Global R&D Tax Incentives

The Benchmark 2023





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 33.5 - 46.5% non-refundable credit for large companies with over \$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







\cup	\bigcirc	R&D must occur in the country

	Previous financial years claimable	e

		,
\bigcirc	\bigcirc	Is pre-approval required?

	Are other R&D incentives available?

Level of review or enquiry expected		Level of	review or	enauirv	expected
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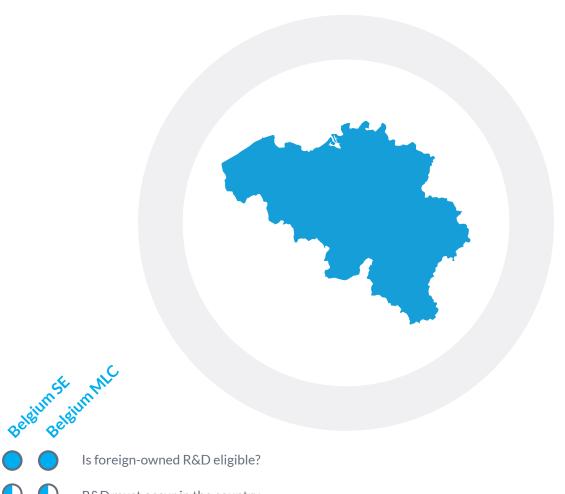
Australia SME	Australia LC
Generosity: 18% Ease of Application	Generosity: 6% Ease of Application

	Australia Small and Medium Enterprises (SME)	Australia Large Companies (LC)	
0	43.5% Tax Credit	33.5%-46.5% Tax Credit	
Benefit Over <u>view</u>	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. Large companies in Australia are eligible to claim a 33.5-46.5% tax credit on eligible R&D expenses. The figure is dependent on eligible spend as a % of total spend in year and group aggregated turnover. This incentive is a non-refundable tax credit, no matter the tax position of the claiming company.		
Eligible Claim Period	Claim Period the relevant fiscal year.		
0	Tax credits may be carried forward, subject to meeting the	Standard tax offset carry-forward rules.	
Application Process			
	Full technical justification pertaining to the relevant R&D i	s required.	
	Once registered, a unique registration number is provided Schedule, lodged with the company tax return with the Au		
0	Companies must register activities for each income year th	ney want to claim the offset.	
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 generating new knowledge. Supporting activities may qualify if they are undertaken to directly support eligible Core R&D activities.			
Eligible Expenditure	Eligible expenditure is incurred by the eligible company du Salaries, contracted work and other direct costs relate Materials transformed or consumed during activities Decline in value of assets used in R&D activities Contributions to Cooperative Research Centres and R	ed to R&D	
O Regulatory Body AusIndustry reviews activity eligibility, whereas the Australian Taxation Office processes the tax cro			
Practices	the Company Tax Return	and it ravation office processes the tax credit till ough	
	Appropriate contemporaneous documentation must be maintained to evidence the R&D activities and expenditure incurred.		
Expect a review of claim at least every 4 years. This is higher for larger value and target industries (softwa mining, construction), but an expectation exists here for high levels of contemporaneous documentation.			
Despite the program being retrospective and self-assessed, advanced assurance can be gained through Finding applications.			
Issues to Consider	Who was the R&D conducted for? Did you have ownership risk?	o of results, control over activities or bear the financial	
	R&D conducted in Australia on behalf of a foreign compan agreements in place.	y may be claimed, depending on the countries and	
Where was the R&D activity undertaken? Generally, all activities must be undertaken in Australia in order t qualify. An "Overseas Finding" can be sought for activities undertaken offshore but these must not equate t 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.



		R&D must occur in the country
3	3	Previous financial years claimable
0	0	Is pre-approval required?
		Are other R&D incentives available?
		Level of review or enquiry expected?

Belgium SE	Belgium MLC
Generosity: 13.5% Ease of Application	Generosity: 11.3% Ease of Application

0	Belgium Small Enterprises (SE) ¹	Belgium Medium and Large Companies (MLC)	
Benefit Over <u>view</u>	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 to 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 Investment Deduction: the corporate tax base deduction is equal to 13.5% of the investment value of 20.5% on 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 by	
	R&D Tax Credit: the corporate tax deduction is equal to the calculated R&D investment deduction multiplied by the applicable CIT rate.	the applicable CIT rate.	
Eligible Claim Period			
	Note: The partial wage withholding tax exemption is applicable only to projects that have been notified before the start of the project to the Belgian competent authority. Based on this rule, the Belgian tax administration takes the position that a retroactive application (i.e. application for the past once notification is done) is not allowed.		
	2. This is to be applied in the annual corporate income tax return, covering the most recent taxable period (corresponding with accounting period in corporate tax matters). Unused investment deduction "ID" can be carried forward and applied in subsequent taxable periods without time limit, but capped.		
Historical Background	was upgraded on 1 January 2018 to include listed Bachelor degrees (whereas previously only listed Masters' degrees and PhDs.)		
_	2. This was introduced into Belgian domestic tax law in De	ecember 2005 and this measure is quite mature.	
Application Pro <u>cess</u>	1. Claims in regards to the withholding tax on wages benefit can be reviewed by the Scientific Policy Support Agency of R&D (BELSPO), which employs technical experts and issue binding decisions on the R&D character of activities. However, the benefit application is reviewed and audited by the Belgian tax administration (the Federal Public Service of Finance).		
	2. The 13.5% one-off deduction or a 20.5% per year spread investment deduction for fixed assets is administered and operated by the Belgium Federal Public Service of Finance. Claims are not reviewed by technical experts.		
Regulating Body Policies	Federal Public Service of Finance, the Belgian tax administration, is the regulatory body.		
Eligible Costs			
)	2. R&D expense justifiably capitalized under BEGAAP.		
Issues to consider	1. Every third company applying the R&D WWHT partial exemption has been under tax control lately. Some industries		
	another, adding inconsistencies between regional adminis	ate, law cases may be interpreted differently from a region to tration bodies and local examinations. management is crucial to obtain and secure the full potential o	
	Obtaining "a structural R&D certificate" from BELSPO can	help companies support R&D justification of their activities.	
	2. A pre-notification of the project before applying is mandatory. An environmental certificate should be obtained from the competent Regional authority.		

Brazil

Brazil's main R&D Tax Incentive, Lei do Bem offers a minimum 160% superdeduction on R&D expenses. In addition, accelerated depreciation of R&D assets, tax credit on IT Law, incentives for R&D machinery / equipment acquisition result, IP, Automotive industry.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Average Generosity: 20%

Ease of Application

•		Brazil Minimum R&D Superdeduction	Brazil Increasing contracted researchers	
0		160% R&D superdeduction	Up to 200% R&D superdeduction Increasing up to / more than $5\% \rightarrow +10\%$ / $+20\%$ IPI in Brazil $\rightarrow +20\%$	
0	Benefit Over <u>view</u>	With a minimum of 15% taxation, the scheme allows 9% benefit, and can increase beyong 25%, resulting in benefit exceeding 15% of qualifying expenses.	In case of a 25% taxation, the benefit increases from 15% to 25%	
0	Eligible Claim Period			
0	Historical Background			
0	Ease of Application Claim is based on a self-assessment; no upfront approval is requested. Claiming company is requested to the tax clearance certificate for concerned fiscal year.			
0	Regulating Body Policies	Both Ministry of Economy and Ministry of Science, Technology and Innovation (MCTI) are supervising the schemes.		
0	Eligible Costs 	 Salaries Materials Machines Equipment Instrument Intangibles Limitative R&D subcontracting 		
O	Issues to Consider			

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.





Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

O Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Canada SMB	Canada LC
Generosity: 36.1% Ease of Application	Generosity: 16.6% Ease of Application

0	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	
Benefi Overviev		The Federal Tax Credit for LC is non-refundable. The Provincial Tax Credit for LC can be refundable, depending on the province.	
Eligibl Claim Perio			
Historica Backgroun	The programme was founded in 1944, the first in the wo		
Ease of Application			
Regulatin Body Pol <u>icie</u>	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 their value) Material consumed or transformed Overhead (an additional benefit, approximated either as 55% of eligible salary base, or company calcalculate it in detail) Third Party Payments - Universities and Public Research Centers - which are capped at 80%.		
Issues t Conside	Appropriate presentation or positioning of projects is	key, otherwise the claim will be denied in audit y, meaning every new claimant is visited the 1st year and	

China

China offers a wide range of Incentives for Innovation and R&D. The R&D superdeduction has been renewed and even improved for manufacturing companies. In addition, TASC (Technologically Advanced Service Companies) and HNTE (High and New Technology Enterprises) statuses offer reduced taxation amongst other bonuses.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 18,75% 25% for manufacturing

Ease of Application

0		China Standard	China Manufacturing companies	
0		175% R&D superdeduction	200% R&D superdeduction	
0	Benefit Overview	With a standard 25% corporate income tax rate, the extra 75% superdeduction allows a 18,75% standard generosity.	Considering the extra 100% superdeduction, the benefit results in a 25% average generosity.	
0	Eligible Claim Period	Expenses incurred during fiscal year are claimed with the end. The scheme is a superdeduction that reduces tax liab		
0	Historical Background	Available since many years, the scheme has recently experienced a renewal until at least 2023, in addition to an increase in generosity for all companies and especially manufacturing companies.		
0	Ease of Application			
	Regulating Body Policies	The claims can be assessed from both financial and technical / scientific aspects, at both local and regional levels, so discussions can be engaged in case of disagreements. Tax authorities have a 20% target for controlling claims.		
O	Eligible Costs			
0	Issues to Consider	The formalism for demonstrating R&D is very demanding. approach, all R&D and Innovation being labelled upfront.	It is hence very difficult to claim on an opportunistic	

Colombia

Colombia offers a full deduction of R&D expenses from tax liability. In addition, a 25% tax credit is granted on those same expenses. An enhanced 50% rate is granted to SMEs.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 25%

Ease of Application

0	Colombia Standard	Colombia Micro & SMEs
0	25% tax credit	50% tax credit
Benefit Over <u>view</u>	Investments in Research & Innovation are 100% deducted in the tax liability. 25% of the costs are granted as tax credit.	The 25% tax credit is extended to 50% for MSMEs.
Eligible Claim Period	Investments are claimed during the Fiscal Year. Pre-appro scientific and financial details.	val being compulsory, the projects are presented with
Historical Background		
Regulating Body Policies Ministry of Sciences (Ministerio de Ciencias) mainly supervises the application of the scheme, included approval and control. Tax authorities are also involved. Other ministries can also be solicited dependent.		
Eligible Costs		
Issues to Consider	Companies are due to pay at least 75% of the gross tax lial expected for presenting a project.	bility. A full demonstration, scientific and financial, is

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.



- Is foreign-owned R&D eligible?
- R&D must occur in the country
- Previous financial years claimable
- Is pre-approval required?
- Are other R&D incentives available?
- Level of review or enquiry expected?

Generosity: 19.3%

Ease of Application

	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 preparation and processing 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.	
	 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. 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. 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).	
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 purchased from public research institutions (as defined for public research institutions) 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). 	

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 and accredited subcontracted R&D (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 30% from expenditure in 2023 of innovation expenses up to 80K€ (400K€ in QE).



Level of review or enquiry expected?

	France all companies	France SMEs ——
0	30% Research Tax Credit (up to €100 million QE, 5% thereafter)	30% Innovation Tax Credit (SMEs, up to K€400 QE)
Benefit Over <u>view</u>	The calculated Tax Credit is deducted from the year's cor back for a maximum four years after claiming.	porate income tax, with unused tax credits being cashed
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 when it became a volume-based incentive. Improvement is now mature and stable, having been declared durable b	to the regime occurred in the early 2010s and the scheme y the last 3 presidents.
Ease of Application	There is a flexible but compulsory justification template for demonstrating R&D and/or Innovation that companies have to complete for each R&D or innovation project. This covers both technical and financial information with a significant level of detail.	
	The 2069-A-SD Tax Form needs, in the case of a tax audit, cost category and for each project, along with supporting	
	The benefit is deducted from income tax the year of claim	ing, unused credits being carried forward for three years.
	Cashback of unused credits is given after this 3 year perion cashback is available for SMEs.	od and is usually received within weeks. Immediate
0		
Regulating Body Policies	The tax authority does regular and randomised audits of s Education, Research and Innovation is requested to asses	
	Sometimes an audit meeting is organised for the company	y to present its R&D and qualifying activities.
OEligible	Technical staffing costs	Technical staffing costs
Costs	R&D equipment depreciation allowances	 Innovation equipment depreciation allowances
	Operating costs – pre-determined as 43% of	Operating costs – pre-determined as 43% of staffing and 75% of depreciation allowances
	staffing and 75% of depreciation allowances	Subcontracted Innovation
	Subcontracted R&D Technological watch - conferences, IP	Innovation Grants (as a deduction of the QE)
	Patents	
	Standardization meetingsR&D Grants (as a deduction of the QE)	
0		
Issues to Consider	published each year by the French Ministry of Research. I	ation has to be operated according to an updated template n the case of a tax enquiry, both the Ministry of Research or is technical or financial. The window of enquiry is until 31st

Germany

The German R&D tax incentive scheme (Forschungszulagengesetz, FZulG) was established in 2020 and offers a 25% tax deduction of the eligible costs, where the eligible costs are staff costs and 60% of external contract research. To apply for tax credits, companies have to follow a 2-step-approach. First: Applying for the technical certificate for the eligibility of projects. This certificate is automatically transferred to the tax office. Second: Filling in the financial claim in ELSTER (German online tax office system and deduction of the companies taxes or cash payment if tax liability is less than claim.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 25%

Ease of Application

0	Germany all companies
_	25% reduction of tax liability, or cash credit paid to a maximum of 1.000.000 Euro per company (group) and year.
Benefit Over <u>view</u>	25% on R&D labour costs and effective 15 % of contract research costs, to a maximum claim of 1.000.000 Euro per company (or group/holding if the company is part of a larger organization). The tax benefit is taken as a reduction of the corporate tax owed or, if there is insufficient tax liability, a credit is payed out.
Eligible Claim Period	It is a retrospective regime – the first application can be made for 2020. Projects must not have started before 1st of January 2020. There is a possibility to claim more than 1 year back on any eligible R&D activity. The eligible claim period can go back for 4 years.
Historical Background	This is one of the youngest regime, started on 1st of January 2020. For the technical evaluation of projects, the "Bescheinigungstelle Forschungszulage" (BSFZ) was established. A complete digital application platform is online since January 2021. All other necessary processes are now also digitally mapped.
Ease of Application	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 quite new regime that impacts and involves a lot of governmental bodies (at least two ministries, one new grantor body (consortium of three existing grantor bodies) and the local finance authorities and b) these bodies strongly refer to the European GBER and follow their regulations, it took almost two years until the entire process was established. Now the evaluation of the technical application (1st step) is very standardized and limited to max. three months. The evaluation time for financial claim (2nd step) depends very much on the local tax office: it lasts between one week and several months.
Regulating Body Policies	Regulation is managed by the Ministry of Finance and the Ministry of Research and Education and a separate, grantor body (BSFZ) that handle all R&D claims. The assumed/estimated budget will be approximately €2.5 bn per year.
Eligible Costs	Labour costs for R&D staff and (60% of) external contract research to contractors located in the EU or EEA.
Issues to Consider	R&D definitions are Frascati-based. All projects, without exception, underly a technical evaluation in the 1st step of the claiming process. The eligible costs of all approved projects can be claimed in one application for the respective financial year. Even if companies' projects are claimable in a first step, the amount of costs can be doubted during tax declarations. In addition to the documents to be submitted, many documents must be kept available in response to possible inquiries. This applies in particular to a comprehensive recording and documentation of the hours of the employees involved.

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.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 25%

Ease of Application

Ireland all Companies 25% Tax Credit on Eligible R&D Expenditure for all companies Benefit Ireland's R&D tax credit regime is generic in nature, covering a wide scope of eligible activities and offers a Overview 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 The tax credit must be claimed within 12 months of the end of the accounting period for the year in which the Period expenditure occurred • Research and Development Tax Incentives are issued by the Irish Office of Revenue Commissioners. Historical • R&D Tax incentives were launched in Ireland in 2004 and it was an incremental regime. Since then it has slowly Background evolved into a volume-based regime. R&D claims are submitted to the Irish Revenue by submitting a CT1 form using the Revenue Online Service, which Application **Process** details only the QE. 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 All claims are submitted to the Irish Office of Revenue Commissioners which reviews the claims. **Body Policies** 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. **Eligible Costs** 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. 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. Issues to • Comprehensive, contemporaneous financial and technical support must be captured in real time for all R&D projects claimed. Consider • 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 a tax credit for Industry 4.0 for machinery and software.

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) and 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).



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 22%

Ease of Application

Italy all Companies From FY2020 there are five different types of Tax Credit with different rates for expenses in R&D, Technological Innovation, 4.0 Technological Innovation, Ecological Transition and Design. Benefit The 2020 Italian Budget Law (Legge di Bilancio 2020) introduced several changes to the existing tax credit regime: Overview by way of example, a new calculation method (from incremental to volumetric) as well as four 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 2022 Italian Budget Law has renewed the tax credits until 2031 foreseeing a reduction in rates over the years. For FY2023, the applicable rate is 10% for all type of tax credits. 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 €4 million for R&D projects €4 million for ecological transition and 4.0 technological innovation and at €2 million for both for technological 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. Eligible 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. Claim Period 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.). 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 The previous incremental regime has seen several changes between 2015 and 2019. These varied the tax credit's Background rates from between 25% to 50% depending on the cost's category. Ease Of Pre-approval is not required however companies must obtain a Statutory Audit Certification and are obliged to Application produce a technical report - signed by the R&D Manager and countersigned by the legal representative - describing the implemented projects. Regulating The Italian tax authority (Agenzia delle Entrate) regulates the process as well as being in charge of any enquiry. **Body Policies** 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. • Personnel directly employed in eligible projects (the cost within baseline's calculation is increased to 150% for PhD Eligible Costs 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. Issues To • 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 Consider the Oslo Manual; • The new tax credit regime is in force from 1st January 2021 to 31 December 2031, foreseeing a reduction in rates over the years: • 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.

Mexico

The R&D Tax Credit proposed by Mexico is an incremental 30% reward., applied to R&D expenses exceeding the average of the 3 previous years, in the limit of 50 million pesos (approx. 2 Million euros).



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Average Generosity: 10%

Ease of Application

0		Mexico Incremental Tax Credit
0		30 % (QE ^N - (QE ^{N-1} + QEN ⁻² + QE ^{N-3}) / 3)
		QE = Qualifying Expenses
0		N = year of R&D expenses
0	Benefit Over <u>view</u>	Only increased R&D expenses will open the benefit for the tax credit. The average of the 3 previous years set the reference of standard R&D expenditures for the company. The benefit is then computed by the difference of the investments incurred in the concerned year to that average reference.
0	Eligible Claim Pe <u>riod</u>	For each year, companies must present technical / scientific evidence, administrative documents and computations before end of February. This upfront approval is requested before proceeding to the use of the credit on the tax liability.
0	Historical Background	In 2020 the Mexican government and the National Council of Technology & Science (CONACYT) has decided a stimulus for Research and Innovation.
0	Ease of Application	To be approved, the claim needs: increasing expenses, strong innovation evidence, pe-approval form authorities. Following the approval, companies must follow a guideline for reporting achievements of the projects.
0	Regulating Body Policies	National Council of Technology $\&$ Science (CONACYT) supervises the incentive.
0	Eligible Costs	Most expenses engaged in R&D are included, such as salaries, prototyping and experimenting costs, tools, equipment, machinery, materials, and outsourced R&D, especially with public bodies (universities, R&D centres)
0	Issues to Consider	Strong Innovation and R $\&$ D indicators are expected, such as IP and cooperation with research organisms.

Netherlands

The primary fiscal instrument with which the Netherlands support R&D in the private sector is the payroll withholding tax credit called WBSO (Wet Bevordering Speur- en Ontwikkelingswerk). Through this government incentive scheme, costs (wages, non-labor costs and expenditures) directly and uniquely in service of R&D will be partially compensated for by the Dutch government. The WBSO has to claimed in advance.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 11.4%

Ease of Application

Netherlands all Companies* Tax benefit per calendar year: 32% of withholding tax exemption up to 350,000 in qualifying R&D expenses (40% for startups) 16% above Benefit A WBSO application should describe the planned R&D projects, its associated hours/costs, for a fixed period of Overview minimum three months. When approved, the applicant is granted a total payroll withholding tax credit which it can offset in monthly instalments for the duration of the period covered. The WBSO is meant to alleviate the costs of two types of R&D projects: 1. development projects 2. technical scientific research The WBSO works by converting part of the eligible R&D project costs (wages, non-labour costs and expenditures) into a payroll withholding tax credit which can be used up in monthly instalment by the recipient. The eligible claim period relates to the future (limited to 1 year) with no possibility to claim retroactively. Eligible Claim Period An eligible WBSO period covers at least three months (within the same calendar year) and is at most one full calendar year. The application has to be introduced at the latest on the day before the period during which the eligible R&D costs are made. Applicants can introduce a maximum of four applications per calendar year. An application period cannot bridge different calendar years. There is no limit on the number of R&D projects (and thus the total eligible costs) that are taken into account in a WBSO period. The WBSO legislation went into effect on January 1st 1994 with a budget of about 95 million EUR vs 1 438 million Historical Background EUR in 2021. Its primary benefit is the reduction of payroll costs associated with R&D projects. The WBSO in its current form is the result of the 2016 merger of the former withholding payroll tax credit for R&D wage costs (also called WBSO) and the R&D tax allowance for non-labour related R&D expenses (called RDA). As of January 1st 2020 applications can be submitted one calendar day before the start of the period in which R&D costs are incurred (vs 1 month until December 2019). Application The WBSO application process works via an online portal (eLoket) and is fully digitalized. As of 1st of July 2021 **Process** authentication requires each applicant to log in using level 3 authentication. On the portal, applicants can follow their ongoing applications as well as their historical granted applications. The digital application consists of three parts: identification of the applicant, period of application and description of the projects, estimation of the R&D hours and Applications are evaluated by advisors of the Rijksdienst voor Ondernemend Nederland (RVO). For approved WBSO applications an extensive administration has to be kept such as timesheets identifying and differentiating the actual R&D hours spent (updated at least every two weeks) as well as project documentation proving the execution of the project according to the approach laid out in the application. Finally, in the first quarter of year N each recipient of a WBSO tax credit has to submit a report via the online portal detailing the actual R&D hours and expenses incurred during the WBSO period. If the reported actuals are at least 10% lower than the estimates in the initial application, the recipient will receive notice for a rectification equal to the difference In case a WBSO application is denied, the applicant can introduce an official objection to the trade and industry Appeals Tribunal. **Regulating Body** The Rijksdienst voor Ondernemend Nederland (RVO) is an executive body of the Dutch Ministry of Economic Affairs and Climate Change and is tasked with evaluating the WBSO applications and performing (on site) inspections on **Policies** recipients to check whether sufficient documentation can be shown to prove the projects were actually executed. Eligible - Payroll costs of employees working on the R&D projects ongoing during the WBSO period in the application - R&D related non-labour costs and expenses for which the applicant can choose for two regimes: the first regime is Costs an overhead model in which an allotment for non-labour costs and expenses is calculated with R&D person hours is used as a cost driver. In the second regime the applicant can use invoices and quotes to prove incurred costs and thus ask for reimbursements via the WBSO. The WBSO applications are primarily evaluated on the technical/scientific challenges and uncertainties by advisors Issues to Consider with STEM backgrounds and working experience in a relevant sector. Be prepared to answer detailed and in depth technical questions on each R&D project in the application. Applicants are expected to keep detailed and extensive administration for all R&D projects which are part of an approved WBSO period. Applications can be submitted in Dutch or in English. No retroactive claims are possible.

New Zealand

New Zealand offers a flat 15% tax credit for all companies.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 15%

Ease of Application

	New Zealand, all companies
0	15%
Benefit Overview	15% tax credit
Eligible Claim Period	1 historic year, plus 30 days to file.
Historical Background	An R&D scheme existed in NZ for a few years around 2008-10 but was abolished. A new scheme was introduced for the 2019-20 income year; although based on many similar schemes in anglophone countries it is still quite immature.
Ease of Application	Generally fairly straightforward; NZ Revenue is open to cooperative discussions prior to claims. Expectation of contemporaneous documentation of R&D, although this is flexible and it is recognised that the record-keeping should not be onerous.
Regulating Body Policies	From 2020-21, claims over $$2m$ must either seek specific approval for each R&D activity; or seek 'significant performer' approval for he claim methodology and certification of the R&D activities.
Eligible Costs	Fairly broad – works on an exclusionary basis. Generally all opex is eligible, including depreciation, as long as it can be directly attributable to R&D. There are however, particular restrictions: Costs related to commercial production are limited only to additional costs incurred because of the R&D. Outsourced R&D can only be claimed on a 'look through' basis. The 'feedstock rule' applies to materials, limiting to the cost of input less the value of output.
Issues to Consider	Strong Innovation and R&D indicators are expected, such as IP and cooperation with research organisms.

Poland

For SMEs and Large Enterprises, Poland offers an equal deduction of 200% of labour costs and 100% of the rest of all eligible costs for research and development projects. In the case of R&D centres, the deduction amounts to 200%. The regime allows for companies to claim retrospectively up to 5 years.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 19%

Ease of Application

	Polish SME and Large Enterprises	Polish R&D Centres
O	200% - Tax Deduction of labour costs 100% - Tax Deduction of other eligible costs	200% Tax Deduction
Benefit Over <u>view</u>	All companies can claim up to 200% 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. From 2022 companies can also use two new proinnovation reliefs: relief for prototypes and innovative employees relief. Both mechanisms are complementary to R&D relief.	Companies that have special R&D centre status can claim from 100% (cost of getting legal protection for technical knowledge) and 200% for all additional qualifying costs, as a reduction of their tax base within the year the expenditure is incurred.
Eligible Claim Pe <u>riod</u>	Companies can claim retrospectively up to 5 years. In prastandard fiscal year following the claim period. It's not pos	
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 November The third version was accepted on 9 November 2017. The 2022.	r of 2015, with the second version on 4 November 2016.
Application Process	Companies apply the tax deduction in the tax declaration end of fiscal year. If the claim is made retrospectively, com and prepared corrections of CIT declarations for past yea. The claim processing time in Poland is instantaneous if maretrospectively the processing time can take up 2 months.	apanies have to ask the tax authority for tax overpayment rs - maximum 5 years back. ade at the end of fiscal year. If the claim is made
Regulating Body Policies	Fiscal controls are carried out by tax authorities. The Act is managed by the Ministry of Finance.	
Eligible Costs	Eligible costs related to R&D activities can be used to claim from 100 to 200% 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 200% 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.
Issues to Consider	The Polish R&D regime is easy to apply and claim for, how documentation is professionally prepared in case of fiscal claims submitted up to 5 years back. It is responsibility of that all legal requirements have been met.	
	Company is obliged to separate the R&D eligible costs int	o 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.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 48.4%

Ease of Application

	Portugal all Companies	
0		
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 12 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 120%.	
	* SIFIDE (Sistema de Incentivos Fiscais à I&D Empresarial)	
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.	
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. Participation in the capital of R&D Institutions and contribution to Funds that invest in companies certified by ANI, only by 32,5%. *Employee has a minimum of secondary level of education plus a traineeship, i.e. the employee must have a minimum rating level of 	
0	Employee has a minimum or 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	
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.	

Romania

Romania's main R&D Tax Incentive offers a minimum 150% superdeduction on R&D expenses.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 8%

Ease of Application

Level of review or enquiry expected?

		All Companies			
_		150% R&D superdeduction			
O	Benefit Over <u>view</u>	The Superdeduction could be claim if the company paid taxs on the year. The unused tax credits is report on the next year and in the following 7-year period. The unused is never cashed. No carry back of tax losses is available.			
0	Eligible Claim Period	The superdeduction is included on the annual corporate tax return, which must be filed by 25th of the third month after the end of the tax year.			
0	Historical Background	The scheme was originally introduced in 2015 by the Ministry of Financial and the Ministry of Research, with modifications being made in 2016 and 2017.			
O	Ease of Application	Claim is based on a self-assessment; no upfront approval is requested. Claiming company is requested to present the tax clearance certificate for concerned fiscal year.			
	Regulating Body Policies	The regional and national tax offices, and the Ministry of National Education and Scientific Research.			
	Eligible Costs	 Technical staffing costs R&D equipment depreciation allowances Operating costs, including a part of administrative costs Subcontracting Externally porvided workers 			
	Issues to Consider	R&D definitions are Frascati based (Fundamental R&D are not eligible), need a notion of a risk on the market The projects costs can be claim OR by the contractor OR by the subcontractor. Need a letter of renunciation from the contractor for the subcontractor to claim the project .			

Singapore

Singapore offers a flat 150% superdeduction for all companies, so long as R&D is undertaken in Singapore.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 25.5%

Ease of Application

0		Singapore all companies				
0		25.5%				
0	Benefit Overview	150% superdeduction for eligible costs, though the specific costs that can be included are quite constrained. At the main rate tax rate of $17%$ (exemptions for v low profits) this gives a benefit of $25.5%$				
	Eligible m Period	3 Year of assessments, including current YA (hence 2 historic yrs).				
	listorical kground	Various discretionary incentives have existed for decades, but a statutory scheme was introduced as a superdeduction in 2009. There have been various adjustments since then. Substantial changes to the scheme effective from 2018, most notably a significant increase in generosity (with superdeduction increasing from 50% to 150%				
Арі	Ease of plication	Company makes claim via Form C-S; this is fairly self-explanatory but requires an overview, documentation, and separate quantification for each project included in the claims. A company may directly request review by the 'Technical Panel' of scientific experts; this is also automatic after two rounds of correspondence with IRAS.				
	egulating Policies	Details of each project, including a summary of the R&D undertaken and a quantification of each cost, must be provided in the Form C-S. Each claim is reviewed by IRAS (not clear the level of scrutiny) IRAS is open to less stringent documentation for smaller businesses and claims. IRAS has recently introduced the "R&D Assurance Framework" as a mechanism to get certainty for 3 years at once; subject to a minimum number of projects and expenditure.				
0	Eligible Costs	Staffing costs Consumables 60% of 'contracted out' costs.				
	Issues to Consider	R&D must take place in Singapore to be eligible for superdeductions. Overseas activity is deductible at 100% (without superdeduction) but only if it is related to the trade.				
		Any grants received (and there are a lot available in Singapore) must be deducted from QE. No payable credits, so lossmaking companies do not gain a cash benefit.				

Slovakia

Slovakia offers a 100% deduction of eligible costs from the income base, providing a net benefit of 21% on the cost of R&D. There is an additional deduction that can be applied to any incremental increase between current and previous two years of QE, equating to an additional 21% benefit.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 23.9%

Ease of Application

0	Slovakia all Companies				
0	100% for all QE in current year plus an additional bonus based on calculation between current and previous two years. The net benefit equals $21%$ from the result.				
Benefit Over <u>view</u>	Slovakia offers a 100% deduction of eligible costs from the income base, providing a net benefit of 21% on the cost of R&D. There is an additional deduction that can be applied to any incremental increase between current and previous two years of QE, equating to an additional 21% benefit.				
Eligible Claim Period The company can look back retrospectively for one financial year and the claim must be made with of year-end, as an input into the tax computations (immediate relief). The company can request a 'company can look back retrospectively for one financial year and the claim must be made with of year-end, as an input into the tax computations (immediate relief). The company can request a 'company can request a 'compa					
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 was possible to claim 100% of R&D costs. For FY 2019 it was 150% and 200% since FY2020, plus an additional 100% for any incremental QE over and above the average of the two previous years.				
	In FY 2022 it is possible to claim again 100% of R&D costs in the year.				
Ease of Application	There are 2 main conditions: 1) 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. 2) Company is obliged to 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	 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 860 companies, universities and academic institutions) Certification of the R&D results (e.g. homologation) Services purchased from the Slovak Academy of Sciences or from a Universities If R&D project has full or partial funding from public resources received for any of the costs, this deems them ineligible. 				
Issues to Consider	 An R&D tax deduction is easy to apply and claim for. However the company claiming needs to make sure that the documentation is professionally prepared and within the law. The Financial Administration can retrospectively review claims submitted up to 5 years back, during tax audits. In that case, it is the responsibility of a taxpayer to provide evidence or supporting detail that all legal requirements have been met. The company is obliged to separate the R&D eligible costs for each project into individual analytical accounts. R&D tax cannot be combined with 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.



- Is foreign-owned R&D eligible?
- R&D must occur in the country
- Previous financial years claimable
- Is pre-approval required?
- Are other R&D incentives available?
- Level of review or enquiry expected?

Generosity: 14%

Ease of Application

South Africa all Companies 50% additional tax deduction (150% Super deduction) Benefit The South African 150% super deduction scheme requires pre-approval and allows qualifying companies to deduct Overview 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. Eligible All projects must be approved by the Department of Science and Technology (DST). Companies can claim from the Claim Period date of submission of the pre-approval application and not just the date of approval, until the project's completion. Historical The scheme was originally introduced in 2006, with modifications being made to the incentive in October 2012, Background introducing the pre-approval application process. In 2017 the DST introduced an online portal to facilitate online submissions. Regulating • The R&D tax incentive is administered jointly by the DST and the South African Revenue Service (SARS) **Body Policies** • 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 • 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. 0-----Eligible • 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 Costs • 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.

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

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 QE receives a 42% benefit, percentage that can reach 59% for those workers dedicated exclusively to R&D. A monetised tax credit is also available, at a slightly lower benefit, that involves meeting additional requirements and usually has a 3 year wait to receive the benefit.

The definition of R&D applied for the evaluation of projects is rather tight, requiring a high degree of novelty at sectoral level.

There is another possible qualification for projects as 'Technological Innovation'. This type of project is eligible for a 12% tax credit being a much more accessible qualification since the novelty is at a subjective level, which allows many more projects to qualify.



Spain all Companies

- 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 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 novelty and it is more accessible to most companies.

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 private monetisation, where the rights are transferred to a private third party through a commercial operation using a specific purpose vehicle. This mechanism is known as Tax Equity.

Eligible Claim Period

Applications must be submitted no later than 6 months and 25 days after the end of the financial year. Companies that want to apply for an IMV ('Informe Motivado Vinculante') certificate from the Ministry of Science and Innovation, can only do so for the last financial year. In this case, the Ministry takes about one year to issue its decision.

Tax relief without pre-approval is declared in the company's tax statement, and requires additional documentation only in the case of tax audit. The scheme allows the tax deductions recovery from previous tax years.

Due to recent changes in the law, companies can only claim the credit for the last 4 tax years -not prescribed years-.

Historical Background

The first definition of R&D based tax relief dates back to 1978, but different revisions have evolved the scheme. 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 the Government Tax Agency, 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.

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 Science and Innovation, 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 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
- 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. for the application of the deduction on the full tax liability, pre-approval is not required. Where a company is not claiming cashback, they can decide whether to apply for pre-approval for their projects, or prepare a technical inside the parenthesis (each project) and economic report, justifying the correct application of the incentive, and retain it in case of an eventual tax audit.
- When pre-approval is claimed, a fee is charged for each project by the external auditor.
- In many cases the process is complex, making it very difficult for companies to process and access deductions.
- Results vary due to different interpretations of the stringent regulations applied by the different experts involved in the emission of official reports on projects.

Switzerland

Switzerland has introduced a the Federal level a superdeduction with the possibility for cantons to propose a 50% superdeduction on R&D expenses.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 7,5%

Ease of Application

	Switzerland all companies ————————————————————————————————————
0	Max. 50% superdeduction.
Benefit Over <u>view</u>	In cantons offering up to 50% R&D superdeduction, considering an average 15% cantonal Corporate Income Tax rate, the benefit is $50\% \times 15\% = 7,5\%$.
Eligible Claim Period	The superdeduction is detailed and claimed with the tax return.
Historical Background	The superdeduction was recently (2020) introduced.
Ease of Application	Tax ruling is available to ensure upfront compliance. Considering cantonal and federal taxation rule, the superdeduction can be limited in benefit.
Regulating Body Policies	Swiss tax authorities
Eligible Costs	Staffing costs Operationnal costs, equal to 35% of the staffing costs 80% of R&D operations subcontracted to third parties
Issues to Consider	Eligibility criteria are close to Frascati, so most R&D typical activities might qualify. Expenses are claimed the following year with the tax return

Turkey

Turkey allows company to take full tax deduction with their R&D expenses and investment. Therefore, even loss-making companies can take benefit of this tax deduction by carrying forward their deductible R&D expenses as long as they need. If the process of applying is demanding, either by certifying entities and / or their projects, additional bonuses are likely to convince.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

Level of review or enquiry expected?

Generosity: 23%

Ease of Application

		Turkey All companies			
0		100% R&D deduction from income tax ② infinite carry forward in case of loss-making			
0	Benefit Over <u>view</u>	The main feature of the Turkish scheme is a 100% corporate tax deduction for expenses incurred in R&D. Loss making companies can therefore carry forward indefinitely. With a reduced corporate income tax of 23% in 2022, it is a 23% benefit guaranteed for all companies, even if the scheme is not properly saying a superdeduction. The benefit for profit-making companies is therefore limited. In addition, an income tax withholding incentive and a social security bonus complete the scheme amongst other features.			
Clair	Eligible m Period	Deduction for pre-approved R&D projects is processed with corporate tax return.			
	listorical kground	For two decades, Turkey has invested in R&D tax incentives for economic development. It has ever since been continuously renewed and reshaped until its latest modification in 2021.			
Apı	Ease of plication	Pre-approval is compulsory from TUBITAK. Certified design centres or R&D must be certified by a sworn-in certified public Accountant.			
	egulating Policies	TUBITAK (Scientific and Technological Research Council of Turkey)			
0	Eligible Costs	All costs incurred for the approved projects are eligible and can be carried forward.			
	Issues to Consider	Companies must obtain pre-approval from TUBITAK for projects or getting certified for applying to the scheme. Minimum R&D resources are requested to do so.			

United Kingdom

The UK offers SMEs a 130% deduction from taxable profits or loss-making SMEs a cash credit of up to 14.5% and LCs a 13% expenditure credit (R&DEC) for large companies. These rates are due to change significantly with effect from April 2023.

Technical justification is not required by law, but a document stating the nature of R&D activities is highly advised.

Eligible costs have to fit within prescribed cost categories.







\bigcirc	\cup	R&D must occur in the country

2	(2)	Previous financial years claimable

()	Is nre-annroval required?

	Are other R&D incentives available?

	Level of review or enquiry expected?

UK SME	UK LC	
Generosity: 24.7% Ease of Application	Generosity: 10.5% Ease of Application	

0	UK Small and Medium Enterprises (Si	UK Large Companies (LC)		
0	130% tax deduction (230% Super Deduction)	Cash Credit	Research and Development Expenditure Credit (R&DEC)	
Benefit Over <u>view</u>	This scheme applies only to profit making SMEs. The net benefit seen is 26% of qualifying R&D tax	If an SME is a loss making entity, they are able to surrender losses for a 14.5% cash credit. The net benefit is seen as a 33.3% benefit on every pound spent on eligible R&D projects.	Large companies in the UK are eligible to claim on the RDEC scheme for a 13% expenditure credit. This is an above the line credit.	
Eligible Claim Pe <u>riod</u>	The UK utilises a retrospective schem ability to claim back for eligible R&D e	oment tax benefits. This includes the		
Historical Background	Maturity of Regime: 2000		Maturity of Regime: 2002 (RDEC was introduced in April 2013 and has since replaced the historical LC regime)	
0	Regimes for both SMEs and Large Cor	npanies have become ever more genero	us over their lifetime.	
Application Process				
Regulating Body Pol <u>icies</u>	Research and Development Tax Incentives are issued by Her Majesty Revenue & Customs (HMRC). All claims for R&D tax benefits are to be submitted to the HMRC in the tax return (CT600) for review. Technical and Financial supporting documentation are not required with an application, but they are strongly advised. In the case of an inquiry, 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 payed, the tax authority aims for 29 days.	Claim Processing Time: The tax authority aims for 29 days	Claim Processing Time: No official timetable. Approximately 6 -12 weeks	
Eligible Costs	 R&D Staff Subcontractors Externally provided workers (EPWs) Consumed or transformed materials Software Data and Cloud computing (from April 2023) 		1. R&D Staff 2. Externally provided workers (EPWs) 3. Consumed or transformed materials 4. Software 5. Independent research 6. Data and Cloud computing (from April 2023) 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 Consider		nical experts and may have trouble read an enquiry to ensure that the technical I		

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 shall be equal to 14% of so much of the Qualified Research Expenses (QRE) for the taxable year as exceeds 50% of the average QREs for the three prior tax years for which the credit is being determined. In addition, 36 of 50 states offer a tax credit.



Is foreign-owned R&D eligible?

R&D must occur in the country

Previous financial years claimable

Is pre-approval required?

Are other R&D incentives available?

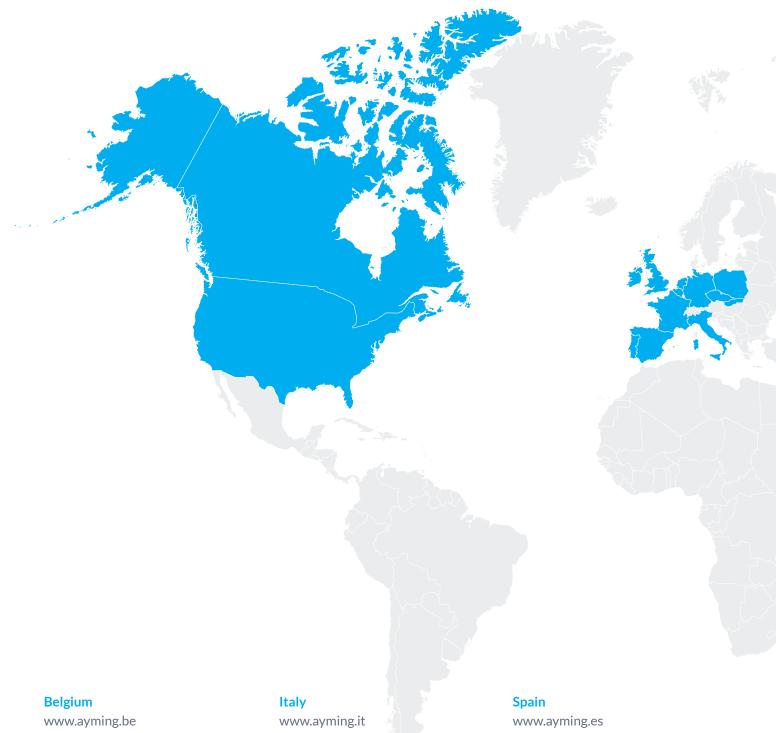
Level of review or enquiry expected?

Generosity: 12.1%

Ease of Application

	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, th generally between 5% and expenditures.	e calculation varies, but 15% on incremental, eligible	
Benefit Over <u>view</u>	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, with under \$5m in sales annually, a tax credit can be applied against payroll taxes.			
O Eligible Claim Period	Fiscal year-based claim, up to 3 years back.	The eligible claim period will vary by state.		
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			
Ease of Application	bill. ase of No pre-approval is required at a federal level. Many states do require pre-approval. A relatively comprehensive			
	For current year returns, the scheme only requires completing a 2-pa providing a summary of expenditures to be claimed. Internal Revenue (IRS) expects Taxpayers to have a readily available report detailing the building process and methodology, eligible expenditures, eligible progeligible activities, along with records to substantiate the claim. For amended years, there are both project and employee activity des required. Specifically: Taxpayers filing a refund that includes a claim for the IRC § 41 researmust provide, at a minimum, five essential pieces of information: 1 - Identify all the business components that form the factual basis of research prodit claim for the claim year.		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 with the exception of a few states which require an application.	
	research credit claim for the claim year. 2 - All research activities performed by business compone 3 - All individuals who performed each research activity b 4 - All the information each individual sought to discover l 5 - The total qualified - employee wage expenses, - supply expenses, and - contract research expenses.	y business component.		
Regulating Body Policies	The Internal Revenue Service (IRS) is responsible for assessing the federal tax credit, covering both technical and financial eligibility. State Taxing Authorities 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 individuals who spend more than 80% of time on qualified activities, 100% of their salary is eligible) • US Contractors • Supplies • Basic research payments to qualified organizations			
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. 			

Our locations



+32 2 737 62 60

Canada

www.ayming.ca +1514-931-0166

Ireland

www.ayming.ie +353 (0) 1 669 4831 +39 02-80583223

Portugal

www.ayming.pt +351 21 35 28 221

Slovakia

www.ayming.sk +421 917 889 867 +34 91 575 03 01

Czech Republic

www.ayming.cz +420 773 427 434

France

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



Poland

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