”

STEM Initiatives at Primary and Secondary Levels: Companies are extensively involved in promoting STEM through school-level initiatives, sponsoring local STEM competitions, facilitating workshops, and supporting community-based STEM education projects. This involvement strengthens the local talent pipeline, fostering early interest in STEM fields.

Company Comments

“We engage actively with local schools through STEM initiatives, workshops, and outreach programs to encourage early interest in science and technology.”

“We started extensive programmes with secondary schools a number of years ago. Just last year the first (female) student who had taken part in our Transition Year programme and studied Engineering at college because of that programme took up a graduate place with the company.”

3.4 Section 4: Subcontracted R&D Activities to Third Parties

Problem: *Excessive administrative burden and a low outsourcing cap are impeding collaborative R&D.* Currently, companies can only claim credit on 15% (or €100,000) of outsourced R&D costs, which quickly gets. This restrictive cap, combined with complex claim procedures and inconsistent guidance, discourages firms from partnering with third-party experts. Many companies report *internal resistance to external collaboration* due to these limits and the paperwork involved. In short, the policy’s design unintentionally penalises firms for seeking outside expertise, undermining innovation by forcing projects in-house even when a specialist partner would be superior or in many cases with the project not going ahead at all.

Company Comment

“Raising or removing the external collaboration cap would substantially boost our innovation capability, benefiting both industry and research institutions.”

“In treatment of outsourced R&D minor clarifications have been made but restrictions remain. IVDR firms often outsource trials or technical development (e.g., to CROs or specialist labs). Only 15% (or €100,000, whichever is greater) of outsourced R&D is eligible unless it's to a university. This limits the benefit for companies with heavy reliance on third-party research”

“Outsourcing is critical to access expertise and technological capabilities that are otherwise not feasible for us to develop internally.”

“The current restriction severely limits our ability to fully engage with external experts, especially universities. Once we hit the cap early in the year, it constrains further potential projects.”

“Restrictions on external collaboration discourage deeper integration with universities and specialised third-party institutions, limiting our innovation pipeline.”

“We regularly face internal pushback against external collaboration due to financial caps, which forces us to internalise activities even when external expertise is clearly superior.”

“The existing caps don’t align with real-world costs of substantial collaborative projects. Increasing allowable third-party spend or removing the cap altogether would be transformative.”

“The current system effectively penalises us for external collaboration, pushing us to internalise projects even when external expertise would be clearly superior.”

Proposed Solution: Raise or remove the outsourcing cap and streamline oversight through a central R&D unit. To directly address the cap problem, increasing the allowable subcontracted R&D spend (e.g. to 25% or €250,000) or eliminating the cap would remove the financial barrier to collaboration, aligning Ireland with global best practices (the OECD has identified the low cap as a collaboration barrier).

Beyond restrictive caps, respondents highlighted administrative complexity and delayed reimbursements as further exacerbating collaboration issues. There is a notable reluctance to engage in external partnerships due to increased bureaucratic burdens, confusion around qualifying criteria, and financial uncertainty from delayed or uncertain reimbursements.

Company Comment

“The administrative complexity around collaborative projects often discourages us from pursuing potentially beneficial partnerships. Claims involving external research are frequently viewed as too risky or cumbersome administratively.”

“We face internal pushback against collaboration because of the perceived high administrative burden and uncertainty over claim approvals.”

In tandem, we recommend establishing a dedicated R&D Tax Credit unit within Revenue would tackle administrative hurdles. A centralised unit would consolidate expertise and standardise guidance, making claim reviews faster and more predictable. This simplification of process (along with clearer definitions of qualifying outsourced activities) directly reduces the bureaucratic load on companies, addressing the root causes of hesitation to engage external partners.

Expected Outcome: Greater collaboration, accelerated innovation, and alignment with strategic principles. By lifting the cap and cutting red tape, firms of all sizes can confidently tap external expertise – accessing university researchers, specialised labs, and technical consultants without fear of hitting a cost ceiling or facing undue paperwork. We expect to see more outsourced R&D projects moving forward, broader industry-academic partnerships, and a richer innovation pipeline as companies pursue the best resources for a given problem rather than defaulting to in-house efforts. This not only boosts individual firm competitiveness but also strengthens the national innovation ecosystem. **Ambition** is served by matching world-class collaboration standards, **Accessibility** is improved by lowering barriers for SMEs to engage in R&D partnerships, **Agility** is increased as firms can quickly leverage external skills for fast-evolving tech needs, and **Accountability** is reinforced through a specialised Revenue unit ensuring consistent, transparent administration of the credit. In sum, the chain from problem to solution to outcome is clear: **restrictive rules and burdens → hindered collaboration and innovation; easing those restrictions and improving oversight → an open, dynamic R&D environment that drives Ireland’s innovation leadership forward.**

Company Comment

“Removing or significantly raising the external collaboration cap would substantially boost our innovation capacity, directly benefiting both industry and academic partners”

“Clearer eligibility definitions for collaborative R&D activities would reduce uncertainty and encourage broader, deeper engagement with external research institutions.”

3.5 Section 5: Grant Funding

Proportion of R&D Projects with Grant Support: Companies reported extensive engagement with various grant funding programs alongside qualifying for the R&D tax credit. The proportion of R&D projects receiving grant support varies significantly depending on company size, sector, and specific project types.

One consistent feature over the three years of the survey is that more respondents to the Index use the RDTC scheme than avail of grants on an annual basis. This is illustrated in looking at the 2024 and 2025 index results below. This may be due to an intermittent draw down of grants and a consistent use of the RDTC scheme, but we have insufficient data to draw any firm conclusions at this point. The figures for the 2024 and 2025 surveys can be seen in Fig 3.5 below.

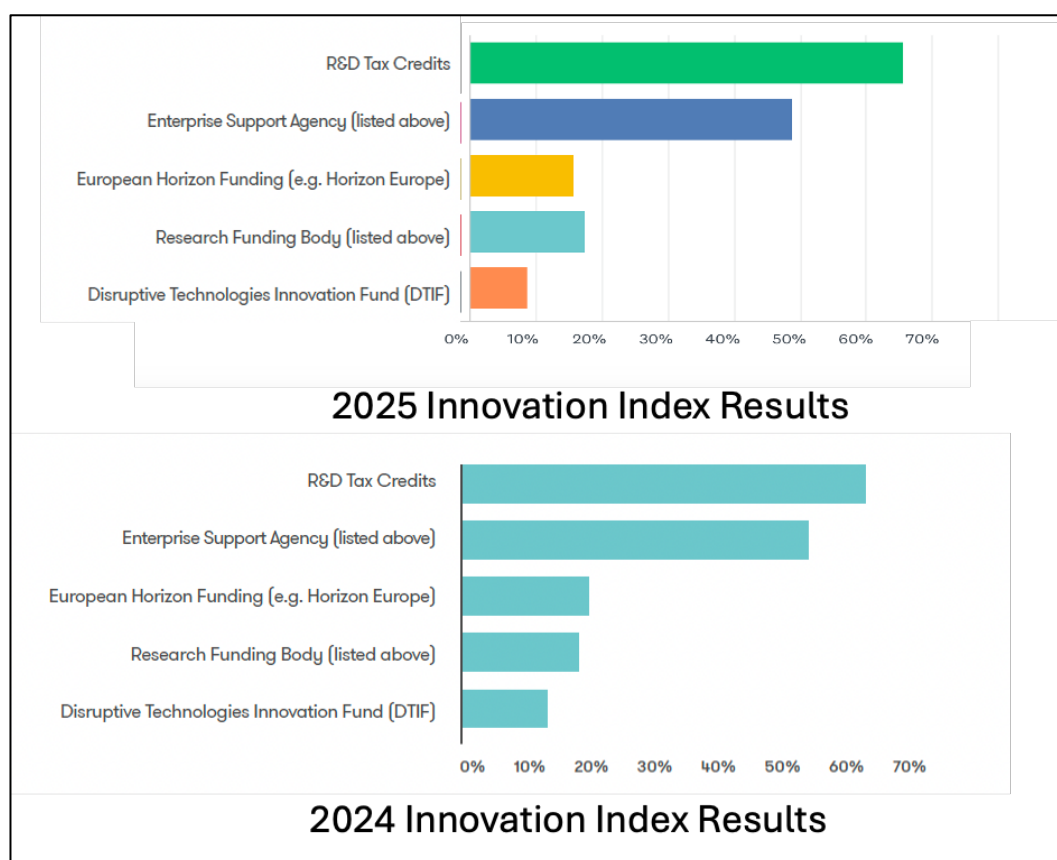


Fig 3.5 Use of RDTC and Grant and other incentive schemes Source: Index

Companies highlighted substantial support from Enterprise Ireland and IDA. SMEs and startups emphasised reliance on these grants for critical early-stage funding.

Company Comment

"We heavily rely on Enterprise Ireland grants in parallel with the R&D tax credit, significantly enhancing our capacity to innovate and accelerate our projects."

"A significant proportion (approximately 60%-70%) of our R&D projects benefited from either IDA or Enterprise Ireland grants."

European Union Funding (Horizon Europe, Horizon 2020): Engagement with EU frameworks was prevalent among larger enterprises and companies involved in high-tech and life sciences sectors, though the proportion was typically lower compared to national sources due to complexity and competition.

Company Comments

“Participation in EU Horizon programs is important but administratively challenging; thus, we limit engagement to around 20%-30% of our eligible projects.”

“EU funding is strategically important but represents a smaller proportion of our overall funding mix, typically around 10%-25%.”

Other Sources (UK or Non-EU): Relatively fewer companies reported receiving grants from sources outside the EU, primarily due to administrative complexity, eligibility limitations, and geopolitical factors such as Brexit.

Company Comment

“Funding from non-EU sources is minimal due to complexity and uncertainty post-Brexit; only 5%-10% of our projects have received such grants.”

Impediments to Identifying and Claiming Grant Supports: Companies consistently identified several significant impediments, primarily administrative complexity, lack of clarity around eligibility criteria, lengthy application and reimbursement processes, and resource-intensive documentation requirements. These barriers often discourage companies from pursuing available grants.

Company Comment

“The administrative burden of claiming grants is enormous, particularly EU funding, which can take substantial resources away from actual innovation activities.”

“Identifying eligible grants is often unclear and complex, making the process cumbersome and resource-intensive”

“The complexity of applications and delayed funding timelines pose significant hurdles, limiting our use of grant supports despite their potential benefits”

Reducing administrative complexity, clarifying eligibility guidelines, and streamlining the application and reimbursement processes for grants would substantially enhance the accessibility and attractiveness of grant funding, complementing and maximising the effectiveness of the R&D tax credit scheme.

Future Focus of R&D and Emerging Technologies: Companies across sectors highlight significant future investments in digital transformation, artificial intelligence (AI), sustainability, advanced manufacturing processes, biotechnology, and pharmaceutical innovations. These areas represent critical drivers of competitive advantage and strategic differentiation.

Company Comment

“AI and digitalisation are radically redefining how research is conducted. We anticipate substantial investment in integrating AI across all R&D activities”

“Sustainability and decarbonisation technologies are rapidly emerging as core priorities due to regulatory pressures and consumer demand for eco-friendly products.”

“We see substantial future investment in digital innovation, AI, and sustainable technologies to ensure competitive advantage and regulatory compliance.”

Biggest Threats and Competitors: The most significant threats identified include international competition, particularly from regions with aggressive R&D incentives (such as Singapore, the US, and certain EU countries), talent availability, and regulatory complexity. Companies highlight that Ireland risks losing its competitive edge without addressing these challenges.

Company Comment

“We face intense global competition, especially from regions offering more flexible and generous R&D incentives. Countries like Singapore and the US pose significant threats.”

“The complexity and slow administrative processes in Ireland could drive investment to more efficient jurisdictions.”

Areas Not Currently Qualifying for R&D Tax Credit: Respondents frequently noted that specific activities around business process innovation, digital integration into existing technologies, quality and reliability improvements, and certain sustainability projects are often excluded from current R&D definitions.

Company Comment

“Current definitions narrowly focus on new technology and product development, excluding critical innovation in processes, sustainability, and digital integration.”

“Many projects involving digital transformation, sustainability improvements, and incremental process innovations do not qualify due to restrictive criteria.”

“Software and Digital Health Elements are a particular issue. No dedicated guidance for software R&D has been released. IVDR devices increasingly rely on embedded software, machine learning algorithms, or connected diagnostics. There's uncertainty about eligibility of software development under the R&D tax credit, especially if used for compliance, not innovation. This should be a key consideration going forward as this is often one of the largest portions of an R&D project and most IVDR specialists reside in the United States.”

Role of Decarbonisation and Digitalisation: Decarbonisation and digitalisation are highlighted as critical strategic areas driving future growth, innovation, and regulatory compliance. Companies see significant R&D opportunities in developing greener processes, products, and integrating digital technologies to enhance operational efficiency and customer engagement.

Company Comments

“Decarbonisation initiatives offer extensive R&D opportunities, particularly around energy efficiency and alternative sustainable materials.”

“Digitalisation is integral to enhancing productivity, efficiency, and market competitiveness across all our operations.”

Measures to Encourage Greater Engagement: Beyond scope or rate adjustments, companies consistently recommend reducing administrative complexity, streamlining processes, and providing clearer, consistent guidelines on eligibility criteria. Improved support for external collaboration and faster reimbursement procedures would significantly boost engagement with the R&D tax credit scheme.

Company Comment

"Simplifying the claim process and speeding up reimbursements would greatly enhance the attractiveness of the R&D tax credit."

"Clearer, simpler definitions and streamlined administrative processes would encourage significantly greater engagement in R&D activities."

Our Innovation Index results across hundreds of companies over three years consistently show complexity and bureaucracy are significant barriers to innovation

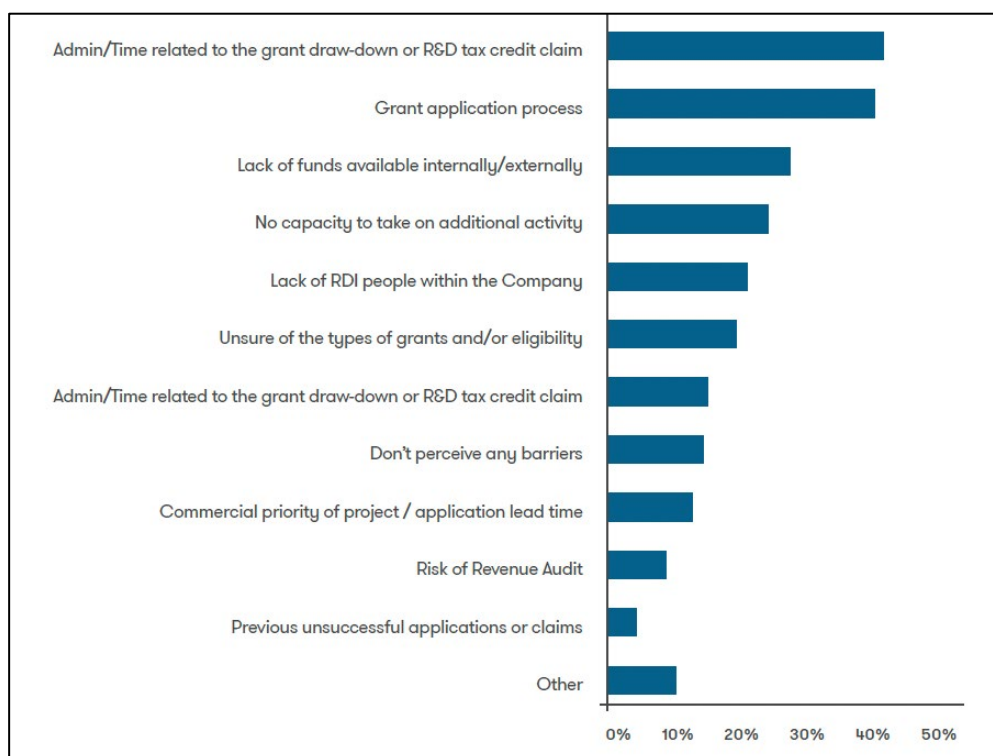


Fig 3.6 Barriers to use of State Support Mechanisms : Source Innovation Index 2025

Recommendations

To secure Ireland's position as a global innovation leader, future policy must focus on broadening eligibility criteria to include digital, sustainability, and incremental innovations, streamlining administrative processes, enhancing clarity, and improving incentives to remain internationally competitive. Addressing these areas will ensure robust and sustained future engagement with the R&D tax credit regime. In addition we propose the introduction of the Innovation Tax Credit (ITC) for areas outside of the scope of the RDTC which will also address some of the criticisms of the RDTC raised by companies.

4 Strengthening R&D Tax Support for SMEs

This chapter is based on specific issues and challenges for SMEs and how they may be addressed

4.1 The SME Innovation Landscape

Despite policy liberalisation, the total number of companies claiming the R&D Tax Credit remains relatively stagnant at approximately 1,600 firms annually since 2012.

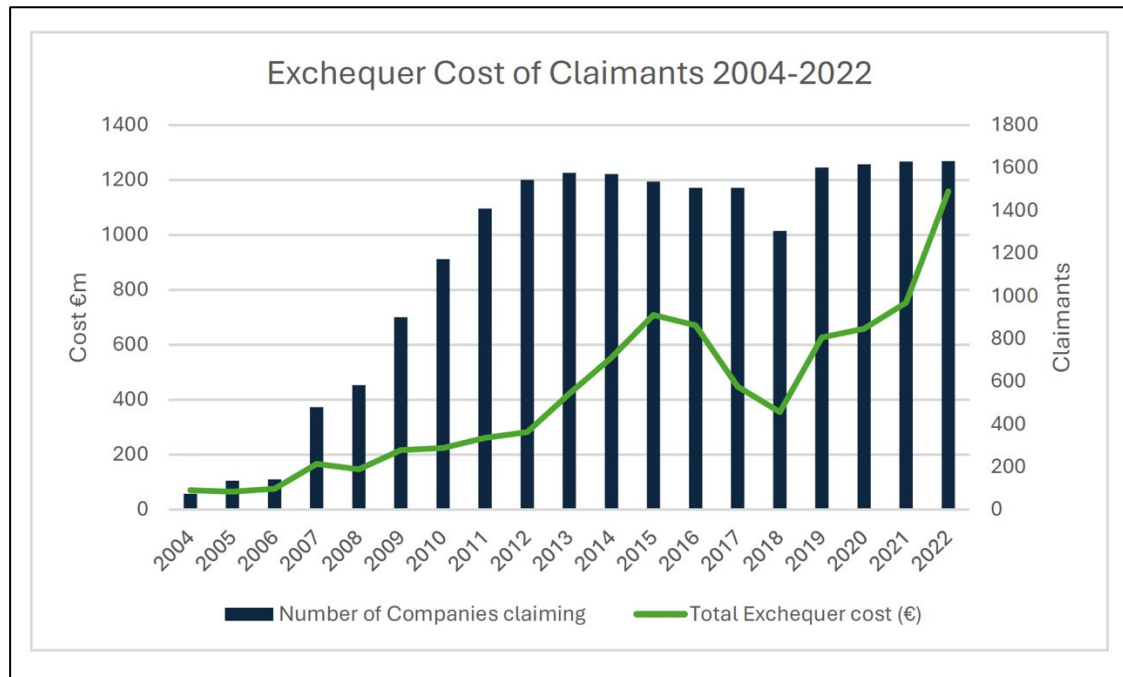


Fig 4.1 Number of RDTC Claimants and Cost 2004 – 2022: Source Finance 2025

The number of SMEs claimants has similarly remained relatively static over the last decade.

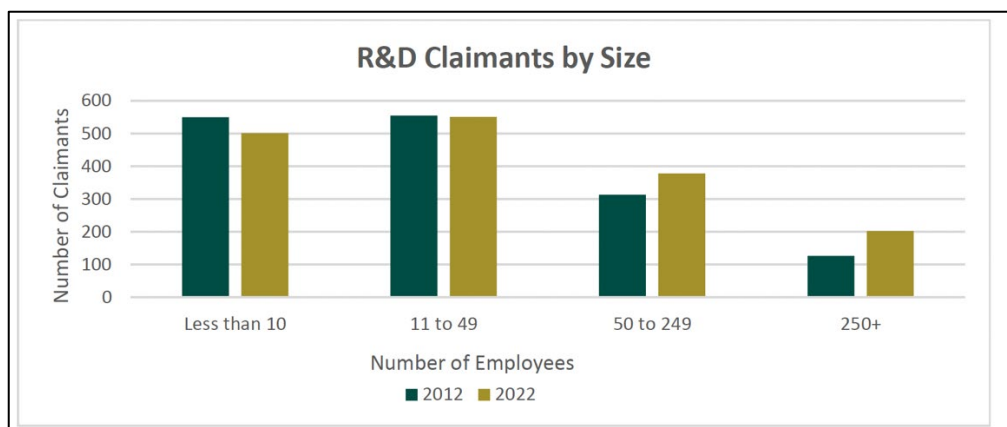


Fig 4.2 Number of RDTC Claimants by Company Size 2012 and 2022: Source Finance 2025

Over the same period the population of active SMEs has grown by more than 20 %, new knowledge-intensive sectors have emerged, and the credit itself has been liberalised (cash-refunds, higher headline rates). Yet SME take-up has not moved, with the exception of single data point showing a welcome overall increase in total claimants of 10% in 2023. The details on this increase remain scarce at the time of the submission. (Revenue, 2025)

In contrast, the UK's comparable R&D scheme supports roughly 60,000 SMEs annually highlighting a clear opportunity gap (HMRC, 2024). If Ireland reached a similar per capita penetration approx. 4,500 SMEs would actively claim credits, potentially injecting an additional €1.5-2 billion of private R&D annually. This cash also tends to be reinvested by companies leading to further growth. Of approx. 62,000 claims in 2023 HMRC audited 9,700 companies with a 1% fraud rate. The Irish Revenue Commissioner do not disclose similar figures on audits or rates of fraud.

4.2 Strategic, Economic and Regional Benefits.

The prize from expanding early-stage tax-funded R&D significantly surpasses the immediate fiscal numbers, offering profound strategic and economic advantages over reliance on venture capital funding alone. International evidence clearly demonstrates several compelling reasons why robust, tax-supported R&D at early stages is preferable:

1. Strengthens Founder Autonomy and Bargaining Power: Early-stage R&D tax incentives reduce founders' early reliance on external venture capital, allowing them critical time to refine their products, develop market traction, and scale operations independently. This financial autonomy significantly improves entrepreneurs bargaining power, ensuring they negotiate equity investment on more favourable terms, thus retaining greater ownership, control, and strategic direction.

2. Anchors High-Value Economic Activity Locally: Tax-funded early-stage R&D strongly anchors intellectual property (IP), headquarters functions, and high-value jobs domestically. Venture capital investments often pressure early exits or relocate key functions closer to major financial or technological hubs abroad. In contrast, robust local R&D incentives help secure strategic decision-making, high-quality employment, and long-term economic benefits within Ireland.

3. Accelerates Export Intensity and Wage Growth: Companies engaging early with tax-supported R&D consistently achieve greater export intensity and faster wage growth compared to peers reliant primarily on external equity funding. This creates a cycle of sustained economic value, driving higher-skilled employment, stronger domestic purchasing power, and broader economic stability.

Real-world examples underline these benefits. An Irish-founded, university spinout company, now employing over 200 staff, explicitly credits the R&D tax credit for its continued Irish ownership and local presence. Without the incentive, the company states, it would likely have sought external, international funding—risking relocation and loss of domestic economic benefits:

“Without the R&D tax credit, I'm not sure we could have continued as an Irish-owned company. We'd likely have had to look externally for investment. It's been hugely important in keeping our company locally anchored and Irish-owned.”

Similarly, another High-Potential Start-Up (HPSU) highlighted how crucial the tax credit refunds were to their immediate survival and longer-term growth:

“The R&D tax credit is critical for our cash flow right now. Without it, we'd run out of cash. It supports and leverages existing state investment via Enterprise Ireland, directly sustaining our technology development.”

Strategically, doubling Ireland's base of R&D-active SMEs—from approximately 1,500 to 3,000—would lay the groundwork for Ireland's own version of the highly successful German **“Mittelstand”**² (referring to a strong base of mid-sized firms, as in Germany). This vibrant ecosystem would consist of thousands of profitable, innovative, and predominantly Irish-owned businesses. These companies would deliver sustained job creation, regional economic balance, and robust tax revenues for decades, creating deep economic resilience far exceeding any short-term gains from narrowly focused venture capital funding alone.

Additionally, focusing on tax-supported R&D encourages broader innovation across sectors, including those traditionally underserved by venture capital, such as manufacturing, agriculture, and regional enterprises. Irish SMEs exhibit strengths in ICT, advanced manufacturing, agri-food, and emerging climate-tech sectors. Regional uptake varies significantly, with rural and regional SMEs underrepresented in R&D claims, indicating untapped potential (Index, 2025). This diversification not only fosters inclusive economic growth but also reduces systemic risks associated with concentrated investment patterns prevalent in venture capital-led ecosystems. Ultimately, this approach promotes a resilient and balanced national economy capable of adapting more effectively to global economic shifts and disruptions.

In short, a revised, tax-supported R&D strategy offers a more sustainable, balanced, and locally anchored economic future for Ireland, safeguarding high-quality jobs, strategic IP, and stable economic growth.

4.3 Current Barriers for SME R&D Investment

Ireland's economic future relies on broad-based innovation, yet small and medium enterprises (SMEs) face particular hurdles in engaging in research and development. Large companies account for the bulk of Ireland's R&D activity – in 2019, firms with 250+ employees made up 66.1% of all business R&D expenditure (about €2.15 billion) and had grown to over 77% by 2023 – though a large portion of this increase was due to capital investment. (CSO, 2019, 2025)

In contrast, small enterprises (<50 employees) contributed just 14.3% (c. €465 million) despite constituting the vast majority of active firms. This imbalance signals a significant underutilization of the R&D Tax Credit by SMEs, driven by factors such as cash-flow constraints, administrative complexity, and uncertainty about how the credit applies to small R&D projects.

As noted above Revenue statistics confirm that SME claimant numbers have remained nearly static—1,496 in 2022 versus 1,428 in 2013 (Revenue, 2024). SMEs consistently report cash-flow timing, complex eligibility criteria, high administrative burden, and fragmented supports as primary barriers (Index, 2024; TALC, 2024). This is reflected in the Innovation Index survey with consistent results across the three years.

² Mittelstand, which translates to "middle class" or "middle stand," refers to Germany's small and medium-sized businesses (SMEs). These businesses, often family-owned or privately held, are a crucial part of the German economy and are known for their innovation, quality, and long-term vision

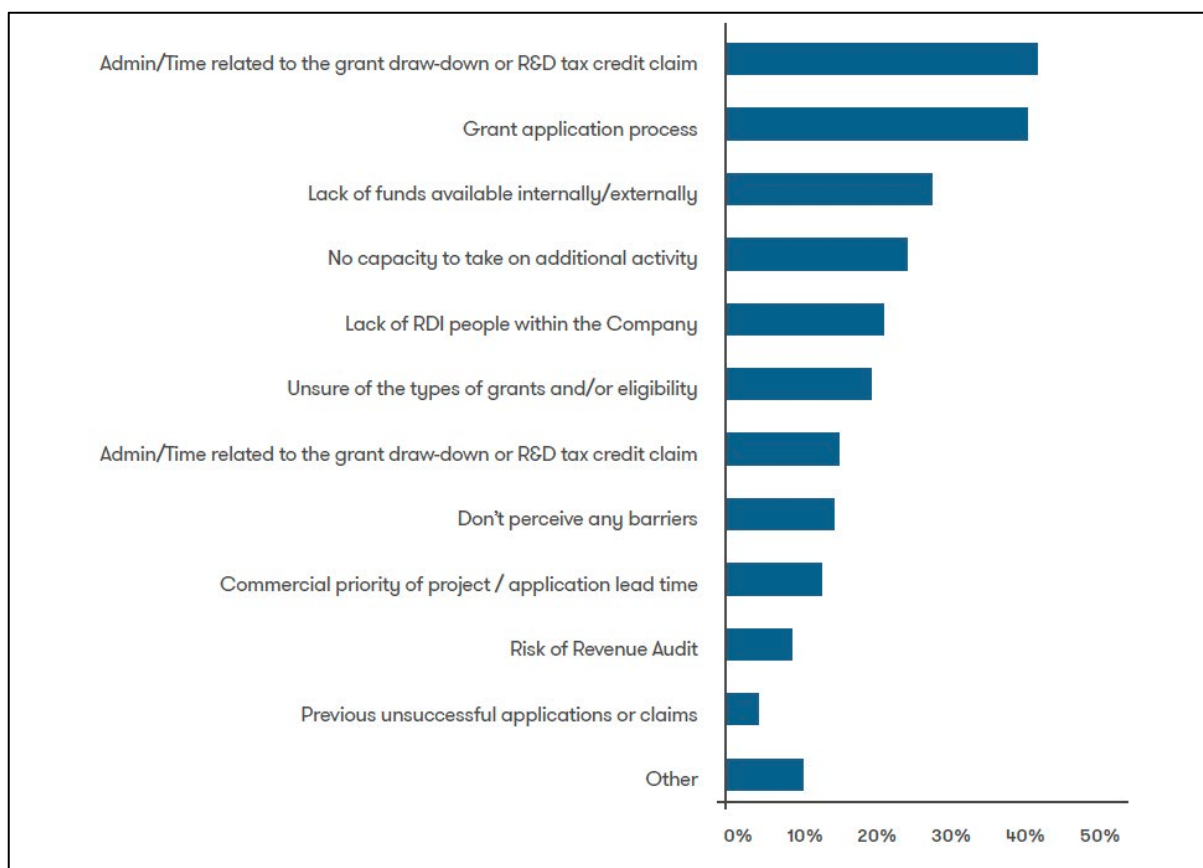


Fig 4.3 Barriers to use of State Support Mechanisms : Source Innovation Index 2025

Feedback from stakeholders and data analyses confirm these barriers (Index 2024, 2025). The European Innovation Scoreboard identifies Ireland's recent slippage in innovation rankings – from 6th to 11th in the EU between 2016 and 2021 – partly to a “reduced performance of government support for business R&D” in recent years. Likewise, Ireland's R&D intensity (R&D expenditure at 1.2% of GDP) remains well below the EU average of 2.3% with SMEs' low engagement in R&D as a contributing factor (CSO, 2019). Regional development goals are also impacted: because SMEs are distributed nationwide, their limited R&D activity means fewer high-tech jobs and innovation clusters in regions outside the major urban centers. In sum, boosting SME uptake of R&D tax supports is pivotal to reversing these trends and ensuring Ireland's innovation ecosystem is inclusive and globally competitive.

Company Comments

“We greatly value the work effort as currently being undertaken by the TALC Sub-Committee on Simplification of Business Reliefs for SMEs. While Revenue have highlighted the difference that grant supports are State aid governed by the General Block Exemption Regulation (“GBER”) and as a consequence of this, are subject to selectivity and the parameters imposed by the GBER requirements. The R&D tax credit does not come within GBER.”

“Can there be any opportunity here to move closer together on Revenue R&D Tax Credit and Grant supports being aligned? Is this the situation in other countries?”

“Preparing technical reports and contemporaneous documentation for IVDR-related projects is time-consuming, particularly when distinguishing between routine regulatory work and genuine

innovation. If the paperwork required could align more closely with the work carried out under IVDR it could help reduce the burden.”

Key obstacles have been identified through consultation with companies. Firstly, the R&D Tax Credit’s refund mechanism – currently spread over three years – strains SMEs’ cash flow. Many small firms are loss-making in early innovation phases and cannot fully benefit from a tax credit unless it is refunded promptly. Secondly, administrative complexity and uncertainty around eligibility deter SME claims. Companies often fear that investing in R&D might not qualify, or that claims will be challenged by Revenue, creating a climate of caution. Finally, limits on outsourcing R&D (e.g. the cap on subcontracted R&D at 15% of in-house spend or €100k) constrain SMEs that lack internal R&D capacity and would benefit from collaborating with universities or industry partners. These challenges suppress the scale and scope of R&D activities that SMEs undertake. Section 4.4 outlines targeted measures to address each of these barriers.

4.4 A blueprint to double SME participation

IRDG believes with key changes it is possible to more than double the SME participation in the R&D Tax Credit scheme. We outline key changes to enable this below. Some of these overlap with points already raised in Chapter 3. Taken together they create an effective and transformative set of policy measures for SMEs.

4.4.1 Cash-Flow Relief: – Faster, Phased Refunds

Cash-flow constraints cited by 58% of SMEs hinder R&D credit uptake significantly (IRDG, 2024). To address this, implementing a one-year refund cycle with an immediate 35% refund for claims under €300,000 could dramatically enhance liquidity. This approach mirrors successful practices in France (Crédit d’Impôt Recherche) and the Netherlands (WBSO). Raising the initial instalment threshold to €150,000 would further alleviate cash-flow issues. This change would swiftly inject cash into innovation-driven businesses, addressing the liquidity gap that many SMEs face when investing in R&D. The fiscal impact of faster refunds is largely a timing issue rather than an absolute cost: it would involve a one-time acceleration of payments (bringing forward refunds that would have been paid in later years).

For example, in 2021 about €339 million of R&D credit was paid out in installments (Revenue 2024) consolidating such payments up-front for SMEs might advance roughly €150–€200 million into the first year, after which annual refund outlays stabilise on a new schedule. This one-off cashflow cost must be weighed against the benefit of increased R&D investment and SME viability. Evidence strongly supports this move – the Irish Tax Institute also advocate refund acceleration, noting it would “provide valuable assistance to smaller companies that tend to be cash constrained” Early refunds also reinforce Ireland’s compliance with global tax norms (ensuring the credit remains a “qualified refundable tax credit” under OECD Pillar Two rules) an important consideration for the Department of Finance. By easing cash bottlenecks, faster refunds are expected to stimulate additional R&D activity in the near term, yielding greater innovation output for each euro of tax expenditure. Finance officials can be assured that this measure offers value-for-money, effectively leveraging SMEs’ agility: international analysis indicates small firms respond more to R&D incentives (incrementality ratio ~1.6) than large firms do (OECD MICROBERD 2023). The table below outlines a comprehensive set of steps that can be taken with low cost and high impact.

Introduce an “Advance Assurance” program for first-time R&D claimants. *Proposal:* Establish a voluntary advance certification process whereby small companies can submit their R&D project plans to Revenue for upfront validation of eligibility. This *assurance* would give new and

inexperienced claimants confidence that their activities qualify, significantly reducing the perceived risk of ex-post denial or penalties. The UK introduced a similar Advance Assurance scheme for SMEs, which has been successful in encouraging smaller firms to claim R&D relief by providing certainty and reducing fear of audits. In Ireland's context, advance assurance was strongly recommended by tax professionals: the Tax Administration Liaison Committee (TALC) feedback noted a "certain level of anxiety" among companies about Revenue challenges to claims, and suggested a pre-approval process to "help alleviate the uncertainty" for small/micro enterprises (TALC, 2024). By implementing this, administrative efficiency would improve for both taxpayers and Revenue. Fewer contentious audits and retroactive corrections would be needed, focusing compliance resources only where truly necessary. The fiscal cost of advance assurance is minimal – it mainly requires dedicating some expert personnel time to review applications upfront, which is offset by fewer disputes later. In terms of economic impact, the benefit is enabling more firms to engage in R&D with peace of mind. Even conservative estimates indicate many SMEs currently *underclaim* or avoid the credit due to uncertainty; removing this barrier could unlock a portion of the "missing" R&D investment at virtually no direct cost. This recommendation clearly aligns with Finance's goals of administrative simplification and risk reduction: it promotes compliance by design rather than through after-the-fact enforcement. As a result, the scheme would bolster the credit's uptake among SMEs while maintaining fiscal responsibility and robust oversight.

Raise the cap on subcontracted R&D expenditure to foster collaboration.

Proposal: Increase or remove the restrictive cap that limits outsourced R&D costs claimable to 15% of in-house R&D spend (or €100k, whichever is greater). This measure would enable SMEs to engage more freely with external research partners – for example, by contracting work to universities, Institutes of Technology, or specialised R&D firms – without losing the tax credit on those expenses. The current cap, while intended to ensure companies maintain internal R&D capacity, may be *unintentionally holding back* valuable collaborative projects, especially for small firms that might do most of their R&D through partnerships due to limited in-house resources. International best practice leans toward greater support for collaborative innovation: countries like France and the Netherlands impose higher limits or more generous treatment for R&D subcontracting, recognising that SMEs often benefit from external expertise. Increasing the outsourcing threshold above the 15%/€100k level will better "foster collaboration between academia and private business." Expanding the cap would carry a modest fiscal cost – primarily, some R&D spending that currently exceeds the cap would newly qualify for the 30% credit (or 35% under other proposed changes).

However, relatively few SMEs reach the cap today, and those that do are precisely the high-ambition innovators we want to encourage. If, for instance, even 50 companies were enabled to claim an extra €200k of outsourced R&D each, the additional credit cost at 30% would be €3 million – a small investment for potentially significant innovation outcomes. The economic payoff is that firms could undertake larger or more advanced R&D projects by tapping external capabilities, leading to more impactful innovations (and subsequent economic benefits) than would occur if they were limited to in-house efforts. Importantly, this proposal aligns with Ireland's regional development and knowledge diffusion goals: SMEs all around the country could collaborate with nearby universities or tech centres, spreading innovation activity beyond current hubs. It also resonates with the value-for-money principle: outsourcing R&D can be a cost-effective strategy for SMEs to innovate, and supporting it ensures the R&D Tax Credit is fuelling real, measurable R&D outputs rather than being underutilised due to artificial limits.

In addition to the above major proposals, IRDG proposes measures to simplify compliance (e.g. clearer guidance and reduced documentation for small claims) and to expand eligibility where

appropriate (for instance, recognising R&D-related rent – which was included in Revenue Guidance until 2019 or other vital expenses as qualifying costs). Such steps, many of which were highlighted in public consultation feedback, would complement the core recommendations by generally easing the innovation journey for SMEs. Every reduction in complexity or uncertainty can increase the likelihood that a small firm takes on an R&D project. We urge that any changes be made with input from Revenue and taxpayers to ensure they are practical to implement and maintain the integrity of the credit. Simplification aligns with the Department’s emphasis on administrative efficiency, helping achieve policy objectives without new budgetary cost. The guiding principle is that Ireland’s R&D support framework should be as accessible and user-friendly as possible for innovative SMEs, so that scarce resources are invested in innovation rather than paperwork. These proposals are summarised in Table 4.1 below.

Objective	Action	Detail & precedent
1. Make cash real, and make it fast	One-year refund for claims ≤ €300 k	Immediate 35 % refund within four months of filing. Mirrors the French Crédit d’Impôt Recherche fast-track and the Dutch WBSO monthly offset.
	Increase first-instalment floor from €50 k to €150k	Removes artificial cliff for growing firms; costs €15 m by bringing payments forward but no increase in net cost to exchequer
2. Replace fear with certainty	Launch “Advance Assurance – SME”	10-day binding eligibility letter for companies < 250 employees / < €20 m turnover, modelled exactly on HMRC’s successful scheme.
	Plain-English “SME R&D Playbook”	20-page illustrated guide; check-lists; worked micro-company examples. Co-branded by Revenue, EI, IDA, Údarás, LEO network.
3. Cut bureaucracy by 70 %	Single “Innovation Claim” portal	One secure log-in auto-populates from ROS payroll & CRO returns; uploads double for grant & tax claims; aligns with MyGovID.
	Micro-claim template	Two-page technical summary + auto-generated cost schedule for claims < €50 k; uses payroll tags and standard apportionment keys.
4. De-risk the first step	Regional R&D Voucher – 80 % funded feasibility projects up to €20 k	Replaces the current Innovation Voucher with a version ring-fenced for firms who have never claimed the tax credit. On completion, voucher holders get facilitated into the Advance Assurance pathway.
5. Reward collaboration & diffusion	Lift subcontract cap to 30 % / €250 k	Incentivises SMEs to buy specialist lab or expertise instead of reinventing it.
6. Hard-wire ambition & accountability	Publish annual 3,000 by 2030” scoreboard	SME claimant numbers by county, sector, gender of founder. Sets a transparent, cross-agency KPI.

Table 4.1 Summary of SME Targeted Measures.

In addition, there is an opportunity to add several additional measures to support SME investment in R&D and consequent value creation.

4.4.2 University–Industry and Inter-SME Consortia

Encouraging university-industry partnerships and inter-SME collaboration through targeted incentives can significantly boost innovation. IRDG suggests introducing regional R&D vouchers funding up to 80% of feasibility projects (max €20,000), explicitly aimed at first-time claimants. This targeted support would streamline SMEs' entry into systematic R&D (Innovation Index, 2025).

4.4.3 Adjusting the 15% Outsourcing Cap for SMEs

The existing 15% outsourcing cap limits SMEs reliant on external specialist expertise or advanced facilities. Raising this cap to the greater of 25% or €250,000 would better reflect SMEs' operational realities and foster more substantial collaboration with universities and specialist providers (OECD, 2019; IRDG, 2024). Lifting the cap has been discussed in detail in section 3.2 above.

4.4.4 Expanding Key Employee Relief & Mobility Supports

Enhancing the Key Employee Relief scheme and streamlining mobility supports could improve SMEs' ability to attract and retain critical technical and scientific talent, essential for sustainable innovation growth (TALC, 2024). 30% of companies in the Innovation Index Survey (Index 2025) cite a skills gap as a key challenge and a similar number of 32% highlight recruitment of key talent as one of the biggest barriers impacting their ability to innovate. Ireland's competitiveness reports highlight skill shortages in STEM; easing mobility via enhanced relief could make us more attractive to top researchers.

4.4.5 Regional Cluster Vouchers and Shared-Equipment Grants

Regional Cluster Vouchers and Shared-Equipment Grants would considerably lower SMEs' access barriers to high-cost, specialised equipment, particularly beneficial in regional innovation clusters, promoting balanced regional economic development (Programme for Government, 2025).

4.5 A Reformed R&D Tax Credit for SME Impact

4.5.1 Economic Impact & Vision: Towards an Irish Mittelstand

Doubling SME claimant numbers to 3,000 could generate substantial economic benefits, including approximately €1 billion additional private-sector R&D spend annually and creating 10-15,000 high-skilled jobs, significantly enhancing productivity (OECD, 2019; Eurostat, 2023). The detailed economic calculations here are included with the figures for Economic Impacts on larger companies in section 5.6 including Table 3. With an approx. 1 job created for each 80K – 100K of additional R&D spend.

Such strategic reforms could establish an enduring innovation-driven Irish Mittelstand, driving sustained regional prosperity.

By implementing the package of SME-focused R&D tax support enhancements, Ireland can expect substantial economic and fiscal returns. A core goal is to significantly increase SME participation in R&D – for illustration, doubling the number of SMEs claiming the R&D Tax Credit over the next several years. In 2022, about 1,500 companies claimed the credit [creditrevenue.ie](https://www.creditrevenue.ie), the majority of them SMEs. If that number were doubled (adding ~1,500 more SME claimants), and assuming each new claimant undertakes R&D similar to current SME averages, we could see on the order of an additional €800–€900 million in private-sector R&D investment annually (SMEs contributed ~€888 million in allowable R&D spend in 2022) This would raise Ireland's business R&D intensity closer to peer country levels, moving the needle on the 1.2% of GDP figure toward the government's Impact 2030 target of 2.5% of GNP by 2030. The innovation dividends from this uptick are significant: more

R&D means more product and process innovations, higher productivity growth, and enhanced international competitiveness of Irish SMEs.

4.5.2. Future Direction of the R&D Tax Credit

There is now growing importance placed on sustainability, the circular economy, and decarbonisation. However, many companies are innovating in ways that don't always meet the current "scientific uncertainty" threshold. We address this gap through our call for a separate Innovation Tax Credit in Chapter 7.

The R&D tax credit does not currently **reward collaborative innovation** across supply chains or regions (e.g., cross-industry partnerships on waste valorisation or low-impact packaging).

Recommendations:

Introduce tiered incentives or bonuses for R&D projects that align with national priorities (e.g. climate action, biodiversity, marine stewardship). Enable enhanced support for collaborative R&D, especially across sectors or involving SMEs and public research institutions. Consider adding a "green innovation" supplement to the tax credit for projects with measurable environmental benefits.

The employment effects of expanding SME R&D are similarly compelling. R&D projects are intensive in high-skilled labour – engineers, scientists, technicians – and tend to create well-paid, sustainable jobs. An increase of €0.8–€0.9 billion in annual R&D spending by SMEs could directly translate into several thousand new R&D jobs across the country. Even a rough estimate illustrates this: if roughly half of additional R&D spending goes to salaries (the remainder to materials, equipment, etc.), that's €400–€450 million in wages. At an average fully-loaded cost of €80,000 per research job, this equates to 5,000–5,600 new high-skilled positions in the SME sector. Those jobs generate income tax and social insurance contributions – a fiscal feedback that partially offsets the cost of the tax credit. Using the above figures, €400 million in additional payroll could yield on the order of €80–€100 million in annual tax revenue (income tax, USC, PRSI), flowing back to the Exchequer. Moreover, as SMEs grow and become profitable thanks to innovation, they will contribute more in corporate tax over time. In short, empowering SMEs to innovate doesn't just advance industrial policy goals – it also broadens the tax base in the medium to long term, a point that should resonate in value-for-money evaluations.

International experience reinforces the expectation of strong returns on these supports. Studies of SME-focused R&D tax schemes in other countries show that the additional R&D investment generated ("additionality") often meets or exceeds the amount of tax relief provided. For instance, the OECD's multi-country analysis finds a gross incrementality ratio around 1.4 on average – each €1 of R&D tax support induces €1.4 in private R&D – with smaller firms seeing ratios up to 1.6 (OECD, 2023). The Netherlands' WBSO program (a wage-tax credit for R&D) demonstrated that "each €1 of WBSO allowance leads on average to €1.01–€1.02 extra R&D expenditure in the short term", with a wider range of €0.7–€1.3 depending on firm and project characteristics (WBSO 2004). This essentially pays for itself in terms of R&D stimulus, even before accounting for longer-term "spillovers" (social benefits from innovation) which are considerable.

The UK's SME R&D tax relief has been evaluated multiple times: earlier evaluations found very high additionality (e.g. £1 of relief generating £1.50–£2.30 of R&D in some estimates), though more recent HMRC studies suggest a more conservative range around £0.60–£1.00 per £1 for the payable credit element (LSE, 2019). Even at the lower end, the policy ensures that a substantial portion of the supported R&D simply would not happen otherwise, justifying the expenditure. France's Crédit d'Impôt Recherche (CIR), one of the most generous R&D credit schemes, has been credited with

helping France achieve one of the highest business R&D intensities in Europe (around 2.2% of GDP) and fostering tens of thousands of R&D jobs – a strong indication of ROI when such credits are scaled up. Across these examples, a common theme emerges: SME-focused R&D supports yield positive returns in the form of higher R&D spending, improved innovation outcomes, and long-run economic growth. By benchmarking and tailoring Ireland’s supports in line with these proven practices, we can expect similarly robust results.

Fiscal cost estimates and payback horizon. The proposals in Section 4.2 have varying cost profiles, but all are designed with **fiscal prudence** in mind and are expected to **pay for themselves** over a reasonable horizon through the economic benefits outlined above. To summarise:

- **Faster SME refunds:** Principally a cash-timing shift. The one-off acceleration (approximately in the low hundreds of millions euros) would be incurred in the first year of implementation. Thereafter, annual credit costs remain as per the underlying R&D activity. Given the additional R&D stimulated and the likely increase in SME claimants, this measure’s payback can be viewed in terms of sustaining and growing the tax base (via jobs and profits) over a few years. Notably, making the credit more cash-accessible might prevent SME project cancellations or failures that would be far more costly in lost economic activity.
- **Advance assurance:** Administrative cost only, negligible fiscal cost. It may require a small team of experts (with associated salary costs) to manage approvals. This could be funded within existing operational budgets or offset by efficiency gains (e.g. fewer lengthy audits). The economic payback is immediate in the sense that more SMEs will invest in R&D due to reduced uncertainty. Even a handful of new R&D projects triggered by assurance would far outweigh the program’s cost. This is a high-return, low-cost reform.
- **Outsourcing cap adjustment:** Direct cost dependent on uptake. If more outsourced R&D spend becomes eligible, the Exchequer will refund 30% of those amounts. Using the earlier scenario (e.g. 50 firms × €200k extra qualifying spend = €10m, credit cost €3m), we see that the scale is modest. If uptake is higher, say an extra €20 million qualifying spend, the cost is €6 million. These figures are minor relative to the overall R&D credit budget (~€1.4bn in 2023). The payback horizon here is relatively short: the collaborations enabled could lead to new products or processes within 1–3 years, translating into business growth, taxable profits, and jobs. Also, some of the cost is a reallocation – projects that might have gone abroad or not done at all will instead be done in Ireland, thereby keeping economic activity (and future tax revenue) domestic.
- **Ancillary simplifications:** Minimal cost, potentially slight savings. Simplified rules and guidance do not inherently cost money; if anything, they reduce compliance costs for businesses (a benefit) and could lower administrative burdens on Revenue over time. No fiscal payback needed since there’s no fiscal cost, but the improved uptake and compliance would contribute to the broader positive impacts.

In aggregate, even if the static cost of these SME-focused enhancements is, for example, on the order of an additional €10–€20 million per year (a very rough estimate encompassing higher credit claims from increased R&D activity and outsourcing), this should be weighed against the dynamic returns: hundreds of millions in new R&D spend, thousands of skilled jobs, and a stronger innovation-driven tax base. Those returns, as argued, accrue over the medium term. It is reasonable to expect that within 3-5 years, the fiscal benefits (in terms of incremental tax revenues from higher growth and employment) will overtake the upfront costs, yielding a net positive for the Exchequer. Crucially, even before that crossover point, the strategic value of investing in SME innovation capacity aligns with Ireland’s long-term goals (which cannot be achieved if we under-invest in

innovation today). Thus, the cost-benefit assessment strongly favours these measures – they are prudent investments in Ireland’s future competitiveness and revenue-generating capacity.

4.5.3 From start-up dependency to a resilient Irish Mittelstand

Conclusion – Strategic Alignment: The above recommendations and their economic rationale demonstrate that enhancing R&D tax supports for SMEs is not at odds with fiscal responsibility – it is an expression of it. By reallocating resources to high-impact areas (innovation in the SME sector), the government can achieve multiple policy wins: improved value-for-money in public expenditure (through high additionality of private R&D OECD MICROBERD 2023), greater administrative efficiency (through simplified and streamlined processes), ensured fiscal sustainability (via medium-term revenue gains and avoidance of innovation deficits), and strengthened alignment with national strategic goals such as Impact 2030 and balanced regional development. These proposals have been crafted to reflect feedback from stakeholders (as evidenced by Revenue/TALC inputs and industry surveys) and to mirror successful international practices, while tailoring solutions to Ireland’s unique context. We believe the proposals here presents a compelling, evidence-backed case for the Department– one that marries prudence with ambition, and positions Ireland’s SMEs to become engines of innovation and growth in the years ahead.

A larger, simpler, faster SME R&D regime does more than boost today’s claim counts:

1. Extends the runway – founders can iterate products several times before diluting ownership, learning to sell internationally on their own terms.
2. Keeps decision-making in Ireland – IP, engineering and product management stay close to origin, anchoring manufacturing and services.
3. Builds balance-sheet strength – profit-funded R&D generates retained earnings and collateral, allowing firms to weather shocks.
4. Creates regional prosperity – mid-sized, export-oriented firms disperse outside the capital, mirroring Germany’s Mittelstand engine.

Ireland’s fiscal position gives us the latitude to be bold. By executing the actions above we could:

- lift SME claimant numbers to 3,000 by 2030;
- unleash an extra €1 billion of business-funded research every year;
- seed thousands of permanent, innovation-led jobs in every county; and
- lay the foundations for an Irish Mittelstand that will power indigenous prosperity for half a century.

The choice is between incremental tweaks and a strategic leap. The evidence – and the ambition of our entrepreneurs – argue strongly for the leap. Let us take it.

5 Driving Frontier R&D in Large Enterprises

In Chapter 5 we review and look to shape future policy regarding the investment by Large Irish Enterprises and FDI in R&D.

5.1 Ireland's Large-Company Innovation Footprint

Ireland's 1,500+ large enterprises—mostly multinational corporations—employ over 580,000 people, spend approximately €3 billion annually on internal R&D, and generate nearly two-thirds of Ireland's merchandise exports (Revenue, 2024; IRDG Innovation Index, 2024). As one life sciences executive succinctly summarised:

Company Comment

“When our group decides where the next therapy platform goes, it follows the R&D talent. If Ireland can keep that talent – and the cost and regulatory envelope is predictable – the manufacturing follows.”

These firms therefore underpin every priority in Impact 2030 – from balanced regional development to the target of doubling business expenditure on R&D (BERD) by 2030. But they are also mobile: Singapore, Switzerland, the UK, and several US states now court them with headline R&D tax rates of 40 – 50 %, fast-track immigration and rapid licence turnarounds.

5.1.1 Contribution to Employment, Exports and Clusters

Large enterprises significantly underpin Ireland's economic landscape, anchoring employment and exports in strategically critical clusters including biopharma, ICT, and advanced manufacturing. These sectors are central to achieving Ireland's Impact 2030 objectives, notably doubling business R&D spending by 2030 (Programme for Government, 2025).

5.1.2 Spill-overs to Local Supply Chains

Multinationals generate substantial positive spill-over effects on local supply chains, elevating the capabilities of indigenous SMEs through technology transfer, skills enhancement, and increased innovation intensity within local enterprises (Index, 2025).

5.2 What Large Enterprises Tell Us

“We are Benchmarked against peer jurisdictions”

Multinational corporations benchmark Ireland against jurisdictions from Singapore and Malaysia to Switzerland and France which offer headline R&D incentives of up to 50%, accelerated immigration processes, and rapid regulatory approvals. To remain competitive post-Pillar Two, Ireland must enhance both incentive attractiveness and administrative agility (OECD, 2023).

In a post pillar two world our competitiveness is eroding. Large enterprises consistently identify critical challenges impacting their strategic decision-making and competitiveness in Ireland. The current outsourcing cap of 15% or €100k on third-party R&D significantly limits collaboration with essential global partners, such as contract research organisations and design houses. One company highlighted this constraint vividly: *“Our AI model needs 18 months of offshore data work—but only 15% is claimable.”*

Additionally, uncertainty stemming from OECD Pillar-2 and DEMPE rules has tangible impacts on Ireland's attractiveness for strategic group-level R&D activities. CFOs frequently discount Ireland in their location-selection models, with one executive noting, *"We can't book group R&D here if DEMPE substance still triggers a top-up tax."*

Prolonged refund cycles, stretching up to three years, negatively impact the net present value (NPV) of major investments, particularly large-scale biopharmaceutical plants or semiconductor fabrication facilities. This extended waiting period contrasts starkly with competitor jurisdictions, as noted by one company representative: *"When Singapore wires 90% of the benefit in year one, our board notices."*

Finally, significant delays in grid connections and permitting approvals jeopardise timelines for critical infrastructure, particularly in data-intensive sectors such as AI mega-clusters. Companies urgently require stable and timely access to renewable energy, with one business clearly articulating the stakes: *"We need 100% renewable power by 2028 or we expand elsewhere."* Addressing these critical pain points is essential to maintaining Ireland's competitiveness and attractiveness for high-value, large-scale investments.

Company Comments

"The R&D Tax Credit has long been a pillar of industrial policy, but its current design places artificial limits on the country's competitiveness in a global innovation economy. Specifically, the exclusion or restriction of offshore R&D spend—even when it directly enhances Irish-owned IP—undermines the Government's broader objectives: to strengthen economic resilience, advance STEM education, and attract and retain top-tier global talent."

"Half of our global R&D would leave Ireland tomorrow if the credit disappeared; we simply cannot justify the cost otherwise"

"The recent enhancements have significantly increased our global competitiveness, particularly against regions like Asia. It gives us critical firepower to invest aggressively."

Common Themes:

- **Strategic Dependence on R&D Tax Credit:** Multinationals consistently express how integral the tax credit is to their overall global investment strategy. It fundamentally influences decisions to anchor critical R&D operations, IP, and employment in Ireland.
- **Linking R&D with Broader Employment:** A recurring narrative from larger firms highlights that high-value R&D roles are vital in supporting a much broader base of employment, particularly in manufacturing, operations, and services.
- **Administrative Speed and Simplicity as Competitive Factors:** Large enterprises consistently emphasise the necessity of streamlined, clear, and fast administrative processes. Delays in Revenue processing are explicitly cited as significant barriers to maximising R&D spend and associated investment in Ireland.
- **International Competitive Pressures:** There is frequent reference to competitive incentives from international locations (Singapore, Malaysia, USA), highlighting the critical importance of maintaining Ireland's competitive position through attractive R&D incentives and simpler administrative mechanisms.
- **Strategic Focus on Decarbonisation and Digitalisation:** Multinationals strongly emphasise that Ireland's attractiveness as a base for future R&D is significantly enhanced by robust incentives specifically aligned to digital and sustainability transitions.

5.3 Sustaining Competitiveness

Maintaining the 30% Rate and Cash-Refund Mechanism

Maintaining Ireland's 30% headline R&D credit rate is critical, yet respondents urge an increase to 35% for the first €25 million of expenditure per group, coupled with full refundability within 12 months. This structure would place Ireland competitively against Singapore's aggressive incentive model and help secure significant large-scale R&D projects.

Supporting Capital-Intensive & Sustainable Manufacturing R&D

Incentives for Low-Carbon Process and Bio-Economy Pilots

A specialised 50% Green-Tech R&D credit is proposed for projects demonstrating significant emissions reductions (>30%) or circular economy advancements, supplemented by a 100% year-one capital allowance. This aligns incentives directly with Ireland's Climate Action Plan and positions Ireland as among the leading global destinations for strategic R&D investment for sustainable innovation (EPA, 2023; Programme for Government, 2025). Sustainability supports are covered in Chapter 6 below.

Large-Scale Test-Bed and Demonstrator Funding

Ring-fencing €2 billion via R&D Infrastructure Bonds from the Infrastructure, Climate & Nature Fund is recommended for critical upgrades in grid, laboratory, and semiconductor clean-room capacity. Ensuring timely readiness of these infrastructures is pivotal to capturing large-scale international R&D investments (IDA, 2024).

Deepening SME–MNC Collaboration

Supply-Chain Innovation Incentive (SCII) Proposal

A proposed Supply-Chain Innovation Incentive (SCII) aims to foster collaboration between large enterprises and Irish SMEs, enhancing supply chain resilience, innovation transfer, and market competitiveness (Index, 2025).

National Technology Access Programme

Establishing a National Technology Access Programme could further enhance SME access to advanced technologies and expertise from multinationals and research institutions, strengthening domestic capability and innovation diffusion (Programme for Government, 2025).

Economic Impact & Strategic Outlook

Implementing these targeted enhancements could significantly increase business expenditure on R&D (BERD) from €4 billion to €7 billion by 2030 (in current spend excluding capital investment, create approximately 35,000 net new high-skilled jobs, and substantially enhance Ireland's share of EU FDI R&D inflows from 9% to 14% (OECD, 2023; Eurostat, 2023). Detailed analysis of the job figures is given in section 5.3 below.

5.4 Creating a Base for IP

IRDG proposes a new, strategically targeted R&D credit regime—one that provides enhanced benefits for companies that own and develop intellectual property in Ireland. This would recognise

global R&D efforts that are demonstrably linked to Irish-based innovation, but only where two clear and credible policy conditions are met:

1. IP ownership must reside in Ireland, anchoring long-term value creation, tax revenue, and decision-making here.
2. Companies must meet the OECD's DEMPE substance requirements in Ireland—bringing real, high-value activities such as development, enhancement, management and protection of IP into the country, supported by a skilled, highly educated workforce.

Only when both these conditions are satisfied would companies be eligible to claim R&D credits on qualifying offshore spend, capped at the amount of R&D spend within Ireland. This creates a clear incentive: the more you invest in Ireland, the greater your eligible global credit.

This policy design delivers multiple benefits:

- Drives sustainable tax revenue: When IP is held in Ireland, so too are future profits—and the associated corporate tax base. Unlike shifting patent boxes or fluctuating transfer pricing, IP ownership creates durable, traceable value for the Irish Exchequer.
- Strengthens DEMPE substance: Global multinationals increasingly struggle to meet Ireland's DEMPE thresholds. This model flips that challenge into an opportunity—rewarding those who bring meaningful, high-value functions into Ireland.
- Incentivises global collaboration anchored in Ireland: Innovation today is rarely confined within one border. Many Irish-based firms rely on global teams for clinical trials, AI development, and manufacturing engineering. This credit would recognise that reality, while keeping Ireland at the core.
- Grows high-skill employment and university partnerships: DEMPE-aligned IP development demands deep expertise. The policy would directly fuel demand for Irish-based R&D roles, senior engineering positions, and data science talent—stimulating greater investment in universities and advanced research partnerships.
- Reinforces Ireland's reputation as a responsible, innovation-driven economy: By tying the enhanced credit to OECD-compliant behaviour, Ireland sends a clear signal to the EU and global tax watchdogs: this is not a race to the bottom, but a model for substance-based, sustainable growth.
- Supports indigenous Irish innovation: While this policy would benefit multinationals, it is equally applicable to Irish-headquartered companies developing their IP footprint. It could unlock scale, investment, and exports for homegrown innovators.

This is more than a technical fix, it can be a visionary policy that makes Ireland the best place in the world not just to bring IP, but to build and grow it.

Super-deduction for Irish-resident IP

Offer a 200 % capital-allowance uplift on qualifying intangible assets where the DEMPE functions, and the legal ownership, reside in Ireland for at least five years. This directly links fiscal support to the 'stickiness' of value-added activities.

5.5 A Policy Package to Out-compete Global Peers

To secure Ireland's competitive position in attracting and anchoring high-value R&D investments, this targeted policy package addresses critical barriers and accelerates innovation, clearly aligning with international best practices and emerging global standards.

Strategic Actions and Impacts:

1. Enhanced R&D Tax Credit:

Increase the headline rate to 35% on the first €25 million per group annually, and 30% thereafter.

Ensure full refundability within 12 months upon validation, eliminating the current three-year phasing.

Implement an automatic adjustment post-Pillar Two, preserving the effective benefit.

Impact: Generates an estimated additional €1 billion per year in R&D investment, achieving parity with Singapore's super-deduction and significantly enhancing Ireland's international competitiveness.

2. Modernise Outsourcing and Align with DEMPE Principles:

Raise the third-party outsourcing cap to 25% of R&D spend or €5 million, whichever is higher.

Allow intra-group recharges of R&D wages where the Irish entity manages and bears risk (aligned with OECD's DEMPE framework).

Publish clear Revenue safe-harbour guidance on DEMPE documentation requirements.

Impact: Unlocks substantial global clinical trials, silicon-tape-outs, and Contract Research Organization (CRO) budgets, strengthening Ireland's position in networked innovation models.

3. Revitalise Knowledge Development Box (KDB):

Reduce KDB tax rate to 6% and expand eligibility to embedded software and algorithmic IP.

Accept cost-sharing structures if the Irish entity undertakes core development and enhancement functions.

Fast-track KDB rulings within a 60-day statutory timeframe through a dedicated Revenue unit.

Impact: Ensures rapid commercial applicability, keeping high-value IP and trade secrets anchored domestically.

4. Introduce a Green-Tech "Double Gear" Credit:

Offer a 50% R&D tax credit for projects significantly reducing greenhouse gas emissions (>30%) or generating circular-economy IP.

Complement this with a 100% year-one capital allowance for near-zero-carbon pilot lines.

Ensure third-party verification of carbon impact before credit release.

Impact: Positions Ireland as a global magnet for major climate-tech investments, aligning strategically with Climate Action Plan 2024.

5. Accelerate Talent Attraction and Retention:

Expand Critical Skills Employment Permits to include quantum computing, photonics, and AI safety specialists.

Introduce a 48-hour decision process for Stamp 4 permits for researchers affiliated with IDA and Enterprise Ireland-supported projects.

Establish an International Talent Office (ITO), coordinating rapid issuance of combined residence and work permits, spousal employment rights, and international schooling support.

Impact: Eliminates hiring delays compared to competitor nations, notably the Netherlands and the US, ensuring rapid talent mobilization.

6. Issue R&D Infrastructure Bonds:

Ring-fence €2 billion within the Infrastructure, Climate & Nature Fund to finance green R&D bonds, targeting infrastructure such as upgraded power grids, wet labs, and semiconductor clean rooms.

Begin with an initial tranche of €400 million to quickly address critical infrastructural gaps.

Impact: Guarantees infrastructure readiness in key regions, substantially enhancing Ireland's attractiveness for large-scale R&D projects.

7. Ensure Predictable and Efficient Administration:

Create a dedicated Large-Case R&D Directorate within Revenue, providing single-point oversight.

Offer pre-filing agreements on costing models valid for five years.

Establish a statutory limit of 180 days for processing refund claims.

Digitise project cost reporting aligned explicitly with DEMPE functions, simplifying compliance.

Impact: Significantly reduces uncertainty in strategic investment models, making Ireland more attractive for sustained, long-term R&D investment.

Immediate Legislative Actions for Budget 2026:

Legislate the enhanced R&D credit rates and refund schedules.

Capitalise the initial €400 million tranche of the proposed R&D Infrastructure Bonds.

Resource and operationalise Revenue's Large-Case R&D Directorate, and publish OECD-aligned DEMPE guidance by Q1 2025.

Guardrails and Compliance:

Introduce clear anti-fragmentation rules to ensure legitimate functional separations.

Require third-party verification for environmental impact claims under the Green-Tech Credit.

These targeted measures will give Ireland a decisive edge against global competitors in attracting R&D investment. They aim to establish Ireland as a top-tier location for strategic R&D projects, ahead of peers like Singapore, Israel, or the US in key areas.

As one senior industry leader stated:

"If Ireland demonstrates it is the easiest place to deploy €50 million on a pilot line—from permitting and power infrastructure to payroll—the subsequent €500 million scale-up investments naturally follow."

5.6 Economic Impacts

Looking at the R&D Performance of Ireland (Large Enterprise & FDI-Driven) – Baseline and 2030 Projections

1. Business Expenditure on R&D (BERD)

Baseline: Ireland’s business sector R&D expenditure reached €3.88 billion in 2021 (latest finalised data, CSO 2023) with a preliminary estimate of about €3.89 billion for 2022. This represented roughly 1.6–1.8% of total EU business R&D spending – for context, EU businesses spent approximately €233 billion on R&D in 2022 Eurostat 2023. Ireland’s BERD intensity (as % of GDP) remains relatively low (~0.9% in 2019), reflecting the dominance of multinational activity in GDP; as a share of GNI* (which strips out distortions), total R&D was about 2.1% in 2021(HEA, 2023) Large enterprises drive the bulk of Irish BERD: in 2023, firms with ≥250 employees accounted for 77.1% of all R&D spending mirroring the strong contribution of foreign-owned multinationals (which made 84% of 2023 R&D outlays) (Irish Times, 2025)

Current EU Share: Ireland’s BERD is on the order of **~1.7% of the EU27 total** (e.g. €3.9 bn of ~€233 bn in 2022) (Eurostat 2023) This share has grown from around 1.2% a decade ago (due to Ireland’s rapid BERD growth) but is still modest relative to larger EU economies.

Projection to 2030: Table 1 summarises 2030 projection for BERD, factoring in national policy goals and economic trends. The Irish government’s Enterprise 2022–2030 plan aims to raise overall R&D spending to 2.5% of GNI* by 2030 (Enterprise 2023) Assuming Ireland’s BERD grows strongly through continued FDI investments, R&D tax incentives, and recovery of indigenous R&D, IRDG projects Ireland’s BERD could roughly double by 2030 (reaching on the order of €8–9 billion). This assumes an average high single-digit annual growth, moderating from the extraordinary 81% surge observed 2021–2023 (Irish Times 2025). For the EU as a whole, if R&D spending continues rising ~5–6% yearly (as in recent years – Eurostat 2023), the EU27 BERD may approach €350–400 billion by 2030. Ireland’s share of EU BERD is therefore projected to increase to roughly ~2.0% by 2030 (reflecting Ireland’s faster growth from a low base, though still a small portion of Europe’s total). Key assumptions include sustained multinational R&D expansions (supported by a 30% R&D tax credit and favourable IP regimes) and improving domestic R&D capacity.

Table 5.1: Business R&D Expenditure – Ireland vs EU (Baseline and Projected 2030)

	Ireland BERD	EU27 BERD	Ireland % of EU BERD
Baseline	€3.9 billion (2021/22)	~€233 billion (2022)	~1.7%
2030 (Proj.)	~€8.5 billion (est.)	~€380 billion (est.)	~2.0% (est.)

Recent data from CSO has BERD at €7bn in 2023. Stripping out the €2B of additional capital spend in the 2023 figures gives an approx. €5B figure for 2023 with estimates of a similar figure for 2024/2025. The 8,5Bn may be a conservative figure on this basis but is reasonable given the full data sets available.

Methodology: The 2030 projection assumes Ireland’s BERD roughly doubles from the latest known value (consistent with the national 2.5% GNI* R&D intensity target Enterprise 2023). EU BERD is assumed to grow more moderately. All figures are in current euro; projections are indicative, based on policy-driven growth in R&D investment (e.g. increased public R&D funding and incentives to leverage private R&D). Ireland’s BERD in 2030 will depend on the sustainability of recent multinational R&D surges (Irish Times 2023) and the extent of indigenous R&D scaling up.

2. Patent Output (Innovation Outcomes)

Baseline: Irish applicants currently file on the order of a few hundred unique patent families per year in international patent systems. To avoid double-counting the same invention across offices, we consider Patent Cooperation Treaty (PCT) filings as a proxy for unique patent families. In 2022 Irish applicants filed 806 international patent applications via the PCT (WIPO 2023), down from 908 in 2021. (Each PCT application typically represents a new invention intended for protection in multiple

jurisdictions.) Similarly, Ireland’s filings at the European Patent Office (EPO) numbered in the several hundreds annually (on the order of 500–600 in recent years, as suggested by WIPO data) IP 2023. Taking into account that many Irish-origin inventions use the PCT and/or EPO routes (often overlapping), the annual number of unique patent families originating from Ireland is currently estimated around 700–800. This is relatively low given Ireland’s size and high R&D investment by multinationals – consistent with Ireland’s “innovation output” gap noted in global rankings Ireland ranked 22nd in WIPO’s Global Innovation Index 2023, partly due to low domestic patenting levels despite strong IP income flows (Sercenja 2024)

Projection to 2030: With anticipated increases in R&D activity and improvements to Ireland’s IP regime, patent output is expected to rise significantly by 2030. Table 2 outlines a projection. We assume that by 2030 the number of unique patent families filed by Irish applicants per year could approximately double, reaching on the order of 1,500+ patent families annually. This growth is predicated on multiple factors: (1) Higher R&D spending will generate more innovations needing protection; (2) Pro-innovation tax policies will continue to encourage patenting in Ireland – e.g. the Knowledge Development Box (KDB) offers a 10% corporate tax rate on profits from patented inventions (KDB 2024) , incentivising companies to locate and file IP from Ireland; (3) Ongoing efforts to strengthen the IP ecosystem (simplified patent grant processes, supports for SMEs and universities to patent) and the EU’s new Unitary Patent system may lower barriers. IRDG also anticipate that Ireland’s share of EU patent filings could inch up, though remaining small (perhaps around 1% of EU PCT filings by 2030, from ~0.7% now).

Table 5.2: Annual Patent Filings by Irish Applicants – Baseline vs 2030 Projection

	Patent Families (Annual)	Notes
Current (~2022)	~800 (e.g. 806 PCT filings in 2022)	Low output relative to investment; many filings via EPO/PCT routes.
2030 (Projected)	~1,500 (approx. double current)	Assumes patent filings grow in line with R&D (~2x); aided by R&D expansion and stronger IP incentives (tax credits, KDB, etc.).

Assumptions: The projection assumes a roughly proportional relationship between R&D expenditure and patentable innovations, i.e. **doubling BERD yields roughly doubling of patent counts** by 2030. This is a reasonable proxy given constant or improving R&D efficiency. The **patent climate** is assumed to remain favourable: Ireland’s tax and legal environment will continue to attract IP registrations (e.g. multinationals on-shoring IP to Irish entities for tax purposes has already made Ireland #1 globally in IP receipt flows (Sercena 2024). Additionally, policy measures in the EU’s IP Action Plan and national innovation strategy are expected to bolster patenting by SMEs and research institutions (improving commercialization of research).

3. High-Skilled Job Creation from R&D Expansion

Baseline employment: Business R&D growth has already translated into substantial high-skilled job creation in Ireland. In 2023, Irish enterprises employed 40,956 R&D personnel (researchers, technicians, etc.), up ~48% from the 2019 figure of just over 27,000 (CSO 2019, CSO 2025) . The majority of these roles are in large, foreign-owned companies – about 62% of R&D staff were in foreign-owned firms in 2021 (CSO, 2023) and by 2023 large enterprises dominated R&D spending (77% Irish Times 2025). Thus, an estimated ~20,000+ of those R&D jobs in 2021 were in large multinationals, with the remainder in SMEs and public research collaborations. This base is set to rise markedly as R&D investment grows. The rise in spending from 2021 to 2024 was a very

significant €3Bn. The majority of this increase €2bn was in capital investment with the remainder in current expenditure.

Direct R&D jobs (large enterprises): Increased BERD to 2030 will directly generate thousands of new high-skilled positions in industry. Using the current labour-intensity of R&D as a guide (approximately €120k in R&D spend per job, derived from €3.9 bn/33k in 2021), an expansion of Ireland’s BERD to ~€8.5 bn implies on the order of 70,000 total R&D jobs in 2030, i.e. roughly +30,000 net new R&D jobs versus 2021 levels. A large portion of these will be in large companies (FDI-driven R&D centres and large Irish firms), given their spending share. IRDG estimates a potential ~10,000–15,000 additional *direct* new R&D jobs in large enterprises by 2030. Such roles will include researchers (scientists, engineers) and highly skilled technical staff, reflecting Ireland’s positioning as a European R&D hub for sectors like pharmaceuticals, ICT, and Medtech. The rise in R&D spend and claims in the past three years and the rise in jobs over the same period indicate the strong linkage between investment and high quality jobs growth.

Spillover & SME/academic innovation jobs: Beyond the direct hires, expanding large-enterprise R&D has multiplier effects throughout the innovation ecosystem. Collaboration with local SMEs, outsourcing of specialised tasks, and spin-off ventures will create additional high-skilled jobs in smaller firms and research institutions. Empirical studies indicate that each high-tech job can induce multiple additional jobs: for example, in Ireland each job in an IDA-supported (FDI) firm is linked to ~3 extra jobs in the local economy (Brady, 2019). (Across Europe, high-skilled jobs have been found to create up to *five* other jobs including services – Brady, 2019) Focusing on *innovation-related* spillovers, IRDG assumes a conservative multiplier – for every new R&D job in a large firm, perhaps 0.5–1.0 additional high-skill jobs are created in SMEs (e.g. R&D contractors, suppliers) or in university labs (through joint projects, funded PhDs, etc.). Under this assumption, the 10k+ direct new R&D jobs by 2030 could spur on the order of 5,000–10,000 *indirect* innovation jobs outside of large firms. Many of these will be roles in Irish SMEs (e.g. startups and scale-ups partnering with MNCs or exploiting niche innovations), as well as researcher positions in academia linked to industry-sponsored projects and spinoffs. See Table 3 below for estimates

Table 5.3: High-Skilled Jobs from R&D Expansion – Direct vs Spillover (Estimates)

	Baseline (2023)	Projected 2030	Net Increase (Jobs)
R&D jobs in large enterprises	~21,000 (approx.)	~31,000–36,000 (est.)	~+10,000–15,000
R&D jobs in SMEs	~19,000 (SME R&D staff est.; plus university researchers)	~24,000 – 28,000 (est.)	~+5,000–9,000

Notes: Baseline 2021 R&D employment is from CSO’s BERD survey (CSO 2023). “Large enterprise” share was inferred from spending share (63% of BERD in 2021 and 75% in 2023 – note the increase in share by large firms was primarily linked to capital investment CSO, 2023) and foreign-firm employment share/ The 2030 job figures are projections assuming proportional growth with R&D expenditure and a moderate multiplier. The multipliers used are in line with research on FDI impacts: Brady (2019) finds ~3:1 total job multipliers for IDA-supported jobs in Ireland, and other studies suggest high-tech multipliers up to 5:1 in developed regions (Konings, 2018). We apply a smaller fraction of these multipliers to count only *innovation-focused* spillovers (excluding most retail/consumer service jobs). Additionally, government initiatives (e.g. clusters, Innovation

Partnerships) are expected to improve knowledge diffusion, enabling more R&D employment in domestic SMEs and research institutes by 2030.

Methodology & Assumptions: We assume Ireland’s push to become an “Innovation Leader” will materialise in both quantity and quality of jobs. Direct job gains were estimated by dividing projected BERD increase by average R&D spend per researcher, and cross-checked against known expansions (e.g. new R&D centers announced by IDA clients). For spillovers, we assume ~0.5–0.7 high-skill indirect jobs per direct job (roughly 20–30% of the total 3:1 multiplier) to isolate the innovation-related impact. These include jobs in SME R&D (contract research firms, tech suppliers) and university-industry linkages (research fellows, innovation officers, etc.). The projections also implicitly assume that Ireland can supply the required talent (via skilled immigration and training) – an increase of ~15k research jobs will require continued investment in STEM education and attracting international talent. Overall, if these assumptions hold, Ireland by 2030 would see a substantially larger high-tech workforce, anchoring both multinational R&D operations and a more innovative SME sector.

Sources: Key data sources include the Central Statistics Office (CSO) for BERD and R&D personnel (CSO, 2019, 2021, 2023) Eurostat/OECD for EU aggregates (Eurostat, 2023), WIPO and EPO for patent statistics (WIPO, 2023), and policy documents (Ireland’s White Paper on Enterprise (Enterprise, 2022) and Impact 2030 strategy for targets. Multipliers and qualitative assumptions draw on OECD and academic studies of R&D spillovers (Brady, 2019; Koeing 2018). These projections should be interpreted as informed estimates – actual outcomes will depend on global economic conditions, corporate R&D decisions, and the effectiveness of Ireland’s innovation policies.

5.7 Ensuring Effective Governance:

IRDG proposes that to support effective Governance and management hat the Government

Publish an Annual Large Company Innovation Scorecard to track Business Expenditure on R&D (BERD), IP creation, and productivity spillovers.

Establish an FDI Innovation Council, co-chaired by DETE and IDA, providing quarterly reviews and resolving bottlenecks.

6. Sustainability & the Green-Transition:

6.1 Context and Objectives

Ireland's commitment to climate action and innovation necessitates a robust policy framework to drive the green transition. Achieving climate neutrality by 2050 and interim 2030 targets requires accelerated development and adoption of sustainable technologies. Research, development, and innovation (RDI) in Green Technologies will be pivotal in reducing emissions while fostering economic growth. As the global economy pivots towards sustainable practices, Ireland has the potential to become a leader in this transition. (IDA, 2024). With strategic support, Ireland can leverage its strong RDI base and ambitious climate goals to create high-value jobs, attract investment, and build long-term economic resilience through green innovation.

This chapter identifies key barriers that currently hinder sustainability-oriented RDI, proposes targeted policy solutions to overcome these barriers, and outlines the expected outcomes. The recommended measures are designed to be **cost-effective, fiscally prudent, and aligned with EU and national strategies**, ensuring Ireland's green innovation drive delivers maximum economic and environmental benefits.

6.2 Key Barriers to Green Innovation

Funding and Incentive Gap: Despite general R&D supports, there is insufficient targeted incentive for companies to undertake green innovation projects that often involve higher technical risks and longer horizons. Ireland's standard R&D tax credit (30% from 2024) is generous, but it does not specifically prioritise climate-related innovation. Competing countries are increasingly using directed incentives for clean technology – for example, France and Portugal provide implied R&D tax subsidy rates of 36%–39% to firms (Tax Foundation 2024) significantly above Ireland's ~23%. The absence of a tailored incentive in Ireland creates a risk that firms will under-invest in green R&D or even relocate projects to jurisdictions with more attractive supports. Indeed, surveys indicate 78% of Irish RDI-active companies would increase R&D in sustainable technologies if a higher tax credit (e.g. 50%) were available (Index 2024, Index 2025) underscoring unmet demand for stronger incentives.

Administrative and Information Barriers: The complexity and administrative burden of accessing R&D supports can particularly deter smaller firms and start-ups from pursuing green innovation. The 2024 Innovation Index survey found that 40% of companies identified the onerous claims process and paperwork for R&D support as a key barrier, calling for simpler procedures to remain competitive (Index 2025) Likewise, over 45% of Irish SMEs report a lack of government support or accessible information as an obstacle to investing in sustainability initiatives (Water 2024). Many SMEs are unsure how to avail of existing grants or tax credits for green projects, suggesting that bureaucracy and awareness gaps are limiting the reach of current policies. These hurdles disproportionately impact domestic enterprises, slowing the diffusion and adoption of new Green Technologies.

Market and Adoption Challenges: Transitioning to sustainable practices often entails upfront costs and uncertain returns, which can slow adoption of green innovations. While nearly 74% of large enterprises in Ireland report using some form of Green Technology (Dublin Chamber 2024), smaller companies lag behind due to cost concerns and perceived risks. In fact, 72% of SMEs cite rising costs as a major barrier to further sustainability investment (Water, 2024). One of the outputs from the Innovation Index (Index 2025) is the insight that only 5% of companies not already engaged in Green

R&D are planning to invest in it for the first time. Early-stage Green Technologies may struggle to compete with incumbent high-carbon solutions without policy support. This “valley of death” for green innovation – between prototype and market uptake – means promising climate tech start-ups and research outcomes may fail to scale. Without intervention to de-risk sustainable innovation and stimulate demand (for example through public procurement or consumer incentives), Ireland risks missing opportunities to commercialise home-grown green solutions.

6.3 Policy Solutions and Recommendations

To address these barriers, a suite of mutually reinforcing policy measures is proposed. Each recommendation is designed to logically address the identified gaps and is presented with expected outcomes in terms of jobs, innovation activity, and economic resilience. All proposals emphasise **value for money, ease of administration, and additionality** – ensuring that public support genuinely induces new green R&D that would not occur otherwise.

Proposed Solution:

Introduce a targeted 50% R&D tax credit for green-tech projects to directly bridge this incentive gap. A super-sized credit – covering half of qualifying R&D costs – fundamentally de-risks green innovation for companies. By doubling the support rate (compared to the regular credit), this measure directly addresses the market failure: it internalises the positive externalities of green R&D by making investment far more attractive financially. The 50% credit would apply to projects with clear environmental benefits (e.g. those achieving >30% emissions reductions or circular-economy advances), ensuring that public support is tied to measurable sustainability outcomes. Importantly, the credit is designed to be immediately refundable for SMEs (up to a limit), recognising that smaller firms need upfront cash support to undertake high-risk projects. This bold incentive is calibrated to shift boardroom calculus from “why invest in green R&D?” to “why not” – directly tackling the hesitation that has left green innovation underdeveloped. The incentive would be ahead of leading regimes (France’s credit is ~30% base but effectively ~36% for profitable firms) (TaxFoundation 2024). The enhanced credit should be time-bound (e.g. 5 years) and reviewed for effectiveness, aligning with the EU’s Green Deal Industrial Plan encouragement for member states to deploy tax incentives for net-zero innovation (SciencesPo 2025).

Expected Outcome: A surge in sustainable R&D investment, more green innovation, and progress toward climate goals. A 50% green-tech credit is forecast to dramatically increase green R&D activity, closing the current participation gap. In fact, 78% of surveyed companies indicated they would significantly boost investment in low-carbon R&D if such a credit, suggesting a substantial pent-up pipeline of projects ready to launch. We anticipate higher expenditure on green innovation (potentially tripling to around €1 billion by 2030, moving from the current ~8% of BERD towards a far larger share) and a corresponding rise in green patents and IP as new sustainable technologies are developed. Over time, this should translate into tangible emissions reductions, as supported projects deliver cleaner processes and products that help meet Ireland’s Climate Action Plan targets. In alignment with Section 2’s vision, this measure exemplifies **Ambition** (a world-leading incentive positioning Ireland at the forefront of climate-tech), **Accessibility** (lowering the barrier for all firms – especially SMEs – to engage in green R&D by alleviating financial risk), **Agility** (a nimble policy response targeting a pressing emerging challenge), and **Accountability** (built-in criteria and expected outcomes like emissions metrics and patent counts to ensure the credit delivers verifiable public benefits). By directly correcting the incentive imbalance, the 50% green-tech credit channels private innovation towards the public good – yielding new investments, technologies, and environmental benefits that would not occur at scale without this targeted support.

Streamline Access to Green Innovation Supports: Simplify and expedite the administrative process for firms (especially SMEs) to claim R&D tax credits and green innovation grants. This involves developing a “**green innovation fast-track**” – for instance, standardised claim templates and guidance specifically for sustainable tech projects, and a dedicated helpdesk to assist SMEs in navigating supports. The goal is to reduce compliance costs and uncertainty. By cutting red tape, Ireland would mirror EU-level efforts to reduce administrative burdens on businesses (the European Commission’s recent measures are projected to save companies up to €6 billion annually by eliminating unnecessary paperwork) SciencePo 2025

Expected outcomes: Higher uptake of R&D incentives by SMEs, as more firms find it feasible to participate. Even a modest uptick in SME engagement can have broad innovation impact, since SMEs account for a substantial share of employment and often drive regional sustainable solutions. Simplification ensures that allocated budgets (tax credits or grant funds) are fully utilised, improving value-for-money. Moreover, faster claim processing cycles will improve firms’ cash flow, enabling quicker reinvestment into R&D. Over the long term, streamlined access contributes to a more dynamic innovation ecosystem where companies of all sizes can respond agilely to green transition opportunities.

Expand Direct Funding for Green Innovation: Augment grant funding and public–private co-investment programs focused on sustainability. This includes scaling up the existing **Climate Innovation Fund** (or establishing a dedicated Green Innovation Challenge Fund) to provide competitive grants for high-impact R&D projects in renewable energy, sustainable agriculture, circular economy, and other priority areas. Such funding should prioritise proposals with clear commercial potential and additionality (i.e. where public funding will unlock R&D that would not proceed otherwise). Collaboration between industry, academia, and state agencies (e.g. through challenge-based programs or mission-oriented partnerships) should be incentivised to leverage collective expertise.

Expected outcomes: By lowering the financial hurdle, more breakthrough projects in areas like energy storage or agri-tech can move from lab to market. This will increase Ireland’s output of environment-related patents and intellectual property, addressing current underperformance (Ireland historically accounts for a small share of EU green patents (EC, 2023) so growth here will signal improved innovation capacity). In the medium term, successful grant-funded projects are expected to attract follow-on private investment, create specialised jobs (for example, in cleantech engineering and manufacturing), and generate knowledge spillovers that benefit the wider economy. Every euro of grant can crowd-in multiple euros of private R&D spending, amplifying the impact while maintaining fiscal efficiency.

Leverage Public Procurement and Market Incentives: Use the State’s purchasing power and regulatory levers to stimulate demand for green innovation. The government can expand green public procurement criteria – committing to buy emerging low-carbon solutions (in construction, energy, transport, etc.) – to provide an early market for innovative products. Additionally, time-limited tax incentives or rebates for adoption of certified Green Technologies (e.g. energy-efficient equipment) can accelerate diffusion.

These demand-side measures complement R&D supports by pulling innovations into practical use.

Expected outcomes: Stronger domestic market demand will encourage local firms to innovate and scale, knowing that sustainable products have a **guaranteed initial market**. This de-risks private investment in innovation. Over time, it contributes to job creation not only in R&D but across supply chains for green products and services. It also tangibly advances national climate targets (for

example, cutting public-sector emissions and fostering greener infrastructure) in a cost-effective manner.

By emphasising procurement of Irish-developed solutions, it enhances international competitiveness of our firms, showcasing Ireland as a “**living lab**” for Green Technology. This reputational gain can attract further foreign direct investment in the green economy, reinforcing a virtuous cycle of innovation and economic growth.

Enhanced Outsourcing Cap: Raise outsourcing allowances to 25% of in-house spend or €250k for collaborative projects involving universities, public research institutions, or SMEs undertaking green R&D.

Company Comment

“A 50% credit would close the gap with the US IRA. It flips the boardroom conversation from ‘why Ireland?’ to ‘why not Ireland?’

“Immediate refundability of a super-credit is critical for our cash-flow and decision-making around significant investments such as pilot pyrolysis plants.”

“A 50% credit would decisively shift our engineering investment towards Ireland for green hydrogen projects

6.4 Projected Outcomes and Economic Rationale

Collectively, the implementation of these policies can deliver a step-change in Ireland’s green innovation performance over the coming decade:

- **Job Creation and Skills Development:** The stimulus to green R&D and the expansion of clean tech industries could create thousands of high-quality jobs – from researchers and engineers to technicians and supply chain roles. The demand for green skills in Ireland is already growing at twice the global average rate (IDA, 2025) and these policies will further boost both the supply of and demand for such skills. Importantly, many of these jobs will be regionally distributed (e.g. tied to renewable energy projects or sustainable agriculture initiatives), supporting balanced economic development across Ireland.
- **R&D Intensity and Innovation Output:** By addressing funding and uptake barriers, Ireland’s R&D intensity (currently ~1.2% of GNI*) will rise toward the national target of 2.5% by 2030. A larger portion of this research effort will be directed at solving climate and environmental challenges. We anticipate a measurable increase in patent filings and other innovation outputs in environmental technologies, as well as a higher rate of adoption of sustainable practices by firms. The increase in innovation not only contributes to emissions-reduction goals but also strengthens Ireland’s position in growth markets (such as renewable energy technology, green finance, and sustainable agriculture solutions).
- **Long-Term Economic Resilience:** Investing in sustainability-related innovation is fundamentally an investment in the resilience and future-proofing of Ireland’s economy. It reduces vulnerability to external shocks such as fossil fuel price volatility and international carbon costs by developing indigenous solutions and industries. It also aligns with Ireland’s EU and national commitments – from the European Green Deal to the Climate Action Plan –

ensuring that Ireland stays ahead of regulatory changes and capitalises on EU funding opportunities. By developing expertise and leadership in Green Technologies now, Ireland can secure a **competitive advantage** as other countries race to decarbonise. This will pay dividends in the form of export growth, energy security, and a robust, diversified economy less prone to boom–bust cycles.

These targets are ambitious. They must be weighed against Ireland’s current performance and what similar **“Green R&D” incentive programs** have achieved elsewhere (e.g. the US Inflation Reduction Act, and policies in the UK, Germany, and Nordic countries). Below, we evaluate each projected outcome’s realism – citing international benchmarks, Ireland-specific data, and expert analysis – to judge whether the 2030 targets are credible or overly optimistic.

Growing R&D Investment from €300 m → €1bn (Tripling Green R&D Spend)

Ireland’s Baseline & Ambition: A jump to €1 billion in sustainable R&D would more than triple current spending on “taxonomy-aligned” research. For context, Ireland’s total business R&D expenditure (all fields) is ~€3.8 billion in 2022 (Index 2024). Only 8% of that (€300 m) is in green-tech, so reaching €1 billion means a major reorientation toward climate innovation. Achieving it by 2030 implies ~15–20% annual growth in green R&D investment. This is aggressive, but not impossible if the 50% credit significantly shifts industry behaviour. Notably, IRDG’s Industry survey (Index 2024) found 78% of firms believe a 50% R&D tax credit for Green Tech would indeed spur more R&D in sustainability. IRDG has explicitly recommended this 50% “green R&D” credit to help double overall business R&D and meet EU targets. Note there has been a large jump in the most recent CSO figures for R&D Investment with 67% of that being capital investment and no indication that any of this investment is in Green Technologies.

Other countries are also scaling up R&D investment.

European Union & Peers: The EU urges members toward 3% of GDP in R&D by 2030. Ireland currently invests only ~1.1% of GDP in R&D, far below the EU average 2.3% (and countries like Sweden at 3.6% and Germany 3.1%) The Irish government’s own target is 2.5% of GNI* (Index 2024). Achieving €1 billion in green R&D would contribute to closing this gap. Finland, as a comparison, has enacted a plan to raise R&D to 4% of GDP by 2030 (ScienceBusiness 2023)– a trajectory that requires strong public incentives. Germany and the UK are also boosting public R&D budgets significantly in this decade (Index 2024). In short, Ireland will need bold measures just to catch up, and a 50% credit fits that mould.

Scale of Incentives: A 50% tax credit is high. Most R&D tax credits globally cover 10–30% of costs Svensson 2024. Few places approach 50% except in special cases. France offers a temporary 50% credit in the first year a company claims R&D tax relief (40% in the second year) to encourage new R&D performers Gov France 2024. Italy briefly allowed combined R&D + innovation credits up to ~50% for projects involving ecological transition and digital tech Energy Islands 2024. Denmark introduced a 130% super-deduction (i.e. 30% extra) for R&D expenses during 2020–22 (WTS 2024). Canada effectively provides 35% federal credit for small firms plus provincial credits, approaching ~50% in some cases. However, no major economy has a broad 50% credit dedicated to green R&D, so Ireland’s plan would be a **the first 50% green R&D credit worldwide, making it a world-leading incentive in sustainability**. This could make Ireland highly attractive for clean-tech R&D investment (Index 2024).

One concern is capacity: Ireland’s economy is near full employment, and skill shortages (e.g. in engineering, science) could constrain rapid R&D expansion. The **National Competitiveness Council**

(NCPC 2023) has noted Ireland must invest more in research talent and innovation infrastructure to support any big R&D ramp-up (Index 2024) In other words, money alone isn't enough – human capital and labs/pilot facilities must grow in tandem.

Tripling green R&D investment in 7 years is ambitious, but given Ireland's low starting base and strong policy drive, it's not implausible. Other countries' experiences show that robust incentives *do* stimulate higher R&D: empirical studies find R&D tax breaks have large effects (a 1% decrease in the cost of R&D can yield ~3.6% more patents and significant spending increases on average) (NYU 2024) . Ireland's 50% credit would dramatically cut net R&D costs for companies, so a large boost in investment is credible if the policy is well-publicised and paired with supportive measures (grants, talent development) Index 2024 However, the €1 billion target hinges on Ireland capturing a surge of green innovation projects; it is ambitious but not unreachable, especially as global cleantech investment is accelerating in response to climate goals.

There are other potential significant benefits which have not been included here in detail – investments here will also lead to net carbon reductions Patent Activity: 180 → 450 Green-Tech Patents per Year. Ireland currently files on the order of ~180 “Green Technology” patents annually (this likely counts patent applications in areas like renewable energy, energy efficiency, agri-tech, etc.). The proposal aims to boost that to 450 per year by 2030, reflecting a much more innovative green economy. This is a 150% increase, aligned with the R&D spending jump. It implies Ireland would significantly improve its output of climate-related intellectual property, which is a key metric of innovation success. There is likely at least 6,-7,000 new high-value jobs created by 2030 as a result of the green R&D credit. Additionality of jobs driven by overall R&D investment increases was covered in Chapter 5 and the rough estimates of 6,000 additional jobs is tied to the increase in Green investment of 600m per annum.

Other non-costed measures of value include avoidance of future climate penalties. Ireland faces the potential for significant financial penalties, ranging from €8 to €26 billion, if it fails to meet its EU-agreed climate targets. These penalties arise from the Effort Sharing Regulation, which mandates that EU member states reduce their greenhouse gas emissions from certain sectors like transport, buildings, and agriculture. If Ireland exceeds its emissions allowance, it will need to purchase carbon credits from other countries that have reduced their emissions more than required. The potential cost savings from avoiding penalties may outweigh all the other sustainability benefits from an exchequer perspective (Irish Times 2025B).

In summary, the green transition presents a strategic opportunity for Ireland to combine climate action with innovation-led growth. The barriers to green RDI are well-understood and solvable with smart policy: targeted incentives, streamlined administration, direct support for high-potential projects, and measures to spur market demand. The recommendations in this chapter underscore fiscal prudence and high impact: each euro of public support is designed to catalyse several euros of private investment and generate tangible economic returns. By embracing this bold yet credible policy agenda, Ireland's Department of Finance can ensure that the country not only meets its sustainability targets but does so in a way that solidifies Ireland's reputation as a leader in green innovation, delivers value for money, and secures long-term prosperity for its citizens.

7 Creating a new Innovation Tax Credit (ITC)

7.1 Introduction Supports for Innovation

Ireland's innovation gap in areas not covered by the R&D tax credit can be addressed by a new Innovation Tax Credit focused on innovation that is risky and uncertain but doesn't meet the standard of the science test in the R&D Tax Credit. This chapter addresses a specific call in the consultation document.

There is a commitment within the Programme for Government 2025 'Securing Ireland's Future' to

to examine options to reward innovation and digitalisation and encourage innovation by domestic and international companies.

While we explore and consider policy in this area and consider how it might align with government objectives such as the green and digital transitions

With regard to R&D the Department of Finance Consultation 2025 notes

"By contrast, "innovation" is a broad concept that will, by its nature, change over time. A key first step in considering support options for innovation will be to develop a clear and robust definition of innovation. The potential scope also requires consideration, having regard to the breadth of the concept of innovation and the potential cost, impact and efficiency of any such measure. In addition, any targeted measure would be required to align with a State aid framework or receive State aid approval before commencement.

"Taking account of feedback regarding the complexity of the R&D tax credit, and the potential for different policy approaches to scope, it is not believed that amending or expanding the definition of research and development in the R&D tax credit to include a provision for innovation would be the most appropriate approach. It would introduce additional complexity and the potential for uncertainty into the R&D tax credit and remove the policy flexibility that could be available through treating the concepts separately

The consultation specifically asks

- *How would you define innovation, having regard to the need for definitions for policy purposes to be specific, unambiguous, and focused on delivering real additionality?*
- *Given the potentially broad scope of "innovation", are there specific government objectives that a support should target to ensure it is cost effective to the taxpayer, adds value to the economy, drives growth and ensures high quality employment?*
- *If an innovation support were to be targeted, for example at a specific sector, location or type of company, State aid considerations would arise. Is there a particular State aid framework or provision that you believe would be of relevance?*
- *What administrative oversights do you believe would be necessary to ensure that any incentives being claimed are for true innovation?*

However, with a view to considering and formulating potential policy in respect of innovation, the views of stakeholders on initial key scoping issues are also being sought.

In this chapter IRDG seeks the urgent introduction of an Innovation Tax Credit in the current year piloted in the 2026 budget to address issues raised by industry.

As we outline below clear and unambiguous definitions of innovation are possible in a way that adds value to the economy, drives growth and ensures high quality employment. This credit is not focussed on targeted approaches, so avoids state aid considerations, and IRDG suggests approaches to administrative oversight to ensure additionality of work and value to the state. By ensuring that this Credit is adjacent to the R&D Tax Credit (RDTC), it addresses several challenges that have been raised over the past two years by our members, several of which are noted above and have been detailed in the preparation of this consultation document.

IRDG believes that over the next decade a scheme such as this can be as valuable as the RDTC with similar levels of impact on the economy which a significant opportunity to improve our economic competitiveness.

7.2 Innovation support alongside (not inside) the R&D Tax Credit

When supporting innovation, it's vital to recognise two distinct types of market failures. Traditional R&D projects—guided by the OECD Frascati Manual (OECD, 2105)—deal primarily with scientific and technological uncertainty. In contrast, broader innovation initiatives—defined in the OECD Oslo Manual (OECD, 2018)—address uncertainties in commercialisation, design, and market uptake. Providing dedicated incentives for these Oslo-type projects would significantly accelerate time-to-market for innovative new products (many of which support decarbonisation), embed advanced design and user-experience (UX) talent in Ireland, and directly support our national green and digital transition goals.

Ireland's overall innovation performance is strong (9th in EU) but relies heavily on outputs; it underperforms on innovation inputs (ranked 26th globally for inputs) (Competitiveness Council 2024) Business R&D spending remains ~1.2% of GDP (~2.3% of GNI) – below the EU average ~2.2% (OECD 2022) – indicating scope to increase innovation activity. Specifically Ireland currently ranks low on non-R&D innovation indicators – e.g. design, eco-innovation outputs at 30-40% of the EU average (European Innovation Scoreboard).

Section 7.3–7.9 will address in turn: how to define 'innovation' for policy purposes, the objectives and scope of a possible ITC, relevant State aid frameworks, and necessary oversight to ensure claims represent true innovation. We will also outline a pilot programme and propose the additional use of ISO 56000 standards to both drive the use of the ITC and create the right set of skills within organisations to innovate successfully. Proper controls, as outlined in Section 7.5, will be vital to prevent abuse and ensure value for money to the exchequer.

7.3 Defining Innovation for Policy Purposes

Ireland's R&D Tax Credit has worked because the state used gold-standard internationally-agreed language to anchor the R&D Tax Credit: the OECD Frascati Manual definition of “research and experimental development”.

In defining Innovation IRDG proposes using the equivalent standard the OECD's Oslo Manual for innovation. The Primary reference point: the OECD/Eurostat Oslo Manual (2018 edition). The Oslo Manual is clear—it defines innovation as:

“A new or improved product or process (or combination thereof) that differs significantly from previous products or processes, and that has been made available to potential users or brought into use by the organisation.”

Eligible innovation activities would exclude those that meet the definition of R&D under Section 766 TCA (and the Frascati Manual) (OECD, 2015). The ITC is aimed at downstream innovation such as design, prototyping and trial production of new products or implementation of significantly new processes, which are **not** claimable under the RDTC. This definition would naturally encompass, and encourage, innovations that advance digital transformation or green transition goals.

This emphasises **significant novelty and implementation**, aligning with the requirement for additionality. In practice, this means the ITC would support, for example, development of prototypes or pilot production runs for new products (especially those new-to-market with innovative features), as well as novel process improvements, **provided these do not qualify as R&D**. Conversely, routine or minor changes should be excluded to maintain additionality.

Where a project or expenditure qualifies for the R&D Tax Credit, it will not be eligible for the Innovation Tax Credit, and vice versa, to prevent overlap. This ensures no conflict with the RDTC and answers any implicit concern about interaction between the two schemes.

Organisational or marketing innovations (as classified by Oslo Manual 2005) are not intended to be covered, given the difficulty in verification and lower additionality. Instead, the focus is on technological, product, or process innovations with tangible outputs (prototypes, new systems, etc.). These definitions are justified as on this basis innovation in this context overlaps with what the EU considers “experimental development” (prototyping, piloting) which may not meet the scientific novelty test for R&D. International best practice (e.g. France’s CII) focuses on new products not yet on the market or with significantly enhanced performance (Banque de France 2022)

There’s a significant amount of innovation happening in Ireland that currently falls outside the rigid boundaries of ‘scientific uncertainty’ in the RDTC. These include customer experience, circular packaging breakthroughs, radical UX designs, and entirely new digital-first business models. Some examples are outlined below

RDTC (Frascati)	ITC (Oslo / ISO 56000)
Addresses scientific uncertainty	Addresses product, process, market uncertainty
Lab experiments, technological prototypes	Product/service design, market pilots, UX improvements
Scientists, engineers, laboratory personnel	Designers, UX specialists, digital and sustainability experts
Currently eligible under RDTC	Currently unsupported– yet requires time, capital, and top-tier talent

Table 7.1 Innovation areas outside Frascati but critical for Ireland

Companies tell us this second column is growing faster every year – driven by net-zero, digital transformation, and radically higher customer-experience expectations. An Irish “Innovation Tax Credit” can bring that work inside the tent.

Area	Example project	Skills & impact
Advanced product & service design	Redesign of a medical-device user interface using haptics and inclusive-design principles.	Requires UX researchers, industrial designers; enhances patient safety and exports.
Business-model innovation	Converting an equipment-sale model to a “product-as-a-service” IoT subscription.	Needs data-science, pricing, legal expertise; drives recurring revenue.
Process & organisational innovation	AI-driven scheduling algorithm that halves hospital outpatient wait times.	Mix of OR, software, change-management; frees clinician capacity.
Sustainability-led innovation	Development of a modular packaging system allowing 80 % reuse cycles.	Involves materials science, LCA analysts, supply-chain redesign; cuts Scope 3 emissions.

Table 7.2 Specific Examples of Projects

These projects carry genuine commercial risk, demand specialised talent, and deliver spill-overs—but rarely qualify under Frascati’s *scientific uncertainty* test.

Ireland's specific challenges in creative outputs, domestic design capabilities, funding barriers, and sustainable innovation underline precisely why a dedicated innovation support, separate from the existing R&D Tax Credit, is necessary. Currently, Ireland's relative weakness in design-driven innovation—as highlighted by the Global Innovation Index—reflects an untapped potential that existing frameworks are not adequately addressing. A distinct incentive scheme aimed explicitly at design, branding, user-experience (UX), and early-stage commercialisation activities would directly target these areas of underperformance, catalysing a step-change in Ireland’s innovation outputs.

Moreover, while Ireland successfully attracts substantial international R&D investments, the limited extent of domestically retained activities in design-intensive sectors reveals a critical gap. A dedicated Innovation Tax Credit would incentivise multinational and indigenous companies alike to anchor more of their strategic design and innovation activities domestically, fostering deeper integration of design and creative talent within the Irish innovation ecosystem.

Addressing financial and administrative barriers also supports the case for a separate innovation scheme. The existing R&D Tax Credit, while valuable, is perceived by 80% of companies as administratively burdensome. A streamlined Innovation Tax Credit —focused explicitly on Oslo-type innovation—could simplify compliance and lower barriers to entry, particularly for SMEs and design-centric enterprises that require more flexible and responsive support.

Ireland’s lags in circular and eco-innovation provides further justification. With circular material use significantly below the EU average, a targeted incentive focused on sustainable design and eco-innovation would align with national environmental goals. Such support would not only enhance economic competitiveness but also contribute meaningfully to Ireland’s sustainability commitments.

Finally, dedicated strategic interventions in domestic R&D capacity, streamlined funding processes, sustainable design practices, and creative sector support would collectively strengthen Ireland's innovation ecosystem. A clearly defined and operationally distinct innovation support—anchored in the OECD Oslo Manual principles and leveraging the EU’s General Block Exemption Regulation—

represents a practical, compliant, and impactful policy tool to ensure Ireland’s continued evolution as a global innovation leader.

Companies are telling us specifically these are areas they need to invest in alongside key R&D Skills to support new investment into Ireland and to retain existing jobs here.

Company Comment

“Definition and Scope of Eligible R&D

“IVDR companies engage in complex, compliance-driven R&D (e.g., clinical validation, software updates for diagnostics, post-market surveillance). These activities may risk partial or full disqualification if not adequately evidenced as “systematic, investigative or experimental”. A widening of scope could assist to alleviate this and ensure it can be classified under the scheme as it is a critical part of the process.

“Software and Digital Health Elements

“No dedicated guidance for software R&D has been released. IVDR devices increasingly rely on embedded software, machine learning algorithms, or connected diagnostics. There's uncertainty about eligibility of software development under the R&D tax credit, especially if used for compliance, not innovation. This should be a key consideration going forward as this is often on of the largest portions of an R&D project and most IVDR specialists reside in the United States.”

“Our industry is constantly innovating – from developing more sustainable processing methods to creating value-added products and reducing waste – but much of this applied, sector-specific innovation doesn’t fit neatly within the current R&D tax credit definitions.

I would like to encourage a broader, more inclusive view of R&D that better reflects sectors like seafood, agri-food, and the marine economy. Clarity in guidance, examples from our sectors, and support for collaborative or sustainability-focused projects would help unlock a lot more potential.”

*“There is now growing importance of **sustainability, circular economy, and decarbonisation**, many companies are innovating in ways that don’t always meet the current “scientific uncertainty” threshold.*

This work doesn’t fit neatly into the current R&D Tax Credit scheme, nor should it. And it's exactly where many Irish SMEs and scale-ups are investing their futures. It’s high-risk, high-skill, and absolutely mission-critical for tomorrow’s economy.

Innovation isn’t just nice-to-have; it’s how Ireland hits our key goals—digitalisation, decarbonisation, and balanced regional growth. The ITC enables:

- **Green transition:** prioritise claims where the innovation directly advances Circular Economy, renewable-energy integration, resource efficiency or biodiversity goals. Ireland is ranked second-lowest in the EU for Eco-Innovation
- **Digital transition:** fast-track AI-enabled service or business-model innovations that unlock productivity improvements across the non-tech SME base.
- **Regional spread & clustering:** encourage ISO-driven cluster projects (Art. 25) to pull SMEs into collaborative, cross-disciplinary innovation.

- **Quality employment:** require that at least 50 % of qualifying payroll relates to roles at National Framework of Qualifications (NFQ) Level 7 or above – ensuring the scheme drives high-value, high-skill jobs.
- **Design-driven innovation:** Currently at 34% of the EU average.

7.4 Designing A Pilot Scheme

IRDG proposes piloting the ITC for **SMEs** (companies <250 employees, per EU definition) in order to target enterprises that typically engage less in R&D. This aligns with France’s approach, where the innovation credit is limited to SMEs (Banque de France 2022). Additional details on state aid compliance are given in Appendix 2 below

Targeting SMEs would also allow the scheme to qualify under **GBER Article 28 (Innovation aid for SMEs) and 29** (state aid for organisational and process innovation), which permits aid up to 50% of eligible innovation costs without individual notification Commission 2014).

Targeting by sector (say high-tech manufacturing or Green Tech) or region could trigger the need for notification unless falling under a Block Exemption category. For simplicity, the pilot could be open to all sectors but restricted to SMEs, using the GBER block exemption to avoid delays. This directly addresses the consultation question on State aid frameworks

IRDG proposes a 3-year pilot (2026–2028) with an interim review after the second year to enable acceleration of the scheme if successful. The impact will be evaluated against metrics like innovation investment and employment growth in claimant firms to ensure that the policy is properly tested and adjusted if needed. If successful the scheme should be rolled out to all companies to encourage systematic investment in innovation.

We recommend a **separate cap** or budget for the pilot to contain State aid exposure, and mention that the ITC claims would be monitored in aggregate to ensure compliance with EU aid intensity limits (e.g. if combined with R&D aid, total aid doesn’t exceed allowable percentages).

This pilot would be sharply focused. It would only support projects that meet the OECD’s Oslo Manual criteria and are embedded in a structured innovation-management approach, guided by the emerging ISO 56000 standard. Initially, companies could self-declare, but within 24 months they should achieve full ISO 56001 certification. That gives them time to build capacity while signalling that this is about serious, systematic innovation and differentiation. This is illustrated in Table 7.3 below.

Feature	Suggested pilot parameter	Rationale
Eligible activity	Projects that meet Oslo Manual criteria and are carried out under an ISO 56000-aligned innovation-management process (self-declaration initially; ISO 56001 certification after 24 months).	Ensures only genuine innovation is supported; aligns with global standards.
Rate & cap (pilot)	20 % refundable credit; €250 k cap per group per annum.	Low fiscal exposure while testing; meaningful to SMEs.

Interaction with R&D credit	Mutually exclusive on the <i>same</i> expenditure line-item; companies may hold both credits for different projects.	Prevents double-dipping; keeps accounting neat.
Certification incentive	+5 % uplift (to 25 %) for firms holding ISO 56001 certification or where the lead innovator holds ISO 56002 professional certification.	Creates demand for global-standard skills; embeds capability.
Green / digital booster	A further +5 % for projects that deliver quantified CO ₂ -e reduction or align with the National Digital Strategy.	Aligns with Programme for Government 2025 priorities.
State-aid basis	Notify under GBER Art. 29 – Process & organisational innovation in services or Art. 25 bis; de-minimis if necessary during pilot. (see appendix 2 State Aid Compliance)	Compliant with EU rules; scalable from pilot to mainstream.
Oversight	• Revenue administers claims through a short <i>Innovation Project Statement</i> template (max 3 pages). • Random sample subject to Enterprise Ireland / IDA technical review. • ISO certificate numbers logged in ROS to cross-check validity.	Light-touch but credible monitoring; uses existing agency expertise.
Pilot review	2-year window; KPI-based evaluation (jobs created, wage level, design exports, time-to-market).	Provides clear evidence for scaling, tweaking, or discontinuing.

Table 7.3 Pilot Design Summary

7.5 Administrative Oversight and Compliance

The R&D credit has regulations defining qualifying R&D activities (Statutory Instrument No. 434 of 2004). The ITC should be similarly grounded with a defined basis for “true innovation”, based on the detailed definition outline above anchored in the Oslo Manual.

IRDG recommends that ITC claims be subject to a **technical assessment process** similar to the RDTC audits. Companies should document their innovation projects with clear descriptions of the novelty and value created, and retain evidence of development work. Revenue’s Large Cases Division (or a dedicated Innovation Unit) could audit claims to ensure they meet the qualifying criteria (significant novelty, implementation, etc.).” It may also be prudent to involve external expertise: “Because ‘innovation’ can be multi-disciplinary, the oversight could be supported by external experts or an agency like Enterprise Ireland for an initial review of claims above a certain threshold.”

As a pilot safeguard, companies could voluntarily seek advance confirmation that a project qualifies as ‘innovation’ (akin to advance assurance), to reduce uncertainty and ensure only bona fide innovations are claimed.”

France’s CII is audited in conjunction with the CIR and subject to the same documentation requirements, including justification of the innovative nature of the prototype (the Banque de

France evaluation implies some firms shifted expenses between schemes, highlighting the need for strict rules) Banque du France (2022).

The UK's recent R&D reforms were driven by abuse in SME claims; they are introducing stricter reporting (e.g. compulsory digital claim forms, additional information) "Learning from the UK's experience, we propose requiring detailed project descriptions at claim time and possibly capping payable credits to prevent misuse.

In response to the Department's question on ensuring 'true innovation' in the consultation on Innovation earlier in 2025 we stress the importance of statutory definitions and rigorous audits. The term 'innovation' should be codified (perhaps via an amendment or schedule to Taxes Consolidation Act, referencing standards like Oslo Manual to guide interpretation), and Revenue should be resourced to evaluate claims against these criteria."

We strongly recommend a dedicated and specialised unit within revenue supported by Enterprise Ireland experts to support this approach. This links to the earlier recommendation of establishing a dedicated R&D Tax Credit unit within Revenue to tackle administrative hurdles. As with the R&D unit A centralised unit would consolidate expertise and standardise guidance, making claim reviews faster and more predictable. This simplification of process (along with clearer definitions of qualifying outsourced activities) directly reduces the bureaucratic load on companies, addressing the root causes of hesitation to engage external partners. Given that the lack of centralised expertise and resourcing in Revenue has been one of the key challenges for SMEs we strongly suggest that establishing a centralised unit from the start will ensure better outcomes for the exchequer in terms of accessibility to SMEs, and accountability by ensuring consistent implementation of the scheme with consistent expedite decision-making and credit delivery.

7.6 International Comparators and References

This submission draws on international examples (France's CII, UK's R&D relief reforms),

France :

France's Innovation Tax Credit (CII), introduced in 2013, allows SMEs a tax credit on innovation expenditure (design of prototypes or pilot installations for new products). Initially 20% up to €400k (max €80k/year), the rate was increased to 30% in 2023 to further spur innovation The French incentive covers prototype and pilot costs for new products not yet on the market and it is explicitly limited to SMEs (Bank de France). Early evaluations found the CII helped SME employment and new product output though some R&D spending was reclassified as innovation spending (Banque-France 2022)

UK

The UK is in the process of reforming its R&D tax relief system. In April 2023 it increased the RDEC (large-company) credit from 13% to 20% and reduced the SME scheme benefit (additional deduction down to 86%, credit rate to 10%). This was aimed at refocusing support on genuine R&D and moving toward a single simplified credit for all companies. The UK's experience underscores the importance of tackling abuse and complexity – lessons that an Irish ITC can heed by keeping definitions tight and administration rigorous. (UK Gov 2022)

7.7 Implementing Innovation: Oslo Is the What, ISO 56000 Is the How

The proposed Innovation Tax Credit (ITC) framework in Ireland is grounded in aligning *what* constitutes “innovation” with *how* to manage it effectively. A clear, internationally-recognised definition of innovation is needed – the Department of Finance itself notes that “innovation” is a broad, evolving concept requiring a robust definition distinct from R&D (Finance, 2025). The **OECD’s Oslo Manual (2018)** provides this definitional foundation.

It defines an innovation as *“a new or improved product or process... that differs significantly from the unit’s previous products or processes and that has been made available to users or brought into use”* (OECD, 2018). In other words, the Oslo Manual establishes **what** qualifies as genuine innovation, ensuring the ITC rewards activities beyond business-as-usual improvements. Adopting the Oslo standards for innovation types (product, process, organizational, etc.) will give Revenue and firms a common reference point for eligibility, mirroring global best practices in innovation metrics and surveys. This alignment on “the what” of innovation is the first pillar of the ITC’s design.

The second pillar is ensuring companies have a structured methodology for *implementing* innovation – the **how**. Here, the **ISO 56000 series on Innovation Management** is pivotal. The new ISO 56000 family (notably **ISO 56001:2024**, with ISO 56002 guidance) provides an auditable, internationally vetted framework for systematically managing innovation activities (NSAI, 2024). Whereas the Oslo Manual offers concepts and definitions, ISO 56000 offers a *management system* approach. It translates innovation objectives into organised processes, governance, and continuous improvement cycles, similar to the ISO 9001 approach to quality management.

Crucially, ISO 56001 (published in 2024) introduces *“structured principles and guidelines to transform innovation from a process often seen as reliant on good fortune into a well-defined, auditable function within organisations*. In practice, this means companies can attain a certification or follow a standard that proves they manage innovation in a disciplined, repeatable way. **Oslo is the map of what counts as innovation; ISO 56000 is the toolkit for navigating that terrain**. By coupling them, the ITC can require or encourage that claimed innovation activities are not ad-hoc, but managed under a robust system. This complementary alignment gives confidence that ITC-supported projects are both *properly defined and properly executed*.

Embracing ISO 56000 in the ITC offers concrete benefits for oversight and effectiveness. Notably, it will:

- **Improve Auditability and Compliance:** Firms using an ISO 56001-aligned Innovation Management System maintain documentation, defined processes, and internal audit trails for their innovation projects. Innovation ceases to be a “black box” activity and becomes an *auditable* part of operations (NSAI, 2024). This directly aids Revenue’s ability to verify that ITC claims meet the innovation criteria. An ISO-certified or compliant firm signals that its innovation practices have been vetted to a global standard, providing external assurance.
- **Ensure Additionality of Activities:** A structured innovation process helps demonstrate that projects supported by the ITC are *additional* – i.e. initiated because of purposeful innovation strategy rather than incidental upgrades. ISO 56002 guidelines include strategic planning for innovation and portfolio management, meaning firms identify and pursue new opportunities methodically (NSAI, 2024). This planning discipline makes it easier to show that the tax credit

is funding truly new innovations, not just routine upgrades that would have happened anyway.

- **Strengthen Risk Management and Quality of Innovation:** The ISO framework embeds risk assessment and management into innovation activities. ISO 56002, for example, provides a structured approach to identify and address innovation risks (Safety Culture 2024). This leads to better project selection, monitoring, and a higher likelihood of successful outcomes. By managing uncertainties proactively, companies reduce project failures, which in turn gives **confidence to oversight bodies** that public funds are being used prudently. Moreover, implementing an innovation management standard signals a commitment to continuous improvement and best practices, enhancing stakeholder (and government) trust in the company's innovation

To operationalise this alignment, the policy proposes targeted **supports for SMEs** to adopt ISO 56000 standards. Smaller firms may lack the resources or expertise to implement a formal innovation management system on their own. To bridge this gap – and thus broaden participation in the ITC – the Government can provide:

- **Innovation management vouchers** – e.g. €10000 vouchers that SMEs can redeem for training or consulting on ISO 56002 implementation (similar to existing innovation voucher schemes). These vouchers would help firms build internal capability in innovation practices aligned to the standard.
- **Certification and audit fee rebates** – reimbursing a portion of the costs for an SME to undergo a first-time ISO 56001 certification (or an external ISO 56002 conformity audit). This reduces the financial barrier to entry for small companies to formally validate their innovation management.

These supports are justified as investments in capacity-building. They would accelerate the upskilling of the workforce in innovation management techniques and instill a culture of disciplined innovation planning in SMEs. In turn, participating firms would be better able to generate and manage high-value projects – amplifying the impact of the ITC. Ensuring that public funds (through the tax credit) go into companies with sound innovation systems greatly improves accountability and value-for-money. Indeed, Ireland's national innovation strategy "Impact 2030" explicitly highlights the ISO 56000 series as key to supporting innovation management, especially in SMEs (NSAI 2024) By helping businesses attain these standards, the Government is aligning with national policy and international best practice for innovation-led growth.

In summary, adopting the Oslo Manual's innovation definitions alongside the ISO 56000 innovation management framework provides a strong foundation for the Innovation Tax Credit. It marries conceptual clarity with operational rigour – "*Oslo is the what, ISO is the how.*" This alignment allows the ITC to be implemented with **administrative simplicity** and integrity: companies will largely self-govern their innovation process under a recognised standard, easing the compliance burden on both firms and Revenue. A firm that plans and executes innovation under ISO 56001 will naturally produce the documentation and outcomes that satisfy ITC requirements, streamlining claim reviews. For policymakers, this approach offers greater assurance that the credit is fostering real, well-managed innovation, while avoiding the need to craft entirely new oversight mechanisms. In essence, ISO 56000 operationalises the Oslo Manual's principles within companies. It enables Ireland to confidently extend tax support to a broader spectrum of innovation activities – knowing that those activities will be *clearly defined, professionally managed, and accountable*. This combination is critical for making the Innovation Tax Credit a success, turning policy vision into on-the-ground innovation performance.

7.8 Next steps

1. **Stakeholder round-tables** (Revenue, DECC, DETE, EI, IDA, NSAI design & sustainability bodies) to refine eligibility grid.
2. **Draft legislation** modelled on s.766 but referencing Oslo Manual & ISO 56000.
3. **EU State-aid pre-notification** leveraging GBER Art. 29 / Art. 25 bis.
4. **Publish pilot scheme** in Budget 2026 with a 2026 start; allocate €40m ceiling ($\approx 0.5\%$ of current R&D credit cost) for evaluation.

By combining internationally recognised definitions (Frascati for R&D, Oslo & ISO 56000 for Innovation) with a tightly scoped, certifiable pilot credit, Ireland can reward true additional innovation—driving green & digital objectives, spreading high-value design jobs nationwide, and keeping compliance clear for both businesses and the Exchequer.

Company Comments

“We nailed the science-credit twenty years ago and the world took notice. Now let’s nail the innovation credit – so every Irish firm, from farm shed to fintech tower, can test, tweak and triumph before the big guys buy the idea and the jobs fly off-shore.”

“Give the country that plank across the design-and-demo abyss, pin a clear ISO certification to keep the paperwork honest, and stand back. The next generation of home-grown legends will do the rest.”

A carefully-piloted **Innovation Tax Credit** on the statute book, tied to ISO certification, backed by clear State-aid guidelines can give Irish firms the confidence (and cash-flow) to tackle the market, design and business-model uncertainties that sit **beyond** pure science, yet still decide tomorrow’s competitive edge.

7.9 The ITC Economic Rationale and Projected Impacts

7.9.1 Economic Rationale for an Innovation Tax Credit (ITC)

Traditional R&D tax credits target Frascati-defined research (science and technology R&D), but as noted above many forms of innovation fall outside this scope. The OECD’s Oslo Manual broadens “innovation” to include not only new products and technologies, but also improvements in services, processes, marketing, design, and business models (OECD/Eurostat, 2018; International Organization for Standardization, 2020). These non-R&D innovations – such as user experience (UX) design, process improvements, service innovation, and commercialisation activities – often suffer from market failures similar to R&D.

Firms underinvest in design and process innovation because the benefits (knowledge spillovers, improved practices) can diffuse to competitors, and these activities often lack formal IP protection or clear ownership, making it hard for innovators to fully appropriate returns. This positive spillover justifies public support: without intervention, companies may neglect socially beneficial innovations (for example, sustainable packaging designs or service delivery improvements) that have high upfront costs but diffuse benefits (e.g., environmental gains, customer welfare) (OECD/Eurostat, 2018). Additionally, capital market imperfections mean it is harder to finance intangible innovation – banks may be reluctant to lend for a new service process or design prototype with no physical collateral. An ITC directly lowers the cost of these activities, encouraging firms to invest where they otherwise might not, thus correcting the underinvestment caused by these market failures.

Policy Rationale and Standards: By explicitly including Oslo-type innovations (design, process, organisational and marketing innovation) as eligible, the ITC aligns with international best practice definitions. The ISO 56000 series on innovation management similarly recognises that innovation can be “incremental or radical” across products, services, processes, business models, and even “design-driven innovation activities” (International Organization for Standardization, 2020). Modern standards and metrics treat creative design and process improvements as integral parts of innovation, even if they don’t meet strict R&D criteria. This provides a robust rationale for policy support: these activities contribute to productivity and competitiveness but are not incentivised by existing R&D credits. The proposed ITC would extend support to this broader innovation spectrum, ensuring Ireland’s policy environment encourages comprehensive innovation, not just lab research.

Comparative Policies: International precedents strengthen the case. In France, the government recognised the gap in support for downstream, non-R&D innovation and in 2013 introduced the *Crédit d’Impôt Innovation* (CII) targeted at SMEs. The CII is an innovation tax credit at 20% rate, applied to expenditures on prototype development, design, and pilot production for new products (capped at €400,000 per firm annually) (Government of France, 2021; Bunel and Hadjibeyli, 2021). Crucially, the CII was designed to complement the existing R&D credit (*Crédit d’Impôt Recherche*), by bridging the stage between experimental R&D and market launch (Bunel and Hadjibeyli, 2021).

This policy rationale is directly relevant to Ireland: just as the CII “supplements the R&D credit by promoting the economic development of a technology once experimental development is done” (Bunel and Hadjibeyli, 2021), an Irish ITC would support firms in the costly steps of design, testing, and commercialization that follow core R&D. Early evaluations of the French CII show it succeeded in spurring innovation – beneficiary firms produced a greater number of new products and saw higher medium-term sales growth than non-beneficiaries (Bunel and Hadjibeyli, 2021). This suggests that tax support for design/prototype work can tangibly increase innovation outputs.

In the UK, policy has until recently focused narrowly on scientific R&D tax relief (recently enhanced to 30% credit) and on sector-specific creative industry incentives. There is no broad equivalent of an “innovation credit” for design or process innovation. HMRC’s R&D relief explicitly excludes activities in arts, humanities, and many social or service innovations, unless they directly contribute to a scientific/technological advance (HM Revenue & Customs, 2020a, 2020b). This creates a policy gap: for example, a company investing in UX design or a novel business process in the UK generally cannot claim R&D relief, even though these innovations improve productivity. The absence of a dedicated design/process credit underscores the opportunity for Ireland to take the lead.

By implementing an ITC, Ireland would join France in correcting this imbalance, extending innovation incentives beyond the lab. This would encourage Irish firms – especially SMEs – to invest in areas like digital process innovation, service delivery improvements, and green design, where currently there is a tendency to underinvest due to spillovers and uncertain returns. Such support also aligns with national goals such as digital transformation and sustainability. In summary, the economic rationale is that an ITC will level the playing field for non-R&D innovation, correct market failures by internalising spillover benefits, and ultimately boost the innovation capacity of the Irish economy in areas currently neglected.

7.9.2 Projected Impacts of the ITC (2026–2030)

2(a). Employment Impact

Direct High-Skilled Job Creation: The ITC is expected to stimulate additional innovation projects in design, digital transformation, and related fields, which in turn require skilled personnel. Based on

recent R&D activity data, Ireland had about 32,961 people engaged in R&D in 2021 (of whom ~16,700 were researchers) (Central Statistics Office, 2021). Non-R&D innovation roles (designers, process engineers, UX specialists, etc.) are not fully counted in this figure, indicating a currently untapped reservoir of potential high-skilled jobs. With the ITC, firms will undertake more innovation projects, each project requiring skilled labour. IRDG assumes conservatively that for roughly every €100,000 of innovation expenditure induced by the ITC, 1 direct full-time job is created.

By 2030, under a conservative scenario, the ITC could induce approximately €50 million in additional innovation spend per year (a small fraction of total private R&D spend, which was €3.9 billion in 2021) (Central Statistics Office, 2021). This corresponds to an estimated 500 direct high-skilled jobs supported by ITC-eligible activities by 2030. Roles include UX/UI designers, digital process engineers, data analysts for service innovation, and sustainable product designers. This cautious estimate represents less than 2% of the existing R&D workforce, assuming new or retained roles attributable directly to ITC-supported projects.

Indirect and Spillover Employment: Innovation projects generate additional demand along the supply chain and in supporting services. Applying a conservative employment multiplier of 1.5, 500 direct innovation jobs would support roughly 250 indirect jobs in the wider economy, emerging in design consultancies, certification bodies, supplier networks, and professional services.

Table 7.4 summarises the employment projections under the conservative scenario:

Impact Metric (2030)	Projected Value	Conservative Assumptions
Incremental annual innovation investment due to ITC	~€50 million	~1% of private innovation spend
Direct high-skill jobs created (ITC-supported)	~500 jobs	1 job per ~€100k in additional innovation spend
Indirect jobs (spillover in supply chain & services)	~250 jobs	Multiplier = 1.5

2(b). Innovation Index Performance (2026–2030)

Beyond jobs, the ITC will likely improve Ireland’s performance on international innovation indices, notably the European Innovation Scoreboard (EIS) and Global Innovation Index (GII). Ireland ranks 7th in EIS 2024 (Government of Ireland, 2024) but struggles with certain indicators that the ITC could positively influence:

- **Design & Creative Outputs:** Ireland currently ranks low for design innovation output, approximately 33.7% of the EU average (European Commission, 2024). By incentivising design activities, Ireland could improve significantly, potentially reaching 60% of the EU average by 2030.
- **Eco-innovation & Green Tech:** Ireland ranks second-last in the EU in environment-related innovation outputs (European Commission, 2024). With ITC incentives, this performance could rise to around 50% of the EU average by 2030, contributing positively to national sustainability goals.
- **SME Innovation & Collaboration:** Ireland has a high rate of innovative SMEs collaborating (178% of the EU average), but there is room to enhance SME process and organisational innovations (European Commission, 2024). The ITC could help increase SME-driven innovation by approximately 5 percentage points by 2030.

- Overall Innovation Score/Rank: By addressing these weaknesses, the ITC could help Ireland move closer to becoming an Innovation Leader (score >125% of the EU average by 2030) (Government of Ireland, 2024), potentially entering the top 20 in the Global Innovation Index by improving design and environmental innovation performance (WIPO, 2023).

These projections reflect achievable improvements based on international experience, such as France's successful Crédit d'Impôt Innovation (Bunel and Hadjibeyli, 2021).

7.9 Methodology and Assumptions

Approach to Projections: The projections are developed using a conservative scenario analysis, leveraging the latest available data (2022–2024) and proven policy impacts. Baseline metrics such as current R&D employment and Ireland's EIS indicator values were identified, with incremental changes attributable to the ITC conservatively applied. The assumptions made were intentionally conservative to prevent overstatement.

- **Employment Calculations:** A linear relationship was assumed between additional innovation expenditure and jobs, with a ratio of 1 job per €100,000, aligning closely with Ireland's average cost per R&D job (approximately €118,000 based on total BERD of €3.88bn divided by approximately 33,000 R&D personnel) (Central Statistics Office, 2021). – note the increases in 2023 leads to similar figures. An employment multiplier of 1.5 for indirect jobs was selected, consistent with lower-end economic literature estimates for high-tech sectors. A gradual scale-up over several years was assumed, reaching 500 direct jobs by around 2030.
- **Fiscal Cost Assumptions:** Fiscal costs were estimated conservatively. If 500 firms claim an average credit of €20,000, the annual fiscal cost would be around €10 million. A higher potential cost of €20 million per year by 2030 was allowed, reflecting either a higher number of claimants or larger average claims. This remains minor relative to Ireland's total tax revenue, assuming reasonable uptake by SMEs (approximately 5–10% of Ireland's SMEs).
- **Attribution to ITC:** Attribution assumptions were cautious, discounting heavily for potential background growth. For example, improvements in design registrations were attributed conservatively to the ITC, assuming only half the observed improvements directly resulted from the ITC. Similar caution was applied to employment projections. Attribution was guided by international evaluations, notably France's Crédit d'Impôt Innovation evaluation (Bunel and Hadjibeyli, 2021).
- **Conservative Scenario Definition:** The scenario intentionally errs on the side of caution, using conservative multipliers and growth assumptions. Despite France's CII achieving over 6,500 SME claimants within two years (Bunel and Hadjibeyli, 2021), Ireland's ITC claimants by 2030 were projected conservatively at around 1,000 firms. Improvement targets like doubling design indicators were also conservative, deliberately below optimistic benchmarks.
- **Data Sources and Currency:** Monetary figures are in current Euros without inflation adjustments. Employment figures represent full-time equivalents. Baseline data is drawn primarily from the most recent Community Innovation Survey, EIS 2024, and CSO R&D survey data (Central Statistics Office, 2021; European Commission, 2024). Projections extend

to 2030, aligning with Ireland's Impact 2030 strategy timeframe, offering a practical evaluation period for the ITC's impact.

The methodology combines cautious, evidence-based assumptions to present credible and conservative forecasts of the ITC's potential impacts, offering solid economic justification for the policy.

7.10 Delivering Innovation: Aligning with Strategic Vision

This Innovation Tax Credit proposal fundamentally aligns with Ireland's strategic vision outlined in Section 2, explicitly addressing the principles of Ambition, Accessibility, Agility, and Accountability:

Ambition: By establishing a dedicated Innovation Tax Credit distinct from traditional R&D support, Ireland boldly commits to becoming a global frontrunner in fostering broad-based innovation. This measure positions the nation not merely as a follower but as a leader, driving pioneering efforts in user experience design, digital business models, and sustainable innovation.

Accessibility: Through clear alignment with internationally recognised frameworks (OECD Oslo Manual and ISO 56000 standards), the Innovation Tax Credit reduces complexity and ambiguity. Simplified procedures and clearly defined eligibility criteria ensure firms of all sizes—particularly SMEs previously deterred by administrative barriers—can confidently access and utilise this support.

Agility: The proposed scheme embodies policy agility by explicitly supporting the types of innovation not adequately captured by traditional scientific criteria, rapidly responding to market shifts, emerging sectors, and global innovation trends. Its adaptable design, including the pilot structure and potential for future expansion, ensures ongoing responsiveness to Ireland's evolving economic and technological landscape.

Accountability: Clear governance, robust oversight mechanisms, and measurable KPIs are built into the proposed Innovation Tax Credit framework. Leveraging ISO 56001 certification for auditability, this ensures transparency, measurable outcomes, and confidence among taxpayers and policymakers alike.

In summary the Innovation Tax Credit is strategically designed not just as an incremental policy adjustment, but as a transformative step toward realising Ireland's long-term innovation vision—ambitious in its goals, accessible in its execution, agile in its responsiveness, and accountable in its outcomes.

8 An Integrated Policy Approach

8.1 Bringing It All Together – An Integrated Policy Framework

The proposals outlined in this pre-budget submission constitute a single coherent strategy deliberately designed to reinforce Ireland's leadership in global innovation. This integrated framework directly targets four key objectives in tandem: enhancing SME participation in R&D (addressing low uptake by smaller firms), sustaining large-scale multinational R&D investment (amid intensifying global competition and tax changes), driving sustainability through targeted green innovation incentives (to meet climate obligations and develop new green industries), and bridging critical innovation gaps beyond traditional R&D (by supporting activities like design and digitalisation that drive commercialisation). By tackling these priorities in unison, the framework ensures that Ireland can respond dynamically to economic and technological shifts while creating synergies between initiatives. It embodies **Ambition** in its bold scope, promotes **Accessibility** by broadening the base of innovators, maintains **Agility** in adapting to change, and upholds **Accountability** through clear goals and metrics – collectively securing long-term prosperity and resilience.

8.2 A Phased Roadmap: Immediate, Medium-Term and Strategic Actions

Immediate actions focus on removing barriers for SMEs and improving Ireland's competitive edge for larger investors. Simplifying the R&D tax credit process for SMEs – through accelerated refunds, automated small claims processing, and clearer eligibility criteria – will encourage more small and mid-sized firms to engage in innovation right away. In parallel, raising the effective R&D tax credit rate to 35% on an initial tranche of qualifying R&D expenditure for larger companies, coupled with faster and more predictable refunds, will immediately strengthen Ireland's position in attracting and retaining major R&D projects (and the high-value jobs that come with them).

Medium-term initiatives introduce new supports to fill gaps in the innovation ecosystem. Launching a pilot **Innovation Tax Credit (ITC)** – explicitly defined by international standards (OECD's Oslo Manual and ISO 56000) – will extend support to high-value innovation activities such as design, digitalisation, and other non-laboratory projects. This pilot approach reflects agility and prudence: testing the scheme at a smaller scale with clear evaluation criteria (built-in KPIs) ensures that it delivers value before full rollout. At the same time, implementing a dedicated **50% Green-Tech R&D tax credit** will catalyse sustainability-oriented innovation. By incentivising projects that achieve measurable emissions reductions and circular-economy advances, this measure aligns directly with Ireland's climate action targets and is expected to stimulate investment in clean technologies – contributing both to environmental goals and the growth of a green jobs sector.

Strategic actions (long-term) will involve continuously benchmarking and adjusting Ireland's innovation policies to maintain global competitiveness. This means regularly measuring the effectiveness and additionality of incentives (ensuring ongoing value-for-money) and aligning with evolving international frameworks (such as OECD global tax reforms) to keep Ireland's regime attractive. It also requires investing in the fundamental enablers of innovation: enhanced skills training and STEM education, international talent attraction, and robust research infrastructure (e.g. advanced testbeds and digital labs). These longer-term efforts will expand the innovation ecosystem's capacity and resilience. By remaining **ambitious** in goals yet **accountable** in execution –

constantly evaluating outcomes and updating policies – Ireland can agilely navigate future technological waves while safeguarding fiscal prudence.

8.3 How the Measures Interlock to Achieve the National Vision

The proposed measures are designed to work in concert, creating **synergies that amplify their collective impact** and advance Ireland's national innovation vision. The simplification and targeted support for SMEs will broaden the base of grassroots innovators, leading to new start-ups and regional technology development. Enhanced incentives for large firms will anchor key multinational R&D operations in Ireland, translating into sustained foreign direct investment and high-skilled employment. Crucially, a robust multinational presence further benefits domestic SMEs through supply-chain partnerships, knowledge spillovers, and mentoring, creating a virtuous cycle of innovation across company sizes.

Meanwhile, the introduction of the Innovation Tax Credit bridges a critical gap by supporting innovation and commercialisation activities that fall outside the scope of the traditional R&D tax credit. This will accelerate the conversion of research into marketable products and services, boosting productivity growth and helping more home-grown ideas reach global markets. Similarly, the dedicated Green-Tech R&D credit positions Ireland at the forefront of sustainable innovation by rewarding firms that tackle climate challenges. It directly supports national priorities on emissions reduction and resource efficiency, while fostering a homegrown green technology sector. Together, these measures form an integrated portfolio that delivers robust, sustainable economic growth, substantial job creation, and enhanced global competitiveness. By aligning each initiative under a cohesive strategy, the Government's investment achieves a multiplier effect – maximising value-for-money and driving progress toward Ireland's strategic goals (from EU-leading innovation performance to climate leadership).

8.4 Risk Assessment and Mitigation

Implementing this transformative innovation agenda entails managing several risks through careful design and oversight. Key risks include potential **administrative complexity** (if processes are cumbersome for applicants or administrators), **uptake uncertainty** (especially among SMEs, where participation could be lower or higher than anticipated), **EU regulatory constraints** (e.g. state aid rules that could limit certain supports), and **workforce capacity** challenges (ensuring enough skilled talent to carry out the additional R&D activity stimulated by these measures). There is also the overarching risk of fiscal inefficiency if measures do not generate the intended additional innovation activity.

To mitigate these risks, the policy framework builds in **safeguards and adaptive measures** at every stage. **First**, procedural complexity will be minimised through streamlined digital claim systems and user-friendly guidance, upholding the Accessibility principle so that smaller firms can easily participate. **Second**, a phased implementation with pilot programs (for the new Innovation Tax Credit and other novel supports) will allow for evaluation and course-correction before scaling up. Robust evaluation checkpoints and clear KPIs will ensure **Accountability** – only initiatives that demonstrate additional impact and value-for-money will be expanded, thereby managing fiscal exposure. **Third**, ongoing consultation with stakeholders (industry groups, SMEs, tax experts) will help refine eligibility criteria and program guidelines in real time, reducing ambiguity and unintended loopholes. **Fourth**, proactive engagement with the European Commission will address

any state aid compliance issues early, ensuring Ireland's measures remain within EU rules. **Finally**, parallel investments in education, reskilling, and talent attraction will alleviate workforce constraints over the medium term, aligning with the Ambition to grow national innovation capacity. By anticipating these risks and responding with agile management and oversight, the framework maximises the chances of successful, sustainable outcomes.

8.5 Conclusion

Ireland stands at a pivotal moment in its innovation journey. The integrated policy framework outlined here provides a clear and actionable roadmap that is both **ambitious in scope and pragmatic in design**. It represents a cohesive economic strategy – not a loose assortment of initiatives – by directly linking each policy intervention to tangible outcomes and national objectives. By proactively filling current gaps and reinforcing Ireland's competitive strengths, this plan will significantly boost innovation capacity, drive productivity and job creation, enhance economic resilience, and solidify Ireland's global standing as an innovation leader. Equally important, these reforms align with Ireland's broader strategic goals (from digital transformation to net-zero commitments), ensuring that public investments in innovation yield measurable dividends for the economy and society. Successful execution of this strategy will require **immediate, collaborative, and sustained effort** from government, industry, and academia alike. With strong leadership and the guiding principles of Ambition, Accessibility, Agility, and Accountability at the forefront, Ireland can confidently invest in its innovation future – knowing that this integrated approach will deliver long-term value-for-money and secure national prosperity for years to come.

8.6 Summary of Key Recommendations by Chapter

Chapter 2: Strategic Context and Vision

- Articulate a clear and ambitious national innovation strategy, aligning R&D incentives with broader economic and societal goals.
- Embed the principles of Ambition, Accessibility, Agility, and Accountability into all innovation policy frameworks.
- Ensure continuous stakeholder engagement to inform policy refinement and responsiveness to emerging innovation trends.
- Establish robust governance structures with clearly defined roles, responsibilities, and accountability measures.
- Implement comprehensive monitoring and evaluation frameworks, with clearly defined Key Performance Indicators (KPIs) to measure success and guide policy evolution.
- Increase Government Budget Allocations for R&D (GBARD) to match international benchmarks and support long-term innovation capacity.

Chapter 4: Enhancing the R&D Tax Credit for SMEs

- Immediately simplify administrative processes for SMEs to claim R&D credits, including faster refunds and streamlined documentation.
- Provide immediate cash-flow relief through faster phased refunds of the first €300,000 (within one year) and increased initial payment thresholds.
- Increase the effective R&D tax credit rate to 35% on qualifying expenditure.
- Introduce automated processing and eligibility assurances ("Advance Assurance") to improve SME uptake and confidence.

- Increase outsourcing caps to enable SMEs to effectively engage external expertise and partnerships.
- Establish a dedicated Revenue R&D technical unit to centralise and streamline administration and claims management.
- Develop a clear, accessible SME R&D Playbook to simplify understanding and application procedures.

Chapter 5: Strengthening Large Enterprise R&D

- Increase the effective R&D tax credit rate to 35% on initial qualifying expenditures to attract and retain large multinational R&D investments.
- Accelerate refund timelines to improve financial predictability and attractiveness to large enterprise investors.
- Raise the outsourcing cap significantly, enhancing opportunities for large enterprises to collaborate with specialist providers.
- Establish a dedicated Revenue R&D technical unit for consistent policy interpretation and efficient administration.
- Regularly benchmark Ireland's R&D incentives against international competitors to ensure continued global competitiveness.

Chapter 6: Sustainability and the Green Transition

- Introduce a 50% Green-Tech R&D tax credit specifically targeting measurable sustainability outcomes such as emissions reductions and circular economy advancements.
- Ensure immediate year-one refundability of the Green-Tech credit for SMEs to overcome cash-flow barriers.
- Provide green innovation vouchers (€9,000) to micro and small enterprises to facilitate partnerships with public research institutions.
- Streamline environmental aid schemes and grant approval processes, ensuring rapid administrative responses for applications under €3 million.
- Offer super-deduction capital allowances (100%) for near-zero-carbon facilities meeting strict environmental performance standards.

Chapter 7: Innovation Tax Credit (ITC)

- Launch an Innovation Tax Credit pilot explicitly aligned with OECD's Oslo Manual and ISO 56000 standards, supporting non-traditional innovation activities such as design, digitalisation, and user-experience innovation.
- Include built-in evaluation metrics (KPIs) and clear oversight mechanisms to assess and refine the pilot programme before wider implementation.
- Offer Enterprise Ireland and IDA vouchers (€10,000) for SMEs to prepare for ISO 56001 innovation management certification.
- Provide rebates for the first 250 Irish firms achieving ISO 56001 certification to boost national innovation capabilities and international credibility.

Complementary Skills and Standards

- Expand strategic talent development initiatives, including micro-credentials in innovation management, to ensure a steady supply of skilled professionals to support enhanced R&D activities.
- Invest in national research infrastructure, such as advanced testbeds and digital labs, to bolster Ireland's capacity for cutting-edge innovation across key sectors.
- Encourage inter-SME and university-industry collaborations through targeted regional R&D vouchers and shared-equipment grants.
- Embed continuous improvement and robust governance in innovation management through widespread adoption of ISO 56001 standards.

Chapter 8: Integrated Policy Framework and Strategic Alignment

- Continuously benchmark and adapt R&D policies to maintain competitiveness in the evolving international innovation landscape.
- Implement phased roll-outs with clear evaluation checkpoints and risk management measures to ensure fiscal prudence and effectiveness.
- Foster collaborative action across government, industry, and academia to effectively deliver the integrated innovation strategy and maximise economic and societal benefits.
- Maintain transparency, measurable outcomes, and clear accountability through regular reporting and monitoring aligned with strategic national goals.

8.7 Call to Bold Ambitious Collaborative Action

This document calls for urgent, joint action. Only with decisive leadership partnership and collaborative efforts across government, business, and academia can the potential of these policies be fully realised – securing Ireland's place among the world's innovation leaders. IRDG strongly recommends taking bold action now to capture the next wave of global R&D investment. This will ensure Ireland's position as a world leader in innovation and safeguard the nation's long-term prosperity through continuous, innovation-driven growth.

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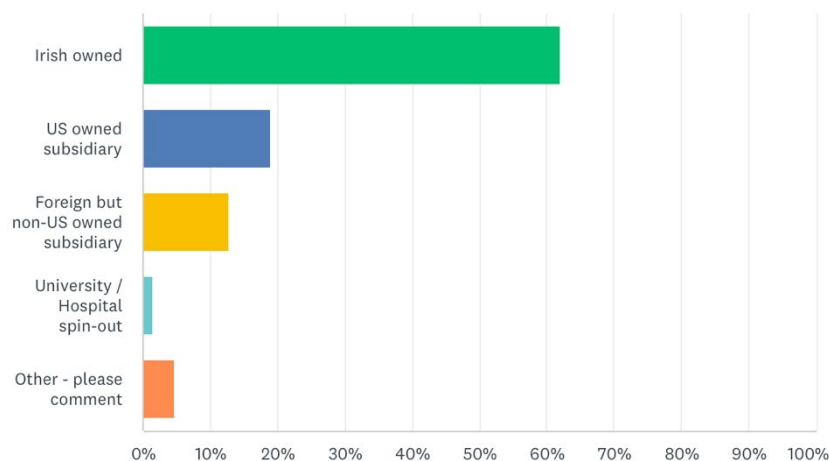
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APPENDIX 1 DETAILS OF INNOVATION INDEX PARTICIPANTS

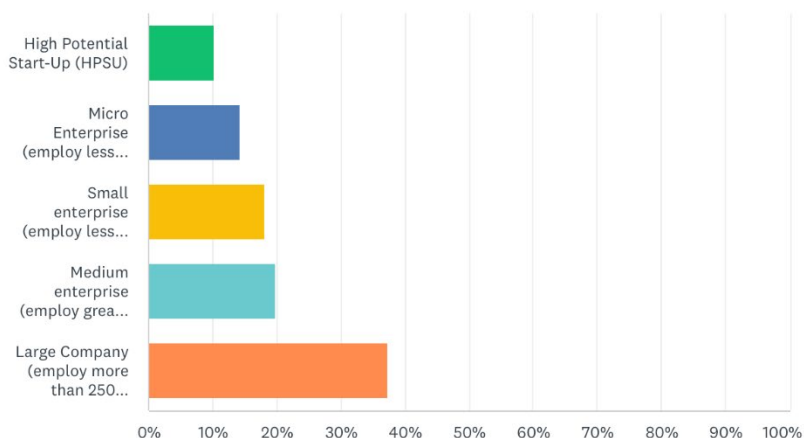
Who owns your business?

Answered: 556 Skipped: 0



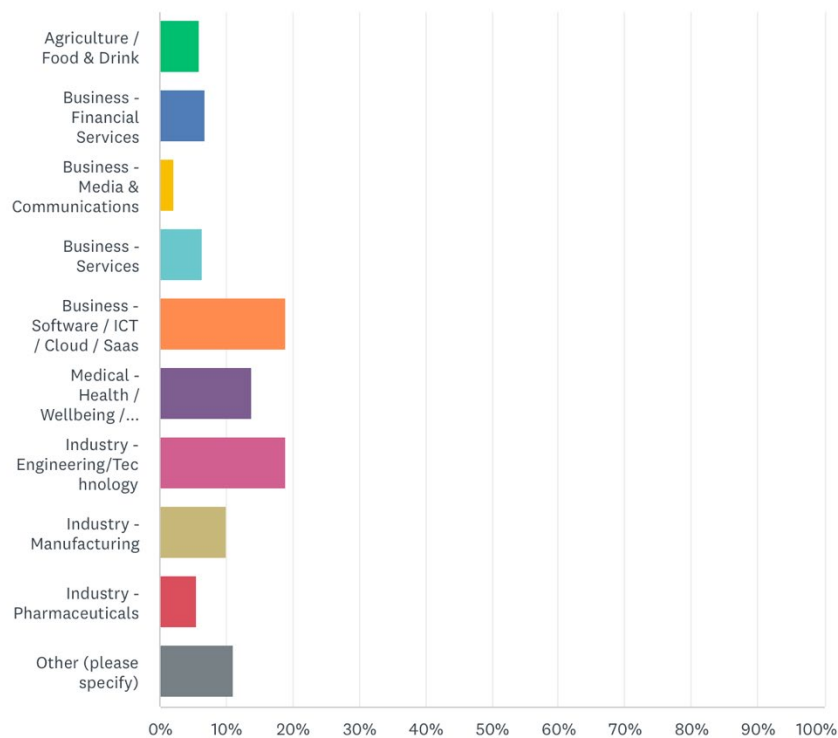
Which of the following best describes your business / operations in Ireland?
(Note: if your business is part of a Group, please choose the Employee, Turnover and Annual Balance Sheet figures which would apply to the Group as a whole)

Answered: 556 Skipped: 0



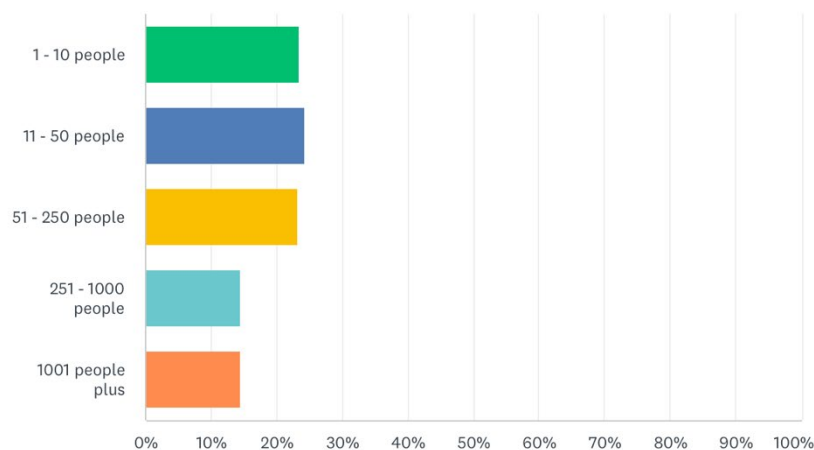
Choose the category that best describes your business in Ireland?

Answered: 546 Skipped: 10



How many people do you employ in Ireland at this time? (FTE's - full time equivalents)

Answered: 531 Skipped: 25



APPENDIX 2 State Aid Compliance

Relevant EU State Aid Provisions (GBER Articles 25, 28, 29)

Article 25 – Aid for R&D Projects: Under the General Block Exemption Regulation (GBER), Article 25 allows aid for **research and development projects** (covering fundamental research, industrial research, experimental development, and feasibility studies). Aid intensities depend on the R&D category: e.g. up to 50% of eligible costs for industrial research and 25% for experimental development. SMEs can receive bonus percentages (e.g. +20% for small enterprises) and additional uplifts for collaboration or dissemination, potentially reaching **80%** in certain cases. Article 25 is not SME-exclusive – large companies can benefit (at base rates of 25–50% depending on research type, with SME bonuses not applicable to them). However, any aid exceeding these intensities or covering non-R&D activities would fall outside Article 25. In summary, Article 25 provides a framework for supporting **traditional R&D activities**. With the pilot’s broader “innovation” scope other provisions might be even more appropriate.

Article 28 – Innovation Aid for SMEs: Article 28 is tailored to **innovation activities by SMEs** and is limited to companies <250 employees (EU SME definition) – exactly the target group of the pilot. It permits State aid up to **50%** of eligible innovation costs, exempt from prior notification. Eligible costs under Article 28 are specific: **(a)** costs for obtaining, validating, and defending patents or other intangible assets, **(b)** costs of seconding highly qualified personnel from research institutes or large firms to an SME, and **(c)** costs of **innovation advisory and support services**.

Notably, Article 28 does *not* cover general in-house R&D or innovation project expenditures beyond these categories – its scope is narrower, focusing on capacity-building (IP, staff expertise, consulting) for innovation in SMEs. Aid intensity is capped at 50% for these costs (and can even reach 100% for innovation advisory/support services, up to €220k over 3 years, to encourage SMEs to use external expertise). The pilot aligns with Article 28 in **spirit** – it targets SMEs and aims to spur innovation – but it must ensure that the expenditures it incentivizes fall into eligible categories or otherwise remain within allowed intensity limits.

If the ITC pilot supports, say, prototype development costs or technology implementation costs that are not strictly “innovation advisory” or patent-related, Article 28 alone might not cover that. In practice, many countries have successfully used Article 28 for SME innovation schemes. For example, France’s innovation tax credit (Crédit d’Impôt Innovation, CII) is limited to SMEs and provides a 20% credit for developing new product prototypes or pilot processes, up to €400k in costs (max €80k credit). This French scheme mirrors Article 28’s intent – by restricting to SMEs and keeping the aid intensity at 20% (well below 50%), France ensured the measure met GBER conditions.

The proposal’s SME focus and a **20% base credit** similarly position it safely within Article 28’s 50% aid ceiling. As long as the pilot’s supported activities can be framed within the eligible cost categories (or combined appropriately with Article 29 as noted below), it can take advantage of Article 28’s block-exemption for SME innovation aid.

Article 29 – Aid for Process and Organisational Innovation: Article 29 allows aid for **innovations in processes or organizational methods** – essentially, non-technological innovations or improvements in how a business operates (this aligns well with the **Oslo Manual** concepts of process and organizational innovation mentioned in the proposal). Under Article 29, aid is block-exempt up to **50% of eligible costs for SMEs** (and 15% for large firms). Importantly, large undertakings can only benefit if they collaborate with SMEs and the SMEs incur at least 30% of the project costs – in effect, pure large-company projects are excluded unless an SME is meaningfully involved.

Eligible costs under Article 29 are defined by reference to the R&D cost categories: **personnel costs, equipment and instruments, contractual research, and other operating costs (materials, supplies, etc.) incurred due to the innovative project**. In other words, an **organisational or process innovation project** can be supported similarly to an R&D project in terms of cost types, which is broader than Article 28’s list. There is a nuance in Article 29’s scope: it covers **“the implementation of new or significantly improved production or delivery methods”** and new organisational methods in business practices, workplace organization, or external relations.

Routine or minor changes, simple upgrades, or adaptations of products are excluded – the innovation must be non-trivial (the regulation explicitly excludes things like mere customisation, seasonal changes, periodic changes, etc., from the definition of eligible innovation). The pilot’s design – supporting projects that meet Oslo Manual criteria and requiring a structured innovation management system (ISO 56000 series) – is intended to ensure **“only genuine innovation is supported,”** which aligns with Article 29’s intent to aid real process/organisational innovation rather than everyday business changes.

By keeping the pilot to SMEs, it neatly fits the Article 29 allowance of 50% intensity for SMEs. The proposed aid intensity (20% credit, with possible uplifts to 25% or 30%) is comfortably below the 50% cap, meaning compliance margins are strong. If some supported projects under the pilot are more technological (product development) and qualify as R&D, they could be covered by Article 25; if they are improvements in processes, practices, or non-R&D innovation, Article 29 covers them – **the proposal smartly straddles these categories**.

Article 25 bis refers to a *new* provision inserted in GBER amendments (2023) dealing with **testing and experimentation infrastructures** (Article 25a) or **innovation pilot projects**. While those new articles (25a, 25b) focus on research infrastructures and “Teaming” actions, they might not directly apply to an SME tax credit scheme, so the core relevant provisions remain Articles 25, 28, and 29 discussed above.

In summary, Article 29 is a key basis for **process/service innovation aid** and the pilot’s broad innovation remit (including possibly organizational innovation via ISO 56001 adoption) can be justified under this article. By using Article 29, the scheme can support project costs like staff time and materials for innovation, not just advisory fees or patents, again **without notification** as long as conditions are met.

Alignment of the Proposal with GBER Rules

The **proposed ITC pilot (2026–2028)** is structured in a way to **maximize compatibility with EU State aid rules**, particularly by leveraging the General Block Exemption (GBER) to avoid individual notification and approval delays. Here’s how it stands up to scrutiny:

- SME Targeting and Block-Exemption:** By limiting the pilot to SMEs (<250 employees), the scheme squarely fits into GBER's SME-focused aid categories (Articles 28 and 29) which explicitly allow higher aid intensities for SMEs and exemption from notification. This approach mirrors the French and other EU examples (France's CII is SME-only for this reason). The European Commission's State Aid modernization (GBER 2014) was designed to let well-defined aid to SMEs proceed without red tape, and the pilot takes advantage of that. **Result:** The scheme can likely be implemented under **GBER self-certification** – meaning the government just ensures conditions are met and **no prior notification to Brussels is needed**, avoiding lengthy approval processes.
- Aid Intensity and Caps:** The pilot offers a **20% refundable tax credit**, with potential +5% boosts for ISO certification and +5% for green/digital projects (max 30%). This is well below the **50% aid intensity ceiling** allowed for innovation aid to SMEs. Even if a project were classified as R&D (Article 25), a 20–30% aid intensity is within the range for experimental development projects (which start at 25% for large firms, up to 45% for small firms with the SME bonus). In other words, the credit rate is cautiously set so that **EU limits won't be exceeded**. The proposal also suggests a **€250k cap per group per annum** – this cap not only limits fiscal exposure but also effectively ensures no single SME can receive excessive aid. For context, under GBER the **notification threshold** for innovation aid is quite high (e.g. generally €5 million per project for Article 28, and €7.5 million per project for Article 29 as per the R&D&I Framework), and the pilot's cap is far below those thresholds, adding an extra safety buffer. By capping and phasing the support as a pilot, the authorities can be confident the scheme remains **moderate in aid amounts** and thus low risk from a State aid distortion perspective.
- All Sectors vs. Sectoral Targeting:** The document notes that targeting specific sectors or regions could trigger notification unless covered by another block exemption (such as regional aid, environmental aid, etc.). The pilot is intended to be **open to all sectors** (horizontal), which is simpler for State aid compliance. There is no sector selectivity that would require a different GBER article or a notification. All SMEs nationwide would be eligible, avoiding the need to justify why some sectors get aid and others don't. (If, for example, only "Green Tech" firms were eligible, one would have to ensure that falls under a category like environmental aid or risk needing notification. The proposal wisely avoids that complexity.) By using a **horizontal approach (all industries, just SME-limited)**, the scheme uses the **GBER's horizontal aid categories** and stays clear of sector-specific State aid constraints.
- Cumulation and Aid Limits Monitoring:** The proposal explicitly states that ITC claims will be **monitored in aggregate** to ensure compliance with EU **aid intensity limits**, especially if combined with other aid (e.g. an SME could potentially receive an R&D grant under another scheme and also claim the ITC). EU rules require that when two State aid measures support the **same costs**, their combined aid intensity can't exceed the highest allowed by any one scheme. The pilot addresses this by making the ITC **mutually exclusive with the R&D tax credit on the same expenditure line-item** – i.e. a company cannot get both tax credits on the identical cost, preventing double-dipping. Companies *may* avail of both an R&D credit and the new ITC in the same year, but **for different projects** or cost items (this separation is crucial for compliance). Additionally, by capping the ITC at 20–30%, even if a firm somehow combined it with another aid (say a grant covering 20% of costs), the total ~50% would still be at or below the typical maxima for R&D or innovation aid for SMEs. The authorities plan to **monitor claims and cumulation** – this is a prudent measure, essentially an internal audit check to not breach State aid ceilings. (For example, if an SME is in a region with a regional aid scheme, they must ensure the sum of regional aid + ITC on overlapping costs doesn't go over allowed rates – monitoring will catch that.) This approach aligns with GBER Article 8

(cumulation rules) which says you can combine different aids as long as they concern **different costs** or, if on the same costs, do not together exceed the most permissive aid intensity for those costs.

- **De minimis Fallback:** The text mentions using **de minimis aid** “if necessary during pilot.” The **de minimis regulation** (EU 1407/2013, as amended) allows up to **€200,000** of aid to a single undertaking over 3 fiscal years, outside of the State aid notification framework (de minimis aid is deemed so small as to be negligible in distortion). By keeping some support under de minimis, the pilot can cover edge cases or additional boosts without entangling with State aid limits. For instance, if a particular cost or firm didn’t neatly fit GBER categories, the government could award a small de minimis grant (or treat a portion of the tax credit as de minimis) to stay on the safe side. The proposal’s primary aim is to use the **GBER (Articles 28/29)** for the bulk of the scheme (for scalability to a full program later), but this de minimis tool is a smart safety valve. It shows regulators are thinking ahead about **staying compliant even in unusual situations**. Notably, many Member States structure tax incentives so that smaller claims automatically fall under de minimis, and only larger ones invoke the GBER – this avoids heavy reporting burdens for very small aid amounts. The pilot’s design to have a **separate cap/budget** and aggregate monitoring could facilitate such an approach.
- **Time-Limited Pilot with Evaluation:** Although not directly a State aid legal requirement, the fact it’s a **3-year pilot (2026–2028) with a mid-term review** is helpful from a compliance perspective too. It means the scheme will be reviewed for effectiveness and any unintended consequences (including State aid issues) after two years. If any adjustments are needed (for example, if uptake is low due to too-narrow eligibility, or conversely if there’s risk of over-subsidization in some cases), the government can tweak the scheme. This built-in evaluation aligns with best practices – it’s actually encouraged under the EU’s State Aid Modernisation that aid schemes be evaluated for effectiveness. Moreover, if the pilot is successful and Ireland wants to **expand it to all companies (including large ones)** post-2028, the data from the pilot will help in designing that broader scheme in compliance with State aid rules. A full roll-out to large companies would likely require either using the R&D&I Framework with notification (since Article 29 for large companies requires collaboration, a pure large-firm innovation credit would otherwise need notifying) or creative structuring. The pilot phase thus also serves to gather evidence that can support a case for Commission approval of a wider scheme in the future, if needed.

In sum, the pilot is **structured to fit within existing block exemptions** – it targets SMEs, stays under aid intensity caps, and avoids tricky selective criteria – thereby **standing up well to State aid scrutiny**. The Commission’s GBER (Commission Regulation 651/2014) explicitly allows these kinds of measures to proceed without notification as long as conditions are met, and Ireland’s approach is to rigorously meet those conditions. This directly addresses the consultation question on State aid frameworks: the proposal shows how the new ITC can comply with EU rules (using GBER Article 28 for SME innovation aid and Article 29 for process/organisational innovation), thus minimizing legal hurdles and implementation delay.

ISO 56000/56001 in EU Guidance and National Schemes

Linking the **ISO 56000 series** (innovation management standards) to an aid scheme is an innovative aspect of the proposal. Currently, **EU State Aid rules and guidance do not explicitly reference ISO 56000 or ISO 56001**. The General Block Exemption Regulation and the EU’s R&D&I State Aid Framework focus on the nature of activities (R&D vs innovation) and the characteristics of beneficiaries (SME, collaboration, etc.), not on specific management standards. There’s no

requirement at the EU level that an aided project use any particular standard like ISO 56001. Likewise, when we look at national R&D or innovation incentives across Europe, **none so far have made ISO certification a condition for tax credits or grants** – this appears to be a novel idea coming from IRDG’s recommendations.

However, the absence of ISO 56000 references in law doesn’t mean the idea lacks support – it’s just not yet formalized. In practice, **policy trends are encouraging better innovation management**. For example, the **European Commission** and **OECD** have highlighted the importance of firms having systematic innovation processes (the OECD’s Oslo Manual itself was updated in 2018 with broader innovation concepts, and the Commission participated in developing ISO 56000 vocabulary) Some governments have run pilot programs to help SMEs adopt innovation management systems. **Ireland’s NSAI (National Standards Authority)** has been actively promoting the ISO 56000 series to Irish businesses as a tool to improve innovation capability and consistency. The NSAI notes that these standards provide a “playbook” for systematic innovation and can help SMEs scale by moving from ad-hoc innovation to a managed approach. This shows a policy interest in standards, even if not encoded in State aid rules.

At the EU level, we are starting to see integration of **innovation management principles** indirectly. For instance, the EU’s Horizon Europe research funding program encourages applicants to demonstrate solid innovation management. Some **national innovation agencies** (e.g., in **Sweden** and **Germany**) have offered coaching or recognition for companies adopting ISO 56002 guidelines. In the public sector, initiatives like the OECD’s Observatory of Public Sector Innovation report that public organizations in Sweden have begun implementing ISO 56002 to systematize their innovation efforts. All of this indicates that ISO 56000-series is gaining traction as a best practice framework.

Crucially, using ISO 56001 certification as an eligibility criterion or bonus in the tax credit does not conflict with State aid rules. EU law allows Member States to add their own qualitative conditions on aid as long as they are non-discriminatory and do not undermine the State aid definitions. In fact, one could argue that by requiring firms to eventually obtain ISO 56001 (within 24 months) to continue claiming the higher credit, the scheme is ensuring the aid goes to firms that are **serious about innovation**. This could be seen as a self-filtering mechanism to target the aid to high-quality innovation projects – which is exactly what State aid rules intend (to support genuine market failures like under-investment in innovation, not to subsidize routine business as usual). The ISO requirement might also have an indirect effect of making **notification easier if ever needed**: if Ireland had to justify the scheme to the Commission, they could point out that beneficiary firms are following internationally recognized innovation management standards, which likely increases the effectiveness and reduces any risk of aid misuse.

No current national tax credit explicitly ties into ISO 56001, so Ireland would be at the forefront of this approach. It’s worth noting ISO 56001 (the requirements standard for innovation management systems) was only published in **September 2024** (while ISO 56002 (guidance) has been out since 2019). So this is bleeding-edge thinking. We should check if any **national funding schemes refer to ISO 56002/56001**: so far, it appears not, beyond voluntary encouragement. For example, France’s CII requires an expert to certify that the project qualifies as a *nouveau produit* prototype, but not an ISO certification. Italy’s credit requires documentation of the project’s innovative nature, but again no ISO. Thus, IRDG’s proposal to give a **+5% credit “uplift” for ISO 56001-certified firms (or those whose lead innovator is ISO 56002 professionally certified)** is a unique incentive mechanism. It uses State aid funds to drive adoption of a global standard, potentially building long-term innovation capacity. This does not raise State aid compliance issues per se – it’s an additional national condition on who gets the full 25% versus 20%. All beneficiaries are still SMEs and all get at most 25% base

+5% = 30% aid, under the 50% cap. The Commission would likely view this as a neutral differentiation (it doesn't favor one industry over another, just firms with a certification, which any SME can obtain). It's comparable to how some aid schemes give higher aid intensity if, say, the project involves collaboration with academia – also a qualitative bonus, allowed under the rules.

ISO 56000/56001 aren't mentioned in EU State aid regulations or standard national schemes yet. By incorporating these standards it complements the **EU innovation policy direction** (encouraging robust innovation management and alignment with international best practices). Should the scheme move forward, Ireland might coordinate with NSAI or similar bodies to help companies attain ISO 56001, ensuring that by the 24-month mark companies can indeed be certified (this could even be done under **innovation advisory services**, which are eligible for 100% aid up to €220k under Article 28 – a nice synergy where the credit could potentially cover the costs of getting that certification consultant, within limits).

- Commission Regulation (EU) No 651/2014 (General Block Exemption Regulation), Articles 25, 28, 29.
- GBER Article 28 (Innovation aid for SMEs): 50% aid intensity on eligible innovation costs, eligible cost categories.
- GBER Article 29 (Process/Organisational innovation): 50% for SMEs, 15% for large (with SME collaboration); eligible costs mirror R&D project costs.
- GBER Cumulation Rule: Total aid for same project/costs must not exceed allowed intensity.
- Banque de France (2022), evaluation of France's CII (SME innovation tax credit).
- Italy's 2020 Innovation Credit rates (10% or 15% for digital/green innovation) – aligned with EU limits.
- Spain's 12% Technological Innovation tax deduction for process improvements.
- NSAI Ireland on ISO 56000 series benefits for systematic innovation management in SMEs.
- OECD/OPSI on public sector use of ISO 56002 innovation management principles.
- Definition of "organisational innovation" (GBER Article 2(96)) – excludes routine changes.