Global R&D Tax Incentives The Benchmark 2021





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Introduction

Welcome to The Benchmark - Ayming's global R&D consulting team has now made it possible to easily compare key international R&D tax incentive schemes on a like-for-like basis in one simple graphic, using two clear metrics: Generosity of the scheme and Ease of Application.

No two R&D tax regimes are exactly alike, and there is a multitude of legislation, interpretation and policy to consider when drawing a comparison. Ayming's various R&D consulting teams have extensive knowledge of local R&D tax regimes, and using this experience we have made some assumptions in order to deliver a meaningful and simple comparison.

As well as the main graphic, there are also individual country profiles which give an overview of each of the schemes included in the The Benchmark.

Definitions

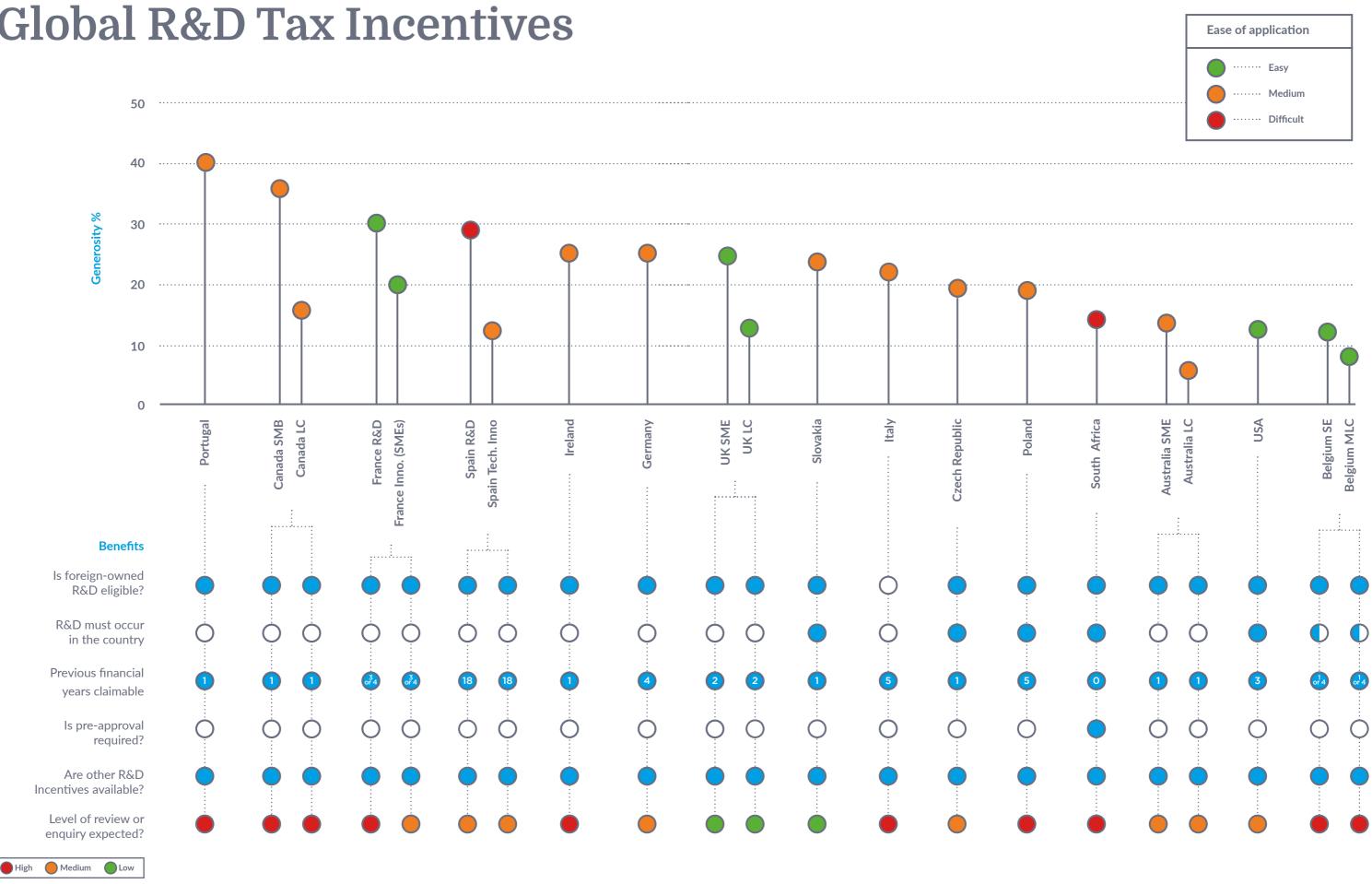
Generosity has been calculated as a percentage. This helps you understand the monetary value of what your company would receive back from a comparable amount of identified qualifying expenditure including the various calculations necessary to make a claim. This value may be different to the tax credit percentage as it takes into consideration the complexities of each scheme and what qualifies as R&D expenditure.

Ease of Application is represented as Easy, Medium, or Difficult. This 'difficulty rating' is calculated relative to other international schemes, so an 'Easy' rating would mean 'Easy for a professional with experience in that country'. Ease of Application takes into consideration a whole host of factors, including how difficult it is to make a claim, how easy is it to obtain the benefit, and if an enquiry were to be opened, what it would entail.

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Global R&D Tax Incentives



Australia

Australia offers a 43.5% refundable tax credit for Small and Medium Enterprises (SMEs), or a 34 - 42.5% non-refundable credit for large companies with over AU\$20 million in turnover. Full technical justifications must be submitted for each project claimed.

AusIndustry reviews activity eligibility, whereas the Australian Taxation Office processes the tax credit through the Company Tax Return.





Australia SME	Australia LC
Generosity: 13%	Generosity: 6%
Ease of	Ease of
Application	Application

0	Australia Small and Medium Enterprises	Australia Large Companies (LC)
0	43.5% Tax Credit	34% - 42.5% Tax Credit
O Benefit Overview	Australian Small and Medium Enterprises are eligible to claim a 43.5% tax credit on eligible R&D expenses. If the company is loss making, the incentive can be offered in cash. Cash refunds are capped at AU\$4 million.	Large Companies in Australia are eligible to claim a 34-42.5% tax credit on eligible R&D expenses. The figure is dependent on eligible spend as a percentage of total spend in year. This incentive is a non-refundable tax credit, no matter the tax position of the claiming company.
Eligible Claim Period	Australia uses a retrospective application scheme and applications must be lodged within 10 months of the end of the relevant fiscal year. Tax credits may be carried forward, subject to meeting the standard tax offset carry-forward rules.	
Application Process	R&D activities are registered with AusIndustry by submit Application. Full technical justification pertaining to the relevant R&E	
	Once registered, a unique registration number is provide Schedule, lodged with the company tax return with the A Companies must register activities for each income year	Australian Tax Office.
O Eligibility Requirements	Eligible R&D activities are classified as either "Core" or "Supporting" activities. In order to register eligible activities, you must have undertaken (or be intending to undertake) at least one Core R&D activity. Core activities are experimental activities where outcomes cannot be known or determined in advance; are determined using a systematic progression of experimental work; and are conducted for the purpose of generating new knowledge. Supporting activities may qualify if they are undertaken to directly support eligible Core R&D activities.	
O Eligible Expenditure	 Eligible expenditure is incurred by the eligible company during the income year and can include: Salaries, contracted work and other direct costs related to R&D Materials transformed or consumed during activities Decline in value of assets used in R&D activities Contributions to Cooperative Research Centres and Research Providers 	
Regulatory Body Practices	AusIndustry reviews activity eligibility, whereas the Aust the Company Tax Return Appropriate contemporaneous documentation must be	
	expenditure incurred. Expect a review of claim at least every 4 years. This is hig mining, construction), but an expectation exists here for Despite the programme being retrospective and self-ass Advance Finding applications.	high levels of contemporaneous documentation.
O	Who was the R&D conducted for? Did you have owners financial risk? R&D conducted in Australia on behalf of a foreign comp agreements in place.	
	Where was the R&D activity undertaken? Generally, all a qualify. An "Overseas Finding" can be sought for activitie more than 50% of the entire project cost.	

Belgium

Belgium offers two key R&D tax incentives:

1. An exemption of 80% of the payroll withholding tax (wage tax) for PhD and Master's qualified employees as well as 80% of the wage tax for Bachelor's qualified employees working on R&D projects. This partial exemption benefits the employer and does not affect the net salary of the 'researcher', reducing the effective employment cost for R&D activities.

2. A 13.5% one-off deduction or a 20.5% per year spread investment deduction for fixed assets recorded on the balance sheet. The deduction applies to the development or acquisition of patents and assets used to promote R&D of new products/services and advanced, eco-friendly technology.

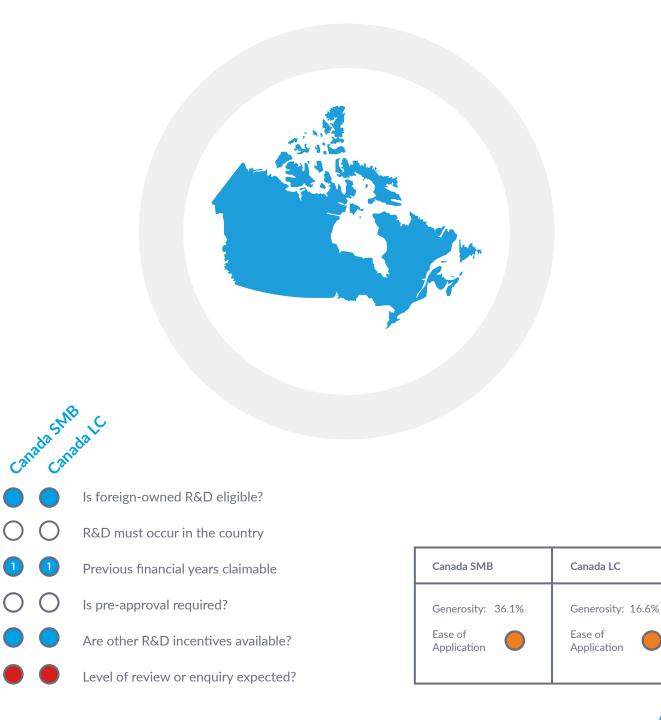


	Belgium Small Enterprises (SE) ¹	Belgium Medium and Large Companies (MLC)
Benefit Overview	1. Wage Withholding Tax partial exemption: 80% of wages are exonerated (on a pro rata basis) for scientific Masters and PhDs when activities are related to R&D, and 80% for Bachelors. The exempted amount related to the Bachelor amount may not exceed 50% of the total.	1. Wage Withholding Tax partial exemption : 80% of wages are exonerated (on a prorata basis) for scientific Masters and PhDs, when activities are related to R&D and 80% for Bachelors. The exempted amount related the Bachelor amount may not exceed 25% of the total.
	 2. R&D Investment Deduction: the corporate tax base deduction is equal to 13.5% of the investment value or 20.5% on Belgian Generally Accepted Accounting Principles (BEGAAP) depreciation on justifiably capitalized R&D costs. R&D Tax Credit: the corporate tax deduction is equal to the calculated R&D investment deduction multiplied 	 2. R&D Investment Deduction: the corporate tax base deduction is equal to 13.5% of the investment value of 20.5% on BEGAAP depreciation on justifiably capitalize R&D costs. R&D Tax Credit: the corporate tax deduction is equal to the calculated R&D investment deduction multiplied by the applicable CIT rate.
	by the applicable CIT rate.	
Eligible Claim Pe <u>riod</u>	 Regularization is possible back to 4 years, provided the tax administration ("BTA") does not allow retrospective ap Note: The partial wage withholding tax exemption is appli start of the project to the Belgian competent authority. B position that a retroactive application (i.e. application for This is to be applied in the annual corporate income tax (corresponding with accounting period in corporate tax m forward and applied in subsequent taxable periods without 	pplication for years prior to the moment of notification). icable only to projects that have been notified before the ased on this rule, the Belgian tax administration takes the the past once notification is done) is not allowed. c return, covering the most recent taxable period atters). Unused investment deduction "ID" can be carried
Historical Background	 This benefit was introduced in 2005 and in its current form from 1 January 2007. It's a mature system and was upgraded on 1 January 2018 to include listed Bachelor degrees (whereas previously only listed Masters' degrees and PhDs.) This was introduced into Belgian domestic tax law in December 2005 and this measure is quite mature. 	
Application Process	1. Claims in regards to the withholding tax on wages bene Agency of R&D (BELSPO), which employs technical exper activities. However, the benefit application is reviewed ar Public Service of Finance).	ts and issue binding decisions on the R&D character of
	2. The 13.5% one-off deduction or a 20.5% per year sprea and operated by the Belgium Federal Public Service of Fir	
Regulating Body Policies	Federal Public Service of Finance, the Belgian tax administration, is the regulatory body.	
Eligible Costs	1. Withholding tax on salaries paid to eligible researchers to R&D activities.	
)	2. R&D expense justifiably capitalized under BEGAAP.	
Issues to consider	A technical documentation file is not strictly required. It is a tax controlcontrol, which is likely.	
	Belgium is a multi-lingual and multi-cultural federal state, and this may give rise to some inconsistencies between regional administration bodies and local examinations.	
	Several bodies are involved in the process. Strong project benefit.	
	Obtaining "a structural R&D certificate" from BELSPO car	
	A pre-notification of the project before applying is manda	tory

Canada

The SR&ED incentive program encourages Canadian businesses of all sizes and in all sectors to conduct R&D in Canada that can lead to new, improved or technologically advanced products or processes. The federal and provincial tax credits combined range from 15% non-refundable to 54.5% refundable.

An additional 55% of eligible salaries are included in qualifying expenditures to capture overhead related to R&D. This simplified overhead calculation makes the calculation easy and beneficial for companies with high R&D staff costs.



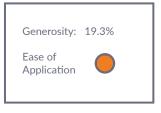
	Canada Small and Medium Businesses (SMB)	Canada Large Companies (LC)	
0	Federal: 35% Tax Credit Provincial: 10% to 30% depending on the province	Federal: 15% tax credit Provincial: 3.5% to 30% depending on the province	
Benefit Overview	The Tax Credit for SMEs is refundable and can provide up to 54.5% of eligible expenditure.	The Federal Tax Credit for LC is non-refundable. The Provincial Tax Credit for LC can be refundable, depending on the province.	
Eligible Claim Period	The Canadian Revenue Agency (CRA) allows claims for fiscal years closing up to 18 months in the past.		
O Historical Background			
Ease of Application	are expected and detailed. The regime requires the company to fill in both Federal (comprehensive and complex. The Federal form includes a financial, as well as a technic	e regime requires the company to fill in both Federal (T661) and Provincial forms, which are relatively nprehensive and complex. e Federal form includes a financial, as well as a technical aspect. The technical part requires the company to esent in a specific format (limited to 1,500 words) for each of the claimed projects	
Regulating Body Policies	The Federal portion is administrated by the CRA and is responsible for assessing the technical and financial eligibility. At a province level, the Quebec portion is administrated by Revenue Quebec, where the assessment is limited to financial eligibility. In Alberta the portion is administrated by Alberta Treasury Board and Finance. The assessment is limited to financial eligibility. All other provinces are also administrated by CRA.		
Eligible Costs	 The following are eligible costs for the regime: Salary (Canadian employees only) Canadian subcontractors (amounts capped at 80% of the Material consumed or transformed Overhead (an additional benefit, approximated either a calculate it in detail) Third Party Payments - Universities and Public Researce 	as 55% of eligible salary base, or company can decide to ch Centers – which are capped at 80%.	
Issues to Consider	 The regime is extremely mature, and documentation of Appropriate presentation or positioning of projects is k Finally, the regime is reaching a record level of scrutiny audited in the second year. All other claimants are expect 3-4 years. 	ompliance is relatively high key, otherwise the claim will be denied in audit /, meaning every new claimant is visited the 1st year and	

Czech Republic

The Czech Republic has an R&D scheme providing an additional 100% deduction of eligible R&D costs from the income base, providing a net benefit of 19% on the cost of R&D. A deduction of 110% is available on any incremental increases in annual R&D expenses.

Although the application process seems relatively easy, the regulatory authorities are rather strict in the process of the claim justification. Therefore, detailed internal documentation on eligible projects and eligible costs is strongly advised.





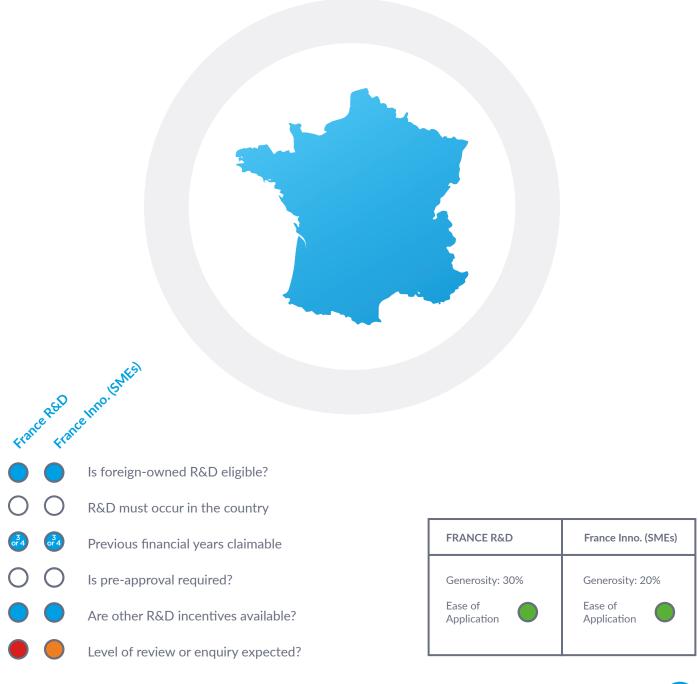
0	Czech Republic All Companies
0	Volume-based: 100% Tax Credit Incremental: 110% tax credit on all QE > previous year
Benefit Overview	The Czech Republic's R&D tax credit regime is generic in nature, covering a wide scope of eligible activities and offering a common rate to all types of companies. There is a more generous benefit for 110% for any incremental R&D expenditure, when compared to the previous year.
Eligible Claim Period	Only the eligible costs a company incurred during the prior fiscal year are eligible. The tax credit must be claimed within 3-6 months of the end of the accounting period for the year in which the expenditure occurred.
Historical Background	The law came into force in 2005 and in recent years, there have been three legislative changes. The 2014 amendment led to increase of R&D deductible costs up to 110%, when an annual increase occurs (110% of the increase, 100% of the last year's costs). The 2016 amendment allowed for claims of 100% of costs of R&D product certification, if legislatively needed. The 2019 amendment led to a major change in the approval process of project documentation and introduced the obligation to keep detailed record of changes.
Ease of Application	 According to the Act's requirements, there are three obligatory conditions: 1. After 2019/04/01 companies must notify an intention to apply tax deduction for every single new project to the competent tax authority. 2. The company must have a written Project documentation which includes a basic description of the project's objectives, time schedule, planned budget, research/project team, methodology, approval and an executive's signature. This document has to be approved before the tax return application is declared for the first fiscal year for which the project costs are applied. 3. Company must keep the eligible costs for each project in separate records. Apart from the above, supporting documentation both technical and financial is strongly recommended.
Regulating Body Policies	Fiscal controls are carried out by tax authorities. The Act is managed by the Ministry of Finance. To apply for the tax deduction, only the sum of the year's eligible costs has to be declared in the tax declaration. In case of fiscal audit, the taxpayer is obliged to provide the required documents (as above).
O Eligible Costs	 Wages and salaries Costs of materials and supplies Tax depreciation of tangible movable property used in direct relation to the project (or proportional part) Operating expenses (electricity, water, heat, gas, etc.) and low value assets Travel reimbursements in direct relation to the project Costs related to financial leasing Services and intangible results/know-how bought from R&D companies (according to the definition for R&D companies) Certification of the R&D results (e.g. homologation).
Issues to Consider	 The Project documentation must exist and be approved internally before the tax return application is declared. The formal/administrative parts of the projects are as important for tax authorities as meeting the R&D criteria (element of novelty, technical uncertainty and systematical approach). Therefore, fiscal controls are looking even for minor formal discrepancies, which can result in refusing the R&D benefit.

France

France offers an R&D tax credit of 30% of qualifying R&D expenses on deductible tax income, for all companies across all sectors.

As main features, this volume-based regime includes an additional benefit of 43% of eligible staffing costs and 75% of eligible capex costs (subcontracted R&D with doubled advantage for public partners) making it attractive for all claimants, whether claiming inhouse or external R&D expenses.

European-sized SMEs can also claim 20% of innovation expenses up to 80K€ (400K€ in QE).



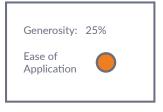
0	France all companies	France SMEs
0	30% Research Tax Credit (up to €100 million QE, 5% thereafter)	20% Innovation Tax Credit (SMEs, up to K€400 QE)
Benefit Overview	The calculated Tax Credit is deducted from the year's corporate income tax, with unused tax credits being cashed back for a maximum four years after claiming.	
Eligible Claim Period	The eligible claim period can go back a minimum of 3 years and in some cases 4 years (depending on the company's financial year-end).	
Historical Background	The scheme was created in 1983 and remained negligible until the early 2000s. It then reached its peak in 2008 when it became a volume-based incentive. Improvement to the regime occurred in the early 2010s and the scheme is now mature and stable, having been declared durable by the last 3 presidents. In 2013, the Innovation tax credit was introduced for the SMEs to specifically claim the QE of Innovation.	
O Ease of Application	1 7 7 7 1	
	The benefit is deducted from income tax the year of cla Cashback of unused credits is given after this 3 year pe cashback is available for SMEs.	aiming, unused credits being carried forward for three years. riod and is usually received within weeks. Immediate
Regulating Body Policies	The tax authority does regular and randomised audits of Education, Research and Innovation is requested to ass Sometimes an audit meeting is organised for the comp	sess the scientific level of claimed R&D activities.
O Eligible Costs	 Technical staffing costs R&D equipment depreciation allowances Operating costs - pre-determined as 43% of staffing and 75% of depreciation allowances Subcontracted R&D Technological watch - conferences, IP Patents Standardization meetings R&D Grants (as a deduction of the QE) 	 Technical staffing costs Innovation equipment depreciation allowances Operating costs - pre-determined as 43% of staffing and 75% of depreciation allowances Subcontracted Innovation Innovation Grants (as a deduction of the QE)
Issues to Consider	published each year by the French Ministry of Research	fication has to be operated according to an updated template n. In the case of a tax enquiry, both the Ministry of Research that is technical or financial. The window of enquiry is until

Germany

The German R&D tax incentive scheme (Forschungszulagengesetz, FZulG) was established in 2020 and offers a 25% tax deduction for R&D labour costs.

To apply for tax credits, companies have to follow a 2-step-approach. First: A technical certificate grants the eligibility of projects. Second: The certificate has to be added to the tax declaration to get the deduction of the companies taxes.





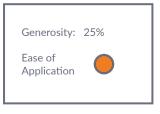
0		Germany all companies
0		25% reduction in tax liability, or cash credit paid to a maximum of 1.000.000 Euro per company and year.
C	Benefit Overview	25% on labour and contract research costs, to a maximum claim of €1m per company (or group/holding if the company is part of a larger organisation). The tax benefit is taken as a reduction on the corporate tax owed or, if there is insufficient tax liability, a credit is payed out.
Clair	Eligible m Period	This is a retrospective regime – the first application can be made for 2020. There is a possibility to claim more than 1 year back on any eligible R&D activity, although this has not yet been confirmed. The eligible claim period can go back for 4 years.
	listorical kground	This is a very new regime, started on 1 January 2020. Law has been accepted and the eligible claim period started the 1st of January 2020.
Apj	Ease of plication	This is a retrospective regime. However, the eligibility of a project(s) can be checked and confirmed upfront, which need to be submitted electronically. Since it is a.) a new regime that impacts and involves a lot of governmental bodies (at least two ministries, one granting body and the local finance authorities and b.) these bodies strongly refer to the European GBER and follow their regulations, we expect a lot of difficulties at least for the first two years.
	egulating Policies	Regulation is managed by the Ministry of Finance, the Ministry of Economic Affairs and the Ministry of Research and Education and a separate, granting body (existing or new) is being set up to handle all R&D claims. The assumed/estimated budget will be approximately €2.5bn per year.
0	Eligible Costs	Labour and (60% of) external contract research.
-	lssues to Consider	R&D definitions are Frascati-based. Even if companies' projects are claimable in a first step, the amount of costs can be doubted during tax declarations.

Ireland

Ireland's R&D tax credit regime offers a 25% tax credit to all types of companies. Comprehensive, contemporaneous financial and technical support must be captured in real time for reporting all R&D projects as part of a claim.

Full financial and technical justification should be prepared and retained by the claimant to support their claim, should an enquiry be opened. Especially in the first year a company makes a claim, there is a high chance of enquiry.





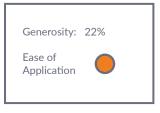
0	Ireland all Companies
0	25% Tax Credit on Eligible R&D Expenditure for all companies
O Benefit Overview	Ireland's R&D tax credit regime is generic in nature, covering a wide scope of eligible activities and offers a common rate to all types of companies.
	Where a company has insufficient Corporation Tax against which to claim the R&D tax credit in a given accounting period, the tax credit may be credited against the Corporation Tax for the preceding period, carried forward indefinitely. Or, if the company is a member of a group, it can be allocated to other group members.
	The R&D credit can also be claimed by the company as a payable credit over a 36 month period or, as an incentive to certain staff, a company may transfer some or all of its R&D credit to 'key employees' to use against personal income tax liabilities. It should be noted that specific restrictions apply when a company claims a payable credit or surrenders the credit to key employees.
O Eligible Claim Period	The tax credit must be claimed within 12 months of the end of the accounting period for the year in which the expenditure occurred
Historical Background	 Research and Development Tax Incentives are issued by the Irish Office of Revenue Commissioners. R&D Tax incentives were launched in Ireland in 2004 and it was an incremental regime. Since then it has slowly evolved into a volume-based regime.
Application Process	R&D claims are submitted to the Irish Revenue by submitting a CT1 form using the Revenue Online Service, which details only the QE.
0	Although not required, a full technical and financial report is highly recommended should an enquiry be opened on the claim. Furthermore, the R&D claim is often evaluated by technical experts.
Regulating Body Policies	All claims are submitted to the Irish Office of Revenue Commissioners which reviews the claims. Other than the CT1 application on the Revenue Online System (ROS), no technical or financial justification is required to make a claim. However comprehensive, time-stamped technical and financial documentation must be prepared and retained by the company for 5 years, in case an enquiry is opened. There is a view that it is more likely that an enquiry will take place during the first year's claim.
O Eligible Costs Policies	There are no defined eligible cost categories in Ireland.
Policies	Qualifying expenditure can include any expenditure incurred wholly and exclusively by the company for carrying out R&D activity and these can include: • Salaried staff • Materials
	 Individual consultants Subcontractors, Agency staff & Individual consultants* University Research*
	 Royalty payments Plant and Machinery (This is inclusive of expenditure which also qualifies for capital allowances) Expenditure on the construction or refurbishment of a qualifying building used for research and development (Only the portion of the building or structure that is used for R&D activities can be used to calculate the credit and the cost of acquiring the land does not qualify for the R&D credit).
	Grants received towards qualifying R&D expenditure must be deducted from the costs included in a claim. Any expenditure met directly or indirectly by the EU or State aid will not be treated as qualifying expenditure.
	 *Payments to subcontractors and universities / institutes of higher education are permitted costs, however they have special conditions. It is important to note that outsourced activity must constitute as R&D in its own right. - Universities / institutes of higher education: The greater of 5%; of total qualified R&D expenditure or €100,000. Costs are still eligible if work is outsourced to European universities - subcontractors: The greater of, 15% of total qualified R&D expenditure or €100,000. Costs are still eligible if work is outsourced to European universities - subcontractors: The greater of, 15% of total qualified R&D expenditure or €100,000. Note: all subcontractors need to be given written warning by the company claiming for the R&D, to avoid double claiming. - Individual consultants: Those hired as part of the team are eligible it they; 1 provide specialist knowledge that is unavailable in-house, 2. are employed for less than 6 months, 3. work under the company's direction and control and 4. work on the company's premises.
O Issues to Consider	• Comprehensive, contemporaneous financial and technical support must be captured in real time for all R&D projects claimed.
	• There is a high chance of enquiry, especially in the first year a company makes a claim.

Italy

From FY 2020, Italy benefits from renewed tax credit schemes based on a new calculation method (from the incremental method used until FY 2019 to the volumetric calculation method). Tax credit is extended not only to R&D projects but also to technological innovation/ecological transition and design ones. The tax credit rates are in effect for FYs 2021 and 2022.







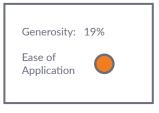
	Italy all Companies
0	From FY2020 there are three different types of Tax Credit with different rates for expenses in R&D, Technological Innovation and Design.
Benefit Overview	The 2020 Italian Budget Law (Legge di Bilancio 2020) introduced several changes to the existing tax credit regime: by way of example, a new calculation method (from incremental to volumetric) as well as two new tax credits to encourage investments in technological innovation/ecological transition and design. The 2020 Budget law also reconfirmed tax credits for R&D expenses.
	The 2021 Italian Budget Law (Legge di Bilancio 2021) has renewed the tax credit on a two-year base – FYs 2021 and 2022 – and increased the rates applicable:
	20% for R&D 10% for Technological Innovation (15% if classifiable as an Industry 4.0 and/or ecological transition projects); 10% for Design.
	Compared to the previous regime, investments do not require a minimum expense to be eligible for tax credits. However, with the newly introduced measures, the tax credits' maximum amount is now capped at \leq 4 million for R&D projects and at \leq 2 million for both for Innovation and Design ones.
	The new method does not foresee an incremental calculation on a baseline. Rather, it is now based on a direct calculation on the total eligible costs in the fiscal year.
	The new tax credit, by changing the calculation method, also encourages investment in skilled labour. In particular, it prizes qualified personnel with subordinate employment contract (or in a self-employment relationship with the company) and, in particular, under-35s holding a PhD or a scientific degree. Furthermore, expenses relating to extra muros contracts with universities, research centres and innovative startups are also promoted.
	Although no pre-approval is required, it is important that the company is able to provide in-depth technical and financial documentation in case of a tax authority inspection.
O Eligible Claim Period	Companies can use the tax credit after the closure of the relevant fiscal year and upon the release of the statutory audit certification. It is mandatory to indicate the tax credit amount in the annual tax return.
	The tax credit must be used, in equal annual instalments, throughout a three fiscal year period and will offset the payment of different types of taxes (e.g. corporate tax, social charges, local taxes, etc.)."
<u> </u>	If the available tax credit for a specific fiscal year is partially used (or is not used at all) by the claimant, the balance can be carried forward indefinitely.
Historical Background	The previous incremental regime has seen several changes between 2015 and 2019. These varied the tax credit's rates from between 25% to 50% depending on the cost's category.
Ease Of Application	Pre-approval is not required however companies must obtain a Statutory Audit Certification and are obliged to produce a technical report - signed by the R&D Manager and countersigned by the legal representative - describing the implemented projects.
Regulating Body Policies	The Italian tax authority (Agenzia delle Entrate) regulates the process as well as being in charge of any enquiry. For any issue related to the eligibility of expenses, Italian companies may submit a request to the tax authority. Similarly, for specific technical issues, companies may submit a request to the Ministry of Economic Development.
OEligible Costs	 Personnel directly employed in eligible projects (the cost within baseline's calculation is increased to 150% for PhD under-35 at first permanent employment contract); Extra muros contracts for research or innovation (the cost within baseline's calculation is increased to 150% for contracts with universities, research centers and innovative startups based in Italy); Depreciation and/or rental of tangible and intangible assets - the value can equate up to a maximum of 30% of personnel costs;
	 Technical consulting from other companies (e.g. feasibility studies, testing, technical design, prototyping, etc.) - the value can equate up to a maximum amount equal to 20% of personnel costs (or for R&D activity, 20% of extra muros contracts' cost); Purchase of materials, supplies and other similar products directly used in R&D activities - the value can equate up to a maximum amount equal to 30% of personnel costs or 30% of cost for extra muros contracts for research or innovation; For R&D activities, depreciation of Intellectual Property Rights - the value can equate up to a maximum amount of €1 million.
O Issues To Consider	 Significant workload both for cost reporting and technical reporting; Activities must fall under the R&D definition of the Frascati Manual and the Technological Innovation definition of the Oslo Manual; The new tax credit regime is in force from 1st January 2021 to 31 December 2022 (although it is likely to be further extended in the near future); Companies are now required to certify the final technical report; The Ministry of Economic Development must be notified of the company's use of tax credits; Both the Ministry of Economic Development and the tax authority can ask at any time for extensive technical or financial documentation connected to the tax credit.

Poland

For SMEs and Large Enterprises, Poland offers an equal deduction of 100% of all eligible costs for research and development projects. In the case of R&D centres, the deduction increases from 100% to 150%. The regime allows for companies to claim retrospectively up to 5 years.







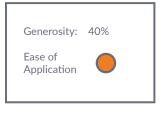
	Polish SME and Large Enterprises	Polish R&D Centres
0		
0	100% Tax Deduction	100-150% Tax Deduction
Benefit Overview	All companies can claim 100% of eligible R&D expenditure as a reduction of their tax base within the year the expenditure is incurred. Startups can benefit from "cash back". If the company is loss making in the year it started operating, the incentive can be offered in cash.	Companies that have special R&D centre status can claim from 100% (cost of getting legal protection for technical knowledge) and 150% for all additional qualifying costs, as a reduction of their tax base within the year the expenditure is incurred.
Eligible Claim Period	Companies can claim retrospectively up to 5 years. In pra standard fiscal year following the claim period. It's not po	actice the majority of claims are made by the end of the
O Historical Background	The Research and Development Tax Incentives issued by generosity of the regime has increased year on year. The first version of law came into legal use on 2 Novemb 2016. The third and current version of law came into lega	the Polish government were introduced in 2016 and the per of 2015, with the second version on 4 November
Application Process	Companies apply the tax deduction in the tax declaration by filling out an annex (CIT-BR) to the tax relief - deadline end of fiscal year. If the claim is made retrospectively, companies have to ask the tax authority for tax overpayment and prepared corrections of CIT declarations for past years - maximum 5 years back. The claim processing time in Poland is instantaneous if made at the end of fiscal year. If the claim is made retrospectively the processing time can take up 2 months, or 3 if the case is particularly complicated.	
O Regulating Body Policies	Fiscal controls are carried out by tax authorities. The Act is managed by the Ministry of Finance.	
O Eligible Costs	 Eligible costs related to R&D activities can be used to claim the 100% tax deduction: Salaries (wages, allowances, bonuses, overtime, leave, superannuation, payroll tax and workers comp insurance) Civil law agreements (contract of mandate, contract work) Materials & Supplies (all materials and supplies used for R&D including low cost laboratory equipment) Co-operation with Scientific Units (costs of analysis, research, development and comparable services) Renting of research equipment Acquiring legal protection for technical knowledge (all costs made to acquire patent and other similar legal protection in Poland and the EU) Amortization (intangible assets) and depreciation (fixed assets) used in R&D, excluding houses, buildings and cars. 	 Eligible costs related to R&D activities can be used to claim the 150% tax deduction: Salaries (wages, allowances, bonuses, overtime, leave, superannuation, payroll tax and workers comp insurance) Civil law agreements (contract of mandate, contract work) Materials & Supplies (all materials and supplies used for R&D including low cost laboratory equipment) Cooperation with any company for R&D (costs of analysis, research, development and comparable services bought from any company) Renting of research equipment Amortization (intangible assets) and depreciation (fixed assets) used in R&D, including houses and buildings. Note: The cost of acquiring legal protection for technical knowledge can be claimed at 100% in regards to the tax deduction. This includes all costs made to acquire patents and other similar legal protection in Poland and EU.
O Issues to Consider	The Polish R&D regime is easy to apply and claim for, hor documentation is professionally prepared in case of fisca claims submitted up to 5 years back. It is responsibility of detail that all legal requirements have been met.	wever the claiming company needs to make sure that the I control. The Treasury Chamber can retrospectively review
	Company is obliged to separate the R&D eligible costs in	to individual analytical accounts.

Portugal

The Portuguese R&D tax credit scheme (SIFIDE) offers a base rate of 32.5% on all qualifying expenditure (QE). An additional incremental rate of 50% can be added for all QE over the average of the 2 previous tax periods. If no prior claims have been submitted, all QE receives an 82.5% tax credit.

Although the definition of R&D is the same as most other jurisdictions, the evaluation is tighter and demands a higher degree of novelty and the existence of technical uncertainty.





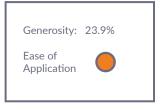
0	Portugal all Companies
0	Volume based and incremental – 32.5% up to 82.5% tax credit
Benefit Overview	The Portuguese R&D tax credit scheme (SIFIDE*) works by allowing a company to apply a deduction to its tax amount. There is no cap related to qualifying expenditure, but there is a cap of €1.5 million for the incremental rate.
	The application must be presented to the National Agency for each claim, which takes almost one year to be evaluated. Although, the tax credit can be applied before the approval.
	Full technical and financial justifications are needed to support the claim. If the tax credit is not fully applied, there is the possibility to carry forward the tax credit remaining value for 8 fiscal years.
	A company that benefits from SIFIDE may be subject to a technical audit, performed by the official innovation agency (ANI).
	New SMEs that have not yet completed two fiscal years and which have no incremental rate, can have an increase of 15% base rate.
	Qualifying expenditures of R&D activities from eco-design projects could be considered at 110%.
	* SIFIDE (Sistema de Incentivos Fiscais à I&D Empresarial)
O Eligible Claim Period	Only R&D activities from the previous fiscal year are eligible and the application has to be filed within 5 months of the financial year end.
O Historical Background	The Portuguese scheme was introduced in 1997. In 2004 there was a suspension of SIFIDE. The suspension ended in 2005 and the current regime will run until 2025.
Ease of Application	The application needs to be presented to the National Agency for each claim, which takes almost one year. Full technical and financial justifications are needed to support the claim.
	SIFIDE requires applications to be evaluated by a body of R&D experts.
	Although the definition of R&D is from the Frascati Manual, the evaluation demands a higher degree of novelty and the existence of technological uncertainty. A state of the art technological analysis is also required, and so the National Agency evaluation team will often contain experts.
Regulating Body Policies	Ministry of the Economy through the Innovation National Agency (ANI – Agência Nacional de Inovação)
Eligible Costs	Mainly:
	 Staff salaries - R&D Team plus technical management team (all need at least level 4* qualifications) at 100%. 120% for all PhD staff. R&D Subcontractors Indirect costs, capped at 55% of Staff cost (including Directors, Management & other staff with less than level 4 qualifications; consumed/transformed materials; project-specific costs; and subcontractors.) Acquisition of tangible fixed assets, as long as they are new and directly allocated to the R&D activity (no land or buildings)
	 Patent registry and maintenance Patents acquisition related to the R&D activities (only for SMEs) Specific R&D auditing and certifications.
	* employee has a minimum of secondary level of education plus a traineeship, i.e. the employee must have a minimum rating level of four as defined in the National Qualifications Framework
O Issues to Consider	The Portuguese R&D Tax credit scheme is very demanding. A good knowledge of the regulation and claim process is needed. R&D definitions are Frascati based. The evaluation demands a higher degree of novelty and the existence of technological uncertainty. Audits, technical or fiscal, may exist.

Slovakia

Slovakia offers a 200% deduction of eligible costs from the income base, providing a net benefit of 42% on the cost of R&D. There is an additional 100% deduction that can be applied to any incremental year-on-year increase of QE, equating an additional 21% net benefit.

There is a certain lack of clarity regarding how the legislation should be interpreted, but the Finance Administration has been taking steps to help in this regard.





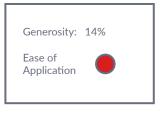
	Slovakia all Companies			
0	200% for all QE in current year and an additional 100% of any additional QE (average of current and previous year) over and above the average of the two previous years. The net benefit equals 42%.			
Benefit Overview	Slovakia offers a 200% deduction of eligible costs from the income base, providing a net benefit of 21% on the co of R&D. There is an additional 100% deduction that can be applied to any incremental year-on-year increase of Q equating to an additional 42% benefit.			
Eligible Claim Period	The company can look back retrospectively for one financial year and the claim must be made within three months of year-end, as an input into the tax computations (immediate relief). The company can request a 'delay' to submit 6 months of previous financial year (i.e. Dec Y/E – submit half at the end of March and remained end June, both directly into tax comps).			
Historical Background	The regime, based on the Czech one, has been valid since January 2015, but with only a 25% benefit on QE.			
	As of January 2018 it is possible to claim 100% of R&D costs in the year, 150% from January 2019 and 200% since January 2020, plus an additional 100% for any incremental QE over and above the average of the two previous years.			
O Ease of Application	There are 2 main conditions:			
	 The company must have an internal simple entry document created for every R&D project for which it claims the applicable costs for tax deduction. The document must contain the date, project start and end dates, the goals that they want to achieve with the project and the estimated costs for the project for each year. The document must be approved by a person who can act on behalf of the company. Company must separate the R&D costs for each project into individual analytical accounts. 			
	The company applies the tax deduction in the tax declaration by filling out an annex to the tax return which contains data from the entry document and the applicable deduction. The Finance Administration publishes a list of all the companies which have applied for the R&D Tax deduction including a short description of each R&D project. The aim is to increase transparency.			
Eligible Costs	The following are the eligible costs for the regime:			
	 Salary Materials Amortisation of equipment & buildings Software licences (for R&D purposes) Running costs (electricity, water, heat, gas) Non-material development results bought from R&D companies certified under the Ministry of Education (only about 200 companies, universities and academic institutions) Certification of the R&D results (e.g. homologation) 			
0	If full or partial funding from public resources is received for any of the costs, this deems them ineligible.			
Issues to Consider	 The Finance Administration publishes a list of all the companies which have applied for the R&D Tax deduction, which includes a short description of each R&D project. This means there is a potential risk of sharing sensitive information with competitors. R&D tax cannot be combined with any other types of incentives. 			

South Africa

South Africa offers any company undertaking eligible R&D activity an additional 50% deduction, i.e. a total 150% 'super deduction' on qualifying expenses. Pre-approval is required and turnaround times for processing pre-approval applications can be lengthy, estimated at between 6-12 months.

As the process is a forward looking, pre-approval, process, companies are encouraged to have a high level understanding of the project's ongoing activities, as well as potential challenges involved over a prospective 1-3 year period.





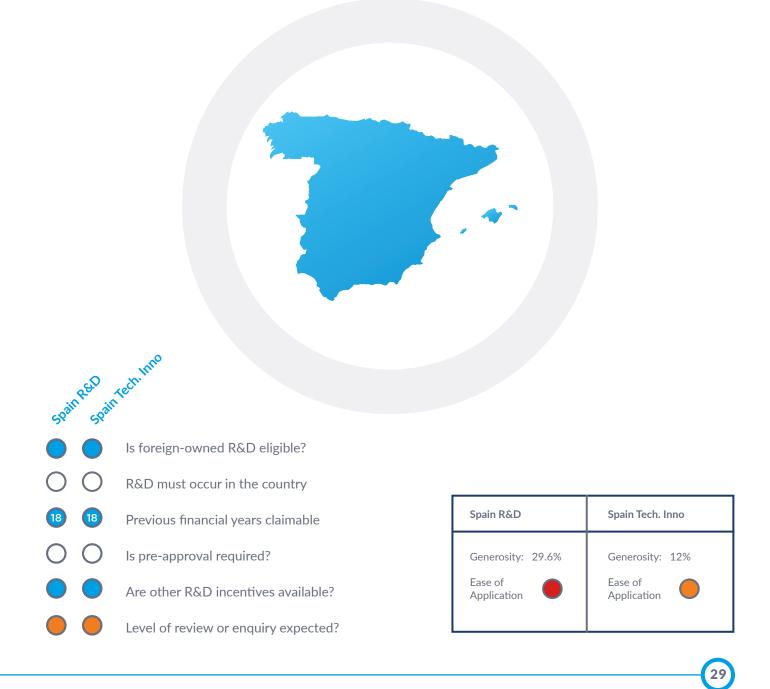
0	South Africa all Companies		
-	50% additional tax deduction (150% Super deduction)		
O Benefit Overview	The South African 150% super deduction scheme requires pre-approval and allows qualifying companies to deduct R&D expenses from taxable income, generating a net tax benefit of 14%.		
	 The definition of R&D for tax purposes is slightly different and the R&D project must fit into one of the below definitions to be eligible for the R&D incentive: 1. Discover non-obvious scientific or technological knowledge 2. Create or develop an invention, functional design, or computer programme 3. Create or develop knowledge essential to the use of an invention, functional design, or computer programme 4. Create significant improvements in functionality, performance, reliability, or quality of the above invention, functional design, or computer programme 5. Clinical trials and the development of multisource pharmaceuticals or generic drugs. Approvals are given to companies on a project by project basis and R&D activities must be carried out within South Africa.		
O Eligible Claim Period	All projects must be approved by the Department of Science and Technology (DST). Companies can claim from the date of submission of the pre-approval application and not just the date of approval, until the project's completion.		
O Historical Background	The scheme was originally introduced in 2006, with modifications being made to the incentive in October 2012, introducing the pre-approval application process. In 2017 the DST introduced an online portal to facilitate online submissions.		
Regulating Body Policies	 The R&D tax incentive is administered jointly by the DST and the South African Revenue Service (SARS) DST approves or rejects projects, based on pre-approval applications The qualifying expenditure claim is administered by SARS, through the submission of the company's annual tax return Turnaround times for pre-approval applications to be processed are currently estimated at 6 - 12 months, after which an approval or rejection letter is received The general deadline for submitting an annual corporate tax return is one year after the financial year end. Companies can elect to claim the incentive in their provisional tax returns, allowing them to benefit from the incentive sooner Special rules now enable the taxpayer to claim the R&D benefit in cases where the DST has taken longer than tax amendment prescription periods (3 years) to adjudicate the pre-approval application submitted. Applications are filled out in a prescriptive online application form. However applicants are allowed to submit supporting project documentation, which is strongly advised. 		
O Eligible <u>Costs</u>	 Only costs incurred after submission of the pre-approval application will qualify for the incentive. As such, it is best to do the pre-approval before the start of the R&D project As a general rule, qualifying costs are costs that are directly related to the R&D activities. As such, costs do not qualify when they are incurred in respect of indirect R&D or other supporting activities Once approved, costs fall into the following categories when calculating the claim value; Labour Subcontractors Overheads Materials Costs incurred in the creation/development of a prototype/pilot plant will qualify for the incentive as long as it is not intended to be utilised or is not utilised for production/commercial purposes after the R&D is completed. 		
O Issues to Consider	Due to the scheme's prospective nature, companies should ideally have a projected roadmap of each project's development and evolution, with identified areas of risk and uncertainty, before applying for the incentive. This will improve the chances of obtaining pre-approval and help ensure continued eligibility of the evolving activities and associated costs to maximise the claim value.		



Spain's R&D Tax credit is generally set at a 25% of qualified R&D expenses. Additionally, when the expenditure exceeds the average of the 2 previous years, that incremental QE receives a 42% benefit. A monetised tax credit is also available, at a slightly lower benefit, which also requires pre-approval and usually has a 2 year wait to receive the benefit.

The definition of R&D applied for the evaluation of projects is rather tight, with a higher degree of novelty required.

There is another possible qualification for projects as 'Technological Innovation'. This type of project is eligible for a 12% tax credit and the evaluation criteria are lighter, and allows many more projects to qualify.



	Spain all Companies		
0	 25% tax relief for all QE that are less than or equal to the average of previous 2 years Additional 42% Tax Relief for all incremental QE greater than the average of 2 previous years' QE Additional 17% benefit for all staff spending 100% of their time on R&D projects 12% tax deduction for all eligible expenditures on technological innovation activities 		
Benefit Overview	R&D project requirements can be hard to meet due to the level of novelty required, which is generally understood to be at an international rather than company or domestic level. There is another category "Technological Innovation (TI)" which does not require the same level of "ground-breaking achievements" and has easier evaluation criteria.		
0	Although not mandatory, pre-approval is generally advisable especially for larger projects and for monetization of the tax credit (cashback) is a must. There are two options, public cashback, where claimed 80% of the total tax credit with two years wait to receive the credits with some requirements about employment maintenance and reinvestment. Second option is private cashback or technological patronage, where the rights are transferred to a private third party through a commercial operation. This mechanism is known as Tax Lease.		
Eligible Claim Period	Whenever pre-approval is sought, claims must be submitted before 6 months and 25 days after the end of the company's financial year; companies can only look back one financial year. The external certification process typically takes 2 months and this process should be completed before placing the claim. The Ministry of Economy can take up to 2-3 years to respond.		
	Tax relief without pre-approval is declared in the company's tax statement, and requires additional documentation only in the case of tax audit. Claims without pre-approval may include many previous financial years.		
	Following the law closely, up to 18 previous fiscal years can be considered to claim the credit. However, it is quite common for companies with greater aversion to risk to limit to the last 4 years.		
O Historical Background	The first definition of R&D based tax relief dates back to 1978, but numerous revisions have improved the mechanism. The Law 27/2014, including all modifications up to this date, regulates the current benefit.		
Application Process	Spanish R&D claims are looked over by Government Tax Agency, where the claim is examined by a technical expert almost immediately. Pre-approval is voluntary, and generally indicated for large projects. However, all applicants can be asked to present a full technical justification or report in case of tax audit.		
O Regulating Body Policies	If no pre-approval is claimed, tax relief is evaluated by the Tax Agency only in case of a general tax audit. Pre-approval is given by the Ministry of Economy, and even in the cases when it is mandatory, this report is not binding for the Tax Agency that might apply different criteria.	Consultations for binding rulings can be placed at the Tax Agency, and while restrictive, their result is absolutely binding in case of audit. Previous binding rulings for similar projects are public (and thus jeopardise any sensitive IP) and can be used to argue in favour of a project in case of audit.	
Eligible Costs	 The following are counted as eligible costs: Salaries Consumables Costs of investments in fixed assets dedicated to R&D Equipment depreciation, which is proportional to the intensity of usage for the R&D Research providers, including advanced software use, post 2001. Other contracted services related to R&D projects 		
Issues to Consider	 Pre-approval is only compulsory for those projects claiming cashback, monetization of tax credit both through the administration and through a private investor. For the rest of cases, i.e. reduction of tax owed, pre-approval is not required, as dictated as optional in the law. Where a company is not claiming cashback, they can decide whether to apply for pre-approval for their projects, or take on the risk and simply create a technical and economic report without this pre-approval, and retain it in case of an eventual tax audit. When pre-approval is claimed, a fee is charged for each project The definition of R&D applied for the evaluation of projects is rather tight, with a higher degree of novelty required In many cases the process is complex, making it quite difficult to navigate Results vary due to different interpretations of the stringent regulations applied by the different experts involved in the emission of official reports on projects. 		

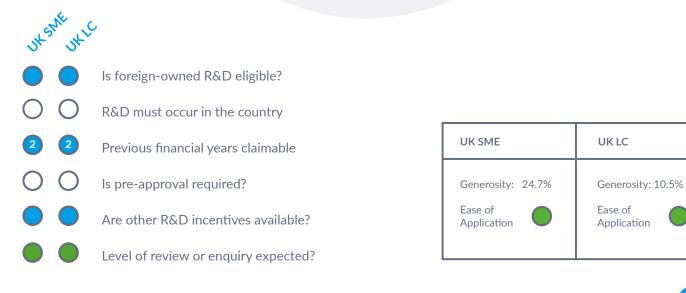
United Kingdom

The UK scheme has different benefits for Large Companies (LCs) and Small and Medium Enterprises (SMEs). The regime offers profit-making SMEs an additional 130% deduction (230% super deduction) of qualifying expenditure from taxable profits; Or loss-making SMEs a cash credit of 14.5%. LCs are offered a 13% expenditure credit (R&DEC).

Technical justification of the claim is not required by law. However a document stating the nature of R&D activities is highly recommended.

Eligible costs have to fit within prescribed cost categories.





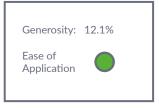
	UK Small and Medium Enterprises (S	ME)	UK Large Companies (LC)	
	130% tax deduction (230% Super Deduction)	Cash Credit	Research and Development Expenditure Credit (R&DEC)	
Benefit Overview	This scheme applies only to profit making SMEs. The net benefit is 24.7% of qualifying expenditure.	If an SME is a loss making entity, it is able to surrender losses for a 14.5% cash credit. The net benefit is 33.3% of qualifying expenditure.	Large companies in the UK are eligible to claim on the R&DEC scheme for a 13% expenditure credit. This is an above the line credit.	
Eligible Claim Period	The UK uses a retrospective scheme for its research and development tax benefits. The scheme includes the ability to claim for eligible R&D expenditure two years from the end of a company's accounting period.			
Historical Background	The SME regime was launched in the UK in 2000.		The LC regime was launched in the UK in 2002. R&DEC was introduced in April 2013 and has since replaced the historical LC regime.	
	Regimes for both SMEs and LCs have become ever more generous since their launch.			
Application Process	R&D tax claims are reviewed in the UK by Her Majesty's Revenue & Customs (HMRC), a non-ministerial department of the UK Government. Applicants are not required, but are advised to provide a full financial and a full technical justification for the claim, in the form of a report. HMRC aims to deliver the benefit 28 days after submitting the claim for SMEs and around 3-6 months for LCs.			
Regulating Body Policies	R&D Tax Incentives are issued by HMRC. All claims for R&D tax benefits are to be submitted to HMRC in the tax return (CT600) for review. Amended CT600s are to be provided for claims made in respect of previous years. In the case of an enquiry, these documents are helpful in defending costs related to R&D projects.			
	Claim Processing Time: There is no official timetable. The benefit could be immediate if it is a reduction of tax owed and inserted as an original submission in the tax return (CT600). If it were a credit of tax paid, the tax authority aims for 28 days.	Claim Processing Time: The tax authority aims for 28 days.	Claim Processing Time: There is no official timetable and is approximately 3-6 months from submission.	
Eligible Costs	 R&D Staff Subcontractors Externally provided workers (EPWs) Consumed or transformed materials not sold for monies or monies' worth. Software 		 R&D Staff Externally provided workers (EPWs) Consumed or transformed materials Software Independent research Note: LCs can only claim up to the total cost of the employees' full NIC and PAYE costs in the financial period. This is the full NIC and PAYE cost, not just the apportioned cost. 	
Issues to	HMRC's R&D inspectors are not technical experts and may have trouble reading and understanding certain project			
Consider	submitted to them. This may lead to a of R&D.	an enquiry to ensure that the technical	nature of the work meets the definition	

USA

The USA has one of the broadest definitions of what qualifies as R&D and is accessible to a far wider category of claimant, including individuals.

The USA offers two different R&D incentive methodologies, the Alternative Simplified Credit (ASC) Method being the primary method used. The ASC Method is an incremental and non-refundable tax credit and equals up to 14% on the excess of current year Qualifying Expenditure (QE), over 50% of the average Qualified Research Expense (QRE) for the prior 3 years. In addition, 36 of 50 states offer a tax credit of up to 15% of incremental increases in QRE over 3 previous periods.





	Federal level	State level	
0	14% benefit on incremental, eligible expenditures that are over half of the average of the previous 3 years.	Depending on the state, the calculation varies, but generally between 5% and 15% of incremental eligible expenditure over half of the average of the previous 3 years.	
Benefit Overview	The benefit is a non-refundable tax credit and claimants can claim a Federal tax credit up to 3 years back. Depending on the state, some credits can be claimed up to 4 years back, while some other states only allow a current year filing. For qualifying start-ups in first five years of operation, a tax credit can be applied against payroll taxes.		
Eligible Claim Period	Fiscal year-based claim, up to 3 years back.	The eligible claim period will vary by state.	
O Historical Background	The regime started in 1981 when the R&D Tax Credit was originally introduced in the Economic Recovery Tax Act to help counteract the recession. Since the credit's original expiry date of 31st December 1985, the credit has expired eight times and has been extended fifteen times, retroactively. The last extension expired on 31st December 2014. In 2015, the PATH Act made the R&D tax credit programme permanent in a measure of the government spending bill.		
O Ease of Application	No pre-approval is required either at federal or state-level. A medium level of technical and financial information is required in case of audit. There is added complexity due to there being both federal and state level incentives.		
	The scheme only requires completing a 2-page form, providing a summary of expenditures to be claimed. IRS expects Taxpayers to have a readily available report detailing the claim building process and methodology, eligible expenditures, eligible projects and eligible activities, along with records to substantiate the claim.	This is dependent on the state and the scheme. However, most schemes have adopted the federal methodology, and forms are short and required information is limited.	
O Regulating Body Policies	The Internal Revenue Service (IRS) is responsible for assessing the federal tax credit, covering both technical and financial eligibility. Franchise Tax Boards (one per state): are responsible for assessing state tax credits, covering both technical and financial eligibility.		
Eligible Costs	The following are eligible costs: • Salaries of US employees including support staff (For staff who spend more than 80% of time on qualified activities, 100% of their salary is eligible) • US subcontractors • Equipment depreciation, which is proportional to the intensity of usage for the R&D • Materials • Supplies • Basic research payments		
Issues to Consider	 While the scheme is very broad and easy to apply for, properly documenting the claim building process, as well as collecting contemporaneous technical and financial supporting evidence, are key elements in case of an audit IRS audits can be aggressive, complex and long – being prepared is key. 		

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www.ayming.be +32 2 737 62 60

Canada www.ayming.ca +1 514-931-0166

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Italy

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Portugal

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Slovakia

www.ayming.sk +421 243 337 640

Spain

www.ayming.es +34 91 575 03 01

Czech Republic www.ayming.cz

+420 222 999 640

France

www.ayming.fr +33 (0) 1 41 49 41 00

Germany

www.ayming.de +49 (0) 211 71 06 75-0

Japan www.ayming.jp +81 (0)3 6661 4501

Netherlands www.ayming.nl +32 (0) 2 737 62 60

Poland

www.ayming.pl +48 22 330 60 00

United Kingdom

www.ayming.co.uk +44 (0) 20 30 58 58 00

USA

www.aymingusa.com +1 281 309 1483

+421 917 889 867 kontaktsk@ayming.com www.ayming.sk

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