



IRDG Submission to the Public Consultation on the Research & Development Tax Credit and the Knowledge Development Box

May 30th 2022

Abstract

“We would see the R&D tax credit as existential. We’ve expanded to over 1,000 people over the last few years and are competing with other sites globally (including in the EU). We’re also seeing increasing competition with Hungary copying large elements of Irelands system and France offering up to 30% support in certain areas. For us it’s critical that the R&D Tax Credit is continued to be maintained and enhanced” (Large MNC)

Since its inception the Research & Development (R&D) Tax Credit Scheme has become a central pillar of Irish industrial policy and a critical incentive to deepen the research capacity of firms. It has supported the creation of tens of thousands of jobs, both in R&D and in related activity that otherwise would be located in other countries. The success of the scheme is reflected in the growth of Business Investment in R&D (BERD) which has almost doubled in a ten-year period from €1.7Bn to €3.4Bn and the consequent employment.

In a competitive global environment, the R&D Tax Credit needs to continue to evolve both to meet the ambitions of the state to further double R&D investment by business through to 2030, and to remain competitive in the evolving international landscape. An increasingly competitive global economy, characterised by rapid technological progress, talent shortages, and changing consumer preferences, means the pathways to growth have become ever more challenging. In that context, policies and incentives to support business R&D must continue to evolve and improve. Without R&D investment, Ireland will struggle to remain competitive in a European and global context where investment in R&D is a key requirement to becoming an Innovation Leader. Without this investment we will struggle to produce the talent to attract inward investment and struggle respond to the economic and societal challenges that we face.

By boldly enhancing elements of the R&D Tax Credit, simplifying some of its implementation particularly for Small and Medium Enterprises, and ensuring certainty around its operations we can continue to generate high quality jobs, and meet the global challenge of sustainability we face.

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1 IRDG OVERVIEW

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 thirdlevel colleges, institutes, and R&D centres. This unique combination makes for a very an interesting and experienced network.

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 an annual 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.

We are therefore uniquely positioned to provide insights into the experience of companies with the R&D tax credit and to highlight opportunities for improvement.

2 Background to our Submission

Our submission incorporates

- The original focus of the **R&D Tax Credit** and questions posed by the Department in the Consultation document,
- Our recent submission for the **Commission on Taxation and Welfare**.
- Policy aims of the new whole of Government **R&D Strategy (Impact2030)**.

And is based on

- Extensive consultation with R&D performing companies.
- Detailed R&D surveys with 202 companies.
- Direct conversations and focus group meetings.

The Public Consultation document states

“The Research and Development (R&D) tax credit was introduced in Finance Act 2004. The central purpose of the R&D tax credit is to encourage companies to undertake high-value-added R&D activity in Ireland, thereby supporting jobs and investment here. It supports companies in investing their own resources in R&D activities, thereby stimulating more activity than government resources could support through direct expenditure measures alone.” and

“The purpose of this public consultation is to consider the current challenges facing firms who are active in the R&D space, as well as the implications of recent domestic and international tax reforms for these two reliefs. All input will be considered in the context of this year’s Budget and Finance Bill”

It also states that *“general commentary on the above measures is also welcome”*

IRDG earlier this year submitted a document to Commission on Taxation which asked questions which relate to the R&D Tax Credit including consideration on

“how Ireland can maintain a clear, sustainable, and stable taxation policy as regards Ireland’s attractiveness to Foreign Direct Investment in a changing global taxation environment, including retention of the 12.5% corporation tax rate.”

“review how best the taxation environment for SMEs and entrepreneurs can ensure that Ireland remains an attractive place to sustain and grow an existing business or to start and scale up a new business. (Commission On Tax, 2021)

During the period while this consultation was underway the Department of Higher Education, Research Innovation and Science (DFHERIS) published a whole of Government strategy for Research and Innovation called “Impact2030” (DFHERIS, 2022).

This strategy notes

“Ireland’s enterprise Research, Development & Innovation performance has developed from a base of 800 R&D-active firms thirty years ago with R&D expenditure in the region of €300 million, to an estimated 1,800 R&D-active enterprises spending over €3.4 billion a year.

And that

“Failing to keep pace with other small advanced economies in terms of investment in R&I represents a significant risk to the competitiveness of our economy, to our labour market productivity, to the growth of high-value employment, to our attractiveness to FDI and to our global standing as a ‘strong innovator’.

In Impact2030 the Government sets out a target to double the business investment in R&D (BERD). This includes targeted increases of 25% to €4.2 billion by 2024 and to double the 2020 figure of €3.4 to €6.8 billion by 2030 (DFHERIS, 2022).

IRDG considers the R&D Tax Credit Scheme as a central pillar of industrial policy and a critical incentive to deepen the research capacity of firms. We regularly survey members on their views and experience with the scheme. In addition, we regularly conduct focus groups with SME and large company users of the scheme.

IRDG’s submission is informed by the following:

- A new survey of 202 RDI-performing firms across a wide variety of sectors on the subject of the Consultation.
- Reference to a number of previous surveys with members in relation to R&D and the R&D Tax Credit.
- Focus group consultation with SME and large company members around the specific terms of reference of this review.
- Individual consultations with members who benefit from the scheme.

This response includes quantitative data from the survey and direct quotations from both the survey and focus group consultations and individual conversations.

We believe our submission represents a well informed and practical view of the R&D tax credit scheme, reflects on the aims of the Commission on Taxation and Welfare and will help underpin elements of the Impact 2030 Strategy on Research and Innovation particularly pillar

This work builds on previous submissions and consultations including submissions to the 2019 R&D Tax Credit Review, the National Development Plan, and the Commission on Taxation and Welfare 2022.

3 Executive Summary

- A world class R&D ecosystem is a key determinant of economic development in the 21st Century.
- The R&D Tax Credit has enhanced and developed the Irish R&D ecosystem driving business investment to €3.4bn per year
- General enhancement including increasing certainty will improve the scheme and drive further jobs and investment
- Creating a 50% Green R&D Credit and improving the 25% rate to 30% would be bold moves to position Ireland as a global centre of R&D
- Reducing payment to a single year, improving the overhead calculation and harmonising with the grant system can significantly improve the scheme for SMEs.

Research and Innovation are key drivers of economic progress. Research and Innovation will be fundamental to addressing our economic and social challenges such as climate change, digitalisation and public health. Strengthening and deepening the Research, Development, and Innovation (RDI) capacity of business is essential if Ireland is to continue expanding our innovation economy. In the context of changing economic climate and the development of global minimum tax agreements strong and effective R&D tax policy will be an increasingly important pillar of economic development and progress.

Private sector investment in R&D has grown significantly. Over 25 years, Ireland has gone from a base of 800 R&D active firms, with a research spend of €300 million, to almost 1,800 R&D active enterprises spending of €3.26bn in 2019. In that year, Ireland had the highest proportion of Business R&D in Europe, with 75% of our total investment being performed in private enterprises (CSO, 2021).

The R&D tax credit is a key element of Ireland's R&D and wider innovation strategy. The Department of Finance's economic evaluation of the R&D tax credit in 2016 indicated a reasonable level of additionality and a return-on-investment ratio of 2.4 (Finance, 2016). More recent international evidence demonstrates that effective R&D tax credits are a key pillar in driving the growth in private sector R&D.

Academic evidence shows that *“there is a broad consensus amongst academics and policymakers that the allocation of public funding to support private firms' R&D projects is socially desirable”* Mulligan *et al* (2022). The recent evidence suggests that R&D tax credits have a positive effect on private R&D investment with public

R&D subsidies succeeding in stimulating private R&D as Becker (2015) highlights the international evidence shows that *“that R&D tax credits have a positive effect on private R&D investment.”*

IRDG member companies have communicated the same message stating strongly that the R&D tax credit has been and continues to be instrumental to future RDI and investment plans across their businesses. They see it as a key support element to enable businesses to take the risks and progress innovation. It is instrumental in future-proofing their business and delivering high quality sustainable employment in the economy.

At a global level it enables Irish based multinationals to compete for investment with their peer companies where the investment by the company is location agnostic and could go to any number of locations e.g US / Ireland / Other EU / India. The development of R&D Capability in Ireland also underpins and enhances existing employment – R&D carried out here leads to significant additional jobs. In one case with over 1000 regional non R&D jobs based on R&D carried out here, jobs which would be located elsewhere if the R&D was carried out elsewhere.

In the document below we address the key questions asked in the consultation on the R&D Tax Credit Scheme and the Knowledge Development Box and suggest a number of enhancements to the existing policy that can further improve the scheme and deliver on State policy aims.

The scheme is available to all firms irrespective of size, but the one-size-fits-all regime does not make allowances for the different challenges an SME has with the scheme. In the spirit of continuous improvement, a number of changes are proposed to make the credit more attractive and accessible to SMEs. These include:

In the spirit of continuous improvement, various enhancements are proposed to make the R&D tax credit scheme more effective. These are focussed on creating certainty of the regime to underpin increased business investment, a particular challenge, and to improve the clarity and simplicity and effective operation of the scheme. Our proposals include several general improvements across the scheme as well as specific support for SMEs, which the Dept of Finance has itself highlighted as problematic. This group including early-stage technology companies, more mature small and medium enterprises and High Potential Startups (HPSUs).

3.1 General enhancements

- **Increase Certainty of application of the scheme to encourage risk taking and investment** - A centralised Revenue unit dedicated to R&D tax credit claims and audits, resourced with sector-specific technical assessors already available within the state agencies to bring greater clarity and consistency to the claim and audit process will help increase certainty around the scheme
- **Reduction of Audit Window** - Reducing the audit window from four years to two years would bring greater certainty around the claim and facilitate confidence to reinvest faster without fear of clawback.
- **Create a specific 50% credit for investment in Green Energy and Climate Technology** – the limited evidence available suggests that there is a low level of this type of R&D being carried out suggests a distinct market failure which specific credits could address
- **Increase the general R&D Tax Credit to 30%** This would overcome the challenge of implementing a higher rate for SMEs, would encourage overall investment and job creation and position Ireland as a global centre for R&D.
- **Standardise Guidelines for Incurred expenditure for the purpose of R&D including Rent in included** – Recent revisions to Section 4.1 of the Guidelines

by Revenue removed rent used for the purpose of R&D which disadvantages companies that rent rather than own their premises.

3.2 SME specific enhancements

- **Payment of Credit** - Enhance the value of the credit to smaller non tax-paying companies by paying out the credit over a one year period instead of three years and
- **Overhead Calculation** - Adopt the practice used globally by R&D funding agencies to fix an overhead rate relative to direct costs. This would cut the administrative burden and uncertainty for SMEs.
- **Better Harmonisation Between State RDI Grants and R&D Tax Credits** - The exemption of additional technical audit review for companies holding certain R&D grant awards has been a welcome addition to the scheme. Extending the exemption to include medium size companies and the limitation of the claim to €100,000 would significantly reduce the administrative burden of managing grant awards and claim documentation.

4 Irish Investment in R&D

- § Irish investment in R&D has grown significantly over the last decade driven primarily by Business Investment.
- § Business considers the R&D Tax Credit a key driver of investment to date, job creation and future investment plans. ▀ In the last five years our performance on international innovation indices has declined in relative terms illustrating competitive challenges.
- § We face increasing international competition for investment.

Overall Irish Gross Expenditure on R&D (both public and private investment), termed GERD, has increased every year from €2.56bn in 2011 to an estimated €4.6bn in 2020. Overall business expenditure on R&D (BERD) has increased from €1.7 Bn in

2011 to €3.4bn in 2020. Fig 1 below from Government Budget Allocations for Research and Development (R&D) 2021 published by the Department of Further and Higher Education, Research, Innovation and Science illustrates the general trend (DFHERIS, 2021).

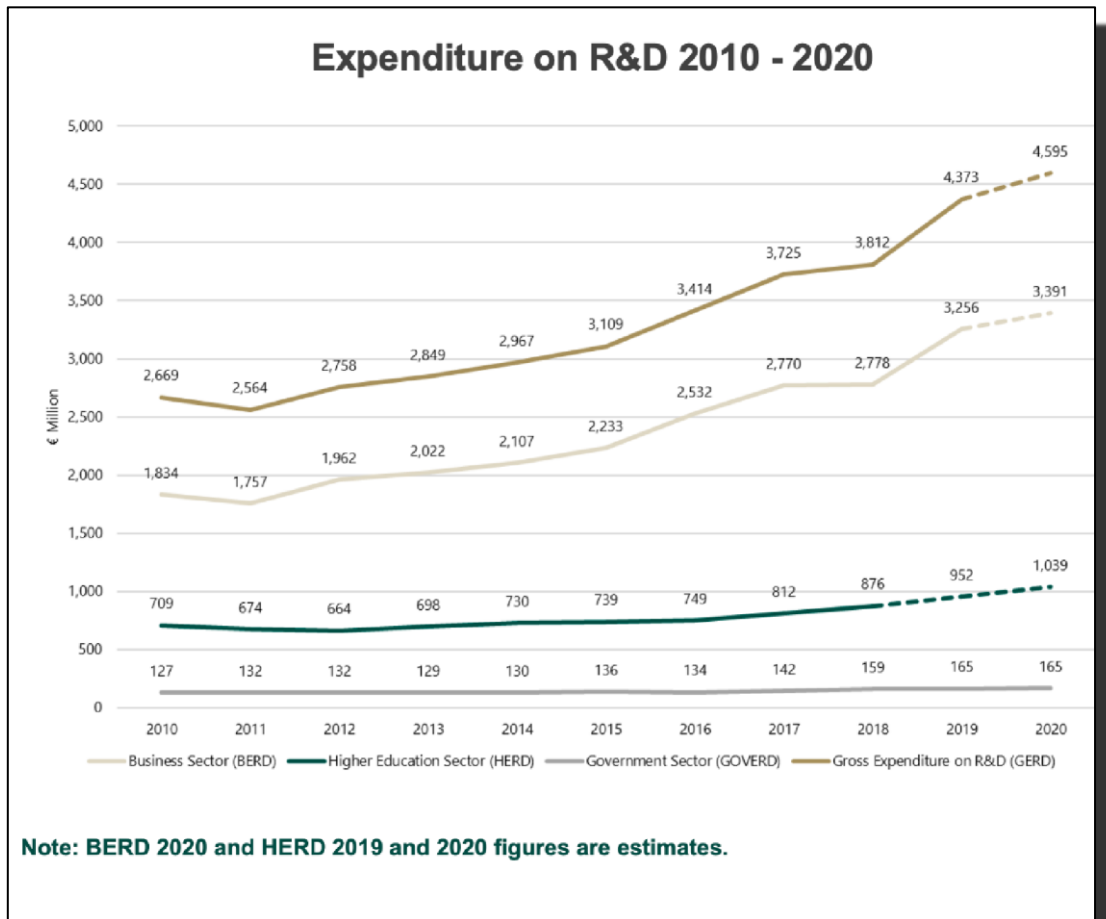


Fig 1 : General Expenditure on R&D (GERD)

A closer look at the recent statistics on overall investment in RDI – General Expenditure in Research and Development (GERD) reveal that business expenditure on R&D (BERD) accounts for 75% of the total the second highest in the EU as illustrated in Figure 3 below.

The overall success of the scheme can be seen in the impact on business R&D intensity in Ireland. The OECD (2021) notes that “from 2006 to 2019, total government support for BERD as a percentage of GDP increased in Ireland by 0.13 percentage points (pp), while the OECD average increased by 0.05 pp. During this period, business R&D intensity in Ireland **increased significantly** from 0.79% to 0.91%”

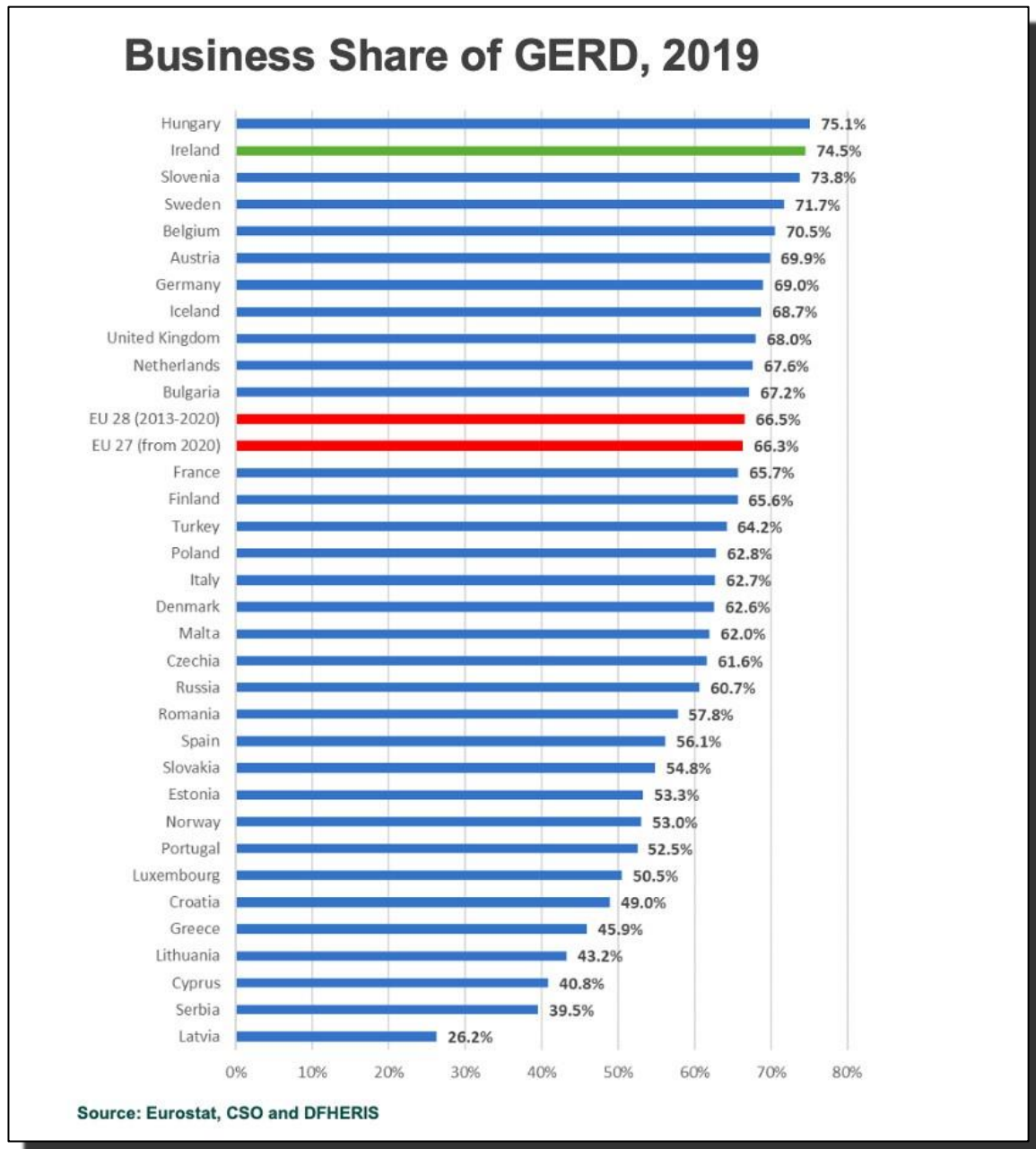


Fig 2 : Business Share of R&D Expenditure

The R&D Tax Credit has been critical to driving this growth.

“We find the tax credit a major drive for more R&D investment in Ireland” - Regional MNC

“Both R&D Tax Credits and Other Funding instruments are important in the overall suite of available budget to drive continued and disruptive RD&I within our company. They ensure a sustained and regular output of IP to underpin our best in class R&D and maintain our competitive advantage in the market.”

Regional MNC

In our survey 80% of respondents indicate that it has allowed more R&D to take place, for over 80% of respondents it has encouraged more investment, and for over 75% it has driven more employment. (Fig 3 below)

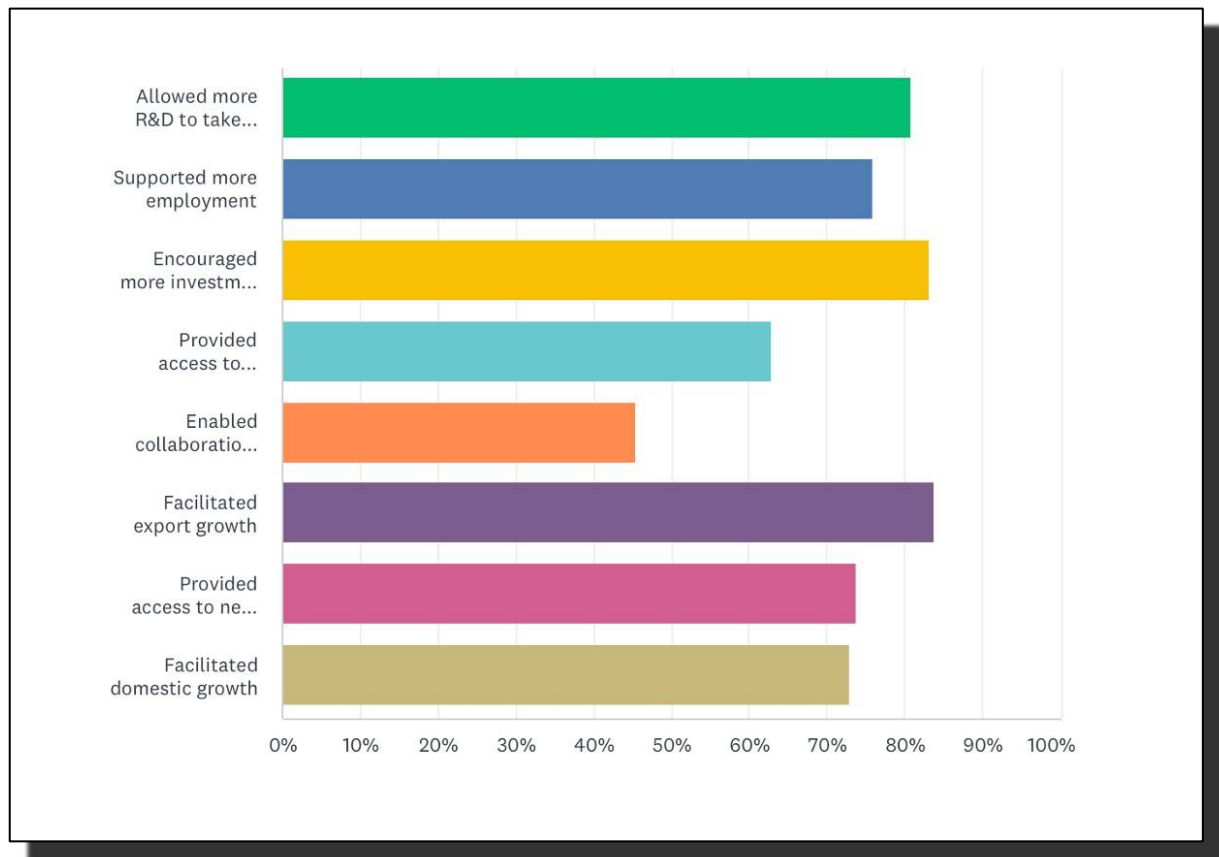


Fig 3 How R&D Tax Credit has impacted Irish business.

Businesses will continue to invest in R&D in coming years with over 70% expecting an increase in R&D over coming three years.

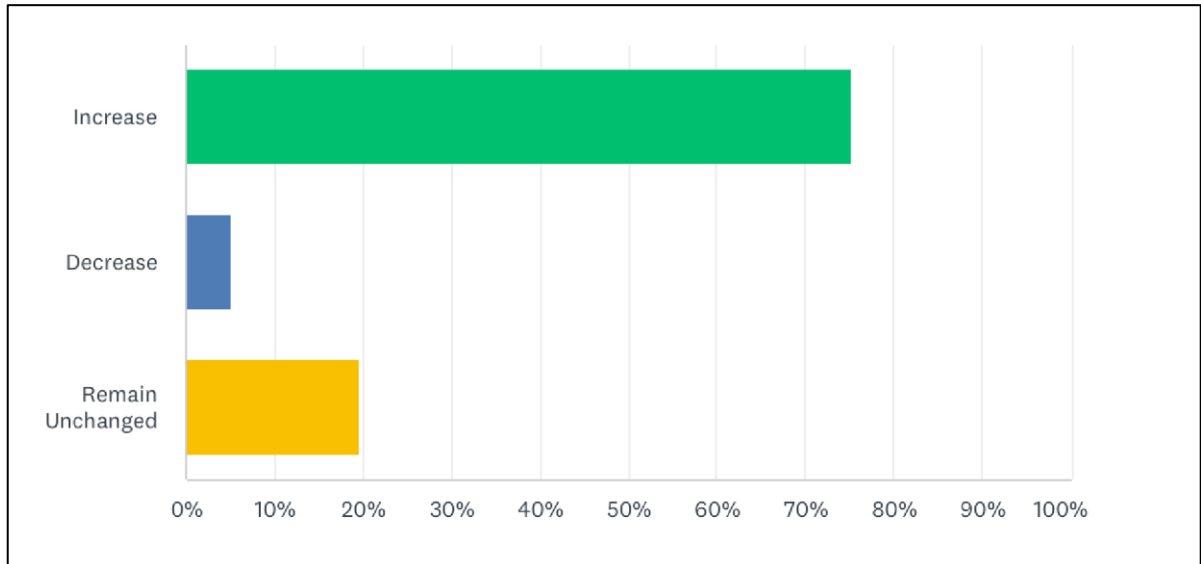


Fig 4 Business Plans on R&D Investment over the coming three years.

This investment is expected to drive growth in staff in all companies investing in R&D with other areas seeing significant investment.

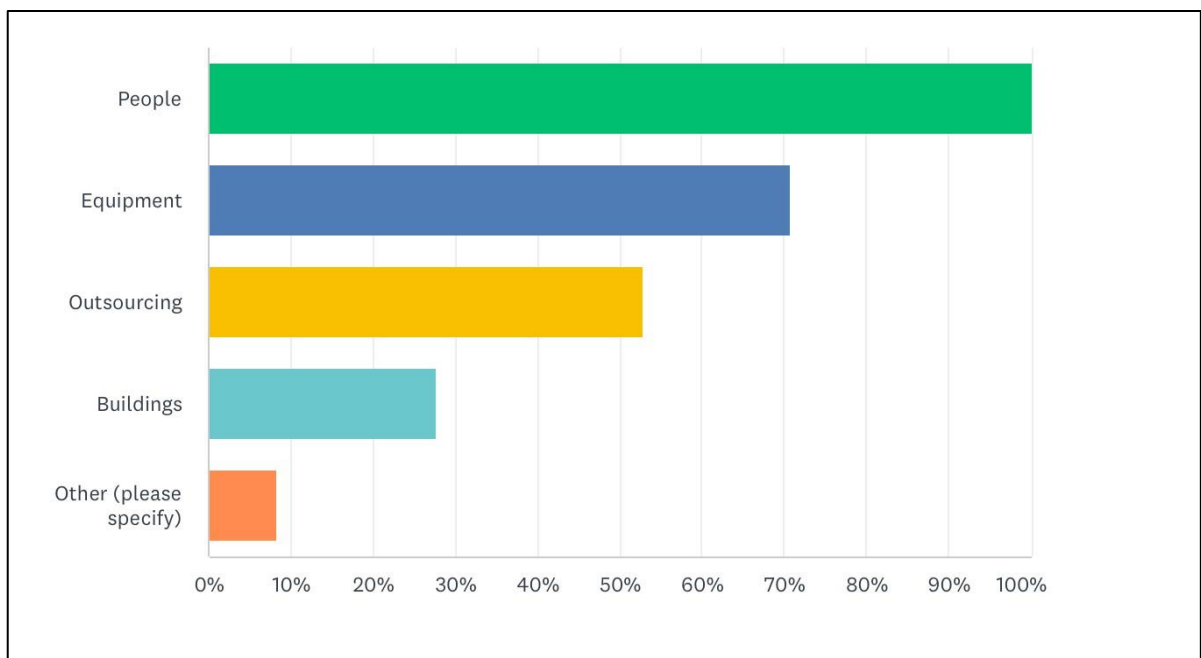


Fig 5 Where Business expects to invest in R&D in coming three years.

With over 90% of companies stating that R&D Tax Credit are very important or important to these investment plans.

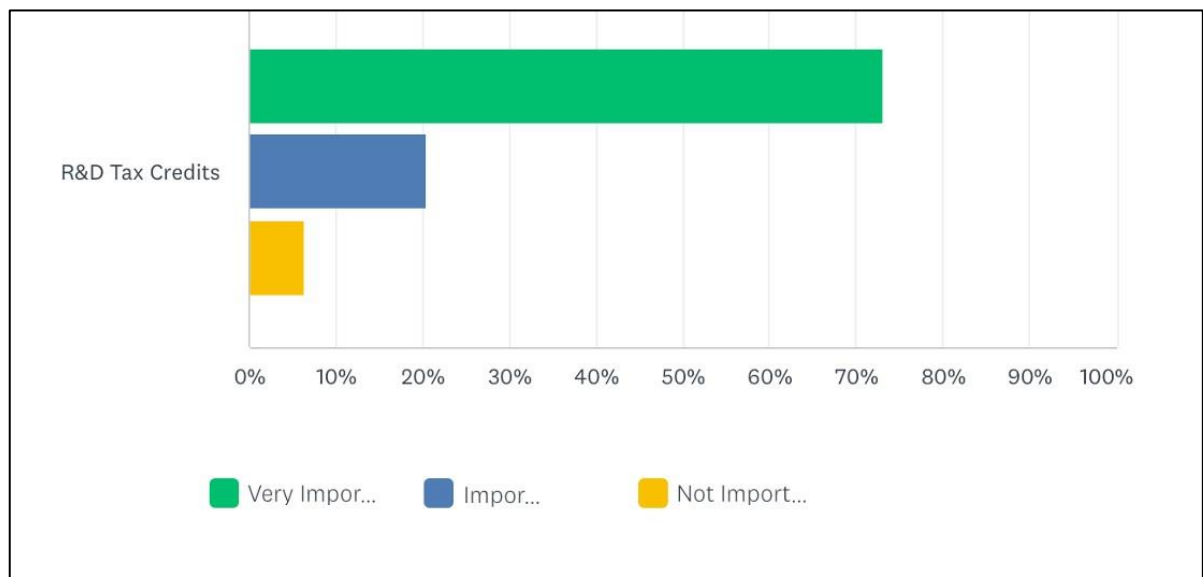


Fig 6 Importance of R&D Tax Credit to future R&D Investment plans.

“Once we are through the initial growth sprint, to maintain and grow the business, these supports will become increasingly important in persuading senior leaders to invest - Ireland is a High cost area, compared with other regions of the world” - Large MNC

Business investment in R&D takes place in a national and international context. The unanimous view from members over a number of years is prioritisation of increased government support for and investment in research and innovation. Its also important to consider the evolving international landscape.

Although Ireland is classed as a “*Strong Innovator*” on the 2021 European Innovation Scorecard (EU, 2021a) placing 11th overall, the country has a significant amount of work to do before it is placed in the top tier of “*Innovation Leaders*” alongside comparator countries such as Sweden, Finland, Denmark and Belgium. Of

particular concern is that “Over time, performance relative to the EU has decreased strongly, in particular in the last three years.” (EU, 2021b).

This is also reflected at the global level where on the Global Innovation Index Ireland performance has declined from 10th in 2017 to 19th in 2021 (see Figure 7 & 8 below).

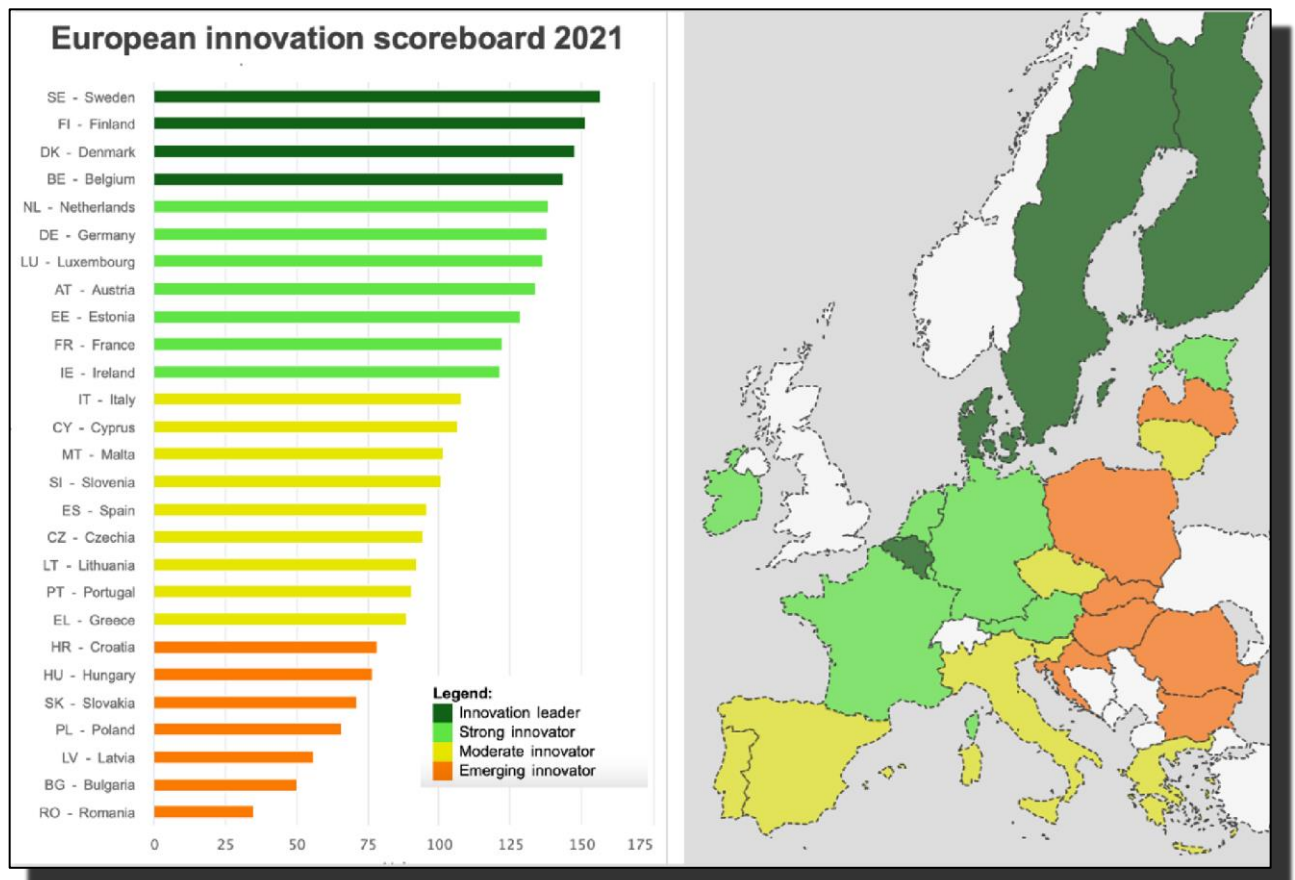


Fig 7 : Irelands Innovation Performance European Innovation Scorecard

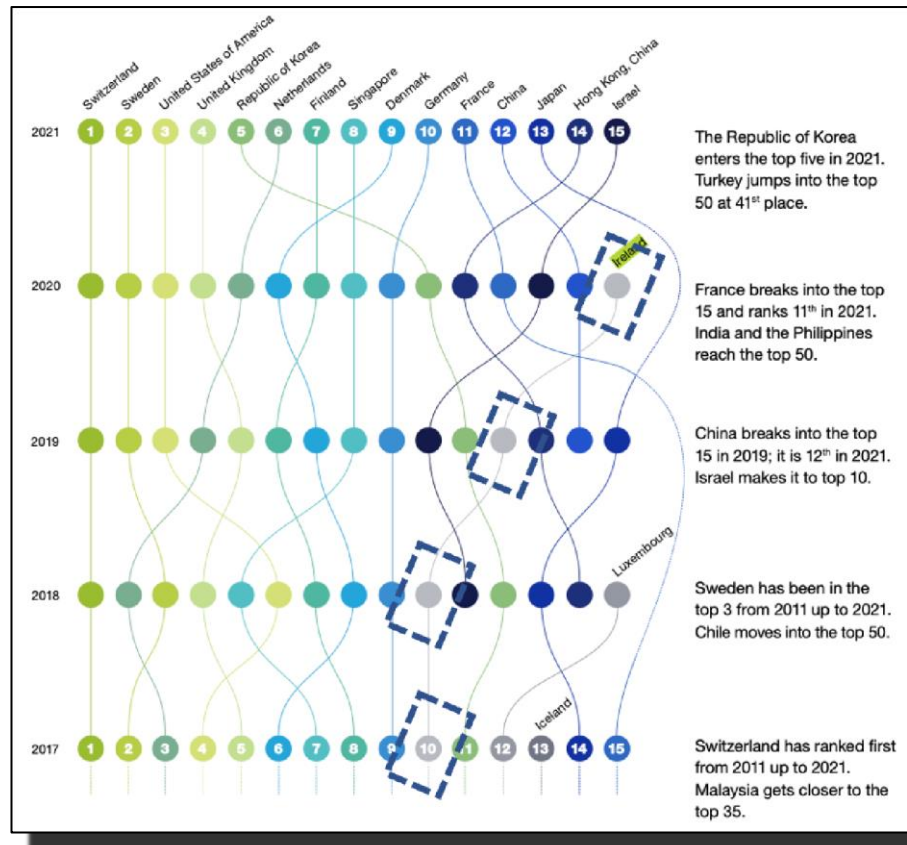


Fig 8 : Ireland's Innovation Performance Global Innovation Index 2017-2021 (WIPO)

This is recognised a challenge in the national R&D Strategy Impact2030 which notes

“While Ireland’s overall investment in R&I has increased in the past decade, our current position as a Strong Innovator on the European Innovation Scoreboard is at risk of being overtaken by other EU Member States, as they improve and invest in their R&I systems. Ireland is no longer one of the ten most innovative Member States, having slipped from sixth place in 2016 to eleventh place in 2021. Likewise, a similar performance can be observed in the Global Innovation Index where Ireland’s position has fallen from seventh place in 2016 to nineteenth out of 132 countries in 2021.”

From 2012, government budget allocations for R&D have hovered below 1% of total government expenditure only growing above this in 2019. This falls well below the EU target of 1.34%. In other terms the GBARD (the Government Budget in R&D) whether compared against GDP, GNP or the Governments preferred measure of

GNI*¹ in percentage terms is significantly behind 2010 (a decline from .64% of GNI* to .43% across that decade). Total Government expenditure would have been 50% higher in euro figures in 2020 if it had expended the same % on R&D in 2020 as it did in 2010.

It is also worth noting that the UK is committing to the fastest ever increase in domestic public R&D spending, including in basic science research to meet their target of 2.4 per cent of GDP being spent on R&D across the economy. Similarly, Germany will spend 3.5% of GDP on research and development by 2025, above the EUs 3% target and significantly ahead of Ireland.

Addressing this deficit will help narrow the public and private investment gap relative to our competitors. This in turn will help chart Ireland's course to a knowledgebased economy, one that drives research and innovation, develops talent, creates high-value jobs and pushes the country forward both socially and economically.

Ireland remains highly dependent on the pipeline of FDI companies whose investments in RDI, along with those of larger indigenous companies are highly mobile. Ensuring Ireland retains its attractiveness as an RDI destination will be of critical importance particularly in comparison to the UK that is aggressively improving its international positioning. The R&D Tax Credit has been a key part of this growth in Business R&D and is a key to its continued growth and will be central to achieving the government's aim of Business Expenditure on R&D of €6.8 billion by 2030.

5 Improving the R&D Tax Credit

¹ GDP measures the total output of the economy, the total income remaining with Irish residents is the GNP, GNI adjusts domestic incomes for subsidies from and taxes paid to the EU. (DFHERIS, 2021)

§	Cost and value of carrying out R&D are key considerations for mobile capital	
§	Significant numbers of non R&D jobs arise because of R&D based in Ireland	
§	In the absence of the credit tens of thousands of R&D and non R&D jobs would be lost	
§	Jobs arising from R&D are extremely highly skilled	▪
	SMEs have specific challenges in Risk and Uncertainty	
§	Specific SME related changes can improve uptake and value of scheme to SMEs	

5.1 Risk, Reward and Mobility of Investment

Investment is a continuously mobile and globalised phenomenon with ever increasing competition. In March 2022 Intel announced investments of over €80billion in Europe. While the investment in Ireland of €12bn is welcome, building on investment to date of €18bn, Ireland effectively finished third in terms of Intel's investment with investment of an initial €17 billion euros into a leading-edge semiconductor fab megasite in Germany, to create a new R&D and design hub in France, and to invest in R&D, manufacturing and foundry services in Ireland, Italy, Poland and Spain.

Academic research shows that internationally *“such R&D projects are risky, often have very long time horizons, and may have inadequate expected private returns to incentivise firm-level investment in the absence of public funding.”* Mulligan et al, (2022) and Clausen (2009).

The nature of risk is recognised in the Revenues R&D Tax Credit Manual (Revenue, 2021) where to avail of an R&D tax credit a company must be engaged in “scientific or technological advance will always involve the resolution of uncertainty”. The risky nature for SMEs is explicitly recognised by the Dept of Finance review of R&D tax credits (Finance, 2016) *“In addition, we did not find evidence that the tax credit scheme is effective in encouraging R&D in younger firms, which suggests other barriers to conducting R&D for this type of firm should be examined in greater detail, and public policy tailored appropriately.”*

5.2 Key considerations on basing R&D activity in Ireland

RDI is largely about risk, and the cost of development versus the potential rewards. In making R&D decisions, both SMEs and large companies consider the total package of financial incentives available in Ireland. Equally important also is the availability, quality, expertise and cost of R&D talent. This is becoming a more pronounced issue as the labour market tightens with companies reporting the need to hire from outside the EU/EEA or engage additional contracted resource. Over 80% of companies recognised talent as a growing challenge.

Ireland's continued progress in R&D activity is evidenced by the increase in business expenditure in R&D from 2011 to 2020 growing from €1.7Bn to €3.4Bn (CSO, 2021). A similarly positive outlook is indicated from the IRDG survey of 202 RD&I performing companies where 75% expect an increase in R&D expenditure in next 3 years. (Despite Covid R&D Expenditure increased in 68% of firms over the previous three years.)

Of particular note 85% of companies noted that there are additional jobs/investment dependant on the R&D activity being carried out in Ireland.

The globalised nature of the R&D investment and internal competition for investment is reflected in comments from our members

"The R&D Tax Credit is very important to our company and its operations. From a corporate perspective Ireland is competing with other countries for work. Internal US teams are closer to corporate but are more expensive. Other locations can be cheaper, but the R&D tax credit makes Irish based activity more cost competitive to moving it off shore. Once the tipping point is hit then corporates will look to more lower cost based economies". (Large MNC)

"We are growing R&D in Ireland. Its grown form 10 in 2008 to over = 150 today and we're doing this vs internal competition. We are benefiting from R&D tax credit for qualifying expenditure (we are conservative on same but very happy with application so far which we cycle back into additional R&D rather than driving P&L). R&D

has also helped to underpin our hundreds of jobs in general operations here which have grown over the last decade.” (Large MNC)

“Cost is king. You need the overall quality of the environment and you need the talent but cost is ah hugely significant factor in the decision of where work gets done, either within the US or across our other global sites. Ireland is effectively competing with lower cost countries and the value of tax credits for qualifying work helps us considerably

in these competitive bids”. (Large MNC)

“Both R&D Tax Credits and Other Funding instruments are important in the overall suite of available budget to drive continued and disruptive RD&I within our company. They ensure a sustained and

regular output of IP to underpin our best in class R&D and maintain our competitive advantage in the market”.

(Large MNC)

“R&D Tax Credits instruments are important in the overall suite of available budget to drive continued and disruptive RD&I within our company. They ensure a sustained and regular output of IP to underpin our best in class R&D and maintain our competitive

advantage in the market”. (Indigenous Medium Enterprise)

“We’ve grown our operations in Ireland by over 50% over the last

few years to over 1,500 staff. This is on the back of our reputation for doing high quality work within the company globally. The R&D Tax credit is a significant factor in this. The combination of tax credits, grants and collaboration project funding helps us build a very strong and cost-effective R&D proposition to our US owners. We've increased our collaborative funding to about 70 researchers and will continue to grow this with the increased limits on outsourcing. While the tax credits help differentiate us from the US the really important part is that it encourages emerging technology type work and allows us to bolster our capability here". (Large MNC)

"The access to the R&D Tax Credit here in Ireland underpins the financial decision to keep our RD&I facility here and moreover, underpins the recruitment of world-class R&D scientists and engineers in Ireland from both a national and international skills base". (Indigenous SME)

"The R&D tax credit works well for our company and has helped to secure significant R&D work for the Irish operations in the past. We are establishing R&D centres in Ireland in the Medtech area which would not have happened without the R&D tax credit". (Large MNC)

Notwithstanding the importance of the R&D tax credit as an incentive to conduct and develop RD&I activity, issues around the implementation of the scheme and the audit process are a cause of concern for some companies and certainly taken into account as they consider their R&D plans:

Indeed, these issues were a cause for one SME we are aware of to relocate much of its R&D abroad. This indigenous software SME, invests heavily in R&D each year and creates high value jobs and exports with a global market focus.

"Too much work and risk for too low a return – a return spread over four years. Despite continuing to invest heavily in R&D

*(€8m), we have moved much of this R&D to other jurisdictions”
(Indigenous SME)*

For indigenous companies’ cost will also be a consideration for future development

“Our current infrastructure means that we are conducting all our R&D activities on the island of Ireland so they are all routed through the Irish system. However, we have recently completed

the purchase of a large facility in the UK. We plan to develop laboratory space to allow us to leverage the best supports available to us” (Indigenous SME)

The importance of the R&D tax credit scheme as a key incentive to support R&D activity is reflected in the high take-up rate amongst all survey respondents (89%) which exceeds that for other RDI grant incentives from Enterprise Ireland and IDA

Ireland (51%). It is considered significantly important by 63% of companies for their future R&D plans which will allow them to futureproof their business, service existing and future markets, create and maintain employment.

5.3 Loss of the R&D Tax Credit and R&D Activity

In the absence of the R&D tax credit, members reported a number of scenarios:

- For some indigenous SMEs, the likelihood is that R&D would stay in Ireland but less activity would be performed. As these companies develop international operations it is likely that R&D would be shifted to these other locations with knock-on impact on other jobs.
- Others reported that R&D would move to lower cost locations either through outsourcing arrangements or to other sites in key market areas. It was estimated that up to 50% of activity could be moved off-shore, with additional jobs shifting as a result of the loss of R&D activity over a number of years.
- For larger companies with competing global sites, the threat of losing R&D activity was highest with figures ranging from 45-65% reported. A number of companies noted it as an existential threat to their operations here.

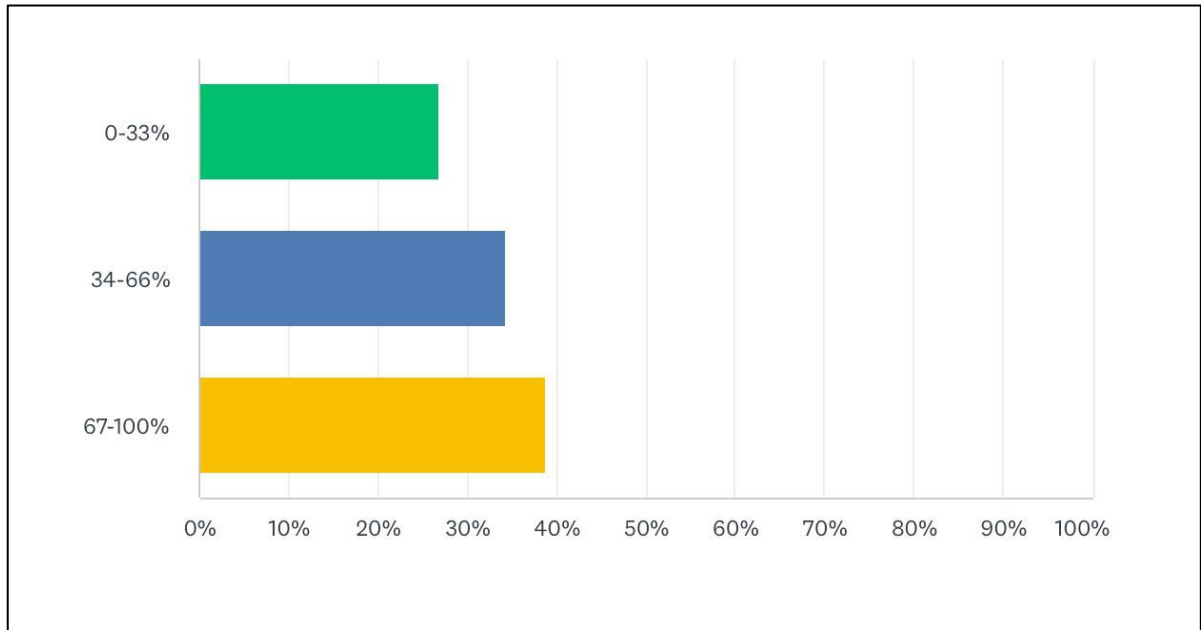


Fig 9 : Impact of loss of R&D Tax Credit on R&D Activity in Ireland

Companies specifically noted that there would be substantial knock-on impacts of losing R&D activity. The overall value of Irish sites would likely decline. One company notes

“We have 50 R&D staff located in Ireland. The R&D has built up over a number of years. We started as a manufacturing site and added R&D later. The R&D Tax Credit has been instrumental in the R&D we’ve carried out in Ireland. We’ve over 1,100 manufacturing jobs in Ireland and 95% of what we manufacture is developed by our R&D team. Without R&D here how many jobs would we have. Its hard to say exactly but probably not more than 200 with most of the jobs following other R&D locations ” (Large Regional MNC)

5.4 R&D In Ireland and Job Increases

A core question asked in the consultation is “In your experience, has your decision to conduct R&D in Ireland resulted in you recruiting additional staff, interns or apprentices?”

The answer to this is an unambiguous yes.

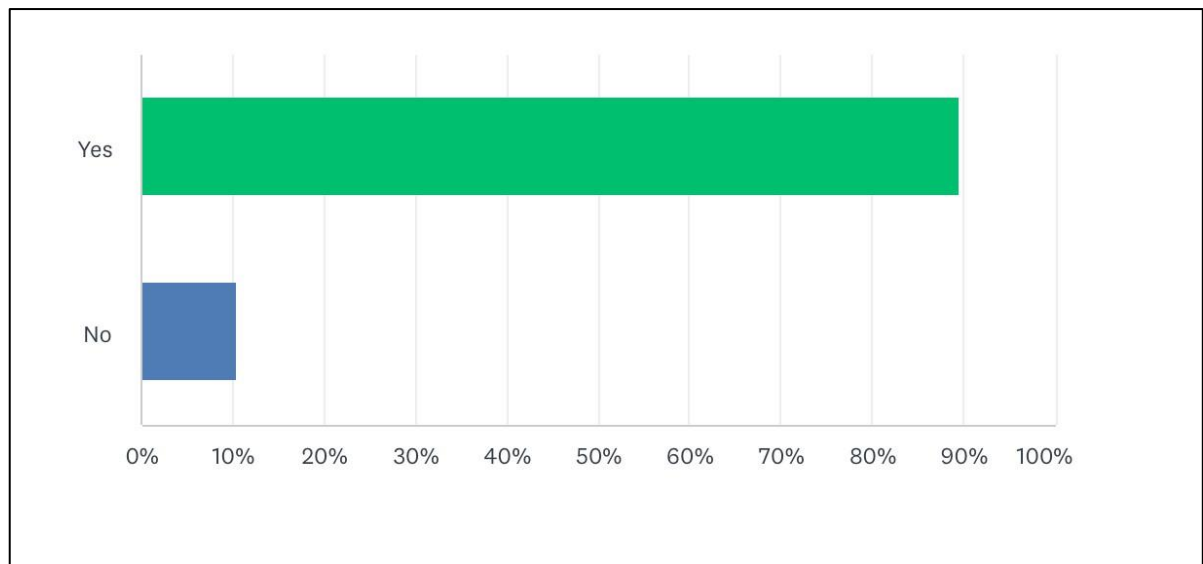


Fig 10 : Has the R&D Tax Credit led to creation of new Jobs ?

Businesses around the world are increasing their knowledge investments which is changing the global RDI landscape. To date 89% of companies in our survey reported that their decision to conduct R&D in Ireland has resulted in them recruiting additional staff, interns or apprentices. The

IRDG survey also indicated that 75% of companies expect an increase in R&D expenditure in next 3 years. Of those, additional spend on personnel was anticipated by 98%.

The rapid pace of change means companies are continually recruiting new talent and skills to support their business objectives. As they explore opportunities to stay ahead of competition, keep up with sophisticated consumer demands, develop novel products, processes and services or enhance existing ones, Irish companies are upskilling and expanding their teams with the talent they need to take their businesses forward.

Overall their investment in R&D is resulting in new jobs and broader competencies in a rapidly changing economy.

Based on feedback from companies, decisions to conduct RDI activity have resulted in significant additional recruitment and investment in Ireland's talent pool.

"The RDTC has allowed me to employ more R&D people in Ireland, without this support my business could not afford to allocate the same resources to future focused R&D" (Indigenous SME)

"Its not just additional R&D jobs. We've a team of about 200 people build up over years. One of our products we've been carrying out R&D on will lead to an additional 150 non R&D jobs over the next 12 months. We never anticipated this when we started the R&D but its been critical to the creation of these jobs and the tax credit was critical to the R&D being carried out as it allowed us to take additional risks" (Indigenous SME)

"100%. We have an excellent internship programme that is highly valued as one of a limited number of process R&D active companies in Ireland. We also are very proud of our retention rate of those interns. We are currently in a significant employee expansion phase, including apprenticeship and graduate programmes to support both R&D and Manufacturing roles". (Indigenous SME)

"We need new staff and apprentices so we can conduct R & D and are continually recruiting and developing for the same."

“Absolutely the R&D credit claim can and does fund a number additional roles each year as we reinvest into R&D rather than taking the credit the P&L” (Large, MNC)

“Initially we were a pure manufacturing site, we’ve now moved up the value chain and our team ranges from production engineers to PhD. We’ve worked with one of the Universities to develop PhD training as we’ll continue to grow that side of the business”. (Large MNC)

“20 years ago we were packing boxes. Now we’ve Masters level engineers programming robots and teams carrying out R&D. The numbers of people we employ has grown and the skillset required of those has grown exponentially”. (Large MNC)

“The R&D tax credit allows us to continue to grow our R&D team from a global base of early stage researchers to subject matter experts with and without industry experience”. (Indigenous SME)

“The key benefit of the tax credit is that it attracts the right type of work here. When that new work is placed here, this early development/research work feeds in to help sustain and grow the established development teams already here”. (Large MNC)

It was also noted that the structure of the Credit mitigates against the rate of hiring by some SMEs

“No; it has not as you don’t get the cash upfront it is after the event. You could not rely on the tax credit as a means to hire more staff. This should be explored as an areas to encourage more uptake and could lead to additional employment
(Indigenous, SME)

Many companies are also proactive in ensuring a future pipeline of talent through different measures including:

- internship offerings to both undergraduate students and 4th level researchers, many of whom are subsequently employed
- bespoke Masters programmes and Masters conversion courses in collaboration with academic institutions
- development of PhD programmes and PhD level training
- engagement with apprentice programmes, e.g. the laboratory apprentice programme
- co-funded courses with Skillnet Ireland networks around the country

These are important indicators for the success of the R&D tax credit scheme as job creation from new innovations is a key driver in a knowledge economy. A strong and sustainable knowledge economy is built on people and skills and some companies are taking a longer-term, strategic view to enhancing STEM in society through engagement programmes with primary schools, hosting transition year students and offering bursaries to leaving certificate students.

The highly educated nature of employees engaged in R&D is reflected in the answers to the question in our survey of What percentage of R&D employees have a PhD or third level science or engineering qualification?

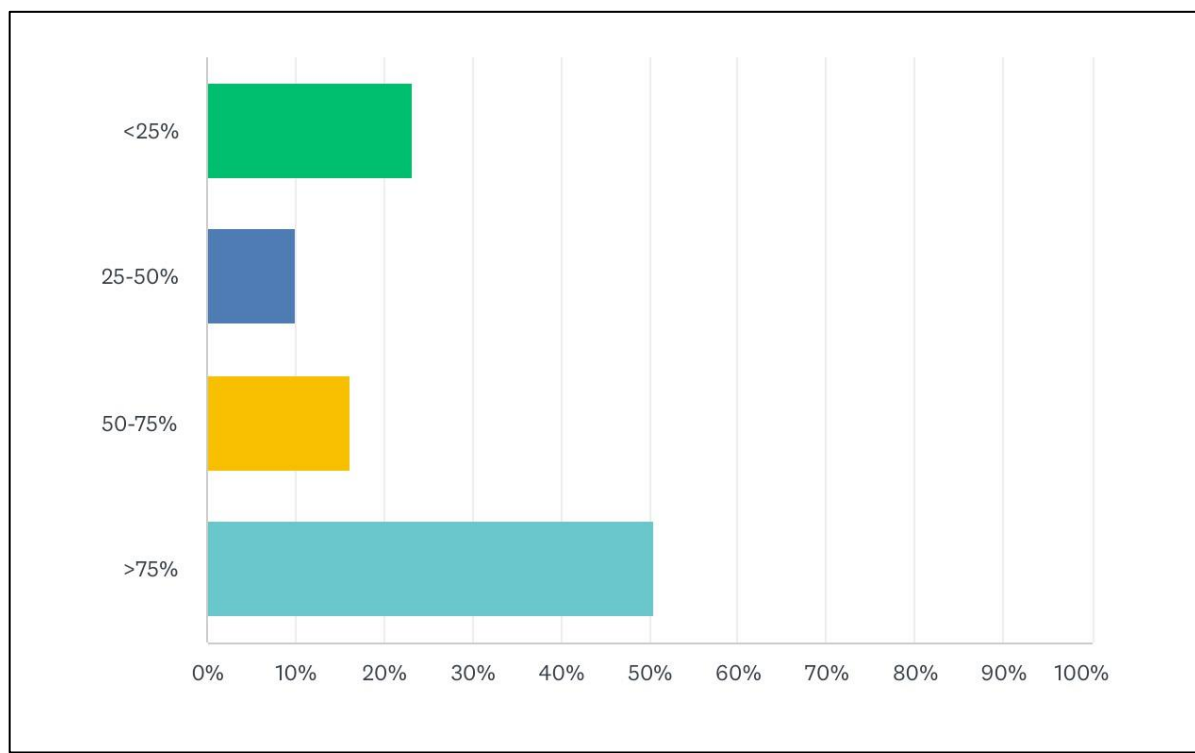


Fig 11 : Percentage of R&D employees have a PhD or third level science or engineering qualification

The rates of PhDs amongst R&D staff varied with 50% of companies reporting over 75% of their R&D staff were qualified at PhD level or had a third level science or engineering qualification.

5.5 SMEs and the R&D Tax Credit

Research shows there is growing evidence that public subsidies can be particularly effective in increasing R&D of small firms, which are likely to be more financially constrained. Noting that “Small firms have, for instance, less collateral in terms of existing assets to be used for obtaining loans, and as a group they are likely to include more young firms” (Becker, 2015). Though a previous Department of Finance review has found lower take-up among younger, smaller firms (Finance, 2016)

IRDG’s survey findings and focus group consultations identified the main issues for low uptake or non-uptake of the credit by SMEs. Specifically, for SMEs, the following were provided as the top three reasons:

1. Do not believe the work we are doing will qualify
2. Do not have the resources to complete the documentation involved
3. Cost of external assistance to help process claim

5.5.1 Uncertainty and the R&D Tax Credit

The main constraint to companies availing of the R&D tax credit is the perception that the work undertaken will not qualify as eligible activity. Uncertainty around definitions and the guidelines underpin this perception, and this discussion features on every occasion when we host our seminars or clinics (25% of all survey respondents believe the current guidelines do not provide sufficient clarity on the process with the majority of these respondents being Indigenous SMEs).

“Sectoral specific guidance is needed. Not just for software, but for other industries - construction, manufacturing etc. “
(Indigenous, SME)

“Sectoral specific guidance and closer alignment to the OECD Frascati manual. Ireland has not provided sectoral specific guidance by the Revenue Commissioners, and as such we have seen clouded judgements on R&D (particularly experimental development) at the higher TRL levels. Providing examples (for e.g.) to Engineering companies on the distinction between NPD and R&D, and how to think about R&D in the context of developing prototypes through to production trials, and particularly when R&D starts and finishes”. (Indigenous, SME)

“The uncertainty of qualifying expenditure has led to under claiming expenditure. Some expenses like telephone and communications being excluded from expenses, seems odd and adds to the uncertainty.” (Indigenous, SME)

“Fear of attracting audits and the cost of this for a SME can sometimes wipe the benefit of the credit. Better clarity on what qualifies would help and also then if there is an audit like event that it can be done in a more efficient manner” (Indigenous, SME)

“The continued revisions of Revenue guidelines make it challenging to "forecast" changes into the credit impact into annualised budgets for R&D activity, particularly for companies who consider the credit

above the line. Fully appreciate that the pandemic led to very positive supports for companies for early submission to support cash remittance, but mid-year high impact changes to guidelines (e.g. rent) had a very significant impact to many SMEs. A standard 2-year revision to guidelines (with exception to OECD-necessary changes) would be preferred.” (Indigenous, SME)

“We stated this before but as a small food company doing R&D, we have never claimed R&D Tax Credits as it is very unclear what will qualify. There is a feeling that sensory science is not recognised by

Revenue. It would be a big help if guidance on food R&D such as they have in Canada was made available” (Small innovative Food SME)

“The new regulations around R&D tax credits are making it almost impossible for companies to claim. It seems that the only thing that is now allowable is completely blue skies new to the world innovation which is not realistic for businesses that are trying to grow through new sales and hence creating jobs” (Indigenous SME)

At a time when many SMEs, and food SMEs in particular, need to invest in RDI to develop exports in an increasingly competitive marketplace, it is imperative that the R&D Tax Credit scheme is accessible and supportive of their efforts.

Recent changes such as the removal of the ability to include Rent as a basis for claim which had been acceptable up to 2019 increase the uncertainty for companies and make it less likely that companies will avail of the scheme and invest in new R&D capacity.

5.5.2 Cost and Risk of the R&D Tax Credit

R&D tax credit claims also require detailed documentation and the apparent time consuming and onerous nature of the work is another noted obstacle. SMEs most often don't have the luxury of committing dedicated people resources to this task; and so, it joins the list of the very many other things one person has to look after. In practice it displaces the actual work of many companies with Audits being the equivalent of shutting down production lines in software business where staff can spend significant amounts of time preparing of audits.

“We find the process too time consuming and difficult to justify spending time on preparing a submission”. (Indigenous SME)

“Very high burden on a small business to meet the compliance requirements of the R&D tax credit system”. (Indigenous SME)

Allied to that is the opinion that external assistance is required to properly evaluate the level of technical uncertainty, prepare technical reports and confirm eligible expenditure. This is supported by our survey findings which show that accounting firms or specialised R&D tax credit advisory firms are used by the vast majority of claimants for information and advice on the scheme. However not all companies, especially SMEs, have the resources to engage external assistance and this represents another barrier to access the credit.

Finally, the risk of getting things wrong is a serious consideration for many SMEs.

“The risk level of claims for SMEs is very large because revenue can assess interest and penalties which combined can far outstrip the original claim itself. So, from a business risk point of view it is too dangerous for an SME at this point to be claiming. We most likely will not be making any claims for the foreseeable future because of this”. (Indigenous SME)

5.6 Improving the R&D Tax Credit for SMEs

One of the key questions in the consultation is “how to make the R&D tax credit more attractive to SMEs, taking account of EU State aid constraints that would militate against the introduction of a targeted element to the existing tax credit ?”

In our close engagements with both SME and large enterprises, it is evident that improvements can be made to the R&D tax credit scheme that will equally favour all claimant companies.

The scheme is available to all firms irrespective of size but it is clear that a one-size-fits-all regime does not make allowances for the different challenges an SME has with the scheme. Therefore, our recommendations include general improvements and others that are focussed towards SMEs.

In making these recommendations, the view of industry is that the consequential short and long-term benefits of higher-level employment and of increased company exports will deliver significantly more benefit to the economy than minimising Exchequer cost.

Overall improvement focus on simplification of the scheme, reducing the administration burden on companies. Some of the representative comments from members which we expand on below include

“A simpler system that doesn't require unnecessary time to be spent making a claim. For example completing an annual document with the technical and financial information needed just in case a Revenue aspect query might come in over the next four years”. (Indigenous, SME)

“Easier to manage system, an online with templates for populating would be brilliant”. (Indigenous, SME)

““Wholly and exclusively” to be removed as it restricts companies Guidelines specifically tailored to specific industries The audit period length to be reduced from 4 years to perhaps 2 years ” (Indigenous, SME)

“Increase the % Simplify the process. Help with consultants. Allow more items to be claimed that have been disallowed since the process started”. (*Indigenous, SME*)

“I would like to see more take-up from SME's. Like everybody else I'd like to see more clarity around the qualification criteria.

Can't figure out why rent was removed from the calculation!!”

(*Indigenous, SME*)

5.6.1 SME specific improvements

5.6.1.1 Payment of Credit in a Single Year

The R&D Tax Credit has the potential to be a much stronger incentive for SMEs if the cashflow aspect of it could be improved.

It is generally recognised that there is a significant gap between the performance of FDI and indigenous firms in terms of R&I expenditure and activity. While indigenous firms account for over 70% of R&D performing business in Ireland, they account for less than a third of our business investment in R&D (DFHERIS, 2022)

Many SMEs availing of the credits are likely to be in an overall tax rebate situation, yet any such rebate is deferred over three years. In an economy where bank lending, for example, remains quite restricted, deferral of the rebates seriously undermines the intended incentive effect. Shortening this period to one year would give more certainty and be more useful. There is a larger number of claims by SMEs but they make up a small proportion of the overall R&D tax claim so there is likely to be a low impact on the cost of claims. In addition many SMEs don't look to R&D or avail of the credits due to the long payback period and the payback period in many cases mitigates against SMEs hiring additional staff and impacts on their planning. This should provide significant additional cashflow for SMEs and a created a potential outsided impact for SMEs with little impact on the overall cost to the Exchequer as the refunds would be processed over the following two years in any case

5.6.1.2 Overhead Calculation

The credit is calculated on the basis of eligible expenditure and for costs such as staff and R&D materials; this is relatively straightforward.

However, other items of expenditure such as overheads crop up as an issue in determining if they are wholly and exclusively incurred directly in carrying out the qualifying activity. Implementing a regime where a percentage of overhead is allowable in some ratio to the direct R&D costs would minimise the issue and make the credit more accessible to SMEs.

This is a common global approach for R&D funding and is already a feature of R&D grants offered by Enterprise Ireland, IDA Ireland, Science Foundation Ireland and at European H2020 level. Overhead calculation & justification is a major time consumer when constructing R&D Tax Credit claims and can be a significant cause of dispute and uncertainty when SMEs engage with Revenue.

Adopting a long-established and well-accepted practice used around the globe would cut the administrative burden and uncertainty for SMEs.

5.6.1.3 Better Harmonisation Between Enterprise Ireland / IDA Ireland RDI Grants and R&D Tax Credits

The exemption of additional technical audit review for companies holding certain Enterprise Ireland / IDA Ireland R&D grant awards was a welcome recent addition to the scheme. However, limits have been included; only small enterprises can apply and the value of the claim must not exceed €50,000 in the accounting period.

For ambitious small and medium sized companies, who have an Enterprise Ireland / IDA Ireland RDI grant or a DTIF award, a claim would well exceed this amount. Extending the exemption to include medium size companies and the limitation of the claim to €150,000 would significantly reduce the administrative burden of managing grant awards in addition to the claim documentation.

5.6.1.4 COVID-19

Irish SMEs also play a very important role in the health of the economy. Given, the difficulties caused for the entire economy by Covid-19, the payable credits have proved to be a lifeline for many SMEs, providing crucial cash in a difficult time. These payable credit claims have been made in good faith based on companies' understanding of the legislation. Challenges by Revenue to claims, based on their current interpretation (which has as already cited shifted dramatically over time) has led to delays and significant reductions in amounts paid to companies. Again, SMEs need certainty, particularly in the current climate

6 Improving the R&D Tax Credit

- § Increase certainty to encourage risk taking by companies
- § Take bold steps to enhance the credit and position Ireland
 - Create specific 50% credit for investment in R&D related to Sustainability related technologies to significantly increase R&D in this area.
- § Raise the general 25% rate to 30%
- § Enable expenditure incurred for the purpose of R&D is included to create clarity and certainty for business

The introduction of the R&D Tax Credit was a strong strategic step to improve the amount of R&D being carried out, to move Ireland towards a knowledge-based economy and to drive the creation of high-quality jobs and inward investment. This approach has paid strong dividends over the past decade. By enhancing this strategy Ireland can further enhance its R&D environment, deal with some of the key strategic societal challenges we face and further improve our economic base.

6.1 Increase certainty for companies

The need for greater certainty around qualifying activity and expenditure was a common response across all SMEs and large enterprises in the qualitative comments from the survey and the focus group consultations. Only 10% of companies agreed that the current guidelines are clear with 25% believing they are somewhat or not at all clear and 50% stating they are somewhat clear. We've already raised the issue of sector specific guidance in addition there are some measures which will also increase overall certainty for companies.

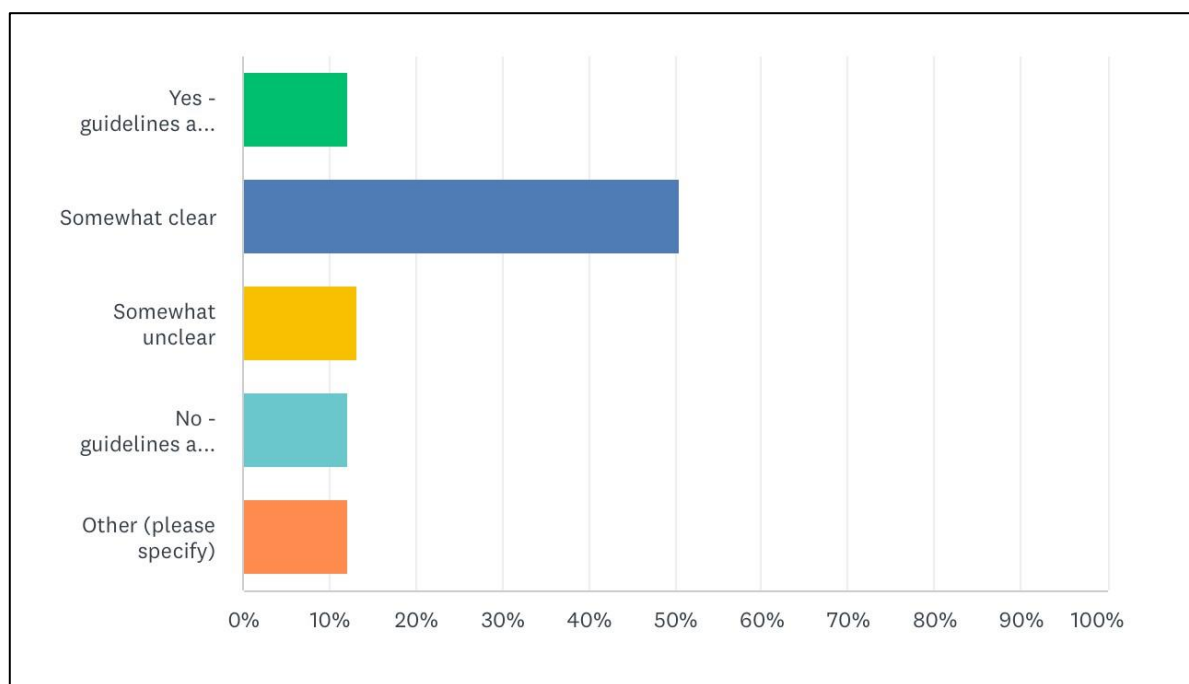


Fig 12 : How clear are the guideline on the R&D Tax Credits?

6.1.1 Technical Experts for Audits

An adequately-resourced centralised Revenue unit dedicated to R&D tax credit claims and audits could be charged with developing clearer guidelines to include sector specific examples of qualifying activity, qualifying expenditure and also a system of indicative pre-clearance of projects. An approach to resourcing this could be to utilise the team of sector-specific technical assessors already available within the state agencies (Enterprise Ireland / IDA Ireland) who are continuously judging the technical merits of industry R&D projects for grant applications.

6.1.2 Technical Experts for Audits

Utilising the team of sector-specific technical assessors already available within the state agencies (Enterprise Ireland / IDA Ireland) for technical R&D Tax Credit audits is recommended. If necessary, this State resource should be expanded. The profile of these technical assessors is much more suitable to industry R&D as compared to many academic assessors who lack the necessary industry experience.

6.1.3 Reduction of Audit Window

Revenue reserve the right to audit a claim up to four years after it's been submitted. This introduces uncertainty for the claimant who's left in limbo about the correctness

of the claim and whether the rebate can be reinvested without fear of clawback. Reducing the audit window from four years to two years would be a welcome development to bring certainty to the process. This is likely to increase the level of

business investment in R&D and can support the States goal under Impact2030 of doubling the Business Expenditure in R&D by 2030.

6.2 Create a specific 50% credit for investment in Green Energy and Climate Technology

IRDG recognises that the biggest single issue facing Ireland and all countries over the next decade and beyond is climate change. IRDG strongly supports the development of an economy grounded in environmental, economic and social sustainability.

In our survey over 80% of respondents believe that a specific R&D Tax Credit Rate of 50% would incentivise increased R&D of Green and Sustainable Technologies. We suggest this higher rate as a strong, bold and substantial step of support to increase R&D in this area in the state.

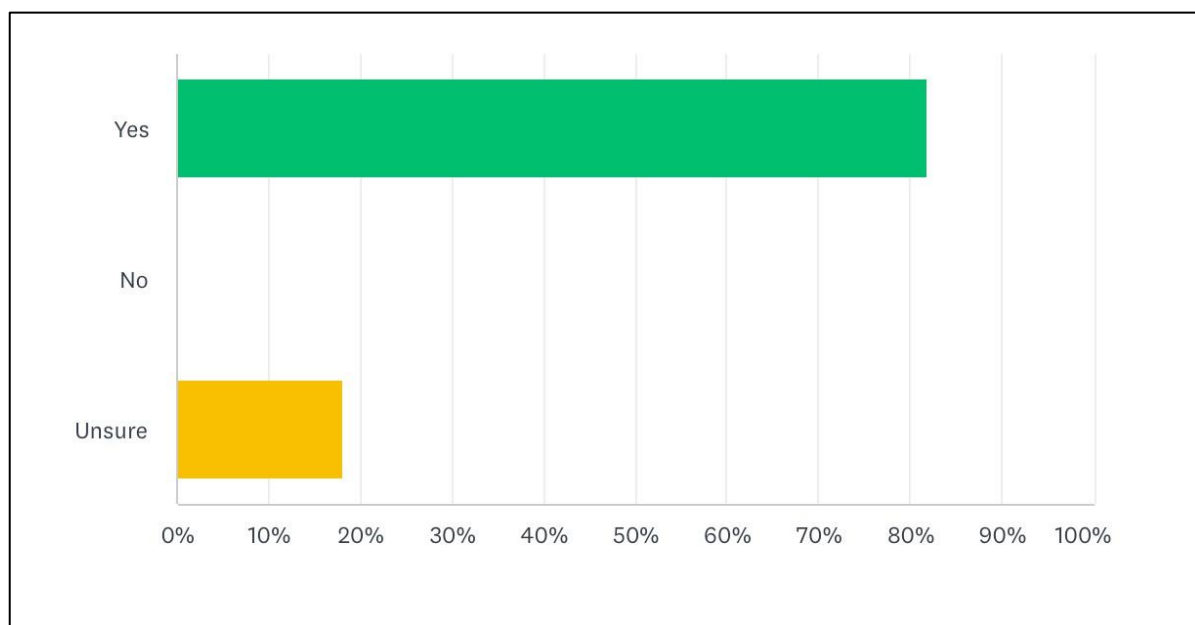


Fig 13 : Would a 50% Rate lead to new investment in R&D in Green Technologies ?

Impact2030 states “Develop innovation solutions to enable all sectors, including our agriculture, construction, transport and energy sectors, to embrace and respond to the challenge of climate change”

It recognises that *“Ireland is committed to transformative action across Government and society to address the climate crisis, to protect our people and the environment and to ensure a sustainable and prosperous future.*

“R&I is an important enabler in meeting our goals. High-quality research is vital in providing a robust, timely and effective evidence-base for policy across all activities and in providing the basis for the product, process, behavioural change and

organisational innovation required in the transformation to a climate neutral and sustainable Ireland. Increasing our resilience to climate change (e.g. increased flooding, drought and extreme weather events) through the development of appropriate adaptation measures will also be key. A decarbonising economy will also bring opportunities. These are clearly emerging in energy efficiency, in renewable energy, in resource recovery, in the circular economy and bioeconomy, and need to be systematically developed through research and innovation. “

The twin transition to a green and digital economy represents a huge opportunity for Ireland. Sustainability challenges will provide enormous opportunities and challenges for companies to drive innovation as they seek to re-invent products and services in line with stakeholder demands and climate limitations.

New constraints will demand a different approach to design, and will shape how key resources such as energy, carbon, water, raw materials and waste are used in products and processes.

Research professionals are facing increasing pressure to develop innovative solutions that both urgently decarbonise their operations and successfully decouple future industrial growth from the consumption of diminishing natural resources. A paradigm shift is occurring as environmental risk is transferring into identifiable economic and financial risks.

While this transition will be led by Irish enterprises, the requirement for conditions that facilitate the development of innovative technical and non-technical solutions (Research) as well as their transfer and uptake by enterprises (Innovation) will be critical to address the challenges faced. Without a sustained national investment in research & innovation Ireland will be reliant on technological solutions and expertise from outside the country, thereby reducing our competitiveness both at home and abroad.

The limited evidence available suggests that there is a low level of this type of R&D being carried out suggesting a distinct market failure which specific credits could address

We suggest this higher rate as a bold and substantial step of support to targets at R&D that impacts

- effective and efficient green decarbonised energy sources
- pollution reduction and promotion of a circular economy
- sustainable agriculture and food production
- energy efficient buildings
- green transport and
- initiatives to foster biodiversity

6.4 Increase the general R&D Tax Credit to 30%

An attempt was made to increase the R&D Tax Credit to 30% for SME and due to the complexity and challenges regarding state-aid rules this has not been implemented. Raising the rate for all companies would also accomplish this aim while being a bold step to position Ireland's R&D ecosystem.

94% of companies in our survey think that an increase in the R&D Tax Credit Rate from its current 25% to 30% would see more R&D undertaken, particularly in our SME sector if combined with the earlier suggested changes.

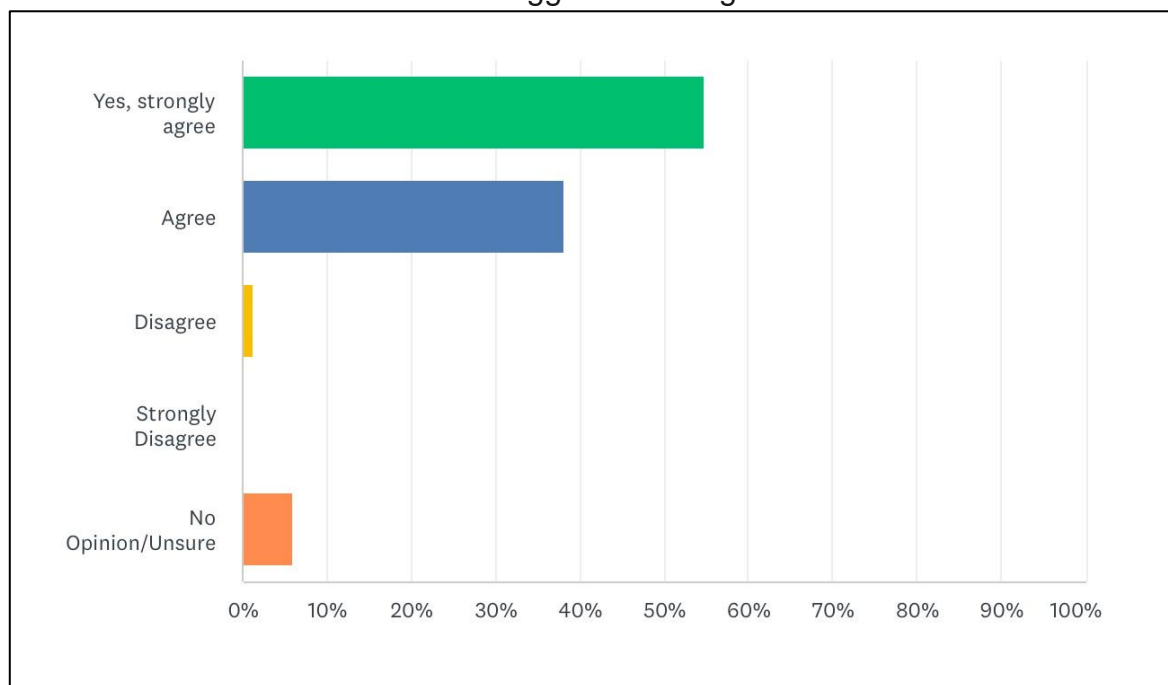


Fig 13 : Would a 30% Rate lead to more R&D carried out?

In 2009, the rate of the incremental tax credit was raised from 20% to 25% this increase contributed to the doubling of the Business Expenditure in R&D from 2011 to 2020.

This approach would also support Irelands ambition under Impact 2030 of delivering on the objective of *“Enterprise innovation capability will be broadened and deepened, increasing the number of enterprises and SMEs investing in RD&I, increasing numbers of new high-value, IP rich start-ups from research, linking our multinationals, SMEs and innovation system and public policy, (DFHERIS, 2022) And “ensure that our R&I taxation offering continues to evolve, is targeted to stimulate additional SME activity and provides a strong incentive in light of the changing international tax landscape (DFHERIS, 2022)*

Ultimately positioning Ireland as a key global centre for Research and Innovation.

6.5 Standardise Guidelines for incurred expenditure

Certainty over what costs can be claimed is a critical part of the R&D tax credit. A lack of clarity in this regard has caused recent problems in the operation of the scheme and increased general uncertainty around the scheme. We are seeking a reversion to the original application of the scheme

The rules governing qualifying expenditure are set out essentially by a short but crucial phrase, as follows:

Qualifying expenditure means

“expenditure, ...wholly and exclusively in the carrying on by it of research and development activities in a relevant Member State”

It is this short piece *“in carrying on by it ”*that has caused so much confusion and difficulty and which now we seek to clarify.

The current Research & Development regime was introduced in 2004 with Revenue drafting a revamped section 766 TCA 1997. This legislation contained the excerpt quoted above. Shortly afterwards Revenue issued Guidelines as to its meaning and how the credit should operate. Given that Revenue drafted these Guidelines at or about the same time that they drafted the legislation, it seems reasonable to assume

that those Guidelines fairly represent the drafter's intent. These Guidelines advised that

"Allowable expenditure would include the cost of the following activities:

- (a) engineering, design, operational research, mathematical analysis, computer programming, data collection, testing, or psychological research; (b) indirect supporting activities such as maintenance, security, administration and clerical activities, finance and personnel activities;*
- (C) ancillary activities essential to the undertaking of research and development activities such as taking on and paying staff, leasing laboratories and maintaining research and development equipment including computers used for research and development activities,"*

Guidelines issued in July 2020, (Revenue, 2021) have greatly restricted the costs that are to be regarded as qualifying expenditure. The specific new change that has caused much recent concern among IRDG members relates to rent paid in relation to qualifying R&D activity.

Section 4.1 of the Guidelines now states that: *"Rent is expenditure on a building or structure and is excluded from being expenditure on research and development by section 766(1)(a) TCA 1997."* (Revenue, 2021)

A survey of IRDG member companies undertaken in August 2020 in response to this latest change tells us that 34% of responding companies claimed rent as part of their R&D claim, have done so for multiple years and many more companies have claimed in prior years. Many of these companies are SME's who do not own their own laboratories. Their situation contrasts with those companies who own their own R&D premises, the capital expenditure for which qualifies for R&D Tax Credit support. This came through again in our most recent survey of companies.

Aside from disagreeing with Revenue's eligibility interpretation the uncertainty such changes create is very perplexing for corporate taxpayers, both MNC 's and SME's alike.

In general, R&D needs to be undertaken indoors and therefore rent incurred on such R&D buildings is required to undertake R&D and should qualify for the R&D tax credit to the extent that it relates to R&D activity.

Revenue Practice

We understand that it appears that no single interpretation has been universally applied throughout Revenue on what qualified as R&D expenditure and that crucial overheads, including broadband, software maintenance of equipment and, most recently, rent (even where a premises is used 100% for R&D) have been excluded based on the local interpretation of qualifying expenditure. This inconsistent treatment has added to the confusion and resulted in unequal treatment of taxpayer companies.

While our members would hold a specific view as to how this phrase should be interpreted, it is clear that the exact meaning of "in the carrying on by it" can be interpreted in many ways. Revenue is entitled to take its own, albeit restrictive, meaning. Accordingly, it is not surprising that Revenue has also struggled with the exact construction to be put on the phrase "in the carrying on by it" as they have felt the need to review and amend their Guidelines as to its meaning, many times, despite the fact that this element of the legislation has not been amended in any way. Revenue's current interpretation differs **radically** from that which prevailed when the legislation was first enacted in 2004 until the revision on 2020.

What we are requesting therefore is a minor amendment to the definition of qualifying expenditure, which would allow Revenue to be satisfied in applying the legislation as originally intended. We would be grateful if you would consider an amendment to Section 766, whereby the original intent of the legislation, as evidenced by Revenue's view at the time the provision was enacted, could be implemented. This is quite simple - the phrase "incurred in the carrying on" could be amended to

"incurred for the purposes of", or "incurred in connection with".

Both of these phrases have long standing meanings within Irish tax legislation and that of other Jurisdictions.

- Alternatively, the current legislation could be made definitive/prescriptive, to include the allowable items listed in the original Revenue Guidelines as above, including rent.

Consequences of not amending the legislation

Risk to New Projects

Irish subsidiaries and branches of multinational corporations must compete within their worldwide group to attract new R&D projects to Ireland. The R&D Tax Credit is a vital incentive in such efforts. If the Irish entity is successful in its R&D endeavours, generally it follows that the manufacture of the final product will also be located here. This is very important to the growth and sustainability of the Irish entities. As you might imagine, such projects are subject to rigorous budgeting. If the Irish entity cannot reasonably **forecast** the value of the tax credit, due to the uncertainty surrounding qualifying expenditure, it may very likely lose that project and the future associated manufacturing to another jurisdiction. Companies that are making a huge investment in the country are entitled to certainty in relation to the **tax** relief available.

6.6 Improve Outsourcing Percentage rates

Over 40% of respondents to our survey have engaged in sub-contracted or outsourced R&D either to other companies or to Third Level Institutes.

There is a general believe that the limits are still too low. When asked Do you consider the limits on sub-contracted R&D to be reasonable for your business? (Limits: restricted to €100,000 or 15% of expenditure incurred, whichever is greater) over 50% of those responding believe it was too low for subcontracting to other companies and over 40% believed it was too low for subcontracting to Third Level Institutes (See Fig 15 below)

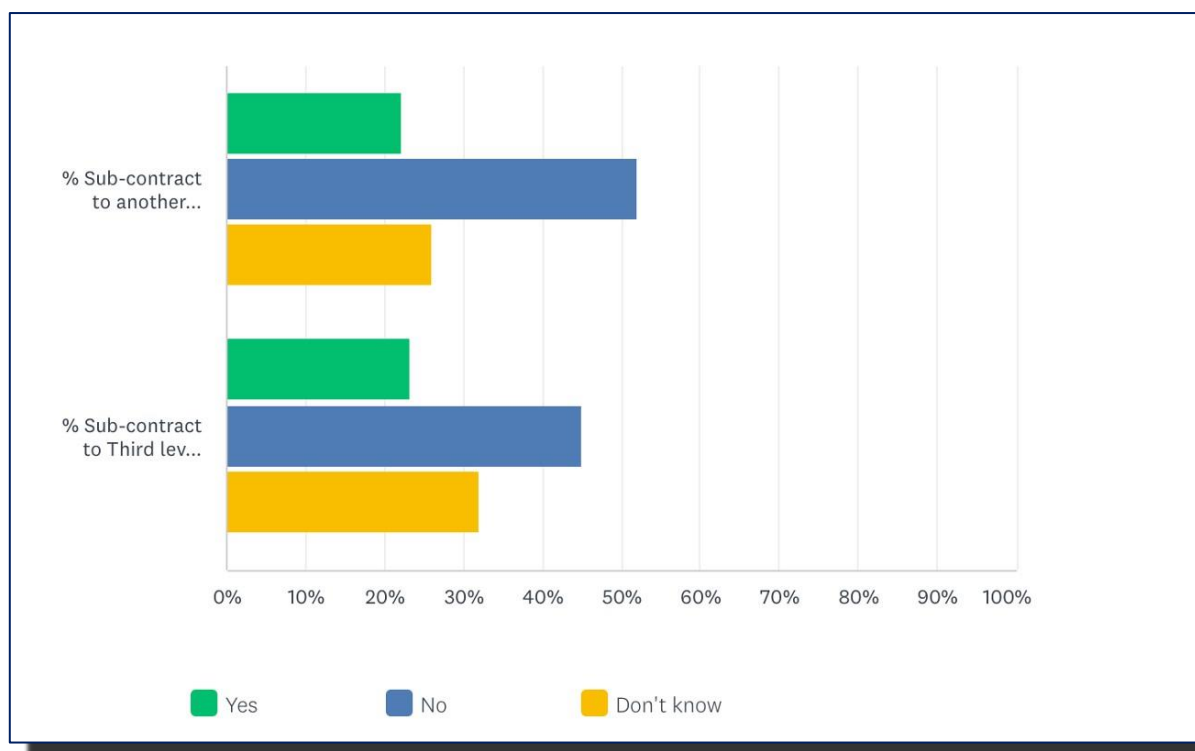


Fig 15: Do you consider the limits on sub-contracted R&D to be reasonable?

A selection of comments from our survey underlines this. The need to subcontract is driven by the need to access specialist skills which drives the overall quality of work in the R&D system and generates additional employment overall. Companies are also finding it harder to recruit and subcontracting plugs a gap enabling them to carry out their R&D again ensuring the growth of jobs and investment in the economy. There is also a reflection on how work is carried out with key specialists who may be an integral to a project opting to work this way and the need to ensure that work which otherwise meets all the requirements of the R&D Tax Credit and delivers on the policy objectives is included in companies ability to claim.

“Given the level of compliance and very specific expertise sometimes required eg. for clinical trials, device design, in vivo modelling, peptide synthesis etc. etc. it lowers the ability of small companies to leverage their network properly to get a complex project done. A better point may be to increase the % allowed if the CRO is Irish (if that is allowed legally) - that gives greater flexibility to the Innovative SME and still keeps expertise in Ireland within the wider ecosystem.”
(Indigenous, SME)

“R&D by nature needs outside expertise to advance technology development. In return that spend creates significant value (products, revenue and employment) in the application of the technology” (Indigenous, SME)

“Without the basic R&D function, there would be no sub contracted activity, yet we don't get to claim for a huge proportion of our spend. The subcontracted costs are highly specialist, so cannot be done in house, therefore we lose out. I would not see this as equitable because it gives an unfair advantage to larger companies who can afford to scale up and perform the same activities in house” (Indigenous, SME)

“More work will be sub-contracted in future due to shortages of specialists - eg software engineers and limits will need to be raised” (Large MNC)

“Sub-contract is a key part of doing business today and should not be overly penalised. We need to recognise changing work practice” (Large MNC)

7 Ensuring the Irish R&D Tax Credit can remain competitive

- § Ireland has been a pioneer of R&D Tax Credits
- § Our current R&D Tax Credit system is generally competitive
- § There is increasing competitive challenges from other jurisdictions
 - Immediate specific changes are needed to remain competitive under US law
- § There are some changes that can remove some anomalies and improve competition internationally
- § Combined with earlier suggestions on 30% general rate and 50% Green rate this will ensure Ireland competes strongly

The OECD notes that in 2019, Ireland is placed just above the OECD average in terms of total government support to business R&D as a percentage of GDP, at a rate equivalent to 0.21% of GDP

A number of earlier comments have noted competitive challenges ranging from cost competition and increased R&D Tax competition (both within and outside the EU). Earlier suggestions on increasing rates, new rates for Sustainability and Green technologies and improving processing and simplification are all designed to increase the competitive position of the Irish R&D Tax Credit, while remaining within international boundaries and delivering on the policy aims of the State.

“Over the years the allowable expenses have been reduced, and travel expenses and rent are now excluded. These are high costs for R&D facilities. Need to ensure further erosion of the credits does not occur as it is a time-consuming and expensive process to complete the submission each year”. (Indigenous, SME)

7.1 Changes to remain competitive under US Tax Regulations

Under new Regulations in the US (released on 28th December 2021) the Irish R&D tax credit would be deemed to reduce the Irish Corporation paid when calculating the amount of foreign tax credits available in the US. This would make the R&D Tax Credit less attractive.

The R&D Credit would need to be fully refundable in order to get favourable treatment in the US. This goes beyond the approach adopted under the BEPS 2.0 GloBE rules, where a refundable R&D tax credit would be considered a 'covered tax' so doesn't negatively impact upon the effective tax rate.

Critically for Financial Years beginning after 2021, the favorable treatment of refundable credits will only apply if the foreign law entitles the taxpayer to receive the full value of the credit in cash at the taxpayer's option, regardless of whether the taxpayer will owe tax to the country in the year the credit is claimed.

To ensure the US Companies with bases in Ireland are not negatively impacted Irish law would need to be updated to allow the full amount of a tax credit to be paid in cash at the taxpayer's option. The taxpayer's choice to apply all or a portion of the tax credit in satisfaction of its foreign income tax liability then is treated as a constructive payment of cash to the taxpayer in the amount so applied followed by a constructive payment of the foreign income tax liability against which the credit is applied.

The specific US Regulation are with specific reference italicised

- **Preamble:**
 - The Treasury Department and the IRS generally disagree that refundable tax credits are appropriately treated as offsetting constructive payments of cash to the taxpayer followed by a constructive payment of an (unreduced) foreign income tax liability. Refundable tax credits that are payable in cash only to the extent they exceed a taxpayer's foreign income tax liability, either in the current year or over a period of years, are not similar to unrestricted cash grants. Tax revenue foregone by a foreign taxing jurisdiction by means of such a tax credit reflects a policy choice to forego revenue, and that may be viewed as a tax expenditure, but a tax expenditure is distinct from a cash outlay. Revenue foregone by granting a tax credit that the taxpayer does not have the option to receive in cash reduces its tax liability in exactly the same manner whether the credit is fully

nonrefundable or potentially refundable only to the extent the credit exceeds the taxpayer's tax liability. In both cases, the taxpayer does

not have the option to receive the applied amount of the credit in cash. No comments suggested that a nonrefundable credit should be treated as constructively received in cash by the taxpayer and used to pay an unreduced tax liability. The Treasury Department and the IRS have determined that it is inappropriate to treat the nonrefundable portion of a refundable credit differently from a fully nonrefundable credit.

- **1.901-2(e)(2):**

- (ii) Credits. Except as provided in paragraph (e)(2)(iii) of this section, an amount of foreign income tax liability is not an amount of foreign income tax paid to the extent the foreign income tax liability is reduced, satisfied, or otherwise offset by a tax credit, including a tax credit that under the foreign tax law is payable in cash only to the extent it exceeds the taxpayer's liability for foreign income tax or a tax credit acquired from another taxpayer.
- (iii) Exception for overpayments and other fully refundable credits. An amount of foreign income tax paid is not reduced (or treated as constructively refunded) solely by reason of the fact that a credit is allowed (or may be allowed) for the amount paid to reduce the amount of a different separate levy owed by the taxpayer. See paragraphs (e)(2)(ii) and (e)(4) of this section. However, under paragraph (e)(2)(i) of this section (and taking into account any redetermination required under section 905(c) and §1.905-3), an amount remitted with respect to a separate levy for a foreign taxable period that constitutes an overpayment of the taxpayer's final liability for that levy for that period, and that is refundable in cash at the taxpayer's option, is not an amount of tax paid. Therefore, if such an overpayment of one tax is applied as a credit against a different foreign income tax liability of the taxpayer for the same or a different taxable period, the credited amount of the overpayment may qualify as an amount paid of that different foreign income tax, if the credited amount does not exceed a reasonable approximation of the taxpayer's final foreign income tax liability for the taxable period to which the overpayment is applied. *Similarly, if under the foreign tax law, the full amount of a tax credit is payable in cash at the taxpayer's option, the taxpayer's choice to apply all or a portion of the tax credit in satisfaction of a foreign income tax liability of the taxpayer is treated as a constructive payment of cash to the taxpayer in the amount so applied, followed by a constructive payment of the foreign income tax liability against which the credit is applied.* An overpayment or other tax

credit that under the foreign tax law is otherwise fully payable in cash at the taxpayer's option and that is applied in part in satisfaction of a foreign income tax liability is treated as an amount of foreign income tax paid notwithstanding that a portion of the amount otherwise payable in

cash to the taxpayer is subject to a lien or otherwise seized in order to satisfy a different, preexisting liability of the taxpayer to the foreign government or to a third party.

7.2 Changes to remove anomalies

In addition there are some other anomalous situations Ireland is somewhat of an outlier in the restrictions placed on qualifying expenditure, particularly overheads. This can place us at a distinct disadvantage in competing for R&D investment. We include **some examples below**.

U.K. - Overhead costs linked to both direct and qualifying indirect activities can be included in R&D claims. Qualifying indirect activities are activities which form part of a project but do not directly contribute to the resolution of the scientific or technological uncertainty. They include inter alia:

- indirect supporting activities such as maintenance, security, administration and clerical activities, and finance and personnel activities, insofar as undertaken for R&D;
- ancillary activities essential to the undertaking of R&D (e.g. taking on and paying staff, leasing laboratories and maintaining research and development equipment including computers used for R&D purposes);
- training.

Based on Revenue's original guidelines, it is clear that the original intent of the legislation was to align qualifying expenditure in this jurisdiction with the UK. Given the uncertainty as to the application of State Aid rules in the UK from 31 December 2020, and the ease of mobility of R&D projects, this is a particular **cause** for concern.

See Appendix 1 below for further details.

France-An R&D Tax Credit (RTC) can be claimed in respect of expenditure incurred on eligible R&D operations. The French Tax code sets out a list of eligible expenses (payroll, depreciation, **overheads** etc.,) that can be included in a claim. Allowable **overhead expenses** for the purpose of an RTC claim are limited to a fixed percentage of certain eligible expenses. The limit on the amount of **overhead expenses is equal to:**

- 75% of the tax depreciation on fixed assets allocated to eligible R&D operations, and
- 43% of the eligible R&D payroll **expenses**.

This approach provides certainty to the companies in planning their projects

Australia - Companies may incur a number of administrative costs and overheads such as rent, light and power, property rates and taxes, cleaning and certain types of insurance, as a result of conducting R&D activities and employing R&D staff.

The expenses that a company can claim as R&D expenditure may be claimed to the extent they are incurred on R&D activities. Administrative costs and overheads can be claimed as incurred on R&D activities where there is a direct link between the R&D activities and the expenditure incurred.

1. As with the scheme in France, it can be seen that a fair and reasonable allocation of overhead expenditure in respect of R&D activities is allowed.

Canada - Companies can claim a Scientific Research and Experimental Development (SR&ED) tax incentive in respect of direct and indirect overhead costs via two methods:

- I. a proxy method whereby the claimant can elect to use 55% of R&D labour costs as a proxy for actual. A significant majority of Canadian claimants adopt this method for calculating overhead expenditure. The maximum limit which can be claimed is the lesser of 55% of R&D salaries and actual total overheads of the company.
- II. claim all expenditures of a current nature (i.e. no capital costs) that are directly related to the prosecution of R&D in Canada and are incremental to the work undertaken. There is no maximum limit to the quantum of overhead expenditure that can be claimed via this method.

8 Knowledge Development Box.

- § Takeup of KDB is a fraction of what was anticipated.
- § Multifactorial challenges underlie this poor takeup.
- § For indigenous SMEs even without a patent it's a high cost process.
- § Certain types of R&D activity doesn't generate patents or patents aren't good protection .
- § For MNCs corporate policy is decided on global basis and the KDB doesn't necessarily fit with those policies.

The consultation document recognises the low takeup of the Knowledge Development Box (KDB) relative to the R&D Tax Credit with only an average of 15 companies per year using the scheme since inception through to 2019 the last year for which we have figures. This is 1% of the numbers using the R&D Tax Credit.

This rate is much lower than anticipated. In our 2016 survey approx. 25% of companies replying expected to avail of the KDB in the future. This would have been an expected takeup rate of hundreds of companies rather than 15 per year.

There are a number of different challenges that have impacted on the uptake of R&D. Irelands relatively low patenting rate relative to other countries means that there isn't the same depth of patentable IP that the KDB targets. Related to this Multinationals structure their operations in ways which mean they home their IP in different jurisdictions for specific reasons and intercompany transactions mediate against the use of the KDB. Additionally certain type of R&D (specifically software) historically has used trade secret rather than patenting to protect its IP because of the rate of

change in the sector. Developing patents or work similar to patents does not necessarily make sense for software companies (indigenous or multinational)

For indigenous SMEs even without a patent it's a high-cost process. The act of almost getting to a patent is almost as onerous in resource terms as getting a patent

We have included a number of comments from companies that reflect both the actual and perceived challenges with the KDB.

“As above this is beneficial to MNC’s with large legal departments that have the time to submit patents. This is the first stumbling block.

The separation of assets from a revenue perspective is also very off putting; it makes the whole thing overcomplicated and more work than is desirable. If IP is used in the product of a product that should be it end of discussion”. (Indigenous, SME)

We have looked at the KDB for some time but really feel that we are not in a position to attract this credit. Which is a pity as we are a commercially successful research performing entity, that is family owned and therefore all profits are re-invested to create further jobs and increase development so something like this

*would be very welcome but is prohibitive at this moment in time”
(Indigenous, SME)*

“Uncertainty around how an audit would work - companies are perhaps waiting for a real life case study. The process appears to be somewhat onerous to carve out revenue related to a specific part of the IP created by a company in a Group (Large, MNC)

“My understanding is that a patent is required, in the PCF sector, IP is usually managed locally, patents are expensive and cant be justified in most cases. To be honest we have not used the KDB as of yet, we continue to invest heavily in R&D within an applied Industrial scale setting”. (Large, Indigenous)

“The process of capturing innovation, filing for patent application and the eventual granting of a patent can be a lengthy multi-year process. This may reflect in low uptakes. Access to expertise at the intersection of legal/finance/IP to navigate KDB effectively may be an issue for SMEs “ (Indigenous, SME)

“Grey area in allocating particular revenues to IP assets - it is tricky for a company to decide on what IP assets are associated with revenues. + Challenge in identifying R&D expenditure leading up to IP asset.”

“Its very theoretical solution, given that as a multinational we have business process and systems in place at a global level, and refactoring business process to deliver on the requirements for local profit centers is impossible” (Large, MNC)

“The KDB is in the same space as the tax credit, the companies doing the tax credit do not have the additional resources to begin a new separate process. If companies can choose one or the other, they go for the Tax credit, it has a longer track record. The incremental tax benefit for small and medium companies does not justify the additional costs and risks. Many Irish SMEs are not that profitable anyway. For private Irish companies the shareholders tax on dividends is effectively 50%, so the saving of company tax of say 6% and say 50% of that additional saving is distributed (which is very high) the benefit to shareholders would be $6\% \times 50\% \times 50\% = 1.5\%$. Just doing back of the envelope calculations, its not very attractive. This is one of the disadvantages of having a low corporate tax rate in Ireland, overall its of great benefit, but on an incremental basis, a lower tax rate is not that attractive.”

9. Conclusion

IRDG's mission is to drive excellence in innovation within Ireland's industry to create growth, jobs and prosperity. A key part of that mission has included the R&D tax credit and incentives. This is a major area of focus for IRDG and we have been involved with the scheme since before its inception. The success of the scheme can be seen in the growth of business investment in R&D over the past 17 years and the increasing number of companies who have engaged in R&D activities.

With the increased commercial and societal challenges and increased importance of Research Development and Innovation in the years we believe that the refinements to the system proposed here will both help ensure

- Ireland remains attractive to companies, Indigenous and MNC basing their R&D in Ireland
- Ensure that Ireland's R&D Tax Credit Remains competitive in an evolving international tax landscape.
- Continues the development of the 10's of thousands for R&D and non-R&D jobs which are located in Ireland due to the success of the R&D Tax Credit
 - Ensure the continued growth of the jobs and investment in the Irish economy
 - Create a smoother functions R&D Tax credit system.
- Improve the system to make it more attractive to SMEs

We can ensure Ireland's attractiveness to Foreign Direct Investment in a changing global taxation environment and help create the best taxation environment for SMEs and entrepreneurs to ensure that Ireland remains an attractive place to sustain and grow an existing business or to start and scale up a new business.

IRDGs continue to provide support to our members to ensure they are informed and understand the detail of the claims and audit process

Our members are fully supportive of the R&D tax credit and through IRDG will continue to bring forward recommendations to improve accessibility of the scheme. We appreciate the opportunity to present this submission as part of the Commission on Taxation and Welfare and remain available for further consultation and dialogue.



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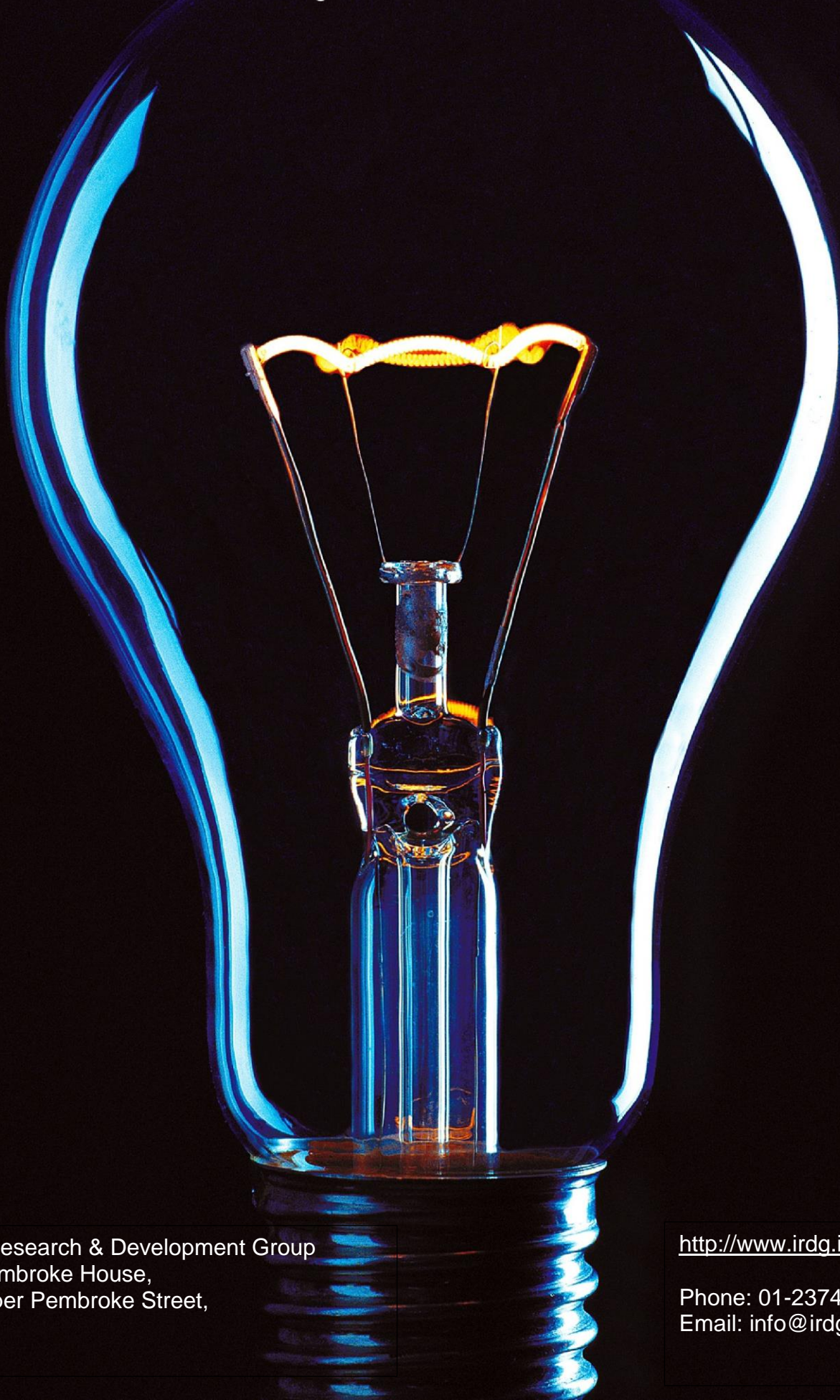
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Appendix 1

U.K - Qualifying indirect activity

These are activities which form part of a project but do not directly contribute to the resolution of the scientific or technological uncertainty. They are:

- a. scientific and technical information services, insofar as they are conducted for the purpose of R&D support (such as the preparation of the original report of R&D findings);
- b. indirect supporting activities such as maintenance, security, administration and clerical activities, and finance and personnel activities, insofar as undertaken for R&D;
- c. ancillary activities essential to the undertaking of R&D (e.g. taking on and paying staff, leasing laboratories and maintaining research and development equipment including computers used for R&D purposes);
- d. training required to directly support an R&D project;
- e. research by students and researchers carried out at universities;
- f. research (including related data collection) to devise new scientific or technological testing, survey, or sampling methods, where this research is not R&D in its own right; and
- g. feasibility studies to inform the strategic direction of a specific R&D activity.



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