

A person wearing AR glasses is shown in profile, looking towards a futuristic data dashboard. The dashboard features various charts, graphs, and data points in a dark blue and teal color scheme. A yellow banner is overlaid on the right side of the image, containing the title and year.

Worldwide R&D Incentives Reference Guide

2019

The EY logo consists of the letters 'EY' in a bold, white, sans-serif font. Above the 'Y' is a yellow chevron shape pointing to the right.

EY

Building a better
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R&D incentives in 2019 and beyond

Tax competition – driven by governments wanting to attract and sustain economic activity in their jurisdiction – sits at the heart of much recent global tax change. In fact, 2018 was a relative boom year for new and improved research and development (R&D) incentives. This trend could be explained by the fact that countries found themselves constrained by the Organisation for Economic Co-operation and Development (OECD) Base Erosion and Profit Shifting (BEPS) recommendations, but at the same time, wanted to maintain or improve their competitive position.

The desire for tax competitiveness is perhaps more apparent within the R&D incentives category than in any of the other business tax categories tracked in the EY organization's annual global outlook for tax policy. However, according to that publication, this trend is decelerating sharply in 2019. Although 9 of 48 jurisdictions (19%) are making their R&D incentives more favorable, this is almost half the number of 2018 (35%) and closer to the 22% figure of 2017. Indeed, not only are fewer countries issuing new or improved R&D incentives in 2019, some (Costa Rica, El Salvador, Honduras and Italy) are making existing incentives less generous.

Additionally, on the tax administration side of the equation, R&D incentives now are under greater scrutiny; survey respondents note that R&D incentive compliance issues are now starting to trigger tax audits, a phenomenon not seen in prior years. This underscores the need for businesses to be fully informed of the eligibility conditions and ongoing compliance requirements surrounding these incentives.

While taxpayers may welcome New Zealand's new 15% tax credit (available from the 2019-20 income year) and news that Germany may introduce a new 25% R&D bonus on R&D payroll costs, there are also some clouds on the horizon. Recent attempts by France and Germany to reinvigorate the European Commission's long-standing Common Consolidated Corporate Tax Base (CCCTB) proposal included a proposed version that expressly delete all tax incentives. That would be a sea change for the European tax landscape, and would dramatically affect taxpayers.

Patent and innovation boxes

The deployment of new patent or innovation "boxes" is somewhat quiet in 2019 compared with recent years, and their future use is uncertain. Recent OECD proposals relating to taxation of the digitalized economy – which in fact have a far greater reach – include the possibility of a global minimum tax measure.

Such a measure would mean a significant narrowing of the sovereignty of countries, potentially affecting their ability to decide on their overall tax mix and ability to incentivize behavior using tax measures. This potentially includes patent and innovation boxes that have already been deemed acceptable after many years of BEPS debate. This will be an important issue to not only monitor, but to be actively involved in.

The facts at your fingertips

To identify and leverage opportunities to benefit from available incentives, taxpayers need a current guide such as the Worldwide R&D Incentives Reference Guide, especially if they are contemplating new or expanded investments in R&D.

The content of our guide remains structured in a straightforward manner, consistent with prior years, and chapter by chapter we summarize the key R&D incentives in 45 jurisdictions.

Each chapter begins with contact information for key EY R&D incentive professionals, then a short overview of that jurisdiction's approach to incentivizing R&D activity and a checklist showing which types of incentives are available. Where an incentive is most commonly referred to in local language, we have provided a translation. In many cases, our professionals indicate which incentive they believe provides the highest level of value to applicants.


For each incentive, we list the following information:

- ▶ A description of the benefits delivered
- ▶ Guidelines around incentive applications
- ▶ Eligibility requirements
- ▶ Intellectual property and jurisdictional requirements
- ▶ Role of governmental bodies in administering the incentive
- ▶ Administrative requirements
- ▶ Any statutory references

The Worldwide R&D Incentives Reference Guide is published alongside three companion guides on broad-based taxes: the Worldwide Corporate Tax Guide, the Worldwide Personal Tax and Immigration Guide and the Worldwide VAT, GST and Sales Tax Guide. In recent years, those three guides have been joined by additional tax guides on more specialized topics, including the Worldwide Estate and Inheritance Tax Guide, the Worldwide Transfer Pricing Reference Guide, the Global Oil and Gas Tax Guide, the Worldwide Digital Tax Guide and the Worldwide Capital and Fixed Assets Guide.

Each guide represents thousands of hours of tax research. The entire suite is available without charge, online, along with timely Global Tax Alerts and other insightful publications on ey.com or in our EY Global Tax Guides app for iOS devices.

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Summary of available R&D incentives

Jurisdiction	Accelerated depreciation on R&D assets	Cash grants	Expedited government approval process	Financial support	Income tax withholding incentives	Infrastructure/land preferential price	Loans	Patent-related incentives
Argentina	✓	✓						
Australia								
Austria		✓					✓	
Belgium	✓	✓			✓		✓	✓
Brazil	✓			✓	✓		✓	✓
Canada	✓	✓		✓			✓	
Chile	✓	✓						
China (mainland)								
Colombia		✓		✓				
Czech Republic		✓						
France	✓	✓					✓	✓
Germany		✓					✓	
Hong Kong								
Hungary		✓						✓
India		✓		✓			✓	✓
Indonesia	✓							
Ireland	✓	✓		✓				✓
Israel		✓		✓	✓			✓
Italy								✓
Japan								
Lithuania	✓							✓
Luxembourg	✓	✓		✓			✓	✓
Malaysia		✓		✓				
Mexico		✓						
Netherlands	✓	✓		✓	✓		✓	✓
New Zealand		✓						
Norway		✓		✓			✓	
Philippines								
Poland		✓						✓
Portugal		✓					✓	✓
Romania	✓							
Russia	✓							
Singapore		✓						
Slovak Republic		✓				✓		✓
Slovenia		✓		✓		✓	✓	
South Africa	✓	✓						
South Korea								
Spain	✓	✓					✓	✓
Sweden								
Switzerland	✓			✓			✓	
Thailand	✓	✓					✓	
Turkey		✓			✓			✓
UK	✓	✓					✓	✓
US								
Vietnam				✓		✓	✓	

Summary of available R&D incentives

Reduced social security contributions	Reduced tax rates/ preferable tax rates	Tax allowance	Tax credits	Tax deduction (including super deduction)	Tax exemptions	Tax holiday	VAT reimbursement	Other
✓	✓		✓		✓		✓	
			✓					
			✓					Reduced income tax for highly qualified scientists moving to Austria from abroad
	✓		✓	✓	✓		✓	Notional interest deduction
	✓		✓	✓				
	✓		✓	✓	✓	✓		
	✓		✓	✓	✓		✓	Tax discount
✓	✓		✓	✓	✓	✓		
				✓				
✓	✓	✓	✓	✓	✓	✓		
✓	✓			✓		✓		
	✓	✓		✓				
	✓		✓	✓	✓			R&D tax credit on R&D buildings
	✓		✓	✓				
	✓		✓	✓				
		✓	✓	✓	✓	✓		
✓	✓		✓	✓				
			✓					
✓	✓		✓	✓				
	✓		✓	✓	✓	✓		
	✓		✓	✓	✓	✓		
✓	✓		✓	✓	✓	✓		
	✓		✓	✓				
✓			✓	✓				
✓			✓		✓			
	✓					✓		Reduced tax rates for license income
✓	✓		✓	✓	✓	✓		
			✓	✓				
	✓		✓		✓	✓		Free training

A

Argentina



Argentina

This chapter is based on information current as of February 2019.

EY contact:

Gustavo Scravaglieri
gustavo.scravaglieri@ar.ey.com
+54 11 4510 2224

There have not been significant changes regarding R&D incentives. However, to boost R&D activity, the Government has increased the budget for the Ministry of Science, Technology and Productive Innovation for 2019. Future developments in this area should be monitored.

1. Overview

Tax policy in Argentina in relation to business incentives is not very extensive.

The main incentives are those found in the software promotional regime, the biotechnology promotional regime, the R&D regime and the training courses regime. In general, they provide for tax reductions, value-added tax (VAT) reimbursements, accelerated depreciation for income tax purposes, and certain exemptions and tax credits. Though most of the regimes have existed for several years, their use is not fully leveraged by taxpayers. Furthermore, some regimes are subject to a cap established by the national Government, according to its annual budget as well as other related regulations.

In addition, the Argentine Technology Fund (FONTAR) and the Software Industry Fiduciary Fund (FONSOFT) provide for cash grants for certain projects. Every year, the authorities issue a tender in which they state the terms and conditions that the projects must observe and the amounts to be accorded. There are eligibility requirements that Argentine companies must comply with to access the benefits.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input checked="" type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Software promotional regime*	R&D promotional regime	Biotechnology promotional regime	Training courses regime
Types of incentives	<ul style="list-style-type: none"> ▶ Reduced tax rates ▶ Tax stability 	<ul style="list-style-type: none"> ▶ Tax credits 	<ul style="list-style-type: none"> ▶ VAT reimbursement ▶ Accelerated depreciation and certain exemptions 	<ul style="list-style-type: none"> ▶ Tax credits

* Although not based upon scientific analysis, EY clients report that this incentive delivers one of the most beneficial results to investors.

Software promotional regime

(Ley de Promoción de la Industria del Software)

Description of benefits

The software promotional regime, set forth by Law No. 25,922 and extended by Law No. 26,692, provides tax stability as well as several tax incentives and tax reductions. Under the regime, companies that develop software or that are engaged in certain software activities receive the following benefits until December 2019:

- ▶ Tax stability for taxpayers registering with the regime
- ▶ Tax credit amounting to 70% of the social security contributions paid for the personnel related to the industry, which can be used to offset national tax liabilities (mainly VAT); the credits may only be used to offset income tax liabilities in proportion to the export activities carried out by the company
- ▶ A 60% reduction in the income tax burden for each fiscal year, applicable to both Argentine source income and to foreign source income
- ▶ Exclusion from VAT withholding or reverse withholding, which could be an important advantage from a financial standpoint

Law No. 26,692 establishes several requirements and clarifications for companies to receive the benefits detailed above. Applications must be filed to gain access to the regime.

Guidelines around incentive applications

The incentives are applicable for current and future investments.

The software promotional regime created the National Registry of Software Producers and Computer Services (the registry). Companies that comply with all of the regime's requirements must be registered with the registry to receive the benefits. In this regard, Resolution No. 5/2014, which was published on 19 February 2014, establishes the procedures and requirements for companies to join the registry.

R&D promotional regime

(Promoción y Fomento a la Innovación Tecnológica)

Description of benefits

Law No. 23,877 provides for the granting of tax credits on investments in R&D. The regime is subject to an annual cap, is competition-based and tends to be small. The benefited entities would be granted a tax credit certificate of 10% or approximately US\$111,000 (whichever is lower) of R&D payments to be utilized against national taxes.

Under the annual budget for 2019, there is approximately US\$33.3 million allocated to the National Agency for Scientific and Technological Promotion (*Agencia Nacional de Promoción Científica y Tecnológica*), which administers the fund that finances the R&D projects. This cap may increase or decrease each year.

Guidelines around incentive applications

The incentives are applicable for current and future investments. The National Agency for Scientific and Technological Promotion holds an annual public submissions process under which it details projects that are eligible for tax credits. The applicant's submission must provide information on the project, budget, innovation activities and the company applying.

Biotechnology promotional regime

(Promoción del Desarrollo y Producción de la Biotecnología Moderna)

Description of benefits

Law No. 26,270 established the biotechnology promotional regime, which grants early VAT reimbursement, accelerated depreciation and certain tax exemptions. A tax credit of 50% is available on the social security contributions payable to the payroll assigned to employees of the R&D project, and a tax credit of 50% is available on expenses related to R&D services provided by national scientific institutions.

Guidelines around incentive applications

The incentives are applicable for current and future investments. Those entities whose activities qualify as development and production of "modern biotechnology" (e.g., biology, biochemistry, microbiology and bioinformatics) must submit an application to the relevant authorities. The characteristics of each project should be analyzed on a case-by-case basis.

Training courses regime

(Régimen de crédito fiscal para los establecimientos industriales que tengan organizados cursos de educación técnica)

Description of benefits

Law No. 22,317 provides for the granting of tax credits on investments in training courses. The regime is subject to an annual cap, is competition-based and tends to be small. Tax credits amount to 0.8% of qualifying expenses (salaries) related to training courses. Under the annual budget for 2019, approximately US\$6.4 million is allocated to the INET (*Instituto Nacional de Educación Tecnológica*) to finance the training courses regime.

Guidelines around incentive applications

The incentives are applicable to current and future investments. Eligible entities must file their applications within a certain date range each year, together with an eligible educational entity. The exact deadline is announced each year. Applications must be filed with the INET, the entity in charge of approvals and rejections.

3. Eligibility requirements

Software promotional regime

Law No. 26,692 provides a list of activities eligible for the software promotional regime. The list includes software development and value-added computer services, such as computer and network security. The scope of the listed activities also includes, among others, the services of design, codification, maintenance, remote support and troubleshooting solutions to be performed for software products destined for foreign markets.

According to Law No. 26,692, to be eligible for this regime, a company will need to perform software production or computer services as its main activity, and should be considered eligible when the following requirements are complied with:

- ▶ More than 50% of the company's annual revenues correspond to the activities involved in the regime
- ▶ More than 50% of the employees perform duties related to such activities
- ▶ More than 50% of the annual salaries paid correspond to employees who perform duties related to such activities

In addition, at least two of the following three conditions must be met. The company must be:

- ▶ Carrying out software R&D activities (proving the existence of R&D expenditures in Argentina)
- ▶ Obtaining a quality certification of software products or processes
- ▶ Performing software exports

Eligibility for the benefits depends on the type of project, and the eligibility of each project is decided by the authorities on a case-by-case basis.

R&D promotional regime

Qualifying expenses are those investments channeled through structures approved by the application authorities, such as collaboration associations. To be eligible, a project must entail investigation and development (i.e., it must deepen the knowledge of a certain scientific area or comprise the modernization of technologies in Argentina).

Biotechnology promotional regime

Eligible biotechnological projects will consist of R&D activities or the production of goods or services using certain patents and must be approved by government authorities.

For the purposes of the law, “modern biotechnology” consists of any technological application that is based on scientific principles and knowledge in the fields of biology, biochemistry, microbiology, molecular biology and genetic engineering, among others, and uses live organisms or their parts to obtain goods and services, or to improve “substantially” productive processes and/or products. “Substantially” is understood as producing innovation with industrial application, economic or social impact, cost reductions, an increase in productivity, or other similar effects accepted by the authorities. The law includes tax benefits and other provisions regulating eligibility requirements.

Training courses regime

Training activities must be duly approved by the application authority from the educational field.

4. IP and jurisdictional requirements

There are no specific jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

A Buenos Aires Technology District exists in the southern part of the City of Buenos Aires. The Technology District has been designed to help technology companies and universities form a center for innovation for software development and the provision of IT services. Companies established in such a district can benefit from exemptions applicable to some local taxes of the City of Buenos Aires, including turnover tax and stamp tax.

Other provinces, such as the Province of Buenos Aires or the Province of Santa Fe, have also established similar rules aiming to promote the development of technology and software activities within their jurisdiction.

6. Role of governmental bodies in administering incentives

Software promotional regime

Once an application is filed, the Undersecretary of Technology Services and Products will verify that the necessary requirements for access to the software promotional regime have been fulfilled. Once that determination has been made, the Undersecretary will issue the corresponding certificate.

R&D promotional regime

Once it has been determined that an application complies with the needed requirements, the National Agency for Scientific and Technological Promotion will consider the project eligible and issue the corresponding certificate of tax credit.

Biotechnology promotional regime

Once an entity applies for the benefits of the biotechnology promotional regime, the authorities will decide whether a project is eligible. If the application is accepted, the project will be subscribed to the Ministry of Production (*Registro Nacional para la Promoción de la Biotecnología Moderna*), and the authorities will issue the corresponding certificate.

Training courses regime

The INET administers evaluations and subsequent approvals and rejections of projects.

7. Administrative requirements

Application to each regime has its own requirements. Description of the corresponding projects and presentation business plans may be required. Certifications may be required in certain cases (e.g., software promotional regime). In addition, obtaining tax credits and using them to cancel tax obligations requires compliance with certain steps set out by the tax authorities.

8. Statutory reference

- ▶ Software promotional regime (Law No. 25,922, extended by Law No. 26,692 – 2004)
- ▶ R&D promotional regime (Law No. 23,877 – 1990)
- ▶ Biotechnology promotional regime (Law No. 26,270 – 2007)
- ▶ Training courses regime (Law No. 22,317 – 1980)

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Australia



Australia

This chapter is based on information current as of February 2019.

EY contact:

Jamie Munday
jamie.munday@au.ey.com
+61 2 9276 9087

From 1 July 2014, R&D entities cannot claim notional R&D deductions for R&D expenditures for a year of claim that exceed AUD100 million for financial years commencing on or after 1 July 2014. Under legislation that received royal assent on 16 September 2016, the rates of the R&D tax offset incentive were reduced by 1.5 percentage points (from 45% to 43.5% for the refundable rate, and from 40% to 38.5% for the nonrefundable rate), with effect for years of income commencing on or after 1 July 2016.

1. Overview

The Government introduced R&D incentives programs to encourage Australian industry to undertake R&D activities, putting in place an overall environment that supports the increased commercialization of new process and product technologies developed by eligible companies. The current R&D Tax Incentive regime has been in operation since 2011, superseding the previous R&D Tax Concession regime introduced in 1986.

Currently, a 43.5% refundable tax offset is available to eligible R&D entities with aggregated turnover of less than AUD20 million per year. A nonrefundable 38.5% tax offset is available for all other eligible R&D entities. Foreign-owned R&D may qualify for the 38.5% or 43.5% tax offset depending on its aggregated turnover.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Name of incentive	R&D Tax Incentive
Type of incentive	► Tax credit

R&D Tax Incentive

Description of benefits

- ▶ A 43.5% refundable tax offset is available for eligible R&D entities with aggregated turnover of less than AUD20 million per year. Aggregated turnover includes the ordinary income of all entities connected with (i.e., 40% or greater control) or affiliated with the R&D entity.
- ▶ A nonrefundable 38.5% tax offset is available for all other eligible R&D entities.
- ▶ Foreign-owned R&D can qualify for the 38.5% or 43.5% tax offset depending on its aggregated turnover.
- ▶ An R&D entity (defined as the head of a tax consolidated group or a stand-alone company) cannot claim the 43.5% refundable tax offset or the 38.5% nonrefundable tax offset in respect of R&D expenditures over AUD100 million. This cap applies annually to an R&D entity's R&D expenditure. R&D expenditures over AUD100 million can be claimed as a tax offset against the corporate tax rate (currently 30%).
- ▶ Unused tax credits may be carried forward indefinitely.

Guidelines around incentive applications

The R&D Tax Incentive program is applicable to current investments. Claiming the benefit is a two-part process:

- ▶ The R&D activities are registered by lodging an application with AusIndustry.
- ▶ The R&D Tax Incentive Schedule is lodged in the company tax return using a unique registration number from AusIndustry.

Companies are required to register eligible R&D activities within 10 months of the end of the income year in which the activities were conducted.

3. Eligibility requirements

Eligible R&D activities are categorized as either "core" or "supporting" R&D activities. Generally, only R&D activities undertaken in Australia qualify for the new R&D Tax Incentive program. Core R&D activities are broadly defined as experimental activities whose outcome cannot be known and that are conducted for the purpose of acquiring new knowledge. Supporting activities may also qualify if they are undertaken to directly support the core R&D activities. Exceptions that are required to pass a higher dominant purpose test are supporting R&D production trials and other "excluded" activities as defined. Software-related projects may also be core or supporting R&D activities unless their dominant purpose is one of internal administration, in which case they will be classified as excluded activities. An additional eligibility test may apply.

An eligible expenditure is defined as an expenditure incurred by an eligible company during an income year, including contracted expenditures, salary expenditures and other expenditures directly related to R&D. R&D expenditures such as feedstock input costs, tax depreciation for assets used in R&D activities and an expenditure that is included in the cost base of an intangible depreciating asset for income tax purposes can be claimed. Core technology, interest expenses, some plant and equipment costs, and costs that form part of a tangible depreciating asset for income tax purposes are not eligible.

Eligible companies are those incorporated in Australia or foreign companies resident in a country that has a double taxation treaty with Australia carrying on business through a permanent establishment in Australia. An entity whose entire income is exempt from income tax is not eligible. No industry sectors are specifically excluded.

4. IP and jurisdictional requirements

Generally, companies must demonstrate that R&D activities are undertaken on their own behalf in order to claim the incentive. Activities conducted by the R&D entity for one or more foreign corporations that are related to the R&D entity (called foreign-owned R&D) may qualify for the R&D Tax Incentive, provided the R&D contract arrangement is undertaken with a company resident in a country with which Australia has a double taxation agreement and in accordance with a written agreement between the Australia entity and the foreign-related company. Eligibility of work performed outside the country requires preapproval through an Overseas Finding Application; however, this is only available to Australian-owned R&D activities, not foreign-owned R&D activities. The intellectual property (IP) regimes are effective as of 1 July 2011. Foreign-owned R&D activities must be undertaken in Australia and cannot be undertaken overseas. An overseas finding cannot be applied for in respect of foreign-owned R&D activities.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Australia.

6. Role of governmental bodies in administering incentives

The R&D Tax Incentive operates on a self-assessment basis and is jointly administered by the Australian Taxation Office (ATO) and AusIndustry. AusIndustry regulates and monitors compliance activities in the assessment of the technical eligibility of activities, while the ATO regulates and undertakes compliance activities in relation to notional deductions and correlated tax offsets.

7. Administrative requirements

Companies must register annually with AusIndustry within 10 months of the relevant corporate financial year-end. An advance finding ruling process is available, which enables companies to seek certainty on a project. An advance ruling provides companies with eligibility certainty for a period of up to three years.

Companies must maintain contemporaneous records to substantiate their R&D Tax Incentive claim. The company's records must be sufficient to show that the claimed activities took place and that they meet all aspects of the definition for either core or supporting R&D activities.

8. Statutory reference

- ▶ Statutory reference – Division 355
- ▶ Year of statutory regime – 1 July 2011

A

Austria



Austria

This chapter is based on information current as of February 2019.

EY contacts:

Christoph Harreither
christoph.harreither@at.ey.com
+43 1 211 70 1171

Michael Obernberger
michael.obernberger@at.ey.com
+43 1 211 70 1381

The subsidy for qualifying R&D expenses (*Forschungsprämie*) increased from 12% to 14%, effective 1 January 2018.

1. Overview

The Austrian Government maintains a positive attitude toward the R&D incentives regime, and the policy of tax-based research subsidies in Austria has been in a state of flux for several years.

Austria promotes R&D activities with relatively generous tax incentives. In general, Austria spends about 3.1% of its GDP on R&D investment, higher than the average R&D investments in the 28 European Union (EU) Member States.¹ As of 2017, an estimated EUR4.1 billion in research subsidies was paid out to businesses.²

The Austrian tax authorities offer a 14% subsidy, or premium (known as *Forschungsprämie*), for qualifying R&D expenses.

For scientists moving to Austria from abroad and becoming tax residents in Austria, Austrian tax authorities offer a reduction of 30% of their individual tax base for a period of five years.

The Austrian Research Promotion Agency offers R&D incentives for qualifying R&D expenses in the forms of cash, loans and guarantees. The percentage of the R&D premium varies depending on the types of R&D activities, and it may increase to 20% or higher for small and medium-sized enterprises (SMEs) and highly innovative projects or projects in which several companies collaborate with R&D institutions. For a basic research project, the R&D premium may cover up to 100% of expenses. R&D premiums are also available through the nine federal states in Austria. In addition, the European Commission's Horizon 2020 program is available in Austria.

¹ *Statistics Austria*, January 2018.

² *Statistics Austria*, January 2018.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>

2. Incentives available

Names of incentives	R&D premium*	Grants by the Austrian Research Promotion Agency	Grants by Austria's nine federal states
Types of incentives	▸ Tax credits	<ul style="list-style-type: none"> ▸ Cash grants ▸ Loans ▸ Guarantees 	<ul style="list-style-type: none"> ▸ Cash grants ▸ Loans ▸ Guarantees

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D premium

(Forschungsprämie)

Description of benefits

The subsidy of 14% is granted for qualifying R&D expenses incurred by SMEs and large businesses. Companies are entitled to the subsidy whether they are in a tax loss or profit position. The subsidy is paid in cash, via a credit to the company's tax account, by the Austrian tax authorities immediately after approval has been given by the Austrian Research Promotion Agency (*Forschungsförderungsgesellschaft*, or FFG), the national funding body for R&D in Austria. The tax credit is transferable to any bank account.

Companies are eligible for two types of subsidies:

- In-house research subsidies
- Subsidies for outsourced (external or subcontracted) research, with the sponsor receiving a subsidy for ordering R&D activities

In-house research subsidies

In-house research subsidies are available to domestic companies conducting research activities internally. The amount of subsidies for in-house research is not capped, and companies are eligible for subsidies of 14% (previously 12%) of the qualifying R&D expenses. The incentive is provided in three stages:

Stage one: meeting the minimum requirement

Companies claiming in-house research subsidies must first obtain the FFG's approval that the R&D activities meet the required criteria. Companies must submit an application to the FFG at the end of the fiscal year providing details on the research project, including the project name, objective, methodology, share of total expenses and starting and ending dates. The FFG then sends a report to the tax office indicating whether the requirements have been met. The tax office reviews the report and determines whether the subsidy should be granted. At this stage, companies are not provided with any legal certainty on the amount of their assessment base for the tax credit, only on whether the R&D activities meet the required criteria.

Stage two: obtaining legal certainty

If companies want to increase their legal certainty at an earlier stage, they can request a confirmation of research from the tax office certifying that the required criteria have been met. The fee for applying for a confirmation of research is EUR1,000.

Stage three: receiving greatest possible legal certainty

The confirmation of research does not contain a ruling on the amount of the assessment base. Questions regarding the amounts of the assessment base are more often picked up within the scope of tax field audits. To clarify the base for an R&D incentive, companies may apply for a notice of determination from the Austrian tax office certifying the amount of the tax base for the research credit. Companies applying for a notice of determination must also submit a certification from an auditor on the correct calculation of the assessment base.

Subsidies for outsourced research

If a company does not conduct research itself, but instead outsources the R&D activity to a third party (e.g., a company or university), the company is eligible for subsidies for outsourced research amounting to 14% of the expenses, up to a total payment of EUR140,000 (for a base amount of EUR1 million). For outsourced research, the R&D activities may be performed outside Austria, but they must be performed within the EU or European Economic Area (EEA). Therefore, companies may engage a foreign company to conduct R&D activities, but only if the company is domiciled in the EU/EEA. A further prerequisite is that the contractor may not be controlled by the hiring company or be a member of the same tax group, as set out by Section 9 of the Austrian Corporate Income Tax Act.

This incentive benefits SMEs that do not conduct their research in-house. Companies do not need to apply for FFG approval when claiming subsidies for outsourced research.

Guidelines around incentive applications

The R&D premium is applicable to retroactive, current and future investments. Claims should be made between the end of the fiscal year and the date when the tax assessment obtains legal force. Incentives are claimed with the tax return, and companies are required to enclose an additional form (Form E 108c) to claim the incentive. Companies claiming in-house research subsidies may apply in advance for a confirmation of research that all requirements for obtaining the subsidy have been met. Particularly in the case of projects spanning several years, it is recommended that companies apply for a confirmation of research. The prerequisite for applying is an ex-ante approval by the FFG.

Grants by the Austrian Research Promotion Agency

(Förderung der Forschungsförderungsgesellschaft)

Description of benefits

This governmental agency provides cash grants, guarantees, loans and advisory services. The amount granted varies, depending on the development phase and type of project, business and subject area. The grants must comply with EU guidelines on state aid.

Guidelines around incentive applications

The incentive is applicable to future investments. The application must be submitted to the FFG prior to the start of the project. Depending on the type of incentive, there may be specific application deadlines.

Grants by Austria's nine federal states

(Förderungen der Bundesländer)

Description of benefits

The nine federal states in Austria provide cash grants. The amount granted varies, depending on the development phase and type of project, business and subject area. The grants must comply with EU guidelines on state aid.

Guidelines around incentive applications

The incentive is applicable to future investments. The application must be submitted to the relevant state agency prior to the start of the project. Depending on the type of incentive, there may be specific application deadlines.

3. Eligibility requirements

Expenses must be incurred for research and experimental development activities that are performed on a systematic basis and apply scientific methods. This criteria is based on the definition of research contained in the Frascati Manual, which was published by the Organisation for Economic Co-operation and Development.

The FFG acts as an appraiser in the subsidies-awarding process. It reviews whether the research activities meet the Frascati Manual criteria. The FFG does not, however, review the correctness of the assessment base. The FFG's appraisal is not binding on the tax office. According to the tax authorities, the FFG's involvement does not create any costs on the part of taxpayers.

The following expenses are part of the taxable base, provided they are related to R&D:

- ▶ Salary and wages
- ▶ Direct expenses
- ▶ Financial expenditures
- ▶ Overhead costs

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Austria.

6. Role of governmental bodies in administering incentives

The European Commission's Europe 2020 strategy focuses on intelligent, sustainable and socially integrated growth, effectively meaning that science and research policies are not isolated areas; rather, they play a leading role in driving economic growth and creating jobs. To achieve this goal, the domestic federal and state institutions work closely together to ensure that tax revenue is invested carefully. In this context, the Federal Ministry of Science, Research and Economy is the hub and acts as a political mediator among the applicable European, national and regional parties and other institutions.

Regarding the R&D premium, the FFG evaluates and provides approval that the R&D activities meet the required criteria. The Austrian tax authorities then pay the tax credit in cash if they determine, after reviewing the FFG's opinion that the requirements have been met, that the subsidy should be granted. The FFG is in effect acting as a consultant with the required technical skills for the tax authorities. The FFG is 100% owned by the Austrian state and is responsible for managing and financing R&D projects. However, Austria's nine federal states, not the FFG, manage their own grants.

7. Administrative requirements

The prerequisite for obtaining the statutory tax credit is the FFG's approval that all qualitative prerequisites set out by Section 108c paragraphs 7 and 8 of the Income Tax Act have been fulfilled. The approval may be requested for free via FinanzOnline, the official website of the federal Ministry of Finance. Companies applying must provide details on all expenses claimed for the fiscal year.

If the company has already received a confirmation of research from the tax office, it is not required to request another approval from the FFG for the same project, so long as it conducts R&D in the same manner.

8. Statutory reference

Cash grant: Section 108c of the Income Tax Act

(Advanced) Confirmation of research: Section 118a BAO (federal tax regulations)

B

Belgium



Belgium

This chapter is based on information current as of February 2019.

The old patent income deduction regime will remain in place through 30 June 2021 under transition rules. A new “innovation deduction” regime compliant with the Organisation for Economic Co-operation and Development’s Base Erosion and Profit Shifting (BEPS) project has been introduced for qualifying intellectual property with retroactive effect from 1 July 2016.

1. Overview

The Belgian Government remains a strong supporter of R&D and innovation at both the federal and regional levels, using R&D tax incentives and direct R&D grants to support these activities. In particular, Belgium offers investors a very attractive and comprehensive regime for R&D activities and the management of intellectual property (IP). The incentives are:

- ▶ The former patent income deduction (PID) regime, which provides for an 80% tax exemption of gross patent income, resulting in a maximum 6.8% effective tax rate (the PID regime was abolished with effect from 1 July 2016, with a transition regime in place through 30 June 2021)
- ▶ A new BEPS-compliant innovation deduction regime that was introduced by the law of 9 February 2017
- ▶ The R&D investment deduction and the equivalent R&D tax credit, for qualifying investments in R&D and patents
- ▶ The partial exemption of 80% of withholding tax for employing scientific researchers, engineers or other innovative personnel
- ▶ Incentives to employ highly qualified foreign employees
- ▶ Direct cash grants and subsidies to R&D projects
- ▶ Beneficial tax regime for income received for the transfer of IP rights from employees to their employers

These incentives have been in place for a significant period of time.

EY contacts:

Hendrik Serruys – People Advisory Services
hendrik.serruys@be.ey.com
+32 3 270 14 68

Pieter Van Den Berghe – International Tax Services
pieter.van.den.berghe@be.ey.com
+32 478 40 15 73

Chris Thijs – Business Tax Services
chris.thijs@be.ey.com
+32 3 270 14 06

Wouter Desmet – Subsidia
wouter.desmet@be.ey.com
+32 9 242 51 06

Bart Wyns – Subsidia
bart.wyns@be.ey.com
+32 9 242 51 44

Maarten Vandewaerde – Subsidia
maarten.vandewaerde@be.ey.com
+32 494 846 852

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input checked="" type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input checked="" type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other (notional interest deduction)	<input checked="" type="checkbox"/>

2. Incentives available

Names of incentives	Cash grants	Loans	Investment deduction for R&D and patents	Tax credit for R&D and patents*	Patent income deduction (old regime)/ innovation deduction (new regime)*	Notional interest deduction (NID)	Foreign tax credit (FTC) for withholding tax on royalties received	Partial exemption of professional withholding tax*	Expat tax regime – tax-free allowances for foreign executives and researchers and exclusion of foreign working days	IP income – beneficial tax regime
Types of incentives	▶ Cash grants	▶ Loans	▶ Super deduction	▶ Tax credit	▶ Tax deduction	▶ Tax deduction	▶ Tax credit	▶ Income tax withholding incentive	▶ Tax exemption	▶ Reduced tax rates/preferable tax rates

* Although not based upon scientific analysis, EY clients report that these incentives deliver the most beneficial results to investors.

Cash grants

Description of benefits

Cash grants for R&D and innovation are provided and managed by the different regions (i.e., the Flemish, Walloon and the Brussels-Capital Regions). Depending on the region, the cash grants regime supports between 25% and 80% of the eligible R&D costs. These grants may be provided in addition to tax incentives, and taxpayers may claim tax incentives and cash grants simultaneously. Although such grants are included in a company's taxable basis, they are exempt from corporate income tax. Taxpayers are required to obtain a preapproval (via an application for a specific project) to receive cash grants.

Guidelines around incentive applications

Cash grants are applicable to current and future investments or activities. An application for the grant should be submitted to the responsible government agency (Agentschap voor Innoveren en Ondernemen for the Flemish Region; Portail de la Recherche et des Technologies en Wallonie for the Walloon Region; and Innoviris for the Brussels-Capital Region). The grant application is required to be submitted before the start of the R&D project(s). Costs are eligible for funding only after the application has been submitted.

Loans

Description of benefits

In the Flemish Region, PMV, an independent investment company in Flanders (and LRM for the province of Limburg), offers financing solutions to all companies that operate in Flanders. They cover a company's entire development cycle, from its earliest inception to its growth and internationalization. Depending on the situation or the purpose of the small or medium-sized enterprise (SME) or large company in question, both offer risk capital, guarantees for capital loans, advantageous loans or investments via external funds. A broad variety of loans are offered by PMV and LRM with funding solutions for startups, SMEs and large companies. Typically, these loans range from a minimum of EUR350,000 to a maximum of EUR5 million for larger corporations and from EUR50,000 up to EUR350,000 for SMEs and startups. Loans can extend over a long period ranging from 3 to 10 years. Loans can either be subordinated or non-subordinated with an interest rate between 2.25% and 6%. Loans are intended to finance tangible, intangible and financial investments, operating capital needs linked to the development of the business, the purchase of shares in an existing company or the acquisition of (part of) the goodwill in the company or to refinance existing debts over a longer period so that sufficient working capital can be retained to safeguard continuity and/or growth. For LRM, the company needs to be based in the Limburg province and only small companies are eligible.

In the Walloon and Brussels-Capital regions, Sowalfin and finance.brussels, respectively, provide access to financing (loans, seed capital, etc.) for all companies active in these regions. Loans are granted to startups and SMEs for projects of both small and large R&D investments or for export outside of Europe. In general, they cover 50% of the requested capital with a maximum of EUR500,000, with a public guarantee generally up to 75%.

Guidelines around incentive applications

The subordinated loans and recoverable advances are applicable to current and future investments or activities. An application for the loan should be submitted to the responsible government agency. For future projects, the application must be submitted before the start of the R&D project(s). Costs are eligible for the loans only after the application has been submitted.

Investment deduction for R&D and patents

(De investeringsaftrek voor onderzoek en ontwikkeling (Dutch)/ La déduction pour investissement en matière de recherche et développement (French))

Description of benefits

The investment deduction for eligible R&D activities and patents entitles a Belgian company or a Belgian branch of a foreign company to apply a deduction in addition to the annual depreciation expense of qualifying assets. The investment deduction may be calculated either as a percentage on the acquisition value of the qualifying asset ("one-shot" deduction) or as a percentage on the annual depreciation amount, in which case the investment deduction is spread over the depreciation period ("spread" deduction).

The one-shot deduction amounts to 13.5% (for tax year 2019) of the acquisition value of the asset (4% tax benefit based on a corporate tax rate of 29.58% for financial years 2018 and 2019; 25% as of the financial year 2020). The spread deduction amounts to 20.5% (for tax year 2019) of the depreciation amount (6% tax benefit based on a corporate tax rate of 29.58%). If the increased investment

deduction exceeds the taxable basis, the excess balance may be carried forward without any time restrictions and can be offset against any future taxable income within certain annually applicable maximum amounts.

The investment deduction applies to tangible and intangible fixed assets used for R&D of new products and technologies that do not have a negative impact on the environment, including capitalized R&D expenses, and to patents for which only a one-shot deduction applies.

Guidelines around incentive applications

The investment deduction is applicable to current and future investments. The incentive must be claimed in the corporate income tax return. Form 275U needs to be enclosed with the corporate income tax return together with the other documents substantiating the conditions to claim the investment deduction.

Tax credit for R&D and patents

(Het belastingkrediet voor onderzoek en ontwikkeling (Dutch)/Le crédit d'impôt pour recherche et développement (French))

Description of benefits

As an alternative to the investment deduction, companies may instead opt for a tax credit that is deductible from the corporate income tax due. The tax credit is equal to the investment deduction multiplied by the standard corporate tax rate of 29.58% (financial years 2018 and 2019)/25% (as of financial year 2020). Therefore, although the calculation is different, the advantage is equivalent. The tax credit may also be calculated either as a one-shot credit or spread over the depreciation period. Excess tax credits are carried forward and can be used considering certain limitations. The remaining balance after five years is refunded, which may result in a cash benefit.

The tax credit applies to tangible and intangible fixed assets used for R&D of new products and technologies that do not have a negative impact on the environment, including capitalized R&D expenses, and to patents for which only a one-shot credit applies.

Guidelines around incentive applications

The tax credit is applicable to current and future investments. The incentive must be claimed in the corporate income tax return. Form 275W needs to be enclosed with the corporate income tax return together with the other documents substantiating the conditions to claim the tax credit.

PID (old regime)/innovation deduction (ID) (new regime)

(De aftrek voor octrooi-inkomsten (Dutch)/La déduction pour revenus de brevet (French))

Description of benefits

PID

The PID is an incentive allowing companies, irrespective of their size or industry, to deduct 80% of their gross patent income from their taxable basis, reducing the effective tax rate on such income to a maximum of 5.9% (i.e., 20% of the Belgian statutory corporate income tax rate of 29.58% for financial years 2018 and 2019). Other protected IP such as trademarks, brands and designs do not qualify. Capital gains realized on the transfer or disposal of patents are not included in the gross patent income.

As a result of the recommendations set out under Action 5 (Harmful Tax Practices) of the OECD's BEPS plan, the Belgian PID regime was abolished with effect from 1 July 2016. However, the PID regime will remain in place for income earned up to 30 June 2021 for patents requested and patents or licenses acquired prior to 1 July 2016. To avoid "patent shifting," non-qualifying patents acquired directly or indirectly after 1 January 2016 from a related party will not be grandfathered under the transition regime.

ID

The ID is a tax incentive that provides for a deduction of 85% of the qualifying net IP income, effectively reducing the related maximum effective tax rate to 4.4% for the financial years 2018 and 2019 (15% of the Belgian statutory corporate income tax rate of 29.58%) and to 3.8% as of the financial year 2020 (15% of the Belgian statutory corporate income tax rate of 25%). The ID replaces the PID. The ID applies to self-developed IP rights as well as IP rights

acquired or licensed from related or unrelated third parties. The development or improvement of the IP assets in a qualifying R&D center is not required.

For IP rights that require a request procedure (not applicable to copyright-protected software), taxpayers will be entitled to a conditional exemption, which is equivalent to the ID pending the request. The amount of the exemption should be recorded on an unavailable reserve account. The exemption will become final provided that the request is granted.

The ID can be applied irrespective of the country in which the qualifying IP, good or service is protected. The globally earned qualifying income can be taken into account provided that it is included in the taxable basis of the Belgian company or permanent establishment (PE).

The ID applies to net income, i.e., gross IP income after deduction of current-year expenditures for the development of the IP asset, including expenditures for the acquisition of IP rights, expenditures in relation to the R&D conducted by the company, as well as R&D outsourced to related or unrelated parties. Prior-year expenditures incurred in financial years ending after 30 June 2016 should also be deducted. However, taxpayers may choose to spread the recapture of prior-year expenses over a period of seven years maximum.

The extent to which the ID can be applied depends on the nexus ratio (i.e., a BEPS Action 5-compliant formula with a 30% uplift to the qualifying expenditures). The purpose of this nexus ratio is to ensure that the ID is only available to the extent that qualifying expenditures (R&D conducted by the taxpayer or that result from outsourcing of R&D to unrelated parties) were incurred by the taxpayer.

The nexus ratio serves only as a rebuttable presumption. Subject to conditions, taxpayers can prove that due to exceptional circumstances the nexus ratio does not correctly reflect the share of their own R&D activities in the overall R&D activities. To deviate from the nexus ratio, taxpayers will be required to obtain an advance tax ruling.

In principle, the calculation should be performed for each IP asset separately. Taxpayers should allocate expenditures and IP income to the various IP assets. But the allocation can be also be done by type of product or service, or by group of products or services.

The amount of the current-year ID is not capped, and the

unused ID can be carried forward indefinitely.

Guidelines around incentive applications

PID

Form 275P needs to be enclosed with the corporate income tax return together with the other documents substantiating the conditions to claim the PID.

ID

Form 275 INNO needs to be enclosed with the corporate income tax return. More detailed rules on the formalities will appear in a forthcoming Royal Decree.

Notional interest deduction (NID)

(De aftrek voor risicokapitaal (Dutch)/La déduction pour capital à risque (French))

Description of benefits

The NID is a unique tax incentive allowing companies, irrespective of their size, industry or activities, to deduct a percentage of their equity from their taxable income. As of tax year 2019, the NID will no longer be calculated on the prior year equity, but on the incremental five-year average equity in order to reduce perceived abuse. In addition, a new anti-abuse provision is introduced in order to refuse the NID if the shareholder financed the capital contribution with a loan. The NID rates for tax years 2018 and 2019 are 0.237% and 0.746%, respectively.

Guidelines around incentive applications

The NID is claimed in the corporate income tax return. Form 275C needs to be enclosed with the corporate income tax return to claim the notional interest deduction.

Foreign tax credit (FTC) for withholding tax on royalties received

(Het forfaitair gedeelte van de buitenlandse belasting (Dutch)/La quotité forfaitaire d'impôt étranger (French))

Description of benefits

The FTC is for foreign withholding tax on royalties of 15/85 of net income at the border. It is creditable against the corporate income tax due. In cases where the PID or ID regime is applicable, the FTC is limited to the actual withholding taxes paid on royalties received.

Guidelines around incentive applications

The FTC is claimed in the corporate income tax return. No specific form needs to be enclosed.

Partial exemption of professional withholding tax

(Vrijstelling doorstorting bedrijfsvoorheffing (Dutch)/Exonération du précompte professionnel (French))

Description of benefits

An 80% exemption of professional withholding taxes on wages paid to specific personnel with a PhD or master's degree in the scientific or engineering domain (e.g., sciences, applied sciences, exact sciences, medicine, pharmaceutical sciences, engineering, IT, architectures, product development) performing R&D activities can be applied.

As from 1 January 2018, a 40% exemption (80% as from 1 January 2020) of professional withholding taxes on wages paid to specific personnel with a bachelor's degree in the scientific domain (biotechnics, health care, industrial sciences and technology, nautical sciences, science in business administration and business administration, with a focus on IT and innovation for the Flemish community and in paramedical and technical domains for the French community) performing R&D activities can be applied. The total withholding exemption for bachelor's degrees will be capped at 25% of the total withholding exemption applied for master's and doctoral degrees. This threshold will be increased to 50% for companies that are qualified as small companies according to the Belgian Code of Company Law.

Guidelines around incentive applications

The incentive is applicable to current and retroactive R&D activities. The withholding tax exemption may be claimed retroactively during a period that covers five income years, starting from the current year (e.g., a tax claim over income year 2015 can be filed until 31 December 2019). A tax claim should be filed together with a corrective withholding tax return. For the current income year, the exemption may be claimed directly through monthly withholding tax returns. Due to the revised income tax law, which is applicable as from income year 2014, the implementation of the withholding tax exemption will require preapproval from the Federal Science Department. New R&D projects and programs should be registered (notification procedure) as from 2014.

Expat tax regime – tax-free allowances for foreign executives and researchers and exclusion of foreign working days

(Gunstregime voor buitenlandse kaderleden en onderzoekers (Dutch)/ Expatriates: le régime fiscale applicable (French))

Description of benefits

Companies employing foreign executives and researchers who temporarily work in Belgium may benefit from a special tax regime. A person who is classified as a foreign executive or researcher is considered to be a nonresident in Belgium from a tax point of view and, consequently, is taxed only on his or her income relating to professional activities carried out in Belgium. Moreover, certain expense allowances (called expatriate allowances) that relate to the temporary nature of the employment in Belgium are fully exempt. The standard maximum amount of this type of allowance is EUR11,250 per year, but for researchers the exemption can be increased to a maximum of EUR29,750 per year.

The increased exemption applies to “scientific research centres and laboratories, Belgian or foreign institutions (public or private) or autonomous departments of Belgian or foreign companies or of Belgian establishments of foreign companies whose activity consists solely of scientific or technical research in any field.” It is automatically applicable when the expat regime is granted.

In addition to these nontaxable allowances, the other major advantage of the special tax regime is that the expatriate is not taxable on that part of his or her remuneration that relates to his or her professional activity outside Belgium. The breakdown between the salary earned in Belgium and the salary earned outside of Belgium is usually (though not necessarily) calculated by comparing the number of days of professional activity spent in Belgium (nominator) with the total number of working days for the whole year or for a shorter time period (denominator).

Guidelines around incentive applications

The incentive is applicable to current and future investments.

IP income – beneficial tax regime

(Auteursrechtelijke inkomsten (Dutch)/Revenus des droits d'auteur (French))

Description of benefits

Under this regime, income related to the cession and concession of IP income and related rights can be considered as movable income (up to EUR61,200 for income year 2019) and will be subject to tax differently than regular professional income. The income from IP will be taxable at a rate of 15% with a 50% lump sum cost deduction up to EUR16,320, and a lump sum cost deduction of 25% for IP income between EUR16,320 and EUR32,640. No cost deduction can be applied for IP income between EUR32,640 and EUR61,200. Otherwise, this income would be taxed as professional income at the progressive tax rates between 25% and 50%.

Guidelines around incentive applications

The incentive is applicable to current and future activities.

Obtaining a tax ruling for this incentive is strongly recommended. Furthermore, the transfer of IP rights also needs to be contractually stipulated.

3. Eligibility requirements

Cash grants

Eligible entities

- ▶ All Belgian resident entities that are subject to Belgian corporate income tax
- ▶ Belgian branches of nonresident entities that are subject to nonresident Belgian corporate income tax

- ▶ Any enterprise, from an SME to the Belgian branch of a multinational company, may request funding under the condition that the enterprise has a legal personality upon signing the agreement. Furthermore, the enterprise should have the capacity to exploit the result to a sufficient extent in the region providing the grant and hence create enough economic impact in the form of employment and investments. However, this does not exclude the possible partial application of the project results abroad.

Eligible R&D expenses

- ▶ Payroll costs of the employer
- ▶ Direct and indirect costs relating to the R&D project
- ▶ Large costs for equipment and other items specifically required for the R&D project
- ▶ Large subcontracting costs

Loans

Eligible entities

- ▶ All Belgian resident entities that are subject to Belgian corporate income tax
- ▶ Belgian branches of nonresident entities that are subject to nonresident Belgian corporate income tax
- ▶ Loans can finance new tangible, intangible and financial investments, fund operating capital needs linked to the development of the business, fund the purchase of shares in an existing company or the acquisition of part of the goodwill in the company and/or refinance existing debts over a longer period.

Investment deduction or tax credit for R&D and patents

Eligible entities

- ▶ All Belgian-resident entities that are subject to Belgian corporate income tax
- ▶ Belgian branches of nonresident entities that are subject to nonresident Belgian corporate income tax

Eligible investments

- ▶ Tangible and intangible assets used for R&D of new products and technologies that do not have a negative impact on the environment
- ▶ Patents

Conditions to be met

- ▶ The investment should relate to new assets, which may be either acquired or self-developed.
- ▶ The investment should be used solely for professional business purposes.
- ▶ The investment must be capitalized under Belgian generally accepted accounting principles and should be depreciated (for tax purposes) over at least three years.
- ▶ The right to use the asset may, in principle, not be transferred to another party.
- ▶ An R&D center must exist for certain qualifying investments.

PID

Effective date

The PID will remain in place for income earned up to 30 June 2021 for patent applications and patents or licenses acquired prior to 1 July 2016. Furthermore, non-qualifying patents directly or indirectly acquired after 1 January 2016 from a related party will not be grandfathered by the transition regime to avoid “patent shifting.”

The PID applies to patents and additional protective certificates, as well as products, processes or services protected under a patent and know-how substantially connected to patents that have not been commercialized prior to 1 January 2007. However, patents may have been granted or acquired before that date.

Eligible entities

- ▶ All Belgian-resident entities subject to Belgian corporate income tax
- ▶ Belgian branches of nonresident entities subject to nonresident Belgian corporate income tax

Eligible patents

- ▶ Patents fully or partly self-developed by Belgian companies (or branches of foreign companies), in R&D centers in Belgium or abroad are eligible.
- ▶ Patents acquired or licensed from related or unrelated parties, provided they are “improved” in R&D centers in Belgium or abroad (independent of whether such improvements lead to additional patents), are eligible.

- ▶ The R&D center should qualify as a division capable of operating autonomously. The PID is not restricted to Belgian patents; European patents, US patents or patents valid in other jurisdictions also qualify.

Eligible patent income

- ▶ The PID applies to income derived from the licensing of patents but is also applicable to patent income that is embedded in the sales price of a patented product or a service.

ID

Effective date

The ID is applicable as of 1 July 2016 and replaces the PID regime, which was abolished as of 1 July 2016 with a five-year grandfathering period.

Eligible entities

- ▶ All Belgian-resident entities subject to Belgian corporate income tax
- ▶ Belgian branches of nonresident entities subject to nonresident Belgian corporate income tax

Eligible IP

- ▶ The ID applies to self-developed IP rights as well as IP rights (see below) acquired from or licensed from related or unrelated third parties
- ▶ Patents and supplementary protection certificates not commercialized before 1 January 2007
- ▶ Plant variety rights requested/acquired after 1 July 2016
- ▶ Orphan drugs requested/acquired after 1 July 2016 (limited to the first 10 years)
- ▶ Data/market exclusivity rights for medicinal products granted after 30 June 2016 (limited to the first 11 years)
- ▶ Copyright-protected software (including adaptations of existing software) resulting from an R&D project within the meaning of the R&D payroll tax exemption that did not generate income prior to 1 July 2016; the copyright-protected software must be self-developed by the Belgian taxpayer

Eligible income

- ▶ License income (e.g., royalties and milestone payments)
- ▶ Embedded royalties included in the sales price of goods/services

- ▶ Embedded royalties related to the production process
- ▶ Indemnities for infringements (defined broadly)
- ▶ Capital gains (subject to conditions)

NID

Eligible entities

- ▶ All entities in Belgium

Eligible activities/expenses

- ▶ As of tax year 2019, the NID will be calculated on the incremental five-year average equity. The percentage rate depends on the applicable taxable period.

FTC for withholding tax on royalties received

Eligible entities

- ▶ All entities in Belgium

Eligible activities/expenses

- ▶ The FTC applies to foreign withholding tax on royalties.

Partial exemption of professional withholding tax

Eligible entities

- ▶ All entities in Belgium with a payroll structure

Eligible expenses

- ▶ Professional withholding tax paid via Belgian payroll

Eligible activities

- ▶ All activities in scope of the OECD's Frascati Manual description of research and development, along with outsourcing activities
- ▶ As from 2014, all activities in scope of the Commission Regulation 5EC, No 800/2008, under the description of "fundamental research," "technical research" and "experimental development" (issued on 6 August 2008)¹

Expat tax regime

Eligible entities

- ▶ A qualifying employer is either a subsidiary, a branch or a PE of an international group of companies.

Eligible activities

- ▶ These concessions are available to foreign highly skilled employees who work temporarily in Belgium for a Belgian entity that is part of an international group of companies.

Eligible expenses

The expatriate tax regime provides for the following reimbursement to qualify as nontaxable:

- ▶ Non-recurring unlimited expenses, justified by actual expenses:
 - ▶ Moving costs to and out of Belgium
 - ▶ Settling-in costs in Belgium
- ▶ Recurring unlimited expenses, justified by actual expenses:
 - ▶ International or private school fees for children who attend primary or secondary school (university and child care excluded)
- ▶ Recurring limited expenses, up to an annual ceiling of:
 - ▶ EUR11,250 or EUR29,750:
 - ▶ Difference in the cost of living and cost of housing between Belgium and the home country
 - ▶ Home leave (for travel by plane in economy class)
 - ▶ Losses incurred when the accommodation in the home country cannot be leased or can only be leased below its normal rental value
 - ▶ Emergency travel (e.g., serious illness or death of a close relative)
 - ▶ Exchange rate differentia
 - ▶ Differences in the income tax burden between Belgium and the home country (tax equalization)
 - ▶ Travel expenses of children studying abroad to visit their parents (maximum two trips per year)

IP income

Eligible entities

- ▶ All entities in Belgium

Eligible expenses

- ▶ Compensation that is paid by the employer/third party for the transfer of IP rights from the employee/contractor to the employer is eligible.

¹ Official Journal of the European Union, <http://www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:214:0003:0047:en:PDF>

Eligible activities

- ▶ This measure can only be applied insofar as the employees create IP rights (e.g., copyrights) during their employment/contractual agreement.

4. IP and jurisdictional requirements

PID

May work be performed outside the country?

- ▶ Yes, the development (or the improvement) of a patent can be performed in an R&D center located in Belgium or abroad. Part of the development of the patent can also be outsourced to related or unrelated subcontractors.

Must the IP be registered/owned locally?

- ▶ The PID is not restricted to Belgian patents only. European patents, US patents or patents valid in other jurisdictions qualify as well.
- ▶ The former PID can be claimed on the basis of full ownership of a patent or usufruct, as well as on the basis of a patent license.

ID

May work be performed outside the country?

- ▶ Yes, the R&D activities can be performed by the Belgian taxpayer in Belgium or abroad or outsourced to related or unrelated foreign parties.

Must the IP be registered/owned locally?

- ▶ IP rights held as owner, co-owner, usufruct, licensee or rights holder (economic ownership) qualify for the ID, irrespective of the jurisdiction where the IP right is obtained.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Belgium.

6. Role of governmental bodies in administering incentives

Cash grants

Each region has its own cash grant program, of which the responsible government agencies are:

- ▶ Flemish region: Flanders Innovation & Entrepreneurship, VLAIO – www.vlaio.be
- ▶ Walloon region: Walloon Public Service, Operational DG for Economy, Employment & Research, DGO 6 – <https://recherche-technologie.wallonie.be/>
- ▶ Brussels-Capital region: Brussels Institute for Research and Innovation, Innoviris – <http://www.innoviris.be/nl>

Loans

An application should be submitted to the competent agency:

- ▶ Flemish region: *Participatie Maatschappij Vlaanderen/ Limburgse Reconvertie Maatschappij* – www.pmv.eu and www.lrm.be
- ▶ Walloon region: *Société Wallonne de Financement et de Garantie des Petites et Moyennes Entreprises* – www.sowalfin.be
- ▶ Brussels-Capital region: *finance.brussels* (Brussels Regional Investment Company) – www.finance.brussels

Investment deduction (or tax credit) for R&D and patents

To apply for an investment deduction (or tax credit) for R&D and patents, companies should obtain a certificate confirming that the investments do not have a negative impact on the environment. These certificates are issued by one of the competent authorities (depending on where in Belgium the company is located):

- ▶ Flemish region: <https://www.omgevingvlaanderen.be/afdeling-partnerschappen-met-besturen-en-maatschappij>
- ▶ Walloon region: <http://energie.wallonie.be> or <http://environnement.wallonie.be/>
- ▶ Brussels-Capital region: <https://leefmilieu.brussels/>

PID

The patent application should be submitted to the competent agency:

- ▶ Belgian patent – the Belgian Office for Intellectual Property: https://economie.fgov.be/fr/entreprises/propriete_intellectuelle/Aspects_institutionnels_et_pratiques/OPRI

ID

The patent application should be submitted to the competent agency:

- ▶ Belgian patent – the Belgian Office for Intellectual Property: https://economie.fgov.be/fr/entreprises/propriete_intellectuelle/Aspects_institutionnels_et_pratiques/OPRI/

Specific applications should be submitted to the competent agency for plant variety rights, orphan drugs and data/market exclusivity rights.

No specific application needs to be submitted for copyright-protected software.

NID

Not applicable

FTC for withholding tax on royalties received

Not applicable

Partial exemption of professional withholding tax

Not applicable

Expat tax regime

Not applicable

IP income

Not applicable

General

Various organizations provide advice and guidance to those wishing to start or expand their activities in Belgium. Foreign companies may contact the Service for Direct Investments:

- ▶ Invest in Belgium: www.ib.fgov.be
- ▶ Flemish region: www.investinlanders.be
- ▶ Walloon region: www.investinwallonia.be
- ▶ Brussels-Capital region: www.investinbrussels.com

7. Administrative requirements

Cash grants and loans

- ▶ Applications for cash grants are required to be filed in advance of the R&D project commencing. Taxpayers may claim tax incentives and cash grants; however, applications for each project are required to be filed separately. The different grants offered by the regions in Belgium to support and stimulate R&D projects may take the form of direct cash grants, recoverable advances or interest rebates. Although such grants are included in a company's taxable basis, they are exempt from corporate income tax.

Investment deduction (or tax credit) for R&D and patents

- ▶ Via the corporate income tax return (an advance tax ruling is possible)
- ▶ Certificate from regional authorities regarding environmental impact (see Role of government bodies in administering incentives above)

PID

- ▶ Via the corporate income tax return (an advance tax ruling is recommended, particularly in cases of embedded patent income)

ID

- ▶ Via the corporate income tax return (an advance tax ruling is recommended, particularly in cases of copyright-protected software and embedded patent income)
- ▶ More detailed rules on the formalities will appear in a forthcoming Royal Decree.

NID

- ▶ Via the corporate income tax return (an advance tax ruling is possible)

FTC for withholding tax on royalties received

- ▶ Via the corporate income tax return

Partial exemption of professional withholding tax

- ▶ Up-front registration of R&D programs and projects

Expat tax regime

- ▶ The expatriate tax regime in Belgium is not granted automatically, but must be requested jointly by the employer and the employee, within six months following the start of the assignment in Belgium.

IP income

- ▶ Obtaining a tax ruling

8. Statutory reference

Investment deduction (or tax credit) for R&D and patents

- ▶ Investment deduction: Article 68 of the Belgian Income Tax Code (ITC) and following
- ▶ Tax credit: Article 289 quarter ITC and following

PID

- ▶ Article 546 (transition regime)

ID

- ▶ Article 194 quinquies ITC (conditional exemption)
- ▶ Article 205/1 - 205/4 ITC (final deduction)

NID

- ▶ Article 205 bis – 205 novies ITC

FTC for withholding tax on royalties received

- ▶ Article 285 ITC and following

Partial exemption of professional withholding tax

- ▶ Article 275³ ITC

Expat tax regime

- ▶ Circular letter of 8 August 1983

IP income

- ▶ Article 17 § 1, 5° ITC

B

Brazil



Brazil

This chapter is based on information current as of February 2019.

EY contacts:

Frederico H. God
frederico.h.god@br.ey.com
+55 11 2573 3232

Jose Paulo S. Peixe
jose.peixe@br.ey.com
+55 11 2573 4379

Henrique Almeida
henrique.almeida@br.ey.com
+55 11 2573 3407

With the publication of Ministerial Ordinance No. 715/2014, the Ministry of Science, Technology and Innovation (MCTI) must issue technical feedback regarding every R&D project's narrative submitted through the annual R&D call for proposals. This procedure helps taxpayers better understand MCTI's premises and concepts to assess whether a project could be classified as R&D.

1. Overview

The Brazilian Government has been a strong supporter of R&D activities in various segments in Brazil. At the end of 2005, the Government created a tax incentive for R&D, which commenced in 2006. Currently, the Government offers super deductions of 160% to 200% to taxpayers with eligible R&D expenses, financial support to new R&D investments and accelerated depreciation on qualifying R&D assets. The Government aims to achieve technological innovation, product innovation and enhanced R&D activities through the R&D incentive.

"Technological innovation" refers to the design of a new product or manufacturing process and addition of new functionalities or characteristics to the product or process that leads to incremental improvements and an effective quality or productivity gain.

"Product innovation" refers to the improvement of new and/or existing products in the domestic or international markets.

"Enhanced R&D activities" refers to basic research, applied research, experimental development, basic industry technology and technical support services.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input checked="" type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D deduction*	Accelerated depreciation	Funding Authority for Studies and Projects
Types of incentives	▸ Super deduction	▸ Accelerated depreciation on qualifying R&D assets	▸ Financial support ▸ Loans

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D deduction

(Inovação Tecnológica)

Description of benefits

A super deduction of 160% to 200% is available to taxpayers with eligible expenses. The “standard” super deduction is 160% of eligible R&D expenses. If a company increases its number of contracted researchers during a calendar year when compared with the average number of contracted researchers in the prior calendar year, the amount of the super deduction increases. If the number of contracted researchers increased up to 5%, an extra deduction of 10% is available (resulting in a total super deduction of 170%); if the number of contracted researchers increased by more than 5%, an extra deduction of 20% is available (resulting in a total super deduction of 180%). In addition, if a company registers intellectual property (IP) in Brazil, an extra 20% deduction is available.

The R&D deduction is applicable to expenses incurred by Brazilian entities, and contract research or greenfield investments are not normally eligible. Unused R&D deductions cannot be carried forward or carried back. To receive the R&D deduction, taxpayers are required to present Tax Clearance Certificates to the tax authorities; however, no preapproval process is required to obtain the R&D deduction.

Taxpayers can also receive a reduction on Federal Excise Tax (IPI) for eligible R&D activities. Under the IPI reduction, 50% reduction is available on the IPI levied on instruments, equipment, machinery, apparatus and tools imported by Brazilian companies or dedicated to R&D activities performed in Brazil. To receive the IPI reduction, taxpayers are required to claim the incentive upon acquisition.

Legislation also provides for a super deduction of up to 250% of eligible expenses made available for innovation projects executed by Scientific and Technological Institutions (ICT), which is intended to be further explored as per the recent regulations governing the matter (Decree No. 9.283, dated February 2018).

Scientific and Technological Institutions are entities of the direct or indirect public administration, or private nonprofit legal entities legally constituted under Brazilian laws, aiming to use the basic or applied scientific or technological research for the development of new products, services and processes. Innovation projects must be previously authorized by a permanent committee formed by members of the Ministry of Sciences, Technology, Innovation and Telecommunications, Ministry of Industry, Global Trade and Services, and the Ministry of Education. This tax incentive cannot be cumulated with the “standard” super deduction of 160% to 180% mentioned above.

According to Decree No. 9.283, public administration may now stimulate the development of cooperation projects between companies, ICTs and private nonprofit entities with a focus on generating innovative products, processes and services, as well as the transfer and diffusion of technology. This legislation extensively regulates the *modus operandi* of such partnerships, including the grant of economic subventions and mechanisms to promote innovation environments.

Guidelines around incentive applications

The R&D deduction is applicable for current year investments. If a company incurs R&D expenses in 2016, it may apply for the incentive considering expenses incurred from January to December of 2016. The R&D deduction is claimed through the income tax return filed in July of the subsequent year.

Accelerated depreciation

(Depreciação Acelerada)

Description of benefits

R&D legislation allows companies to accelerate the depreciation on R&D assets for tax purposes only. Depreciation of 100% is available on eligible R&D assets upon the same year of acquisition.

Guidelines around incentive applications

Accelerated depreciation is applicable to current investments. The R&D deduction is claimed through the income tax return filed in July of the subsequent year.

Funding Authority for Studies and Projects

(Financiadora de Estudos e Projetos (FINEP))

Description of benefits

Financial support with reduced interest rates is available to new R&D investments of Brazilian companies. The fund provided by the Government can provide such funding for up to 90% of the total project costs. The incentive requires a preapproval process to be followed.

Guidelines around incentive applications

Financial support is applicable to current and future investments. To claim the incentive for future investments, taxpayers are required to follow procedures set out by the Government. In addition, taxpayers are also required to meet with specific requirements set by FINEP.

3. Eligibility requirements

Eligibility is not limited to a specific industry. Under Law No. 11.196/2005, technological innovation is defined as “the conception of a new product or production process, as well as the inclusion of new functionalities or characteristics in the product or process resulting in additional improvements, effective quality or productivity increase, as well as competitiveness increase in the market.”

In general, innovation activities eligible for tax benefits are related to scientific and technological stages adopted by taxpayers in the development and implementation of products and/or processes, resulting in productivity gain and incremental improvements. Qualifying expenses include payroll costs, materials, machines, equipment, raw materials for tests and some local expenses directly related to the R&D in Brazil. Third-party costs can also be considered; however, there are specific rules to follow to obtain the incentive.

4. IP and jurisdictional requirements

The IP must be registered and owned locally to obtain the increased R&D tax incentive of 20%. However, the company can apply for the R&D tax incentive locally without registering IP in Brazil.

Furthermore, an exemption of the withholding income tax is available upon the remittance of the consideration destined to the registration and maintenance of intellectual property abroad.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Brazil.

6. Role of governmental bodies in administering incentives

The MCTI fulfills an important role in administering R&D incentives because it must approve and control the application of tax benefits by qualifying the applicable projects. According to Ministerial Order No. 715 from 2014, MCTI is also responsible for issuing an opinion report on whether innovation projects and expenditures comply with the Good Law. Only MCTI has the appropriate skills to analyze the projects presented by companies. The Brazilian IRS maintains its audit role in relation to incentives with tax impact and may (or may not) investigate some accounting and fiscal aspects focused on R&D incentives.

7. Administrative requirements

Only companies that adopt the methodology of Actual Profit (*Lucro Real*) on a quarterly or annual basis may apply for the R&D tax incentive. Companies must fill out the income tax return annually to maintain compliance. In addition, companies that apply for this incentive should have tax clearance certificates that are valid for the full period (January to December of the respective year). In addition, companies must complete a specific R&D form and submit it electronically on an annual basis to MCTI.

8. Statutory reference

- ▶ Federal Law No. 10.973 of 2004
- ▶ Federal Law No. 11.196 of 2005 (the Good Law)
- ▶ Decree No. 5.798 of 2006
- ▶ Decree No. 9.283 of 2018
- ▶ Normative Instruction No. 1.187 of 2011
- ▶ Ministerial Order No. 715 of 2014

C

Canada



Canada

This chapter is based on information current as of February 2019.

EY contact:

Susan G. Bishop
 susan.g.bishop@ca.ey.com
 +1 416 943 3444

Innovative companies play an increasingly important role in driving Canada's economy by seizing global market opportunities. This has led to the creation of a wide variety of new grant programs and tax incentives in recent years. At the same time, however, some of the long-standing innovation incentives, such as the Scientific Research and Experimental Development (SR&ED) tax credits, have experienced stricter eligibility and documentation requirements. It is important for businesses to both understand the relevant incentives available to them and how to optimize their entitlement.

1. Overview

The federal SR&ED program is a tax incentive program designed to encourage economic development and job creation in Canada. The program is the largest source of federal funding for industrial R&D performed in Canada and is well-regarded by business. This tax incentive program (as opposed to a grant program) is demand-driven. There is no ceiling on how much the Government may pay out to claimants in any particular year.

Legislation governing the program is contained in the federal Income Tax Act and Income Tax Regulations and is, therefore, the responsibility of the Department of Finance. However, the Canada Revenue Agency (CRA) is responsible for the program's administration. In recent years, the CRA has been working on administrative improvements directed at simplifying the claims process, increasing the scientific capacity of the program and improving consistency with respect to processing SR&ED claims across the country and across various industries.

The federal Government has provided tax assistance for R&D since 1944. Although investment tax credits (ITCs) were introduced for SR&ED expenditures in 1977, the program as it exists today was developed in the 1980s.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Scientific Research and Experimental Development (SR&ED) tax credit*	Accelerated capital cost allowance (CCA) rate and Manufacturing and Processing (M&P) tax credit	Strategic Innovation Fund
Types of incentives	▸ Tax credit	▸ Accelerated depreciation and tax credit on the R&D asset	▸ Combination of cash grants and loans

*Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

SR&ED tax credit

Description of benefits

A 15% federal tax credit is available on eligible activities and expenditures. An enhanced credit rate of 35% is available for small Canadian-controlled private corporations (CCPCs) on the first CAD3 million of expenditures per year. CCPCs in general must be private corporations, resident in Canada and not controlled directly or indirectly by one or more nonresident persons or public corporations. The 35% credit is 100% refundable.

The CAD3 million expenditure limit is reduced if the preceding year's taxable income for the corporation and associated corporations exceeds a threshold linked to the maximum small-business deduction limit for the year and if the taxable capital of the corporation (or associated group) for the preceding year exceeds CAD10 million. In addition, the annual expenditure limit must be shared among associated corporations. Unused R&D tax credits may be carried forward 20 years and carried back for three years.

For the provincial and territorial incentives, tax credits range from 3.5% to 28%, depending on the provincial or territorial jurisdiction. The majority of provincial and territorial jurisdictions offer refundable credits.

Guidelines around incentive applications

SR&ED is applicable to retroactive and current investments provided they are claimed within 18 months of the fiscal year-end. To benefit from the SR&ED tax incentives, a

claimant generally must carry on business in Canada in the year in which eligible activities and expenditures are claimed; perform eligible SR&ED work that is related to the business of the claimant; and complete and file Form T661, Scientific Research and Experimental Development Expenditures Claim, as well as Form T2SCH31 (Schedule 31), Investment Tax Credit – Corporations, or Form T2038 (IND), Investment Tax Credit (Individuals), as applicable. The reporting deadline is 12 months after the filing due date of the return for the fiscal period in which the expenditures were incurred.

Accelerated CCA rate and M&P tax credit

Description of benefits

To the extent that certain R&D assets are used in connection with a taxpayer's eligible manufacturing and processing activities, these assets may qualify for Class 29 (Class 53 after 2015) property classification. Class 29 assets may be depreciated over a three-year period; Class 53 over approximately four years. The same assets may also qualify for federal and/or provincial manufacturing or processing investment tax credits ranging from 4% to 10% (or more) of the qualifying expenditures. The 2018 Federal Economic Statement Update (FES) proposes to temporarily allow the immediate expensing of Class 53 property acquired after 20 November 2018 and before 2024 that becomes available for use before 2028.

Certain R&D assets may be eligible for other accelerated depreciation property classes such as Class 50 computer hardware, which has a 55% capital cost allowance/depreciation rate. The FES proposes to significantly increase the first-year capital cost allowance/depreciation deduction for Class 50 property from 27.5% currently to 82.5% of the cost of eligible property acquired after 20 November 2018 and before 2024 that becomes available for use before 2028.

Guidelines around incentive applications

The opportunity for capital assets used in SR&ED activities to qualify for accelerated depreciation property classes (e.g., Class 29, 53 and 50) is applicable to projects in current, prior and future years. A taxpayer may amend prior-year corporate tax filings (i.e., revise capital asset classifications) to access classification opportunities to the extent that the years are not statute-barred. With respect to property that is eligible for M&P tax credits, the credits must be claimed by taxpayers on their corporate tax returns (federal or provincial) within 18 months of the year the property was acquired.

Strategic Innovation Fund

Description of benefits

The objective of the Strategic Innovation Fund (SIF) is to accelerate economic growth, strengthen the role of Canadian businesses in regional and global supply chains, and attract investment that creates significant employment benefits for Canadians. Specifically, it accelerates technology transfer and commercialization of innovative products, processes and services; facilitates the growth and expansion of firms in Canada; attracts and retains large-scale investments to Canada; and advances industrial R&D through collaboration among academia, nonprofits and the private sector. The program is available to organizations of all sizes across all of Canada's industrial and technology

sectors and provides support in the form of cash grants or favorable loans up to 50% of eligible project costs. The fund provides contributions to support four distinct activity streams with specific objectives:

- ▶ Stream 1: Encourage R&D necessary to accelerate technology transfer and commercialization of innovative products, processes and services
- ▶ Stream 2: Facilitate the growth and expansion of firms in Canada
- ▶ Stream 3: Attract and retain large-scale investments in Canada
- ▶ Stream 4: Advance industrial research, development and technology demonstration through collaboration among academia, nonprofit organizations and the private sector

Guidelines around incentive applications

The incentive is fully discretionary and is applicable to future investments that have not yet been incurred. There is no defined application period for the SIF, and the application process follows a two-stage process: Statement of Interest (SOI) and a Detailed Application. The SOI is a high-level overview of the project and includes a project description that includes details on how it meets the fund's objectives. Applicants must demonstrate their basic corporate capability to complete the project. Applicants will receive feedback on whether the SOI indicates potential for funding and if they should advance to the Detailed Application stage. Applicants will need to clearly demonstrate the benefits of their project in relation to key Government priorities. Applications will be assessed based on the project's anticipated benefits, including innovation, economic and public benefits. Applicants will be subject to a comprehensive due diligence process. Successful applicants will be required to sign a Contribution Agreement. Recipients will be required to submit periodic reports, annual consolidated financial statements, repayment forecasts (if applicable), project status updates and reports of project benefits.

3. Eligibility requirements

Scientific Research & Experimental Development

SR&ED is defined as a systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis that involves basic research, applied research or experimental development and includes work undertaken by or on behalf of the taxpayer with respect to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing or psychological research where the work is commensurate with the needs and directly in support of the basic research, applied research or experimental development.

The work must be undertaken in Canada. Qualifying SR&ED expenditures may include labor, materials consumed or transformed, subcontracts (SR&ED performed on taxpayers' behalf), other expenses directly related and incremental to the SRED, and third-party payments. Only 80% of subcontractor and third-party costs is eligible. The SR&ED incentive is not limited to particular industries.

Strategic Innovation Fund

For streams 1, 2 and 3, the applicant must be a for-profit corporation incorporated under the laws of Canada and proposing to carry on business in Canada. Stream 4 is geared toward consortia that include academic institutions (e.g., Canadian universities, colleges, research institutes, not-for-profit entities). However, the stream 4 lead applicant must be an entity that is incorporated in Canada, carries on business in Canada and is proposing to conduct industrial research and technology demonstration activities.

Each stream of the program has its own project eligibility criteria. As part of the evaluation process, the Government uses a Technology Readiness Level (TRL) scale to assess the maturity level of a particular technology.

For all streams, eligible costs are those non-recurring costs related to the particular project, including:

- ▶ Direct labor
- ▶ Overhead (limits apply)
- ▶ Subcontracts and consultants

- ▶ Direct materials and equipment
- ▶ Land and buildings
- ▶ Other direct costs

4. IP and jurisdictional requirements

SR&ED-related activities must be carried on by the taxpayer in Canada. The SR&ED program does not require the claimant to own the intellectual property.

The M&P activities related to Class 53/29 assets must be carried on in Canada.

Eligible SIF projects must also be based in Canada. The SIF program, however, requires recipients to own the background intellectual property or hold sufficient background intellectual property rights to allow their project's activities to be carried out. In addition, they must hold sufficient rights to exploit the intellectual property resulting from their project's activities. Recipients may be required to provide the Government with information regarding their intellectual property strategy as it relates to protecting the intellectual property resulting from their project's activities.

5. Technology or innovation zones

There are no defined technology or innovation zones providing R&D incentives in Canada. However, the provinces of Saskatchewan and Quebec have introduced commercial innovation incentives, better known as "patent box" incentives. These patent box incentives are intended to encourage corporations to commercialize patents and other innovations in their respective provinces by reducing the province's tax on income earned from these innovations. More specifically, the patent box incentive will reduce the general provincial corporate income tax rates for an extended period (i.e., up to 10 years) applicable to an eligible corporation's taxable income earned from the commercialization of qualifying intellectual property in Saskatchewan, such as patents, plant breeders' rights, trade secrets and copyright (computer programs and algorithms).

6. Role of governmental bodies in administering incentives

The legislation governing the SR&ED program is contained in the federal Income Tax Act and Income Tax Regulations, which are the responsibility of the Department of Finance.

CCA rates and the M&P tax credits are the responsibility of the Department of Finance (federal or provincial). The CRA is responsible for their administration, including review and assessment.

The Strategic Innovation Fund program is funded through the federal department of Innovation, Science and Economic Development Canada and is administered by Industry Canada.

7. Administrative requirements

To claim a federal M&P credit, a claimant must complete and file Form T2SCH31 (Schedule 31), Investment Tax Credit – Corporations, or Form T2038 (IND), Investment Tax Credit (Individuals), as applicable. For provincial credits, each province has its own form that must be completed and filed with the taxpayer's return for the applicable year.

The SIF program requires completion of a Statement of Interest form and a full detailed application.

8. Statutory reference

- ▶ SR&ED: Canadian Income Tax Act – Section 37, 127, Regulation 2900
- ▶ CCA rate and M&P tax credit: Canadian Income Tax Act – Sections 20(1)(a), 127(9), Regulations 4600, 5202, Schedule II of Regulations – Class 53, 50, 29

C

Chile



Chile

This chapter is based on information current as of February 2019.

EY contact:

Alicia Dominguez
alicia.dominguez@cl.ey.com
+56 2 676 1288

To encourage R&D investments by corporate taxpayers, the Chilean Government provides a tax credit of 35% on pre-certified R&D cash expenditures, excluding cash flows sponsored with public funds; the remaining portion of the expenditure may be deducted as an expense. The Government also provides a relatively generous cash grants scheme to promote technological innovation.

1. Overview

The Ministry of Economy has defined as part of its strategy for Chile's development the goal of converting Chile into a hub of innovation and entrepreneurship in the Latin American region. For this purpose, it has implemented a number of Chilean Economic Development Agency (CORFO) programs designed to attract entrepreneurs and R&D investment to Chile and to connect Chile to the world's main technology markets.

Currently, corporate taxpayers are entitled to a 35% tax credit against their corporate tax liability, subject to a yearly cap of UTM15,000 (monthly tax unit, which is approximately US\$1.2 million), where the base is calculated by using the total amount disbursed in an R&D contract with a registered research center excluding cash flows sponsored with public funds.

If taxpayers use in-house R&D resources, the base would be calculated using the amounts disbursed within the R&D certified project for current expenses and an annual quota of fixed asset depreciation for assets acquired and destined to R&D activities. Disbursements incurred over and above the aforementioned limit may be deducted as expenses. These expenses may be deducted by taxpayers for a period of up to 10 consecutive commercial years, starting in the year in which the R&D contract or project is certified and the payment has been effectively made.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

Although the Chilean Income Tax Law expressly regulated disbursements made in relation to R&D activities under the concept of allowable tax expenses, it was not until the enactment of Law No. 20.241 in January 2008 that the Government clearly showed its attitude toward granting a tax benefit in relation to these activities. However, because of the law's restrictions, i.e., the limits for the total amount of credit available and the deductibility of the expense, and in particular, the requirement to contract with an R&D center (which left companies unable to claim tax relief for

in-house R&D projects), there was not much uptake, as the benefits did not justify the costs. Because the number of investors applying for these tax benefits was lower than expected, the Government modified Law No. 20.241 (via Law No. 20.570) to expand the tax credit available and introduce more flexibility to the R&D tax incentive regime. The modified law, which has been in force since March 2012, has led to more tax benefits being awarded, allowing a higher number of investors to make use of these new benefits.

2. Incentives available

Names of incentives	Tax incentive to private investment in R&D (Law No. 20.241, as modified by Law No. 20.570)*	CORFO grants and lines of credit
Types of incentives	<ul style="list-style-type: none"> ▶ Tax credits ▶ Tax deductions 	<ul style="list-style-type: none"> ▶ Cash grants

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

Tax incentive to private investment in R&D (Law No. 20.241, as modified by Law No. 20.570)

(Incentivo tributario a la inversión privada en investigación y desarrollo)

Description of benefits

To boost R&D in Chile, the Chilean Congress in March 2012 approved a new regulation, Law No. 20.570, that modified the R&D tax incentive regime enacted in 2008 (Law No. 20.241) by expanding the tax credit available and introducing more flexibility to the R&D tax incentive regime. The aforementioned incentives are summarized below.

R&D certified contract with a registered research center

- ▶ The tax credit against the taxpayer's corporate tax is equivalent to 35% of payments associated with R&D certified contracts entered into with a registered research center, with an annual cap of UTM15,000 (approximately US\$1.2 million).

- ▶ Taxpayers will be allowed to deduct as an expense any amounts paid (not deducted as a credit) and associated with R&D certified contracts entered into with a registered research center. In this case, 35% is taken as a tax credit and the remaining 65% is taken as a deduction. For these purposes, disbursements incurred in R&D contracts are considered to be necessary, even though they may not be related to the taxpayer's main line of business.
- ▶ If taxpayers enter into an uncertified contract, they will only be entitled to deduct 65% of the disbursements made in connection with the R&D contract as expenses and will not be entitled to the 35% tax credit. However, certification at a later date, in accordance with the procedures set forth in the law, will enable the taxpayer to access the tax credit benefit.
- ▶ This benefit would apply only on disbursements incurred with the company's own expenses, excluding cash flows sponsored by public funds.
- ▶ Any remaining tax credit against corporate tax may be carried forward until extinction, by including the remaining tax credit in Form 22 of each year.
- ▶ A preapproval process is required to obtain the incentive.

R&D project (based on in-house R&D activities)

- ▶ The tax credit against the taxpayer’s corporate tax is equivalent to 35% of the base composed of total payments made concerning current expenses in tandem with the annual quota of depreciation of fixed tangible property acquired within the scope of the R&D project, with an annual cap of UTM15,000 (approximately US\$1.2 million).
- ▶ Taxpayers will be allowed to deduct as an expense any amounts paid, not deducted as a credit, in connection with an R&D certified project. For these purposes, disbursements incurred in R&D projects are considered necessary, even though they may not be related to the taxpayer’s main line of business.
- ▶ If taxpayers begin making disbursements for an uncertified project (pending its approval), they will only be entitled to deduct 65% of the amount disbursed as expenses. This means the 35% tax credit benefit will not be awarded. However, certification at a later date will enable taxpayers to access the tax credit benefit.
- ▶ The benefit would apply only over disbursements incurred with the company’s own expenses and not for cash flows sponsored with public funds.
- ▶ Any remaining tax credit against corporate tax may be carried forward until extinction, by including the remaining tax credit in the Form 22 of each year.
- ▶ A preapproval process is required to obtain the incentive.

Guidelines around incentive applications

The incentive is applicable to current investments. As the benefits consist of a tax credit and the possibility to deduct the related disbursements as an expense, the tax benefit will be determined according to net taxable income. Tax benefits are claimed annually through the regular tax form used to report income, Form No. 22. This form has to be completed in April of the year following when the disbursement took place.

CORFO grants and lines of credit

Description of benefits

CORFO offers more than 50 programs and financial instruments aimed at stimulating entrepreneurship, innovation and competitiveness in the Chilean economy.

Among others, the R&D-related instruments are listed below.¹

Technological Contracts for Innovation

- ▶ This program seeks to promote the link and collaboration between companies and knowledge providers to solve a challenge or opportunity with a high component of research and development (R&D), generating knowledge and technology transfer (technological and innovation capabilities). This application is compatible with the R&D Law No. 20.241 and can be done together.
- ▶ This applies to entities with business purposes dedicated exclusively to skills training. Universities, professional institutes and technical training centers are excluded from this benefit and so cannot apply.
- ▶ This co-financing covers, according to the company’s size, from 50% and up to 70% of the total cost of the project. The remaining amount must be contributed by the beneficiary in cash.
- ▶ The beneficiaries must be persons or companies taxed with the First Category Tax of the Income Tax Law. Excluded are universities, professional institutes and technical training centers and those that offer bespoke training.
- ▶ The financing covers approximately CLP200 million (approximately US\$330,000).

Technological Prospecting Program

- ▶ This program seeks to motivate entities that wish to implement best practices, not available in Chile, and that contribute to the creation of value and competitiveness, through technological prospecting activities (visits and work in research centers, companies, technology exhibitions or others that have knowledge of vanguard).
- ▶ This co-financing covers up to 60% of the total cost of the project. The remaining amount must be contributed by the beneficiary in cash.
- ▶ The beneficiaries must be persons or companies taxed with the First Category Tax of the Income Tax Law.
- ▶ The financing covers approximately CLP25 million (approximately US\$41,000).

¹ CORFO develops new programs and instruments every year, and some of the programs are discontinued. The requirements to apply for each of the individual programs are detailed on CORFO’s website.

Attraction of International R&D Centers of Excellence

- ▶ This program provides support for the setup and operation of a branch of the International Center of Excellence in Chile, as well as support for activities directly associated with R&D lines.
- ▶ For Institutional International R&D Centers of Excellence, a maximum of US\$12.8 million in co-financing is provided over eight years.
- ▶ For Corporate International R&D Centers of Excellence, a maximum of US\$8 million in co-financing is provided over four years.

Applied R&D Profile Competition

- ▶ This grant supports all activities that contribute to formulation of an applied R&D project. Beneficiaries will receive a contribution of up to 80% of the total cost of the project, with a ceiling of CLP15 million (approximately US\$24,850). Participants must provide the remaining financing in cash.

Applied R&D Project Competition

- ▶ This grant finances activities that enable the development of applied R&D projects. For example, activities pertaining to applied research may be funded, such as prototype development, experimental tests and concept tests; market assessment; technology/intellectual property (IP) assessment; patentability studies; protection of IP; incorporation of foreign experts who support project development; and studies required for R&D, such as a market study.
- ▶ The beneficiary receives a grant of up to 70% of the total cost of the project, with a ceiling of CLP135 million (approximately US\$223,600). Participants must contribute the remaining financing in cash.
- ▶ The beneficiaries must be persons or companies taxed with the First Category Tax of the Income Tax Law. Excluded are those that have a business purpose to provide coaching or training services only, and to the universities, professional institutes and technical training centers. This benefit is not granted for receipt of training by an entity.

Integrated Development Initiatives IFI: Support for Technological Investment Projects

- ▶ This program seeks to provide support for the realization of technological investment projects, new or expansion projects, or the implementation or expansion of innovation centers.
- ▶ Technological investment projects are those that intensively promote the development and/or use of new

technologies in the fields of information technology and telecommunications, biotechnology, new materials, electronics and processing engineering. Likewise, projects that apply new production techniques in the elaboration and aggregation of value to natural resources in the country will be eligible.

- ▶ The incentive may not exceed 30% of the resources committed by the beneficiary company during the first two years of the project's execution, with a cap of up to US\$5 million. The incentive will be applied to the components of expenses and investments that materially affect the setup, implementation and maintenance of their operations. The expenses must be justified and accounted.
- ▶ The beneficiaries must be companies (productive or technological entities), national or foreign, incorporated in Chile.

High Technology Business Innovation Program

- ▶ This program subsidizes corporate innovation activities aimed at developing high-tech innovation projects related to research, development and innovation, oriented at decreasing the uncertainty and technical risk of this kind of project. Likewise, the grant supports activities aimed at developing a strategy for intellectual and industrial property protection, and commercial prospecting activities that assist in decreasing business uncertainty.
- ▶ This line finances up to 50% of the total amount required, with a maximum grant ceiling of CLP400 million (approximately US\$663,000).
- ▶ The beneficiaries must be persons or companies taxed with the First Category Tax of the Income Tax Law. Excluded are those that have a business purpose to provide coaching or training services only, and to the universities, professional institutes and technical training centers. This benefit is not granted for receipt of training by an entity.

Technology Consortiums for Innovation

- ▶ This program is aimed at consortiums that have already been formed via instruments of CORFO, FIA² and CONICYT,³ as well as new consortiums. In the latter case, the initiative must include at least three legal entities, a majority of which are for-profit and have been in business for at least three years. Additionally, at least one of the three associated legal entities must be incorporated in Chile.

² Research Partnerships Program.

³ National Commission for Scientific and Technological Research.

- ▶ This program finances corporate innovation activities that allow for the creation of medium- and long-term scientific and technological research aimed at developing projects with market impact. The proposal must at least address the implementation of an R&D program.
- ▶ Additionally, the program finances technology and innovation implementation activities that are directly related to the consortium's research lines and projects, as well as activities aimed at developing an intellectual and industrial property protection strategy and activities necessary for the operation and functions of the consortium.
- ▶ The program co-finances up to 50% of the total amount required, with a maximum ceiling of CLP5 billion (approximately US\$8.3 million), with a maximum project duration of 10 years.
- ▶ Participants must contribute at least 20% of the total project cost in cash.

Guidelines around incentive applications

The incentives are applicable for future investments. Corporations, research centers, universities and other qualified persons must submit an application to CORFO in accordance with the specific requirements set out for each grant (which are available at the CORFO website).

3. Eligibility requirements

Taxpayers subject to the First Category of Income Tax (corporate tax) who declare their effective revenue based on full accountancy rules and who enter into an R&D contract with a duly authorized research and development center, or those who develop an R&D project using their own resources or from third parties, both duly certified by CORFO, are eligible.

"Research activities" are understood as methodical searches aimed at generating new knowledge in a scientific or technological field that may be categorized as basic research or applied research. "Development" is understood as a systematic study that takes advantage of existing knowledge gained from previous research or experience and is aimed at producing new materials, products or devices to implement new processes, systems and services or to substantially improve existing ones. Software developments are considered a development

activity as long as the software development gives rise to greater knowledge to solve a scientific or technological uncertainty in a systematic way or to generate a substantial improvement and innovation in a current process, product and/or service.

Qualifying expenses eligible for tax credits/tax incentives for private investment in R&D are listed below.

R&D certified contract with a registered research center

- ▶ All expenses related to R&D contract payment qualify. Rights and procedures related to registering any IP right, when related to the R&D activity, also qualify.

R&D project (based on in-house R&D activities)

All disbursements related to the R&D project must be duly presented to CORFO upon application for certification. In particular, the law presents some guidance:

- ▶ Eligible expenses include current expenses such as salaries and fees; direct expenses such as materials, chemical reagents, IT services and data analysis; service contracts with third parties directly related to project development (at least 50% must correspond to expenses incurred within the country); leasing, or subleasing, real estate or buildings necessary to develop the activities; expenses related to IP registration rights; and utility expenses, such as water services and electricity, which must not be more than 5% of the total expenses (although CORFO may authorize more of these types of expenses depending on each particular case).
- ▶ Expenses related to immovable property that are related to the project are eligible.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to IP.

5. Technology or innovation zones

There are no technology or innovation zones that provide R&D incentives in Chile.

6. Role of governmental bodies in administering incentives

The R&D tax incentive operates on a self-assessment basis and is jointly administered by the Chilean Internal Revenue Service (IRS) and CORFO. Under the incentive framework, CORFO is in charge of keeping a registry where the research centers may apply. Additionally, CORFO is in charge of certifying the R&D contracts entered into between a taxpayer and a research center or the R&D project that a taxpayer develops individually.

7. Administrative requirements

Research center registration

- ▶ A research center must apply for registration with CORFO. To do this, the center must attach documentation and evidence required by law and regulations to its application, as well as proof of payment of registration fees. To be registered, the center must at a minimum prove that it:
 - ▶ Has the necessary organization and means, material, and personnel to develop the R&D activities
 - ▶ Has been operating and exercising R&D activities for at least six months prior to the application
 - ▶ Has mechanisms that faithfully and clearly reflect the income and expenses that will be undertaken as part of the project
- ▶ In addition, the legal representative must file an affidavit stating that the records provided are authentic, truthful and are fully valid as of the date of submission.
- ▶ Concerning annual compliance, each May, the legal representative must inform CORFO of any substantial modifications that concern changes on the conditions under which the center applied or those that have helped it maintain registration. If no modifications have taken place, the legal representative must file an affidavit stating so.

Certification of R&D contracts with a research center

- ▶ Taxpayers who wish to benefit from the tax benefits must enter into a written R&D contract for an amount of more than UTM100 (approximately US\$8,000).
- ▶ CORFO must certify the contract, a process in which an analysis will be conducted to verify that:
 - ▶ The contract's purpose is to develop R&D activities.
 - ▶ The activities to be developed are related to the center's resources, material and personnel in order to accomplish the objective.
 - ▶ The price of the contract is at market value.
- ▶ CORFO will be in charge of ensuring that the contract has been properly fulfilled. Tax benefits may be lost if CORFO determines that there has been a breach of contract.
- ▶ The IRS is empowered to review these contracts to verify whether the objectives are being executed in the terms agreed upon and that the projects being developed in relation to the organization and resources available to the respective research center are duly registered.

R&D project certification

- ▶ CORFO must certify the project for the taxpayer to access the benefit. Therefore, the taxpayer must complete an application with CORFO, in which the latter must verify that the taxpayer:
 - ▶ Has an R&D project that includes an R&D purpose, with a cost greater than UTM100, and has adequate capacity in material and personnel to develop the project
 - ▶ Has mechanisms that faithfully and clearly reflect the income and expenses that will be undertaken as part of the project
 - ▶ Has filed an affidavit stating that the records provided are authentic, truthful and fully valid as of the date of submission
 - ▶ Has verified that the costs correspond to the activities to be developed and reflect market values
- ▶ CORFO will be in charge of ensuring that the contract has been properly fulfilled throughout the duration of the project.
- ▶ Concerning annual compliance, the taxpayer must inform CORFO and the IRS regarding R&D projects that are ongoing or that have been executed in the past 12 months, identify the people to whom payments have been made under these projects and the amount of these payments, and give the total cost of each project certified by CORFO through an annual affidavit.

Sworn statements to be filed before the Chilean IRS

► According to the instructions provided by the Chilean IRS, the two sworn statements involved to use this benefit are the following:

► Sworn Statement No. 1841

This form must be filed by every taxpayer that uses the tax benefit established in Law No. 20.241, but only in case the payment of disbursements related to projects and/or respective research and development contracts have been sponsored partially with public resources, all in accordance with the provisions of the final paragraph of article 5 and article 21 of Law No. 20.241 amended by Law No. 20.560 of 2012.

If the payment of a specific contract or project has been 100% sponsored with the taxpayer's own resources, said contract or project should not be informed in this sworn statement. Similarly, if all the research and development contracts signed by the taxpayer or all the projects developed by the taxpayer have been sponsored with their own resources, it is not obligated to present this sworn statement.

Deadline: 29 March of the year following when the disbursements took place

► Sworn Statement No. 1840

This form must be filed by the research centers or, when appropriate, by the sponsoring legal entity that concludes research and development contracts of those referred to in Article 3 of Law No. 20.241, all in compliance with the provisions of subsection eight of article 5 of said law.

Deadline: 29 March of the year following when the disbursements took place

8. Statutory reference

- Law No. 20.241
- Law No. 20.570 (amending Law No. 20.241)
- Decree No. 102, 2012 (regulations)

C

China (mainland)



China (mainland)

This chapter refers to the mainland China tax jurisdiction, and is based on information current as of February 2019.

EY contacts:

Jenson Tang
jenson.tang@cn.ey.com
+86 21 2228 2045

Chuan Shi
chuan.shi@cn.ey.com
+86 21 2228 4306

Derrick Chen
derrick.chen@cn.ey.com
+86 21 2228 6463

A number of new tax regulations that significantly changed the landscape of R&D incentives in China have started to take effect since 2016. Although many preconditions have been relaxed to a certain extent, taxpayers are facing increased uncertainty in tax regulation interpretation and a more stringent ongoing monitoring and assessment process. In addition, new regulations have introduced updated application or filing procedures, which could take time for government authorities to digest and implement, especially when various authorities are involved in one application or filing step.

1. Overview

Most of the R&D incentives have been available in China for many years, and overall, the regime is maturing with constantly issued laws and regulations. However, as some regulations are still not explicit, authorities in different locations may have different interpretations and treatments regarding R&D incentives.

The Government encourages R&D activities, while taking a stringent position on the review and assessment of R&D incentives. Government preapproval or record filing is required to claim R&D tax benefits. Taxpayers are required to submit all relevant information to the Government as early as possible (including the R&D project budget, descriptions of specific R&D projects, categories of R&D expenditures, and management or board meeting documents authorizing R&D project(s)), or retain such information in preparation for potential tax assessment in the future.

China offers incentives to taxpayers eligible for the Technologically Advanced Service Company (TASC) and the High and New Technology Enterprise (HNTE) status. TASC and HNTE refer to those companies with advanced technologies and qualified personnel to produce products or provide services. It also provides pretax super deductions of 150% to 175% on qualifying R&D expenses actually incurred during the year. In addition, China provides corporate income tax (CIT) exemption and reduction for the transfer of qualified technologies.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Incentives for Technologically Advanced Service Companies (TASC) status*	Incentives for High and New Technology Enterprises (HNTE) status	R&D expenses super deduction	Incentives for qualified technology transfer income
Types of incentives	<ul style="list-style-type: none"> ▶ Reduced tax rates 	<ul style="list-style-type: none"> ▶ Reduced tax rates ▶ Tax holiday 	<ul style="list-style-type: none"> ▶ Super deduction 	<ul style="list-style-type: none"> ▶ Tax exemption and reduction

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Incentives for TASC status

(技术先进型服务企业)

Description of benefits

The following tax benefits are available to companies qualifying as TASCs nationwide from the beginning of 2017:

- ▶ A reduced CIT rate of 15%
- ▶ A zero value-added tax (VAT) rate treatment on qualified offshore outsourcing service income

A preapproval process is required to obtain the incentives.

Guidelines around incentive applications

The incentive is applicable for current investments. A company with TASC certifications may enjoy a 15% reduced CIT rate within the validation period of the certification. The application package should be submitted with the relevant forms in the CIT filing return, which include Form A107040 of the return.

Incentives for HNTE status

(高新技术企业)

Description of benefits

- ▶ A reduced CIT rate of 15% is available to HNTEs.
- ▶ For a qualified HNTE newly established in one of the five Special Economic Zones or the Shanghai Pudong New Area on or after 1 January 2008, the enterprise may be entitled to a tax holiday of "two years' exemption and three years' half deduction" from the first year in which it derives production or operating income.
- ▶ From 1 January 2018, tax losses may be carried forward by an HNTE up to 10 years (e.g., tax losses incurred in 2013 that have not yet been utilized till 2018 by an HNTE may be carried forward for another five years).
- ▶ A preapproval process is required to obtain the incentive.

Guidelines around incentive applications

The incentive is applicable for current investments. A company with HNTE certifications may enjoy a 15% reduced CIT rate within the validation period of the certification. The relevant information or documents should be submitted for tax bureau review each year that HNTE status is requested, which is due within five months after the end of the tax year (the statutory annual filing deadline). The relevant forms in the CIT filing return should be submitted, including Form A107040 and Form A107041 of the return.

R&D expenses super deduction

(研发费加计扣除)

Description of benefits

- ▶ According to CIT Law, resident enterprises are allowed to deduct 150% of qualified R&D expenses for CIT purposes (hereafter referred to as "R&D expenses super deduction").
- ▶ Technology-based small and medium-sized enterprises (SMEs) are allowed to deduct 175% of qualified R&D expenses for CIT purposes.
- ▶ From 1 January 2018 to 31 December 2020, all enterprises, not limited to SMEs, are allowed to deduct 175% of qualified R&D expenses for CIT purposes.
- ▶ A documentation filing process is required to secure the incentive.

Guidelines around incentive applications

The incentive is applicable for current investments. The incentives related to the R&D expenses super deduction should be claimed during the annual CIT filing, which is due within five months after the end of the tax year (the statutory annual filing deadline). The application package should be submitted with the relevant forms in the CIT filing return, which include Form A107010 and Form A107012.

Incentives for qualified technology transfer income

Description of benefits

- ▶ According to CIT Law, CIT can be exempted and reduced for qualified technology transfer income.
 - ▶ If the resident enterprise's income from its technology transfer does not exceed RMB5 million (about US\$806,452),¹ CIT may be exempted.
 - ▶ For the part of the enterprise's income exceeding RMB5 million, the enterprise income tax shall be half-exempted.
- ▶ A documentation filing process is required in securing the incentive.

Guidelines around incentive applications

The incentive is applicable for current investments. The incentives related to qualified technology transfer income should be claimed after the end of each tax year, and the claim is due no later than five months after the end of the tax year (the statutory annual filing deadline). The relevant forms in the CIT filing return should be submitted, including the Basic Information Form on Taxpayers, Appendix 5 and Appendix 5(3) of the return.

3. Eligibility requirements

Incentives related to HNTTE status

Key considerations:

- ▶ The HNTTE certificate must be obtained before applying for preferential tax treatment from the in-charge tax authority.
- ▶ The recognition of HNTTE is jointly managed by the Ministry of Science and Technology (MOST), the Ministry of Finance (MOF) and the State Administration of Taxation (SAT), with MOST carrying out initial checks.
- ▶ HNTTE status certificate is valid for three years from the date of issuance.

Major recognition criteria of HNTTE:

- ▶ Core intellectual property (IP) rights ownership
- ▶ Products or services falling within the scope of the catalog of key high-technology and new-technological territories
- ▶ Headcount requirement for R&D personnel (no less than 10% of total headcount for R&D)
- ▶ Minimum R&D expenses requirement (3% to 5% of R&D expenses over turnover for the preceding three accounting periods)
- ▶ Minimum revenue requirement from high-technology and new-technology products or services (60% of total annual revenue)
- ▶ Four analyses are required on the amount of proprietary IP, capability to convert R&D findings into IP, ability of execution and management of R&D activities, and growth of revenue and total assets

¹ Assuming US\$100=RMB620.

Incentives related to TASC status

Major recognizing criteria of TASC:

- ▶ For the CIT incentive:
 - ▶ Engaging in one or more of qualified technologically advanced outsourcing services (information technology outsourcing (ITO), business process outsourcing (BPO) and knowledge process outsourcing (KPO)), adopting advanced technologies or possessing strong research and development capacities
 - ▶ Minimum education level requirement for employees (50% graduates with an associate degree or above)
- ▶ Minimum revenue requirement from qualified technologically advanced services (50% of annual total revenue)
- ▶ Minimum revenue requirement from qualified offshore outsourcing services (35% of annual total revenue)
- ▶ For zero-VAT treatment on the qualified offshore outsourcing service income:
 - ▶ Providing qualified technologically advanced outsourcing services in ITO, BPO or KPO fields to overseas entities

R&D expenses super deduction

Scope of qualified R&D expenses:

Qualifying expenditures	Detailed explanation
Labor cost	<ul style="list-style-type: none"> ▶ Following expenditures for employees directly engaging in R&D activities: salaries, standard pensions funds, standard medical insurance, unemployment insurance, work-related injury insurance, maternity insurance and housing funds, stock options ▶ Service fee for external R&D personnel, including labor dispatching
Direct investment cost	<ul style="list-style-type: none"> ▶ Materials, fuel and power directly consumed for R&D activities ▶ Development and manufacturing costs of equipment and molds used for testing and experiments; costs of samples and prototypes that do not constitute fixed assets and expenses for general testing solutions ▶ Inspection fees for experimental products ▶ The expenditures for maintenance, adjustment, testing and rental cost on devices and equipment for R&D
Depreciation expenses	<ul style="list-style-type: none"> ▶ Depreciation expenses for devices and equipment for R&D
Amortization expenses of intangible assets	<ul style="list-style-type: none"> ▶ Intangible assets used for R&D, including: <ul style="list-style-type: none"> ▶ Software ▶ Patents ▶ Non-patented technologies (licensing, know-how, design and calculation method, etc.)

Qualifying expenditures	Detailed explanation
Designing fees for new products, etc.	<ul style="list-style-type: none"> ▶ Expenses incurred relevant to the below activities: <ul style="list-style-type: none"> ▶ Design of new products ▶ Formulation of procedures with new techniques ▶ Clinical trial for new pharmaceuticals ▶ On-site testing for exploration technology
Other costs directly related to R&D activities (capped at 10% of the total qualifying R&D expenditures)	<ul style="list-style-type: none"> ▶ Expenditures for technical books and information ▶ Translation fees ▶ Expert consultation fees ▶ Insurance premium for R&D of high and new technology ▶ Expenditures for research, analysis, review, verification, identification, evaluation, assessment and inspection of R&D results ▶ Application, registration and agency fees for intellectual property ▶ Travel and meeting expenses ▶ Welfare expenses ▶ Supplement pension funds ▶ Supplement medical insurance

Incentives related to the qualified technology transfer income

Criteria for CIT incentives:

- ▶ The technology transferor must be a tax resident company within China.
- ▶ The technology transferred shall fall into the scope specified by the MOF and the SAT.
- ▶ The technology transfer within China shall be recognized by the provincial-level science and technology authorities or above.
- ▶ The transfer of technology to overseas shall be recognized by the provincial-level commerce authorities or above.
- ▶ There may be other criteria specified by the relevant in-charge authorities.

Scope of qualified technology transfer:

- ▶ Transfer of patent technology
- ▶ Transfer of computer software copyright
- ▶ Transfer of right of integrated circuits layout designs
- ▶ Transfer of new species of plant
- ▶ Transfer of biopharmaceutical products
- ▶ Transfer of exclusive technology use right with a period of no less than five years
- ▶ Transfer of other technology authorized by the MOF and SAT

4. IP and jurisdictional requirements

The IP must be registered and owned locally. The company claiming the R&D incentive must have effective ownership of the IP, or benefit from non-IP R&D results.

5. Technology or innovation zones

There are many National Economic and Technological Development Zones (NETD Zones) in China, and various preferential treatments of financial subsidies are provided to companies established inside the NETD Zones. R&D incentives provided by each NETD Zone are diverse, according to the different development status and development policies of each NETD Zone. There are no specific uniform R&D incentives to these zones other than the incentives listed.

R&D incentives are mainly provided by local authorities of NETD Zones by way of rewards or subsidies. The types of R&D incentives include land/office price reduction, one-off subsidy and financial subsidies to attract the R&D headquarters/center or technological companies, technology innovation project/program financing, additional subsidies to the original R&D incentives, subsidies to the talents engaging in scientific and technological innovation, and rewards for the technology innovation honors.

6. Role of governmental bodies in administering incentives

Incentives related to HNTE status

- ▶ Involved Government agencies:
 - ▶ MOST, MOF and SAT

- ▶ The MOST, MOF and SAT are responsible for the guidance, management and supervision of the HNTE recognition procedures nationwide. The actual processing of application for recognition as an HNTE and the subsequent monitoring will be carried out by the recognition institutes at the provincial level set up by local offices of the MOST, MOF and SAT. When the company is granted the HNTE status, it shall submit the relevant application documents to the in-charge tax bureau to claim the relevant tax incentive for HNTE.

Incentives related to TASC status

- ▶ Involved Government agencies:
 - ▶ MOF, SAT, the Ministry of Commerce (MOC), MOST and the National Reform and Development Commission (NRDC)
- ▶ Eligible companies should submit the application documents to the local science and technology authority, which will jointly manage the recognition of TASC with local authorities of commerce, finance, tax, and national reform and development. When the company is granted the TASC status, it shall submit the certificate and relevant application documents to the in-charge tax bureau in order to claim the tax incentive in its CIT annual filing.

R&D expenses super deduction

- ▶ Involved Government agencies:
 - ▶ SAT, tax authorities at local levels and the science and technology authorities at city level or above
- ▶ There is no need for taxpayers to submit filing documents to the in-charge tax bureau during the annual CIT filing in order to claim the super deduction for R&D expenses. However, it is required by China tax regulations that at least 20% of all taxpayers that applied for R&D expenses super deduction shall be assessed on an annual basis, during which supporting documentation may be required to be submitted for review purpose. The tax bureau may seek help from the science and technology authorities at the city level or above in the qualification assessment of R&D expenses.
- ▶ If the company and the tax authorities cannot agree on the allocation basis and amounts allocated for shared R&D expenses within a group, the involvement of the SAT for a ruling may be required when the group has subsidiaries in different provinces, autonomous regions and cities. Otherwise, only a ruling from the provincial-level tax authorities is required.

Incentives related to the qualified technology transfer income

- ▶ Involved Government agencies include tax authorities at local levels, science and technology authorities at provincial level or above and commerce authorities at provincial level or above.
- ▶ The company should submit the required documents to the in-charge tax authorities for a record to claim CIT exemption or reduction for qualified technology transfer income. The technology transfer within China shall be recognized by the provincial-level science and technology authorities or above, while the cross-border transfer of technology shall be recognized by the provincial-level commerce authorities or above.

7. Administrative requirements

Government preapproval or record filing is required to claim R&D tax benefits. Taxpayers are required to submit all relevant information to the Government when necessary, including the R&D project budget, descriptions of specific R&D projects, categories of R&D expenditures, and management or board meeting documents authorizing R&D project(s), or retain such information to get ready for potential tax assessment in the future.

7.1 Annual compliance requirements

Incentives related to HNTE status

- ▶ In general, HNTE companies should submit record filing form to the in-charge tax bureau before their annual CIT filing. Relevant documents, including the HNTE certificate and specified forms about R&D expenditure ratio and sales/service income analysis, etc., shall be retained for potential tax assessment in the future.

Incentives related to TASC status

- ▶ In general, TASC companies should submit relevant documents or information to the in-charge tax bureau during their annual CIT filing. For example, relevant documents include the total revenue on technologically advanced services and specified forms about the offshore outsourcing service revenue ratio.

R&D expenses super deduction

To enjoy the tax incentive, the following documents need to be retained to get ready for a potential tax assessment in the future:

- ▶ R&D super deduction form in the annual filing package
- ▶ Proposals and R&D expenses budgets
- ▶ Headcount and names of R&D professionals
- ▶ R&D expense super deduction form, which is used to record qualified R&D expenses, excluding those already booked as cost of intangible assets, actually incurred for a tax year
- ▶ Relevant board resolutions or resolutions of general manager meetings
- ▶ Contracts or agreements of relevant R&D projects
- ▶ R&D project progress explanatory reports and research results reports
- ▶ Other materials required by the in-charge tax bureau

The company may engage a qualified accounting firm or tax agent firm to issue special-purpose audit reports or verification reports to claim a super deduction.

Incentives related to the qualified technology transfer income

A company that makes a technology transfer transaction should submit relevant documents to the in-charge tax bureau for the record after the end of the tax year and before submitting CIT annual filing returns. Relevant documents include:

- ▶ Technology transfer agreement (copy)
- ▶ The registration certificate issued by the provincial level of science and technology department or above for transfer of technology within China or technology export registration certificate (or technology export permit) issued by the provincial level of commerce department or above for transfer of technology to overseas parties
- ▶ The information with regard to accumulation, allocation and calculation of technology transfer income
- ▶ Certificate for tax or fee actually paid
- ▶ Other information if required by in-charge tax authorities

7.2 The certification requirement

Incentives related to HNTE status

- ▶ The recognition of HNTE is carried out by the recognition institutes at the provincial level set up by local offices of the MOST, MOF and SAT. Typically, there are six steps in the HNTE recognition procedure:
 1. Online self-assessment
 2. Online registration
 3. Documents submission
 4. Assessment and HNTEs list confirmation by the MOST, MOF and SAT at the provincial level
 5. Public opinion solicitation
 6. Application for preferential tax treatments (if there is no objection incurred in Step 5) and the HNTE certificate is issued
- ▶ An HNTE certificate is valid for three years from the date of issue, and shall be reapplied for once it has expired.

Incentives related to TASC status

- ▶ A company qualified for TASC should apply to the local authority of MOST. The recognition of TASC is jointly managed by local authorities of MOF, SAT, MOC, MOST and NRDC. Typically, there are seven steps in the TASC recognition procedure, subject to different provincial rules and practices:
 1. Online registration
 2. Online declaration and submission of documents
 3. Preliminary examination and recommendation by the prefecture-level offices of MOF, SAT, MOC, MOST and NRDC

4. Assessment and TASC list confirmation by the provincial-level offices of MOF, SAT, MOC, MOST and NRDC
 5. Public opinion solicitation
 6. Submission to the state-level offices of MOF, SAT, MOC, MOST and NRDC for the record
 7. Announcement and TASC certificate issuance
- ▶ A TASC certificate is valid for three years from the date of issue but is eligible for renewal through a reassessment procedure three months prior to its expiration.

Qualified technology transfer income

- ▶ A registration certificate for the technology transfer contract is necessary when applying for tax incentives at the tax bureau. An agreement for technology transfer within China should be registered with the authorities of science and technology at the provincial level or above, while the cross-border technology transfer should be registered with commerce authorities at the provincial level or above.
- ▶ If the cross-border technology transfer agreement involves technology that was developed with government financial support, it should be subject to approval from departments of science and technology at the provincial level or above. The documents to be submitted mainly include the agreement, and scanned copies of the involved intellectual property certificates. The registration requirement may vary among authorities in different provinces.

8. Statutory reference

Regulations	Effective year
Incentives related to HNTE	
Article 28 of CIT Law	2007
Article 93 of Implementation Regulation of CIT Law	2007
Guo Fa [2007] No. 40	2007
Guoshuihan [2009] No. 203	2009
Caishui [2011] No. 47	2011
Guokefahuo [2016] No. 32	2016
Guokefahuo [2016] No. 195	2016
Announcement of the SAT [2017] No. 24	2017
Caishui [2018] No. 76	2018
Incentives related to TASC	
Guobanhan [2009] No. 9	2009
Guo Ke Huo Zi [2009] No. 152	2009
Caishui [2014] No. 59	2014
Caishui [2017] No.79	2017
Caishui [2018] No. 44	2018
R&D super deduction	
Article 30 of CIT Law	2007
Article 95 of Implementation Regulation of CIT Law	2007
Caishui [2015] No. 119	2015
Announcement of the SAT [2015] No. 97	2015
Caishui [2017] No. 34	2017
Announcement of the SAT [2017] No.40	2017
Caishui [2018] No. 64	2018

Regulations	Effective year
Incentives related to the qualified technology transfer income	
Article 27 of CIT Law	2007
Article 90 of Implementation Regulation of CIT Law	2007
Guoshuihan [2009] No. 212	2009
Caishui [2010] No. 111	2010
Announcement of the SAT [2013] No. 62	2013
Announcement of the SAT [2015] No. 82	2015

C

Colombia



Colombia

This chapter is based on information current as of February 2019.

EY contacts:

Margarita Salas
margarita.salas@co.ey.com
+57 1 484 7000

Josep Albert
josep.albert@co.ey.com
+57 1 484 7000

Within the last several years, the call for tax benefits in Colombia for investments in R&D has attracted more public attention and resulted in a higher index of projects submitted and approved. In 2013, 54 projects were submitted and 21 approved, then in 2017, more than 200 projects were submitted and approximately 185 of them were approved. On 27 December 2016, Colombia approved a tax reform plan that took effect in fiscal year 2017. One of the key areas of the plan is the promotion of investments in science, technology and innovation through tax benefits. Under the plan, the tax deduction that existed until then of 175% for investments in scientific and technological projects was replaced by a 25% tax discount, a measure that has benefited companies and further enhanced the call for tax benefits.

1. Overview

R&D in Colombia is based upon the definitions proposed by the Organisation for Economic Co-operation and Development (OECD) contained in the Standard Practice for Surveys on Research and Experimental Development of 1963 (and updated in 2002), also known as the Frascati Manual.

Under these definitions, R&D is defined as those activities that consist of creative work “undertaken systematically to increase the stock of knowledge, including knowledge of mankind, culture and society, and the use of such knowledge to create new applications.” This definition of R&D was adopted by the Administrative Department of Science, Technology and Innovation (*Departamento Administrativo de Ciencia, Tecnología e Información*, or COLCIENCIAS) in Colombia.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input checked="" type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other (tax discount)	<input checked="" type="checkbox"/>

The concept of technological development refers to the application of research results “or any other scientific knowledge for the manufacture of new materials, products, to the design of new processes, production systems or services, as well as substantial technological improvement of materials, products, processes or legacy systems.” And, finally, the term “innovation” involves “the introduction of a new or significantly improved product (good or service) of a process, a new marketing method, or a new organizational method in business practices, the organization of the workplace or the external relationships.”

The Colombian Government has promoted tax incentives for the scientific, technological and innovation development communities, providing different benefits that encourage these activities. In accordance with the Inter-American Development Bank, even though the investment in Latin America in these three concepts is relatively low in comparison with more industrialized countries, the

investment has achieved a growing interest in regional governments. In Colombia in 2018, the investment was about 0.252% of the gross domestic product (Colombian Observatory of Science and Technology – OCyT).

The introduction of tax incentives for scientific, technological and innovation development in Colombia was established with Law 6 of 1992, and the R&D incentives regime has since been expanded to include the following eligible activities: projects for investment in science and technology, and development and new medical products; patents, strategic programs and/or projects of research, technological development and innovation; business and external commerce development; and importation equipment and tools under certain conditions, among other activities.

2. Incentives available

Names of incentives	Income tax discount for investment in research, technology development and innovation*	Expedited Government approval process	VAT exemption for imports in research, development and innovation	Tax exemption on new software with high scientific content	Exempt income for resources for science, technology and innovation, and payment of work performances related to these concepts	Financial support of strategic programs and/or projects of applied research, technological development and innovation
Types of incentives	<ul style="list-style-type: none"> ▸ Tax discount 	<ul style="list-style-type: none"> ▸ Expedited Government approval process 	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Financial support

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Income tax discount for investment in research, technology development and innovation

Description of benefits

A 25% fiscal discount is offered for investments in science, technology and innovation projects, aiming to solve commercial problems, generate new knowledge, take advantage of new market opportunities or solve internal processes problems. The Colombian tax authorities establish a yearly budget for each round. The authority that makes this definition is the National Commission of Tax Benefits.

Guidelines around incentive applications

The incentive is applicable for current and future investments. COLCIENCIAS annually launches a call that goes from August to July, for the allocation of quotas for the next fiscal year. The discount can be taken any year after qualification through a process in COLCIENCIAS.

VAT exemption for imports in research, development and innovation

Description of benefits

A value-added tax (VAT) exemption applies to equipment imported by research or technological development centers and basic education institutions, including elementary, middle or high schools or higher education institutions that are dedicated to the development of projects rated as scientific, technological or innovative.

Guidelines around incentive applications

The incentive is applicable to current investments. The tax benefit must be claimed in the fiscal year in which it occurs. The exemption must be registered in the VAT Return, Form 300. Institutions, R&D centers and the projects must be preapproved as eligible by COLCIENCIAS. Applications must be made electronically via the COLCIENCIAS webpage, www.colciencias.gov.co.

Revenue not taxed with income tax for natural persons, who work as employees, in the execution of research, technology and innovation projects

Description of benefits

Income derived from the development of scientific, technological and innovation projects, according to the criteria and conditions set by COLCIENCIAS, may be exempt from tax. The same treatment is applied to the compensation of individuals for the direct execution of work of scientific, technological and innovation purposes, provided that such compensation is derived from the respective resources for the project. The projects must accomplish the criteria and requirements stated by COLCIENCIAS.

Guidelines around incentive applications

The incentive is applicable to current investments. The tax benefit must be claimed in the taxable year corresponding to the investment. The exemption must be registered in the income tax return.

Financial support of strategic programs and/or projects of applied research, technological development and innovation

Description of benefits

COLCIENCIAS promotes the availability of a range of strategic programs and projects of applied research, technological development and innovation in the form of co-financing and financing.

Guidelines around incentive applications

The incentive is applicable to current and future investments. COLCIENCIAS chooses the programs and/or projects to which the tax benefit is available.

3. Eligibility requirements

To apply for the tax benefits, projects that are applicable for the R&D incentives must be preapproved by COLCIENCIAS. Qualifying activities include:

- ▶ Projects for investment in science and technology
- ▶ Software development
- ▶ Patents
- ▶ Strategic programs and/or projects of research, technological development and innovation
- ▶ Business and external commerce development
- ▶ Importing equipment and tools under certain conditions, among other activities

4. IP and jurisdictional requirements

There are no specific jurisdictional requirements related to intellectual property (IP) to get the benefits.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Colombia. Nevertheless, the technology or innovation zones that are constituted as Free Zones will benefit from a special rental rate of 20%, in addition to VAT and tariff exemptions.

6. Role of governmental bodies in administering incentives

COLCIENCIAS fulfills an important role in administering incentives, including approving, studying and controlling the application of the majority of the benefits by qualifying applicable projects and the benefited entities.

The Colombian Tax Authority (*Dirección de Impuestos y Aduanas Nacionales*, or DIAN) maintains its audit role on incentives with a tax impact.

The Department of Agriculture is required to recognize nonprofit entities that gain a tax benefit arising from donations in the agricultural industry.

The Department of National Education is required to recognize entities that gain an income tax deduction for investment in the education sector. To obtain the tax exemption on new software with high scientific content, the taxpayer must obtain a patent registration from the Superintendent of Industry and Trade.

Autoridad Nacional de Licencias Ambientales ((ANLA), or National Authority of Environmental Licensing) has to approve R&D-related investments that involve environmental matters.

7. Administrative requirements

COLCIENCIAS administers the preapproval process mainly through its website. The information required to be submitted to COLCIENCIAS depends on the type of incentive applied for and the fulfillment of the parameters and conditions established by CNBT.¹ In addition, COLCIENCIAS, the Superintendent of Industry and Trade, the Department of Agriculture and the Department of National Education, and ANLA manage processes related to certificates.

For any project presented in COLCIENCIAS in search of tax benefits, the taxpayer must structure the investment technically and financially. Technically, the problem to be solved must be answered with the execution of the project, defining the methodology of execution of the project and the objectives to be achieved. Financially, all the items of which the expense is composed must be detailed. The taxpayer should look for an R&D group recognized by COLCIENCIAS (in Colombia, there are approximately 4,000 groups) that will supervise the project to be presented.

COLCIENCIAS takes six months to evaluate the projects, and during that time it can request clarification requirements from the taxpayer.

8. Statutory reference

- ▶ Articles 57-2, 158-1, 207-2 and 428-1 of the Colombian Tax Code
- ▶ Decree 2755 of 2003
- ▶ Resolution 1855, 2010
- ▶ Law 450 of 2011
- ▶ Law 1607 of 2012
- ▶ Agreements 3 and 4 of 2011; Agreements 5, 6 and 7 of 2012 (Administrative Department of Science, Technology and Innovation)
- ▶ Law 1819 of 2016

¹ CNBT – It means “Consejo Nacional de Beneficios Tributarios en Ciencia, Tecnología e Innovación,” which translates to “National Counsel of Tax Benefits on Science, Technology and Innovation.” The main function of the CNBT is to establish the criteria and conditions to qualify the projects for tax benefits on science, technology and innovation purposes.

C

Czech Republic



Czech Republic

This chapter is based on information current as of May 2019.

EY contacts:

Ondřej Janeček
ondrej.janecek@cz.ey.com
+420 225 335 360

Martin Hladký
martin.hladky@cz.ey.com
+420 225 335 645

An amendment to the Income Tax Act became effective in April 2019. This amendment is intended to simplify the existing rules and decrease the administrative burden associated with an R&D deduction. It also introduced a new obligation to file a notification of a company's intention to claim an R&D deduction with the Tax Authority before work on the R&D project begins.

In addition, an amendment to the Investment Incentives Act is being discussed by the Czech Parliament and is expected to become effective in 2019. The amendment relaxes conditions for obtaining support but also introduces additional requirements such as approval of all project support by the Czech Government.

1. Overview

Subsidies and R&D relief programs are relatively consistent in the Czech Republic due to the competitive nature of the region.

The Czech Republic offers benefits, including special deductibility of certain R&D costs. Unlike any foreign programs, there is no requirement that the entity claiming the benefit must own the resulting R&D. Therefore, companies conducting contract R&D activities for their customers may also apply this deduction. The deductible item for R&D may also be combined with other forms of support, such as investment incentives tax relief, making it an interesting tool in many respects.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D deduction	Investment incentives for R&D centers	ESIF and national R&D funding programs
Types of incentives	<ul style="list-style-type: none"> ▶ Super deduction 	<ul style="list-style-type: none"> ▶ Corporate income tax holiday ▶ Cash grant ▶ Real estate tax exemption 	<ul style="list-style-type: none"> ▶ Cash grants

R&D deduction

(Odčitatelná položka na výzkum a vývoj)

Description of benefits

Companies with R&D activities may apply a special deductible item with respect to R&D costs. Eligible costs are thus deducted twice – once as operating costs and, for the second time, as a special deduction. The R&D deduction could be increased to 110% for incremental eligible costs incurred in the tax period. There is no requirement that the entity claiming the benefit must own the resulting R&D. Therefore, companies conducting R&D activities on behalf of their customers who will become the intellectual property (IP) owners may also apply the deduction. Unused R&D tax credits may be carried forward for three years.

Guidelines around incentive applications

The R&D deduction is claimed via the standard corporate income tax return form assuming the R&D project documentation was approved within the statutory deadline for filing corporate income tax return form (see Section 3). The form should be filed within the statutory deadline, i.e., six months after the end of the tax period if the company is subject to a statutory audit or is represented by a tax advisor based on a power of attorney; otherwise, three months following the end of the taxable period. Notification prior to commencement of the project is newly required under the 2019 amendment.

Investment incentives for R&D centers

(Investiční pobídky pro technologická centra)

Description of benefits

Investment incentives for R&D centers provide the following benefits:

- ▶ Corporate income tax holiday for 10 years
- ▶ Job creation grants of CZK100,000 (approximately US\$4,500) to CZK300,000 (approximately US\$13,300) per employee in regions with high unemployment and in special industrial zones
- ▶ Training and retraining grants of up to 70% of eligible training costs in regions with high unemployment
- ▶ Cash grants of up to 10% of capital expenditures for R&D centers in case of strategic investment
- ▶ Real estate tax exemption for five years in special industrial zones

Total benefits (excluding training grants) received by the investor must not exceed the benefits cap, which is set as a percentage of the total value of the actual eligible expenses. The level of support is 25% for large enterprises. Training grants are provided on top of this cap. The caps are increased by 10% for medium-sized enterprises and 20% for small enterprises. No incentives are provided in the capital city of Prague.

Guidelines around incentive applications

The incentives are applicable for future investments. The company launching or expanding an R&D center must apply for investment incentives before work on the investment begins. The application is filed with the governmental agency CzechInvest.¹ Investment incentives must be approved by the Ministry of Industry and Trade. After specified requirements are fulfilled, the company can use the corporate income tax holiday in its standard corporate income tax return.

Under the proposed 2019 investment incentives amendment, some changes to the approval process could be introduced, such as a requirement to pass a cost-benefit test (the benefit of the investment must exceed the value of the support provided by the state).

ESIF and national R&D funding programs

Description of benefits

ESIF (European structural and investment funds) and national R&D funding programs provide the following benefits:

- ▶ Diverse operational programs within ESIF and national funding programs (e.g., grants provided by the Technology Agency of the Czech Republic) offer cash grants related to R&D in almost all sectors
- ▶ Cash grants are available not only to SMEs, but also to large enterprises
- ▶ High probability of acceptance of the submitted applications due to high allocations of the programs
- ▶ Opportunity for networking with academic and research organizations

Funding available within ESIF operational programs and national funding programs always depends on the conditions defined in the calls for applications launched within the programs. As an example, in the Operational Programme Enterprise and Innovations for Competitiveness (OP EIC), which is the most relevant in terms of R&D funding, large enterprises can usually receive up to 30% of the total proposed project budget. For SMEs, the limit is usually established at 50%. The cash grants are not available in the capital city of Prague.

Guidelines for cash grants applications

The guidelines for cash grants applications differ per individual operational programs and calls for application. The funding providers responsible for management of individual programs set guidelines for the application process and implementation of the projects. The guidelines are always available on the websites of the respective authorities.

3. Eligibility requirements

R&D deduction

Eligible costs include personnel costs for employees involved in project implementation (including health insurance and social security costs), travel costs associated with the project, depreciation of assets used in direct connection with the project, external services related to R&D provided by public R&D institutions (such as universities and public research institutes) and other directly related operating costs, such as the costs of materials, supplies, energy, heating, gas and telecommunications. Certification of R&D results may not be included in qualifying expenses.

¹ CzechInvest collects, reviews and processes the investment incentives applications.

The 2019 amendment imposed an additional important condition for claiming the deductible item: the notification of a company's intention to claim an R&D deduction has to be filed with the Tax Authority before the work on the R&D project begins. As regards the R&D project documentation meeting all legal requirements (including a description of the objectives and process of the particular R&D activity), it is newly sufficient that this is prepared and approved within the statutory deadline for filing the corporate income tax return (until now, this was needed prior the R&D begun). Expenses incurred prior to the notification being filed do not qualify for an R&D deduction. If there is doubt regarding deductibility, the company may request a binding ruling from the tax authorities that the relevant costs can be claimed as part of the R&D deduction.

Investment incentives for R&D centers

The key qualification conditions for R&D centers include the following:

- ▶ Creation or expansion of an R&D center.
- ▶ Investment in long-term tangible and intangible assets must be at least CZK10 million (approximately US\$442,000), of which at least CZK5 million (approximately US\$221,000) must be invested in new machinery.
- ▶ At least 20 new jobs must be created.
- ▶ The above conditions should be met within three years of the date the investment incentives decision was issued.
- ▶ The investment activities cannot be started before the investor applies for investment incentives via CzechInvest.
- ▶ Acquired assets and created jobs should be maintained for the duration of the incentives use period (10 years) and for at least five years from the finish of the investment project or the creation of the first job.
- ▶ Investment incentives cannot be provided to a company that transferred the same or a similar activity in the European Economic Area in the two years preceding its application for investment incentives or that has concrete plans to transfer such an activity within a period of up to two years after the investment is finished.

Special qualification conditions for investment incentives for R&D centers in the form of a tax holiday

The key special conditions stipulated by the Income Taxes Act should be met and include the following:

- ▶ The maximum amounts of tax depreciation, tax provisions and carryforward tax losses should be applied.
- ▶ The incentives recipient should be the first owner of the acquired assets (except for real estate).
- ▶ The taxpayer shall not be dissolved, subject to bankruptcy proceedings or merged with another entity.
- ▶ The taxpayer will not increase its tax base through non-arm's-length transactions with related parties.

Special qualification conditions for cash grants for strategic investments in the area of R&D centers

The special conditions for R&D centers include the following:

- ▶ The minimum amount invested in long-term tangible and intangible assets is CZK200 million (approximately US\$8.8 million), of which CZK100 million (approximately US\$4.4 million) represents new machinery.
- ▶ At least 100 new jobs must be created.

Eligible expenses for the investment incentive can be one of the following:

- ▶ The value of tangible assets (machinery, building and land) and the value of intangible assets are eligible provided that machinery represents at least 50% of the total tangible and intangible assets' value. Intangible assets should be acquired from unrelated parties at an arm's-length price. Moreover, intangible assets are only eligible for up to 50% of the total qualifying assets' value. The machinery has to be produced no more than two years prior to the acquisition, acquired at a fair market value and not be subject to tax depreciation before.

Or

- ▶ The value of wages incurred over the 24-month period following the month when a job was created and filled is eligible. The new job will qualify if it is created in the period from the day of applying for the investment incentives to the end of the third year after the issuance of the decision to grant the investment incentives. The value of monthly wages per employee for the purposes of cap calculation is limited to three times the average wage in the Czech Republic.

Expected changes

There is an Investment Incentives Act amendment currently being discussed by the Czech Parliament that would modify the above qualifying conditions (e.g., reducing the number of jobs to be created for strategic investments in the area of R&D centers from 100 to 70). The amendment is expected to become effective in 2019. As the amendment could change during the approval process, we strongly recommend consulting the applicable qualifying conditions prior to filing an application for support of any planned project.

ESIF and national R&D funding programs

The applicants must meet the criteria defined in individual calls for applications. For R&D cash grants, the funding providers are open to supporting predominantly applied research and experimental development whose results have great potential for rapid application in new products, production processes and services. All applications are subject to the evaluation process.

4. IP and jurisdictional requirements

There is no specific jurisdictional requirement on the location of IP.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in the Czech Republic.

6. Role of governmental bodies in administering incentives

CzechInvest administers investment incentives. The Czech Ministry of Industry and Trade and the tax authorities regularly review fulfillment of investment incentive conditions. Under the Investment Incentives Act amendment, it is proposed that all investment incentives would need to be approved by the Czech Government, which reportedly would primarily evaluate whether the benefits of the project being supported exceed the support to be granted by the state.

Cash grants provided within ESIF are administered by designated Managing Authorities (usually the national ministries). The Agency for Entrepreneurship and Innovation (API), created by the Ministry of Industry and Trade, manages the most relevant program in terms of R&D – OP EIC. The Technology Agency of the Czech Republic is also an important player in the field of R&D cash grants funded by the national public funds.

7. Administrative requirements

R&D deduction

- ▶ Under the 2019 amendment, a simple notification to the tax authorities prior to commencement of the project is required, while the full project including an annual update will only be required upon filing the tax return where the deduction is claimed.
- ▶ Documentation must be maintained to support claims (e.g., time sheets and allocations of time spent on projects). A subsequent amendment of a corporate tax return to claim an R&D deduction retrospectively is generally not allowed.
- ▶ Czech tax authorities may review fulfillment of the R&D deduction requirements during a potential tax audit.

Investment incentives for R&D centers

- ▶ Companies are required to apply for the investment incentives before the investment activities start. The application is filed with CzechInvest. Companies may claim a tax holiday provided that they received the decision granting the investment incentives by the Ministry of Industry and Trade and fulfilled investment incentives conditions.
- ▶ The tax holiday is claimed on the standard corporate income tax return form. The tax authorities review

fulfillment of investment incentive conditions during the tax audit. The investment incentive recipient should provide sufficient documentation justifying all these conditions have been met in case of an audit.

ESIF and national R&D funding programs

- ▶ Companies must submit applications for cash grants before they incur costs related to the proposed action. The applications are submitted electronically via dedicated portals for applicants according to the instructions defined in the applicable guidelines for applicants. After the application is approved, the beneficiaries of funding are required to submit monitoring reports with payment requests providing an overview of the costs incurred in relation to the project. The costs reported are then reviewed by the funding provider with only eligible costs reimbursed to the beneficiary.

8. Statutory reference

R&D deduction

- ▶ Statutory reference: Income Taxes Act (Act No. 586/1992 Coll.)

Investment incentives for R&D centers

- ▶ Statutory reference: Investment Incentives Act (Act No. 72/2000 Coll.)
- ▶ Statutory reference: Income Taxes Act (Act No. 586/1992 Coll.)

ESIF and national R&D funding programs

- ▶ <http://www.strukturalni-fondy.cz/en/Home-en>
- ▶ <https://www.tacr.cz/index.php/en/>

D

Denmark



Denmark

This chapter is based on information current as of February 2019.

The Danish Government has introduced new incentives for R&D expenses that can result in up to a 110% deduction of the actual costs.

1. Overview

The Danish Government is generally accommodating when it comes to R&D incentives from a tax perspective. Costs related to R&D activities are generally deductible for tax purposes or may be depreciated. Furthermore, a tax credit regime for R&D costs has also been introduced.

Increase of tax deduction for research and development expenses

Taxpayers are currently entitled to claim a 100% deduction of research and development expenses. The law will gradually increase the deduction from 100% to 110% as follows: income years 2018 and 2019 = 101.5%; income year 2020 = 103%; income years 2021 and 2022 = 105%; income years 2023-2025 = 108%; and income years 2026 and onward = 110%.

EY contacts:

Marcel Sikkema
marcel.sikkema@se.ey.com
+46 73 340 7782

Claus Pedersen
claus.pedersen@dk.ey.com
+45 25 29 34 48

Tobias R. Steing
tobias.r.steinoe@dk.ey.com
+45 25 29 41 97

Vivi Funch
vivi.funch@dk.ey.com
+45 25 29 39 93

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input checked="" type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Tax allowance for experimental and research activities	Tax credit scheme*
Types of incentives	▶ Tax allowance	▶ Tax credits

*Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Tax allowances for experimental and research activities

(Udgifter til forsøgs- og forskningsvirksomhed, LL § 8 B)

Description of benefits

Costs incurred in experimental and research activities related to the taxpayer's business are in general fully tax-deductible in the year in which the cost was incurred. Alternatively, the taxpayer may choose to deduct the cost over a five-year period, including the year the cost was incurred. The incentive is not applicable for certain business assets, such as automobiles, ships and certain leased equipment.

The extent of experimental and research activities eligible for increased deductibility is not elaborated on in the legislation; accordingly, case law is currently developing to provide insight. EY Denmark is analyzing and monitoring the development in the case law in practice to formulate an opinion of the current position.

A case-by-case analysis should be performed to determine whether the costs budgeted/incurred qualify as R&D expenses as per the Danish case law.

Guidelines around incentive applications

To claim the incentive, taxpayers are required to file an annual corporate income tax return within six months following the end of the financial year (30 June if calendar year-end – special rules apply if year-end is in Q1). For startups, expenditures incurred before the start of business can be used from the year business activities commence,

and for operative businesses, they are usable from the year they were incurred.

Tax credit scheme

(Skattekreditordningen LL § 8 X)

Description of benefits

The tax credit for R&D activities enables companies to obtain a refund of negative tax (loss) relating to R&D activities. Hence, the tax value of a loss related to specific types of R&D costs can be refunded. From 2016, the tax credit is calculated as up to 22% of up to DKK25 million of eligible R&D costs in the relevant income year, i.e., a cash refund of up to DKK5.5 million. Only actual incurred R&D costs qualify toward the tax credit, i.e., the step-up mentioned on page 2 is not included herein.

For entities jointly taxed according to the Danish mandatory joint taxation regime, the limitation of tax credits is calculated at the joint-taxation level.

Guidelines around incentive applications

The incentive is applicable for current, future and retroactive investments. The incentive must be claimed with the annual corporate income tax return, Form 05.007. Application for the incentive should be submitted separately from the tax return (hence, application is not made on the tax return form). The application can also be submitted online via the Danish tax authorities' website, www.skat.dk. If the investment was made in a tax assessment year shorter than 12 months, there will be a proportional reduction.

3. Eligibility requirements

Qualifying expenses related to R&D and tax credits should be based on a concrete assessment. In general, the eligible expenses include salary expenses, rental cost (laboratory space, etc.) and raw materials. As for the tax credit, costs directly related to obtaining patents are not eligible.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Denmark.

6. Role of governmental bodies in administering incentives

The R&D tax credit regime operates on an application basis. The Danish tax authorities will assess the application to rule on whether the cost qualifies under the tax credit regime.

7. Administrative requirements

The R&D tax credit regime operates on an application basis. The taxpayer must file an application to receive a tax credit, along with the tax return for the relevant year. The Danish tax authorities will assess whether the costs detailed in the application qualify.

Deduction of R&D costs is based on a self-assessment regime. The claim is made in the company's annual tax return for the relevant tax year that is submitted to the Danish tax authorities. In the case of a tax assessment, the Danish tax authorities may request documentation for the claimed deduction. Consequently, companies should maintain records, including detailed description of the R&D projects to accurately substantiate the claim.

8. Statutory reference

Section 8B (deduction for R&D costs) and section 8X (tax credits) of the Corporate Income Tax Act.

F

France



France

This chapter is based on information current as of February 2019.

In existence for more than 30 years, the R&D tax credit has significantly increased in the past decade: the global tax credit granted more than EUR6 billion in France in 2018, whereas the cap was only EUR1 billion until 2005.

1. Overview

Over the last few years, the French Government has been implementing several improved R&D incentives. These incentives can all be described as mature, with the introduction of a reduced corporate income tax (CIT) rate in 1983, the R&D tax credit in 1985 and the Innovative New Company status in 2004.

From a tax perspective, the main strands of the available R&D incentives are:

- ▶ The R&D tax credit, which is equal to 30% of eligible R&D expenses (e.g., salaries, social security contributions, running costs, depreciation, patents) incurred by the company
- ▶ The Innovative New Company status (*Jeune Entreprise Innovante*, or JEI), which allows companies conducting R&D projects in France to receive tax benefits and pay lower social security contributions for highly qualified jobs such as engineers and researchers
- ▶ A reduced CIT rate of 10% instead of the standard CIT rate¹ applicable to revenues derived from patents

In practice, companies benefiting from these incentives, especially when the tax benefit is substantial, are more likely to be subject to a tax audit. In particular, the R&D tax credit has been under high scrutiny since 2011. Tax audits are hence getting more frequent, notably for significant tax credit claims (EUR500,000 and above).

¹ In addition to the standard CIT rate of 33.1/3%, an additional 3.3% social security contribution applies to the portion of the CIT liability exceeding EUR763,000, which gives an effective CIT of 34.43%. Between 2019 and 2022, the standard statutory French CIT will progressively decrease to 25%.

EY contacts:

Patrice Lefeu
patrice.lefeu@fr.ey.com
+33 (0)1 46 938 866

Xavier Dange
xavier.dange@ey-avocats.com
+33 1 55 61 11 28

Thibaut Grandchamp de Cueille
thibaut.grandchamp.de.cueille@ey-avocats.com
+33 1 55 61 14 38

Agnès Serero
agnes.serero@ey-avocats.com
+33 1 55 61 14 15

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Available incentives

Names of incentives	R&D tax credits*	Cash grants for collaborative R&D projects	Reduced CIT treatment of revenues derived from patents	Innovative New Company status	New entities and new buildings assigned to R&D activities	Accelerated depreciation of equipment and tools used for research operations
Types of incentives	<ul style="list-style-type: none"> ▶ Tax credits 	<ul style="list-style-type: none"> ▶ Cash grants 	<ul style="list-style-type: none"> ▶ Reduced tax rates 	<ul style="list-style-type: none"> ▶ CIT exemption ▶ The territorial economic contribution (TEC) and property tax exemption 	<ul style="list-style-type: none"> ▶ Tax relief and allowance for TEC and property tax purposes 	<ul style="list-style-type: none"> ▶ Accelerated depreciation on qualifying R&D assets

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D tax credit

(Crédit d'impôt recherche)

Description of benefits

Companies can receive a 30% tax credit on eligible R&D expenses. There is a credit rate of 30% for the first EUR100 million of qualified R&D expenses incurred during the tax year, plus 5% of any amount in excess of EUR100 million. The tax credit can be offset against CIT liability for the year of application and the next three years. Unutilized credits may be carried forward for three years. A refund is available if the credit has not been totally offset after three years. Subcontracted expenses are eligible up to EUR2 million (EUR10 million if the principal and the subcontractor are not dependent) and three times the amount of other R&D expenses incurred by the company.

Guidelines around incentive applications

The R&D tax credit is applicable for retroactive, current and future investments. The claim should take the form of the filing of a specific form (2069-A) along with the annual tax return of the company. Claims shall be submitted at the latest on 31 December of the second calendar year following the deadline for filing the specific form (i.e., R&D

expenses incurred in 2016 have to be filed in 2017 and can be claimed until 31 December 2019).

Cash grants for collaborative R&D projects

(Subventions accordées aux projets de R&D collaboratifs)

Description of benefits

Cash grants are available for collaborative R&D projects. The cash grants cover all or part of the industrial R&D, R&D personnel costs and the depreciation of R&D equipment. The grants are attributed to a consortium of at least two companies, active in the industry sector, and one R&D laboratory or training center. Several incentives are related to sustain collaborative R&D activity and can reach up to EUR20 million depending on the size of the project (up to EUR50 million with certain projects). Preapproval is required to obtain the cash grants.

Guidelines around incentive applications

The cash grants are applicable for current and future investments. An application must be submitted to the relevant Government authorities or Government operators granting the cash through call for tender.

Reduced CIT treatment of revenues derived from patents

(Taux d'impôt sur les sociétés réduit applicable aux revenus issus de la propriété industrielle)

Description of benefits

Amortization allowances and financing costs are fully deductible from the taxable income subject to the standard CIT rate.²

In addition, subject to certain conditions and on an election basis only, French enterprises may benefit from a 10% CIT rate³ applicable to the net income notably derived from the licensing of patents (or software), after deduction of R&D expenses, and after the application of a nexus ratio comparing:

- ▶ 130% of the R&D expenses directly related to the creation, or the development of the qualifying patent, either by the claiming taxpayer or by non-related parties

To

- ▶ 100% of the total R&D expenses incurred for the creation, the development, or the acquisition of the qualifying patent

Note that this election can be performed on an asset-by-asset basis or on a group-of-assets basis. This election will also be available at the level of French tax consolidated groups, subject to certain requirements.

The same tax treatment applies, still on an election basis, to the net income derived from the sublicensing of qualifying patents, and to the net gains derived from the transfer, to non-related parties, of qualifying patents, provided that the latter have not been acquired less than two years before. Sales between related parties are not eligible for the reduced CIT rate.

Guidelines around incentive applications

The incentive is applicable for current and future investments. To claim the incentive, there is no specific form to file; however, the election is made on the annual tax return of the company for each asset, good, or service, or category of good or service (including an appendix presenting the calculation methods used to determine the net income and the nexus ratio). As a matter of principle, the annual tax return must be filed within three months of the end of each accounting year.

Innovative New Company status

(Jeune Entreprise Innovante/JEI)

Description of benefits

The incentive benefits are as follows:

- ▶ Full exemption from CIT for the first profitable year and partial exemption (50%) for the second profitable year
- ▶ With the approval of the relevant local authorities, exemption from property tax and/or the territorial economic contribution (TEC) for seven years
- ▶ Exemptions for eight years from employer social security contributions for certain categories of employees involved in R&D operations

To receive the incentive, the company should have been incorporated within the past eight years and no later than 31 December 2019. The tax relief is subject to the EU de minimis ceiling (total aid may not exceed EUR200,000 over any three-year period).

Guidelines around incentive applications

The election for the Innovative New Company status is made on the company's annual income tax return. As a matter of principle, the annual tax return must be filed within three months of each account year-end. An advance ruling procedure is available to confirm eligibility.

² 33.1/3%. Between 2019 and 2022, the standard statutory French CIT will progressively decrease to 25%.

³ This 10% CIT rate applies for tax years beginning on or after 1 January 2019, whereas prior to 2019, a 15% CIT rate applied. More generally, the French patent regime has been amended by the French Finance Act for 2019.

New entities and new buildings assigned to R&D activities

(Allégements au titre de la contribution économique territoriale et de la taxe foncière)

Description of benefits

New companies and new buildings assigned to R&D activities may benefit from specific incentives for TEC and property tax purposes:

- ▶ As mentioned above, companies eligible for Innovative New Company (INC) status can benefit from a temporary exemption from property tax and TEC.
- ▶ Companies that perform certain types of activities within specific areas can benefit from a temporary TEC relief. The tax relief is applicable to the operations performed until 31 December 2020 in areas qualified as regional aid areas and for small and medium-sized enterprises (SMEs) in SME investment aid areas. Taxpayers are required to seek preapproval to obtain the TEC relief.
- ▶ As of 1 January 2016, companies that have new buildings directly assigned to R&D activities – and subject to taxes for the first time in 2016 – can benefit from a 50% reduction in basis of Business Contribution on Property (*cotisation foncière des entreprises*), known as BCP, which is the main component of the TEC and property tax. The definition of R&D activities is similar to the one applied for the R&D tax credit.

Guidelines around incentive applications

The request to benefit from the exemption from property tax should be sent by companies eligible for INC status to the relevant property tax authority on plain paper, with a list of the properties concerned by the exemption. This request should be submitted before 1 January of the first year of application of the exemption.

The TEC relief is applicable to current and future investments. The request to benefit from the exemption from the local economic contribution has to be made on Form 1447-M-SD or Form 1447-C-SD for new companies. Form 1465-SD should be filed along with the forms. Form 1447-C-SD shall be filed no later than 1 January of the year that follows the year during which the company was created. Form 1447-M-SD shall be filed no later than the second working day following 1 May of the year preceding the year of taxation and for which the exemption is requested.

To benefit from the 50% reduction of BCP and property tax basis, the companies must seek approval from the relevant local authorities. In practice, the taxpayer must file a 6670-D form every fiscal year before 1 January.

Accelerated depreciation of equipment and tools used for research operations

(Amortissement dégressif des matériels et outillages destinés aux opérations de recherche)

Description of benefits

Equipment and tools mainly used for R&D operations can be subject to an accelerated amortization. The applicable coefficients are 1.5, 2 and 2.5, depending on the standard duration of amortization of the equipment or the tools for tax purposes. The plant and equipment must be primarily (but not exclusively) used for R&D operations eligible for the R&D tax credit.

Guidelines around incentive applications

The incentive is applicable to current and future investments. The amortization has to be booked in the accounts of the company. Form 2055 should also be filed along with the company's annual tax return.

3. Eligibility requirements

To qualify as an eligible R&D activity, the following conditions must be met:

- ▶ The activity must be part of a recognized R&D process.
- ▶ The objective sought must meet the originality or substantial improvement criteria.

In addition, only these main activities are eligible:

- ▶ Fundamental research that contributes to the analysis of properties, structures and physics
- ▶ Applied research that aims to identify possible applications for the results of fundamental research or to find new solutions, allowing the company to reach a specific objective
- ▶ Experimental development that is carried out through the development of prototypes or pilot installations

R&D activities must outperform general practices used in the field of application and must rely on advanced professional skills from scientists and engineers, distinct from the know-how commonly used in the profession. Consequently, R&D activities cannot rely on the design and implementation of conventional solutions. Commercial relevance of the activities (new products or services) or the simple fact that the activity is new or innovative is not sufficient for R&D tax credit eligibility.

Expenses related to subcontracted R&D functions are also eligible. Indeed, companies can outsource R&D to private or public organizations, associations or individual experts. In all cases, the subcontractor is required to possess a certificate of approval delivered by the French Ministry of Higher Education and Research. For the R&D tax credit and the Innovative New Company status, qualifying expenses include personnel expenses, operating expenses, costs related to patent maintenance, costs related to defense and technological development monitoring, and expenses incurred for technological watch. However, the qualifying expenses are not limited to these.

The R&D incentives apply to all industry sectors, so long as there is an R&D activity performed in the French territory or in the European Union.

Specific eligibility requirements for each R&D incentive

R&D tax credit

In principle, R&D activities falling into the scope of the R&D tax credit are the scientific and technical activities for:

- ▶ Fundamental research
- ▶ Applied research
- ▶ Experimental development

The French Tax Code provides a list of expenses eligible for the R&D tax credit (e.g., personnel expenses, operating expenses, costs related to patent maintenance, costs related to defense and technological development monitoring, expenses incurred for technological watch and subcontracted R&D to a subcontractor approved by the Ministry of Higher Education and Research).

Cash grants for collaborative R&D projects

Important eligibility criteria include the economic impact these products may have on the French territory in terms of employment (notably job creation), investment (reinforcing industrial sites) and branch structuring.

Innovative New Company status

The company must fulfill the following conditions:

- ▶ Be no more than eight years old
- ▶ Be an SME, as defined by EU regulations (i.e., with fewer than 250 employees, a turnover not exceeding EUR50 million and/or an annual balance sheet total not exceeding EUR43 million)
- ▶ Be truly new
- ▶ Be independent
- ▶ Have R&D spending that accounts for at least 15% of expenses

The R&D expenses taken into account are the expenses eligible for the R&D tax credit (e.g., personnel expenses, operating expenses, costs related to patent maintenance, costs related to defense and technological development monitoring, expenses incurred for technological watch).

Reduced CIT treatment of revenues derived from patents

- ▶ Scope: (i) patents, (ii) patentable inventions (under conditions), (iii) associated industrial/manufacturing processes that can be viewed as an essential element for the patent or patentable invention and that are licensed together with the related patent or patentable invention, and (iv) copyright-protected software
- ▶ Conditions: (i) intangible asset that qualifies as a fixed asset and (ii), only regarding the sales, a two-year holding period for IP rights acquired (taxation at standard CIT rate during the first two years following the acquisition) and no minimum holding period of IP rights resulting from the R&D activity of the licensing/seller company

4. IP and jurisdictional requirements

For jurisdictional requirements, please refer to the eligibility requirements specified for each incentive.

5. Technology or innovation zones

There are 56 “innovation clusters” in France that are spread across the country. They have been bringing together teachers, researchers and industry stakeholders to develop collaborative R&D projects – in all key technology sectors – that are eligible for state and local aid. Since 2009, 1,600 projects supported by “innovation clusters” have received financial support from the French State and local authorities (EUR7 billion granted over 10 years through direct financial aid and tax exemptions). Based on the most recent data available, nearly 7,000 companies, including 500 foreign companies, now belong to a cluster in France.

6. Role of governmental bodies in administering incentives

R&D tax credit

- ▶ The R&D tax credit is managed by the French tax authorities and the French Ministry of Higher Education and Research.
- ▶ No preapproval is required. An advance ruling process is available to determine eligibility for tax credits; however, it is time-consuming, and taxpayers do not always receive responses during the process. As such, most taxpayers file for tax credits rather than going through the advance ruling process.
- ▶ There is an automatic tax audit if a tax credit exceeds EUR1 million. If the credit amount exceeds this amount, the tax audit tends to be significantly scrutinized (e.g., requiring supporting documentation for every project).
- ▶ Tests on controls (by Government) are conducted on an average of 10% to 20% of the overall projects qualifying for the incentives, and taxpayers are advised to take consistent approaches in preparing documentation.
- ▶ Documentation must be prepared in the French language.
- ▶ The R&D tax credit rate has been increased from 10% to 30% since 2007.

Cash grants for collaborative R&D projects

Various public agencies deal with the collaborative R&D projects:

- ▶ National Agency for Research (*L'Agence Nationale de la Recherche*): the agency finances R&D projects, including those involving private companies
- ▶ Bpifrance: the agency provides specific grants for identified projects (FUI, PSPC, *Programme d'Investissements d'avenir*) such as collaborative projects, strategic industrial innovation projects or zero-rate loans for innovation
- ▶ L'ADEME: the agency finances R&D projects in the renewable energies sector

7. Administrative requirements

R&D tax credit

- ▶ Detailed documentation is required for control purposes and should include detailed factual information (e.g., objective of projects, costs and calculation of the credits). The documentation also requires support on eligibility of the activity and R&D tax incentives related to the activity. This documentation has to be provided to the French tax authorities upon request, within the course of a tax audit. The company should file Form 2069 A each year with its tax return.

Cash grants for collaborative R&D projects

- ▶ A specific demand should be built, and an acceptance process of several steps has to be passed to be granted the money (reimbursable to administration most of the time in case of success).

TEC relief

- ▶ The requested forms (1447-M-SD/1447-C-SD and 1465-SD) should be filed with the relevant corporate tax offices by the aforementioned deadlines. The forms have to be completed as if the company did not benefit from a relief. Therefore, all the information required by the French tax authorities to assess the territorial economic contribution should be mentioned in the forms (e.g., address, nature, size of the premise, number of employees).

Reduced CIT treatment of revenues derived from patents

- ▶ Election should be made on the annual corporate tax return.

Innovative New Company status

- ▶ The election for the Innovative New Company status is made on the company's annual income tax return. An advance ruling procedure is available to confirm eligibility.

8. Statutory reference

- ▶ R&D tax credit: Section 244 quarter B of the French Tax Code
- ▶ Innovative New Company status: Section 44 sexies – 0 A of the French Tax Code
- ▶ Reduced CIT treatment of revenues derived from patents: Section 39 terdecies of the French Tax Code
- ▶ Territorial economic contribution relief: Section 1465 of the French Tax Code
- ▶ Accelerated depreciation of equipment and tools used for research operations: Section 39 AA quinquies of the French Tax Code

G

Germany



Germany

This chapter is based on information current as of February 2019.

German R&D funding programs offer strategic value in addition to financial benefits. Industry stakeholders can boost innovation capabilities, market shares and revenues.

1. Overview

Germany has made a commitment to spend around 3.5% of national gross domestic product per year on R&D activities until 2025 and to improve the conditions for R&D investment by the private sector. Therefore, generous public funding programs are in place to support private investment in innovation and research.

Incentives for R&D activities are available in the form of non-refundable cash grants, which have a positive influence on earnings before interest and tax (EBIT). These R&D incentives are provided on a "project basis" instead of a "company basis." The majority of the funding instruments available in Germany are discretionary in nature, and funding is available for R&D projects in specific thematic areas. To further foster R&D investments, the Government is currently discussing the implementation of a wider tax incentive regime for R&D activities. The plan is to implement the tax measure by 1 January 2020 at the earliest, but this is still subject to some uncertainties.

EY contacts:

Frank Burkert
frank.burkert@de.ey.com
+49 40 36132 21155

Kerstin Haase
kerstin.haase@de.ey.com
+49 40 36132 20284

Lena Ebsen
lena.ebsen@de.ey.com
+49 40 36132 20281

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Name of incentive	Various types of grants
Type of incentive	▸ Cash grants

Description of benefits

R&D activities performed in Germany may be funded at the regional, national and EU level. The typical duration of a project is between 18 and 36 months. In principle, the funding quota ranges from 25% to 75% of eligible costs, depending on the size of the company, the research category of the project and whether the project is conducted in cooperation with other companies or research institutes.

Large companies may typically receive funding of up to 50% for eligible costs for industrial research projects, while the aid intensity for SMEs in this category may be higher. Large companies are often required to collaborate with other project partners to fulfill the funding requirements of different programs and receive funding.

Programs at the regional level (*Länder*) are generally thematically open and aim to support the regional economy. National programs are open to a wide range of eligible industries and are therefore not limited to specific sectors. R&D funding is available to enterprises of all sizes, as well as to R&D institutions. Banks and financial services companies, however, are usually excluded from eligibility.

Generally, funding programs cover thematic areas such as:

- Climate and energy
- Health and nutrition
- Mobility
- Security
- Communication

Funding is granted to key technologies that act as innovation drivers, particularly:

- Information and communication technologies (ICT)
- Materials technologies
- Biotechnology
- Nanotechnology
- Microsystems technology
- Innovative services
- Production technologies

The following cross-sectional technology topics currently receive particular attention from the funding authorities and the respective ministries:

- Internet of Things
- Industry 4.0
- Digitalization
- Disruptive technologies

The European Commission may also provide funding for R&D activities performed in Germany, as well as other EU Member States. European Commission programs typically require collaboration with partners from different European countries.

Guidelines around incentive applications

Public funding of R&D projects is regularly awarded as part of a competitive process. One of the main selection criteria is the project's level of innovation as well as the expected impact. In addition, the effects of the incentive must be clearly stated.

Application procedures involve either a one- or two-stage process, depending on the respective funding program. Before the formal process begins, a review of a project's merits with the relevant project management agency is recommended. At the regional level, funding programs sometimes follow a one-step application process. In general, a two-stage application process applies for all national and regional R&D programs. For the first stage, the applicant submits only a short project outline to the relevant project management agency for valuation purposes. In general, the project outline provides a brief summary of the project idea, its technical risks, the necessity of funding, a work plan and a short plan detailing how the project will be financed and how the results will be exploited. If the project outline passes evaluation, the applicant is invited to submit a full project application, which the project management agency then assesses. The respective ministry in charge will make the final decision on whether the project will be funded.

3. Eligibility requirements

All of the funding programs relate to future R&D activities and R&D-related expenditures. As a general rule, a company must not have started project implementation before the application for funds has been submitted and the funding authority has sent out the grant notification to the applicant. After the funding authority has approved the R&D grant, the company may start implementation of the project. The application/granting process usually takes between 6 and 12 months.

Qualifying activities include fundamental research, industrial research, experimental development and demonstration activities. The costs eligible for funding are project-related and include:

- ▶ Personnel costs
- ▶ Materials and equipment

- ▶ Travel costs
- ▶ Subcontractors
- ▶ Amortization
- ▶ Overheads

Funding for subcontracting costs is granted only if it can be proved that the subcontractor adds a compelling advantage to the project and the grant recipient is not able to implement the task by means of his or her own capacities. In general, the applicant is obliged to tender the subcontracting task and must obtain at least three offers.

In principle, national funding guidelines require that the recipient of the R&D grant has its own legal entity in Germany (or in the case of funding at the state level, in the corresponding state) and that the R&D activities and eligible costs from the project are incurred in Germany.

State support for large projects with large incentives exceeding EUR15 million per undertaking is generally subject to obligatory notification and approval by the European Commission.

4. IP and jurisdictional requirements

The exploitation of the project results must predominantly take place within Germany (and/or in the corresponding regional state). In principle, several exploitation scenarios can be set up, but it is necessary to assess them on a case-by-case basis to be able to allow a final statement.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D tax incentives in Germany. However, Germany supports the creation of innovation clusters in certain areas. Innovation clusters consist usually of different partners from academia and industrial stakeholders. Funding up to EUR5 million (in exceptional cases, up to EUR7.5 million) can be provided to the cluster by regional governments for a duration of up to 10 years. Eligible costs are investment costs for the establishment of the cluster, as well as costs for personnel and administration.

Additionally, the creation of new R&D centers (or production premises) can be funded in specific regions in Germany. Conditional upon the creation of new permanent jobs and further funding conditions, capital expenditure investments for large enterprises can be funded up to 20%, depending on the region.

6. Role of governmental bodies in administering incentives

Some programs are subject to specific deadlines, while others allow the ongoing submission of proposals. As stated above, the approval of the funding authority is necessary to start the project. Typically, the respective government ministries (the ultimate funding authorities) engage project management agencies to evaluate applications, to administer the call of funds and to monitor the beneficiaries' compliance with funding requirements.

The money granted by the funding authority is reimbursed after project costs are incurred. This means that the cash flow proceeds during the progress of the project. In practice, funding is claimed regularly on a national and regional level within the grant period. After the claim for funds, where the eligible costs for the specific time frame are listed and the interim report is submitted to the funding authority and reviewed, the eligible costs are refunded. At the EU level, pre-financing might be available. In general, cash grants are taxable.

Regarding future funding opportunities, specific funding programs have been introduced in accordance with current political goals. Industry representatives and representatives of research organizations are regularly invited to contribute to the process of "topic finding." Therefore, it is advisable for companies to actively participate in this process to have a chance to place their R&D agenda in a political context and have a regular exchange of information with policymakers.

7. Administrative requirements

After the acquisition of the cash grant, it is necessary to comply with the funding regulations and other project-specific conditions. A special focus is made on documentation requirements. Furthermore, the method of calculating eligible costs must be in compliance with the funding regulations. The administration of public funding requires effort and capabilities on the recipient's part in terms of organization and documentation, but if an administration system is established within the company right from the beginning, the process is manageable.

8. Statutory reference

- ▶ EU legislation
 - ▶ Communication from the Commission – Framework for State Aid for Research and Development and Innovation (2014/C 198/01)
 - ▶ Commission Regulation (EC) No. 651/2014 of 17 June 2014, declaring certain categories of aid compatible with the internal market in application of articles 107 and 108 of the Treaty (General Block Exemption Regulation)
 - ▶ Commission Recommendation of 6 May 2003, concerning the definition of micro, small and medium-sized enterprises (2003/361/EC)
- ▶ German legislation
 - ▶ National level
 - ▶ General Conditions of the Federal Ministry of Research and Education for the Allocation of Benefits for R&D Activities to Commercial Companies on a Cost Basis as of April 2018 (*Nebenbestimmungen für Zuwendungen auf Kostenbasis des Bundesministeriums für Bildung und Forschung an gewerbliche Unternehmen für Forschungs- und Entwicklungsvorhaben* (NKBF 2017))
 - ▶ National funding guidelines for investments and innovation clusters (https://www.bmwi.de/Redaktion/DE/Downloads/J-L/koordinierungsrahmen-gemeinschaftsaufgabe-verbesserung-regionale-wirtschaftsstruktur-ab-25082017.pdf?__blob=publicationFile&v=6)
 - ▶ Regional level
 - ▶ Calls on specific thematic areas are published regularly, and the application period usually lasts two to three months. The funding calls are published in the official gazette on the national and regional levels.
- ▶ Further regulations may apply

H

Hong Kong



Hong Kong

This chapter refers to the Hong Kong Special Administrative Region of China tax jurisdiction, and is based on information current as of January 2019.

EY contacts:

Cherry Lam
cherry-lw.lam@hk.ey.com
+852 2849 9563

Charlotte Wong
charlotte.wong@hk.ey.com
+852 2629 3040

Hong Kong introduced an enhanced tax deduction regime for qualifying R&D activities. The legislation was enacted on 2 November 2018 and took retrospective effect for expenditures incurred on or after 1 April 2018.

1. Overview

Under the Hong Kong tax law, an R&D expenditure is generally regarded as being capital in nature and hence disallowable unless it is specifically provided for deduction under certain tax provisions. The new law extended the R&D tax deduction regime to allow super deduction for certain qualifying R&D expenditures on qualifying R&D activities.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentive available

Name of incentive	Enhanced R&D deduction
Type of incentive	▶ Super deduction

Enhanced R&D deduction

Description of benefits

Qualifying R&D expenditures on a qualifying R&D activity will be eligible for a 300% deduction for the first HKD2 million, and the remainder will be deductible at 200% without limitation.

R&D expenditures that do not qualify for the above deduction will continue to be eligible for the normal 100% deduction if certain specified conditions are met.

Guidelines around incentive applications

As the incentive is statutory-based, the claims follow the corporate tax filing timeline. The enhanced tax deduction is claimed against taxpayers' taxable profits in the year the expenditure was incurred.

3. Eligibility requirements

Qualifying R&D activity is defined as follows:

- ▶ An activity in the fields of natural or applied science for the extension of knowledge
- ▶ An original and planned investigation carried on with the prospect of gaining new scientific or technical knowledge and understanding

Or

- ▶ The application of research findings or other knowledge to a plan or design for producing or introducing new or substantially improved materials, devices, products, processes, systems or services before they are commercially produced or used

Eligible R&D expenditures for the super deduction include staff costs and consumables. Other R&D expenditures may qualify for the 100% deduction if conditions are satisfied. The relevant R&D activities must be undertaken and carried on by a taxpayer wholly within Hong Kong. With respect to subcontracted-out qualifying R&D activities, the payments must be made to a designated local research institution to qualify for the enhanced deduction.

Any business carrying on qualifying R&D activities in Hong Kong is eligible for the enhanced tax deduction. No industry sectors are specifically excluded.

4. IP and jurisdictional requirements

Any intellectual property (IP) rights generated from the R&D activities must be fully vested in the claimant. In a cost-sharing arrangement where the IP is generated as a result of pooled R&D activities, a pro rata joint ownership with other participants would be sufficient.

5. Technology or innovation zones

There are no technology or innovation zones designated for providing R&D incentives in Hong Kong.

6. Role of governmental bodies in administering incentives

The enhanced R&D deduction claims are processed by the Hong Kong Inland Revenue Department (IRD). The IRD also monitors the R&D activities of the claimants to ensure they comply with the R&D enhanced tax deduction regime.

The Innovation and Technology Commission designates certain institutions as local research institutions and may give advice to the IRD regarding a deduction claim or an advance ruling application.

7. Administrative requirements

Companies are not required to seek Government preapproval for the enhanced R&D tax deduction. Claimants are required to disclose additional detailed information in supplementary forms when filing their profits tax returns.

8. Statutory reference

Inland Revenue Ordinance, Section 16B and Schedule 45

H

Hungary



Hungary

This chapter is based on information current as of February 2019.

EY contacts:

Péter Vaszari
 peter.vaszari@hu.ey.com
 +36 30 280 5979

Tibor Pálszabó
 tibor.palszabo@hu.ey.com
 +36 30 280 5243

The Hungarian Government encourages R&D-related activities and is very supportive of R&D investments. Numerous cash incentives and tax credit opportunities are available for setting up as well as operating R&D activities.

1. Overview

The R&D incentive regime in Hungary has become mature, well-known and well-used by taxpayers. Further, the Hungarian Government is introducing new elements and definitions to clarify uncertainties and facilitate R&D activities.

Currently, cash grants and tax incentives are available for R&D projects. The Hungarian R&D incentive regime could be beneficial for a wide range of investors depending on their fact patterns and business goals, and many of the elements of the incentive system may be combined to achieve optimum results.

The Hungarian Government reduced the corporate income tax (CIT) rate to 9% in 2017. In light of this change and the mature R&D incentive regime, Hungary can provide a suitable and tax-efficient environment for R&D-related activities.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input checked="" type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	VIP cash grant	Corporate tax credit	Double deduction of R&D costs	Reduced social security contribution and training fund contribution for researchers	Corporate tax exemption of 50% on royalty income	Reduced local business tax base and innovation contribution base
Types of incentives	▶ Cash grants	▶ Tax credits	▶ Super deduction	▶ Tax credits ▶ Tax allowance	▶ Reduced tax rate	▶ Tax allowance

VIP cash grant

(A Kormány egyedi döntésével megítélhető regionális beruházási támogatás)

Description of benefits

A non-refundable cash grant is available for investments. The amount depends on the location and nature of the investments. The grant is paid out as costs are incurred, and the maximum cash grant amount is typically capped at a certain percentage of the total investment amount. Taxpayers must seek preapproval to obtain cash grants. The minimum investment value is EUR10 million and 50 new jobs (depending on location, and it can be even lower in some specific cases).

The Government introduced a special R&D project cost-based cash grant in 2017. The minimum investment value is EUR3 million and 25 new R&D positions.

Guidelines around incentive applications

Cash grants are applicable to future investments. Taxpayers may claim cash grants as they incur costs. They must maintain appropriate records and administration for the claims to be accepted by the Hungarian authorities.

Corporate tax credit

(Fejlesztési adókedvezmény)

Description of benefits

A tax credit is available to decrease CIT liability for a period of 13 tax years. The maximum tax credit amount depends on the location and value of the investment and can decrease the annual CIT liability by 80%. The tax credit may be applied together with cash grants. The Government takes into consideration the losses from initial operations and determines a 16-year period in which the tax credit can be used. Unused tax credits cannot be carried forward once this 16-year statutory deadline has lapsed. The minimum investment value is HUF1 billion (EUR3.3 million) and 25 new jobs.

There is a special opportunity for R&D investments with a significantly lower threshold of HUF100 million (EUR 0.3 million) investment without the new job requirement.

Guidelines around incentive applications

The corporate tax credit is applicable to future investments. Taxpayers may claim the CIT credit in their annual CIT return for a period of 12 tax years from or following the year in which the investment is put into operation. The tax return is due by 31 May following the given tax year (assuming that the business year corresponds to the calendar year) and should be submitted to the Hungarian tax authority electronically.

Double deduction of R&D costs

(K+F költségek dupla levonhatósága)

Description of benefits

The direct costs of R&D or the depreciation of capitalized R&D costs incurred in a given tax year are deductible twice for CIT purposes: as an expense and as a CIT base deduction item.

Guidelines around incentive applications

The double deduction is applicable to past and current projects. Taxpayers claim the double deduction of the eligible R&D costs in their annual CIT return. If a resident taxpayer provides R&D services directly for another resident taxpayer, then the deduction of the eligible R&D costs may be shared by the service provider and the customer based on their joint written statement. In some cases, taxpayers can double-deduct recharged R&D costs from foreign entities. The tax return is due by 31 May following the given tax year (assuming that the business year corresponds to the calendar year) and should be submitted to the Hungarian tax authority electronically.

A ruling can be obtained to secure R&D content and cost allocation method.

Reduced social security contribution and training fund contribution for researchers

(Szociális hozzájárulási adókedvezmény és szakképzési hozzájárulás alap kedvezmény kutatók foglalkoztatásáért)

Description of benefits

A tax allowance is available to companies employing researchers with scientific degrees or academic titles (including students applying for these titles). Under the incentive, the social contribution tax as well as the training fund contribution on these employees' wages will be 0% (instead of 19.5% and 1.5%, respectively), capped at a gross monthly wage of HUF500,000 (EUR1,600) for researchers and HUF200,000 (EUR640) for students. These allowances are available with no specific time limitation.

As of 2018, the taxpayers are entitled to a 50% exemption of the social security contribution for R&D staff. This means a 9.75% savings for the taxpayer in social security contributions. There are no other eligibility conditions or other requirements to be fulfilled.

Guidelines around incentive applications

The incentive is applicable to current costs.

Reduced social security contribution

Taxpayers may apply the R&D-related social security contribution allowance and credit in their monthly tax return, which is due by the 12th day of the month following the corresponding month and should be submitted to the Hungarian tax authority electronically.

Training fund contribution base allowance

Taxpayers may apply the R&D-related training fund contribution base allowance in the annual tax return, which is due by the 12th day of the month following the tax year and should be submitted to the Hungarian tax authority electronically.

Corporate tax exemption of 50% on royalty revenue

(50%-os társasági adóalap-kedvezmény jogdíjbevétel után)

Description of benefits

The incentive allows for 50% of the royalty profit (but is capped at 50% of the pretax profit) to decrease the CIT base. In some cases, part of the profit from the sale of goods or services qualifies as an “embedded royalty.”

Guidelines around incentive applications

The incentive is applicable to current profits. Taxpayers claim the 50% CIT exemption on royalty profit in the annual CIT return. Base erosion and profit shifting (BEPS) approaches should be applied (i.e., a recent change has introduced the nexus ratio, which is calculated based on the “in-house” R&D activity). There is an opportunity to apply pre-BEPS royalty rules for a limited period under certain circumstances. The tax return is due 31 May following the given tax year (assuming that the business year corresponds to the calendar year) and should be submitted to the Hungarian tax authority electronically.

Reduced local business tax base and innovation contribution base

(Helyi iparűzési adóalap-kedvezmény és innovációs járulék alap-kedvezmény)

Description of benefits

All direct costs of R&D in a given tax year are deductible from the local business tax base and from the base of the innovation contribution. Royalty income is fully exempt.

Also, 10% of the R&D direct costs are deductible from the local business tax obligation in certain geographical locations.

Guidelines around incentive applications

The incentive is applicable to current expenses. Taxpayers claim the R&D-related local business tax base allowance and innovation contribution base allowance in the annual local business tax and innovation contribution returns, which are due 31 May following the year when the costs are incurred (assuming that the business year corresponds to the calendar year). A local business tax return should be filed with the local municipality where the taxpayers carry out business activities, and the innovation contribution return should be submitted to the state tax authority.

3. Eligibility requirements

R&D-related VIP cash grant

The VIP cash grant qualifies as state aid. The grants are provided to strategic investors accomplishing: i) R&D-related asset and infrastructural investments, or ii) R&D projects. To qualify for grants involving R&D-related asset and infrastructural investments, a company is required to invest at least EUR10 million in assets and to create at least 50 new jobs related to the R&D investment (depending on the location, and it can be even lower in some specific cases). The qualifying expenses are the related capital expenditure (capex) costs. To qualify for grants involving R&D projects, a company is required to invest at least EUR3 million and to create at least 25 new R&D positions related to the R&D investment, of which 50% should require a higher professional qualification. The qualifying expenses are the payroll-related costs of the researchers, the amortization costs of the assets and the rental costs of the buildings. The eligible costs should be incurred within one to three years from the start of the project.

Corporate tax credit

The corporate tax credit qualifies as state aid. The minimum investment value is HUF1 billion (EUR3.3 million) and 25 new jobs.

A special corporate tax credit is available for R&D-related asset and infrastructural investments; this credit has a significantly lower threshold of HUF100 million (EUR 0.3 million) investment without the new job requirement. The qualifying expenses are the related capex costs.

Double deduction of R&D costs

Qualifying R&D activities are activities carried out using the company's own assets and employees (either for its own purposes or on behalf of another entity) or activities carried out with another resident entity based on a specific R&D agreement. If the Hungarian entity is only financing the R&D, the results of the R&D activities must be used in Hungary to benefit from the deduction. Effective 1 January 2015, based on the decision of the taxpayer, the R&D tax base decreasing item can be allocated from a Hungarian-related party.

Reduced social security contribution and training fund contribution for researchers

The company is required to be recognized as a research center and has to employ researchers and scholars (including students applying for scientific titles) as defined by the legislation. The social security contribution deduction can be used based on the gross wage costs of the research employees up to a certain limitation.

Corporate tax exemption of 50% on royalty profit

The company must receive royalties to receive the incentive. Half of the profit accounted for as a royalty as per Hungarian legislation decreases the CIT base (but is capped at 50% of the pretax profit). The BEPS approach (i.e., the nexus ratio) should be applied.

Reduced local business tax base and innovation contribution base

There is a 100% exemption of royalty income from the local business tax base and innovation contribution base.

4. IP and jurisdictional requirements

Qualifying intellectual property (IP) includes patents, software licenses and other categories similar to patents. Types of income include income from the use or sale of qualifying IP.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Hungary.

6. Role of governmental bodies in administering incentives

VIP cash grant

- ▶ Ministry of Foreign Affairs and Trade: donor
- ▶ Hungarian Investment Promotion Agency: operating agency

Corporate tax credit

- ▶ Ministry of Finance: decision-maker
- ▶ National Tax and Customs Administration: auditor of use of incentive

Double deduction of R&D costs and corporate tax exemption of 50% on royalty income

- ▶ National Tax and Customs Administration: auditor of use of incentive
- ▶ Hungarian Intellectual Property Office: authority to evaluate R&D content

Reduced social security contribution and training fund contribution for researchers

- ▶ National Tax and Customs Administration: auditor of use of incentive

7. Administrative requirements

- ▶ The compliance process for obtaining the incentives or grants has become less onerous, especially for the VIP cash grant. The application processes are streamlined and the administration is fairly manageable.
- ▶ R&D tax credit is used through the CIT return.
- ▶ Double deduction from the CIT base and tax exemption in relation to royalties has to be indicated in the CIT return.
- ▶ The deduction and credit of the social security contribution has to be indicated in the social security contribution return.
- ▶ The National Tax and Customs Administration does not question R&D deductibility during a tax audit if a taxpayer has the written evaluation of the Hungarian Intellectual Property Office confirming the R&D content of the project.

8. Statutory reference

The listed incentives are regulated in the following acts and decrees:

- ▶ Act LXXXI of 1996 on Corporate Tax and Dividend Tax
- ▶ Act C of 1990 on Local Taxes
- ▶ Act LXXVI of 2014 on Scientific Research, Development and Innovation
- ▶ Decree No. 165/2014 (VII. 17.) of the Hungarian Government on Corporate Tax Credit
- ▶ Section IX of the Act CLVI of 2011 on Social Security Tax
- ▶ Decree No. 210/2014. (VIII. 27.) of Use of the Investment Promotion Fund
- ▶ Decree No. 332/2017 (XI.9.) on the detailed rules concerning the research and development qualification of certain activities

I

India



India

This chapter is based on information current as of February 2019.

EY contact:

Rahul Patni
rahul.patni@in.ey.com
+91 226 192 1544

The R&D sector in India is set to witness robust growth in the coming years due to the Government's efforts to make India a global R&D hub. Because of incentivized investments and the launching of various flagship projects to attract investments from around the globe, many investors have either shifted or are planning to shift their R&D bases to India. Further flagship projects, such as the Make in India and Digital India initiatives and the introduction of a patent box regime, are playing a pivotal role in attracting investors to make India a global manufacturing and R&D destination.

1. Overview

The Government of India has a progressive outlook toward R&D activities undertaken in India and continues to promote such activities, focusing strongly on manufacturing and developing innovative solutions in the manufacturing, science and technology fields. This is evident from the ambitious programs the Government has launched, which cover the following objectives:

- ▶ Increase in support to R&D
- ▶ Improvement in pool of scientific manpower
- ▶ Improvement in India's R&D infrastructure
- ▶ Introduction of patent box regime to encourage indigenous R&D with a view to make India a global hub
- ▶ Implementation of flagship programs at the national level to improve technological competitiveness of Indian industries
- ▶ Establishment of research facilities and centers of scientific excellence on par with some of the most globally renowned facilities

Further, the Government has continuously supported R&D activities and seeks to provide an environment that offers the growth of a knowledge-based economy through implementing effective fiscal policies and incentivizing investments in R&D through tax and other benefits.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

The Government also offers various tax benefits in the form of super deductions on revenue expenditure, accelerated depreciation on capital expenditure, and indirect tax benefits, such as customs duty exemptions on the import of specified goods for companies having an in-house R&D unit and concessional goods and services tax (GST) rates and exemptions available for research institutions.

Alongside the fiscal incentives provided by the federal Government, various states in India offer incentives, such as stamp duty waiver and concessions, soft loans, and subsidies related to social security contributions.

In addition to the above, the Government has created a Technology Development Board to provide financial support to industrial concerns undertaking R&D activities in the field of technology.

2. Incentives available

Names of incentives	Deductions for expenditure on scientific research by manufacturing entities*	Deductions for contributions for R&D	Tax holiday on export profits earned by units set up in Special Economic Zones (SEZs)*	Patent-related incentive	Funding for R&D activities in technology	Customs duty exemption and concession	GST concession (research institution)
Types of incentives	▶ Super deduction	▶ Super deduction	▶ Tax holiday	▶ Reduced tax rates	▶ Cash grants ▶ Loans ▶ Financial support	▶ Tax exemptions ▶ Reduced tax rates	▶ Reduced tax rates

* Although not based upon scientific analysis, general industry consensus is that these two incentives deliver the most beneficial results to investors.

Deductions for expenditure on scientific research

Description of benefits and eligibility requirements

A 100% deduction is available to all industries on revenue and capital expenditures (other than expenditures incurred for the acquisition of land) paid out or expended on scientific research related to the business. Further, where any revenue expenditure is incurred within three years before business commences in order to pay salaries to employees engaged in scientific research or to purchase materials used in scientific research, all such expenditures to the extent certified by the Director General of Income Tax (Exemptions) (DGIT(E)), in concurrence with the Secretary, Department of Scientific and Industrial Research shall be allowed as a deduction in the year in which business commences.

Guidelines around incentive applications

The incentive is applicable to current and retroactive investments. To claim the deduction for retroactive investments, the expenses should be incurred within three years of the commencement of business. The deduction may be claimed in connection with retroactive investments in the year of business commencement by filing a tax return within the time prescribed and in the prescribed manner for the financial year in which the expenditure is incurred.¹ Further, an annual certificate stating the incentives claimed during the year needs to be filed with DSIR. Retroactive expenses incurred prior to the commencement of business may be claimed if they are certified by the DGIT(E) or CCIT and DSIR.

¹ Under current tax laws, the due date of filing a return of income is 30 September following the end of the relevant financial year when transfer pricing provisions are not applicable. However, the date is further extended to 30 November following the end of the relevant financial year when transfer pricing provisions are applicable.

Deductions for expenditure on scientific research by manufacturing entities

Description of benefits and eligibility requirements

A super deduction of 150% is available for scientific research on in-house R&D expenditures as approved by the DGIT(E) and DSIR, including capital expenditures (other than land and buildings) by companies engaged in manufacturing and the production of articles and things, except for those articles or things specified in the Eleventh Schedule² or for companies engaged in the biotechnology business. Expenditures on scientific research include expenses incurred on performing clinical drug trials, obtaining approvals from regulatory authorities and filing patent applications. NOLs resulting from the deduction amount may be carried forward for eight years.

From April 2020, the deduction shall be restricted to 100% of the sums paid.

Guidelines around incentive applications

- ▶ The incentive is applicable to current and future investments. The deduction may be claimed in the year the expenditure is incurred by filing the details of the expenditure for the relevant financial year before the DSIR on or before 31 October with DSIR authorities and before the due date for filing the return of income with tax authorities for the relevant financial year.
- ▶ Specific DSIR approval is required to take advantage of super deduction benefits.
- ▶ Specific guidelines have been issued for the automotive industry.
- ▶ The company will be eligible for the super deduction only if it enters into an agreement with the DSIR for cooperation in an R&D facility and for audit of the accounts maintained for that facility.

² Examples of items specified in the Eleventh Schedule include beer, wine, alcoholic spirits, tobacco and tobacco preparations, cosmetics and toilet preparations, toothpaste, dental cream, tooth powder and soap, aerated waters, confectionary and chocolates, gramophones, projectors, photographic equipment and office machines, such as calculators and cash registers.

Deductions for contributions for R&D

Description of benefits and eligibility requirements

Deductions may be granted only in relation to the approved entities to which a donation or contribution is being made. The deductions available are as follows:

- I. Weighted deduction of 150% is granted to assesseees for any sums paid to a national laboratory, university or institute of technology, or specified persons with a specific direction that the said sum would be used for scientific research within a program approved by the prescribed authority. The prescribed authority in the case of a national laboratory, university or institute of technology is the head of the institution, and in the case of a specified person, it is the Principal Scientific Adviser to the Government of India.

From April 2020, the deduction shall be restricted to 100% of the sums paid.

- II. Weighted deduction of 150% is available for contributions made to approved institutions (e.g., research associations, universities, colleges) to be used for scientific research. An approved institution is a research association, university or college that has been approved and notified in the Official Gazette by the Central Government.

From April 2020, the deduction shall be restricted to 100% of the sums paid.

- III. Deduction of up to 100% is available for contributions made to any company engaged in scientific research. However, the following conditions must be satisfied to claim the deduction:
 - ▶ The company must be registered in India.
 - ▶ The main object of the company must be scientific R&D.
 - ▶ The company must be approved by the Chief Commissioner of Income Tax.

IV. Deduction of up to 100% is available for contributions made to approved institutions (e.g., research associations, universities, colleges that undertake research in social science or statistical research) to be used for research in social sciences or statistical research.

To obtain approval, these entities must file the relevant forms before the prescribed authorities. NOLs resulting from the deductions can be carried forward for eight years.

Guidelines around incentive applications

The incentive is applicable to current and future investments. The deduction may be claimed based on the amount of contribution made to the approved entities by filing the income tax return and audit report within the prescribed time for the relevant financial year.

Patent-related incentive

Description of benefits and eligibility requirements

To provide an additional incentive to retain and commercialize existing patents and to develop new innovative patented products, income earned by royalty in respect of patents developed and registered in India will be taxable at a concessional rate of 10% (plus applicable surcharge and tax) without deduction of any expenses.

The following conditions must be satisfied to claim the benefit:

- ▶ The patent should be developed and registered in India.
- ▶ "Developed" is defined to mean "at least 75% of the expenditure incurred by the assessee for invention in respect of which patent is registered."
- ▶ An eligible assessee is any person resident in India who is the true and first inventor of the invention and whose name is entered on the patent register as the patentee under Patents Act, 1970.
- ▶ Eligible income is income by way of royalty from patents developed and registered in India and includes the following:
 - ▶ Income from transfer of all or any rights in respect of patent

- ▶ Income from imparting of any information concerning the working of patent
- ▶ Income from use of any patent
- ▶ Rendering of any services in connection with the activities referred to above
- ▶ Lump-sum consideration for any of the above
- ▶ Eligible income excludes the following:
 - ▶ Consideration taxable as capital gains
 - ▶ Consideration for sale of products manufactured with the use of patented process
 Or
 - ▶ The patented article for commercial use patent

Tax holiday on export profits earned by units set up in SEZs

Description of benefits and eligibility requirements

Incentives are available for companies engaged in providing R&D services under a service arrangement by way of export of services to a foreign principal. Such companies may set up their units in SEZs to secure the tax holiday. SEZ units engaged in the export of goods and services from 1 April 2006 to 31 March 2021 are eligible to claim a 15-year, phased tax holiday (see table below) on all export-linked profits earned.

Amount of deduction to SEZ unit	Period of deduction
100% of export profits	First five years
50% of export profits	Next five years
50% of export profits, provided the profits are transferred to a Special Economic Zone Reinvestment Reserve Account for the purposes of acquiring plant or machinery within three years	Next five years

Export profits of SEZ units are calculated as follows:

Profits of SEZ unit x [Export turnover of unit/Total turnover of unit]

However, the SEZ unit will not be eligible to claim super deduction on research and development expenses as mentioned above.

Guidelines around incentive applications

Incentives are available to any unit set up in SEZs provided such unit is not formed by splitting up or reconstructing existing businesses. In addition, such an SEZ unit must not be formed by the transfer of previously owned plant and machinery. An enterprise may claim the deduction or benefit by filing its income tax return within the time prescribed for the relevant financial year.

The unit in an SEZ can be set up for the following purposes:

- ▶ Manufacturing
- ▶ Providing services (which in turn, may include R&D services)
- ▶ Trading and warehousing

To set up a unit in an SEZ, preapprovals are required from the applicable development commissioner. A detailed application and procedural process is to be followed for seeking an approval.

Investment proposals in an SEZ qualify for bringing in funds in India under the automatic route, and no prior approval is required from the Exchange Control and Regulatory authorities for infusion of funds in India.

Funding for R&D activities in technology

Description of benefits

Support in the form of grants is provided by the DSIR to industrial R&D projects through its Technology Development Program (TDP). As per the project funding guidelines of TDP, the Technology Development Board (the Board) invests in the equity capital or gives loans to industrial concerns and research associations that are attempting development and commercial application of indigenous technology or adapting imported technology to wider domestic applications. The Board also provides grants. However, this mode of funding is not particularly popular with multinational corporations, and grants are provided by the Board only in exceptional cases.

Guidelines around incentive applications

Indian companies, cooperatives and research associations are eligible to seek funding from the Board. Further, domestic R&D institutions such as national and state laboratories, academic institutions, cooperative research associations, in-house R&D units recognized by the DSIR and commercial R&D companies recognized by the DSIR can also apply for funding.

The most common form of Board funding is concessional loan assistance, which comes with a number of conditions, including payment of royalty on sales generated during the term of the loan.

A second mode of funding provided by the Board is equity participation. Conditions for securing funding by way of equity might include pledging of shares by promoters to the Board for a value equal to equity subscription by the Board.

A further mode of funding is Board grants. However, the Board provides grants only in exceptional cases. The recipient of the grant may be required to pay the Board an amount equivalent to the grant received by it or share the profit proportionate to the grant received.

Customs duty exemption and concessions

Description of benefits and eligibility requirements

Customs duty exemption is available on the import of specified goods for use by the agrochemical sector having export turnover of INR200 million and above during the preceding financial year by manufacturers with an in-house R&D unit, subject to conditions. Similarly, a concessional rate of customs duty is available on the import of specified instruments, equipment or components by research institutions in the pharmaceutical and biotechnology sector, subject to conditions.

Further, a customs duty exemption is available on the import of equipment, instruments, raw materials, components, pilot plant and computer software when imported into India for a project by a company having an in-house research and development unit, subject to conditions.

Guidelines around incentive applications

Customs duty exemptions and concessions are applicable to the import of specified goods. No particular forms have been prescribed under the Indian customs legislation for claiming the aforementioned customs duty exemption or concessional rate of duty. However, certificates and approvals (as per relevant notification) would need to be produced to customs authorities at the time of clearing the imported goods to receive such exemption or concession, as the case may be.

Customs duty exemption and concession is available subject to fulfillment of specified conditions prescribed under the relevant notification, such as:

- ▶ The goods imported should not be sold or transferred within seven/five years from the date of importation.
- ▶ The entity importing the goods must be registered with DSIR.
- ▶ Certification from relevant authorities or agencies regarding use for R&D, installation in the R&D wing, value, etc.

GST concessional rate (research institution)

Description of benefits

A concessional rate of GST is applicable to research institutions for procurement of specified goods subject to fulfillment of certain conditions.

Guidelines around incentive applications

GST at a concessional rate is applicable on specified goods supplied to specified research institutions. Further, the suppliers would be required to obtain the relevant certificates and approvals (as per relevant notification) from such research institutions to claim the exemption.

The concessional rate of GST is available subject to fulfillment of specified conditions as prescribed under the relevant notifications, such as the following:

- ▶ The institution must be registered with the Government in the DSIR, and the head of the institution issues a

certificate to the supplier of the goods that they are essential for research purposes and would be used for stated purposes only.

- ▶ The goods should not be sold or transferred for a period of five years from the date of installation.

3. State-level incentives

Many states want to attract investments to set up new units and expand existing units to develop infrastructure, education and employment opportunities. For these purposes, the various states offer many investment-linked incentives and location-linked incentives.

The types of incentives offered include stamp duty waiver and concessions; soft loans and exemptions; and subsidies linked to social security contributions.

Incentives may be offered to specified industry sectors based on the size of the eligible investment, location, employment generation, nature of products, etc. No specific plan is provided for R&D; however, R&D companies are eligible to apply.

The incentives offered may vary from state to state (under respective state industrial policies) with customization for megaprojects or investment in underdeveloped areas based on negotiations with the relevant state Government.

4. IP and jurisdictional requirements

Where the Indian company carrying out research does not own the intellectual property (IP) (e.g., under a contract R&D model), there could be challenges in securing approvals claiming the weighted deduction of 200%, and it may not be effective because the weighted deduction could be restricted to "net expenditure." Apart from this, there are no restrictions with respect to holding IP rights to secure tax-related benefits.

5. Technology or innovation zones

As discussed earlier, the Indian tax regime provides for a tax holiday on export profits earned by units set up in SEZs.

6. Role of governmental bodies in administering incentives

Incentives related to expenditure on scientific research, expenditure on scientific research by manufacturing entities and contributions to R&D

The government agencies involved in administering incentives are the DSIR, Director General of Income-tax (Exemptions) and Principal Chief Commissioner of Income Tax.

The Government of India established the DSIR, an autonomous body and India's largest R&D organization, with a broad mandate to promote industrial research and to carry out activities relating to technology development. The DSIR is part of the Ministry of Science and Technology and carries out the activities relating to promotion, development, use and transfer of indigenous technology. The DSIR has carried out various programs and initiatives aimed at promoting R&D. Because India provides various incentives and benefits to the private sector for R&D, the DSIR also acts as a nodal agency for the approval of benefits claims. The DSIR approves all scientific R&D activities carried out by research associations, colleges, universities, etc. On completion of the R&D activity, the DSIR obtains a completion certificate from the research associations and considers a report of the activities carried out, results obtained and its further application for commercial exploitation.

Incentives related to export profits earned by units set up in an SEZ

Involved Government agencies: Ministry of Commerce and Industry, Department of Commerce

The administration of each SEZ is governed by a three-tier administrative setup. The Board of Approval is the highest body, comprising 19 members from various ministries of the Government of India and headed by the Secretary, Department of Commerce. The Approval Committee at the zone level deals with approval of units in the SEZs and other related issues. Each zone is headed by a Development Commissioner, who is ex-officio chairperson of the Approval Committee.

The Board of Approval and the Central Government approves the setup of SEZs. Subsequently, units are permitted to be set up in the SEZ. All the proposals for setting up units in the SEZ are approved at the zone level by the Approval Committee consisting of the Development Commissioner, Customs Authorities and representatives of State Government. All post-approval clearances, including grants of importer-exporter code numbers, change in the name of the company or implementing agency, broad banding diversification, etc., are given at the zone level by the Development Commissioner. The performance of the SEZ units is periodically monitored by the Approval Committee, and units are liable for penal action under the provision of the Foreign Trade (Development and Regulation) Act, in case of violation of the conditions of the approval.

Incentives related to funding for R&D activities

Involved Government agencies: Technology Development Board, Department of Science and Technology

The Government has constituted the Technology Development Board, which manages and administers the fund created by the Government for technology development and application.

The Board accepts applications for financial assistance from all sectors of the economy and approves the granting of funds to the industrial concerns after a detailed evaluation.

Incentives related to Customs and GST

Involved Government agencies: Central Board of Indirect Taxes and Customs

Benefits of concessional customs duty and GST (including customs and GST incentives in the form of exemptions and concessional rate of tax), is administered through the arm of the Ministry of Finance (i.e., Central Board of Indirect Taxes and Customs) that issues necessary guidelines and notifications in this regard.

Patent-related incentive

Involved Government agencies: Central Board of Direct Taxes

Regarding patent-related incentives, the Ministry of Finance has established the Central Board of Direct Taxes to issue guidelines and notifications to administer the incentives.

7. Administrative requirements

Incentives related to expenditure on scientific research, contributions to R&D and for units set up in the northeastern states of India

No particular forms have been prescribed under the tax laws for claiming a tax incentive. However, the assessee may claim the deduction by filing a tax return within the time prescribed for the financial year in which the expenditure is incurred.

Incentives related to expenditure on scientific research incurred by manufacturing entities

As noted, specific DSIR approval is required to secure the benefit of a weighted deduction of expenditures incurred

by manufacturing companies with an in-house R&D facility. The DSIR, in most cases, conducts an inspection of the R&D unit before granting an approval. To secure a deduction for expenditures incurred by in-house R&D units, the following conditions must also be met:

- ▶ The R&D facility must not exist purely to carry out market research, sales promotion, quality control, testing, commercial production, style changes, routine data collection or similar activities.
- ▶ Separate audited accounts (i.e., certified by a chartered accountant) for each R&D center must be maintained for each approved facility.
- ▶ A yearly statement must show the progress of implementation of the approved program to be submitted to the DSIR.
- ▶ The amounts of expenditures as certified by the DSIR and advised to the DGIT(E) are entitled to the weighted deduction. The weighted deduction is available on the "net" expenditure.
- ▶ Assets acquired with respect to developing scientific R&D facilities shall not be disposed of without the approval of the DSIR.
- ▶ On completion of the R&D activity, a completion certificate must be given to the DSIR with a report of the activities carried out, results obtained and further application for commercial exploitation.

Incentives related to export profits earned by units set up in an SEZ

Units set up in an SEZ are governed by the terms of the letter of permission granted by the Development Commissioner. Apart from the approval procedure listed earlier, compliances for an SEZ unit include the following:

- ▶ An annual performance report must be filed with the Development Commissioner of the SEZ. The annual performance report includes details of imports, exports, capital goods, external commercial borrowings, etc. The contents of the report have to be certified by a chartered accountant.
- ▶ Based on the annual performance report submitted by the unit, the Approval Committee undertakes an annual review of the unit's performance and compliance with the conditions of approval as provided in the letter of permission.

Patent-related incentive

The patent-based incentive can be claimed by filing a tax return within the time prescribed and in the prescribed manner for the financial year in which the expenditure is incurred.³

Incentives related to Customs and GST

Under customs legislation, there is a provision for conducting on-site audits, during which the authorities may check compliance with the conditions stipulated while granting and availing incentives by the assessee.

In case of availing the concessional rate of GST, the company would be required to obtain certificates as provided in the notifications.

8. Statutory reference

Accelerated depreciation

- ▶ Section 35(1) of the Income-Tax Act, 1961 (the Act)

Super deductions

- ▶ Section 35 of the Act
- ▶ Patent-related incentives
- ▶ Section 115BBF of the Act

Tax holiday for export profits for units in an SEZ

- ▶ Section 10AA of the Act

Patent-related incentive

- ▶ Section 115BBF of the Act

Funding for R&D activities in technology

- ▶ Project Funding Guidelines issued by the Technology Development Board

Customs duty exemption (related to the agrochemical sector)

- ▶ Customs Notification No. 50/2017, dated 30 June 2017

Customs duty exemption (related to in-house research units)

- ▶ Customs Notification No. 50/1996, dated 23 July 1996 (as amended from time to time)

Concessional rate of duty (related to research institution)

- ▶ Customs Notification No. 51/1996, dated 23 July 1996 (as amended from time to time)

Concessional rate of GST (related to research institution)

- ▶ GST Notification No. 45/2017-Central Tax (Rate), dated 14 November 2017
- ▶ GST Notification No. 45/2017-Union Territory Tax (Rate) Tax, dated 14 November 2017
- ▶ GST Notification No. 47/2017-Integrated Tax (Rate) Tax, dated 14 November 2017

³ Under current tax laws, the due date of filing a return of income is 30 September following the end of the relevant financial year when transfer pricing provisions are not applicable. However, the date is further extended to 30 November following the end of the relevant financial year when transfer pricing provisions are applicable.



Indonesia



Indonesia

This chapter is based on information current as of February 2019.

EY contact:

Ben Koesmoeljana
ben.koesmoeljana@id.ey.com
+62 21 5289 5030

There is no specific R&D-based tax incentive in Indonesia, although R&D undertaken in Indonesia is a deductible expenditure.

1. Overview

There is no specific R&D-based tax incentive scheme in Indonesia. The general rule provided under Indonesian tax law is that only R&D activities that are conducted in Indonesia may be claimed as a tax deduction in calculating taxable income. These costs are limited to the reasonable amount of costs relating to R&D activities performed in Indonesia for the purpose of discovery of a new system or technology for development of the company.

Businesses conducting R&D on product development or manufacturing efficiency may be entitled to carry forward and claim tax losses for an additional two years under the tax allowance incentive scheme. To qualify for the additional two years (over and above the standard five years) of tax loss carryforward, the proportion of investment made in R&D must be at least 5% of the total investment within five years.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input checked="" type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited Government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Name of incentive	Tax allowance
Types of incentives	<ul style="list-style-type: none"> ▶ Accelerated depreciation and amortization ▶ Reduced tax rates ▶ Investment allowance

Tax allowance

Description of benefits

Businesses conducting R&D on product development or manufacturing efficiency may be entitled to carry forward and claim tax losses for an additional two years (over and above the standard five years). This is available under the tax allowance incentive scheme, which is available for Indonesian companies or cooperatives that are seeking to make investments that are either new investments or for the purpose of expanding the current business in specific industries and/or provinces in Indonesia. The tax allowance incentives include:

- ▶ Accelerated depreciation and amortization

Category of tangible fixed asset	Accelerated useful life	Straight-line depreciation method	Declining balance depreciation method
Non-buildings			
Category 1	2 years	50%	100%
Category 2	4 years	25%	50%
Category 3	8 years	12.5%	25%
Category 4	10 years	10%	20%
Buildings			
Permanent	10 years	10%	
Non-permanent	5 years	20%	

- ▶ A reduced tax rate of 10% for dividend paid to nonresidents (or the applicable tax treaty rate)
- ▶ An investment allowance in the form of a reduction of net income

- ▶ An extended time period in relation to the carrying forward of tax losses

Normally, a tax loss may be carried forward for five years. Taxpayers granted with the tax allowance incentive may be entitled to carry forward and claim tax losses for two additional years if they conduct qualifying R&D activities on product development or manufacturing efficiency. In obtaining the tax allowance incentives, a preapproval process is required.

Guidelines around incentive applications

The tax allowance incentive is available for new or future investments, or investments for the purpose of expanding a current business.

Entities eligible for the tax incentives are required to claim them in the annual corporate income tax return, and they should be reflected in the corporate income tax calculation of that respective year. Entities that have obtained the tax allowance incentive approval are required to declare the approval and the incentive granted in a specific attachment with the corporate income tax return (Form 4A – *Daftar Fasilitas Penanaman Modal*, or List of Capital Investment Incentive).

3. Eligibility requirements

To qualify for the tax allowance incentive, the investment must be a new investment or an investment for the purpose of expanding a current business, with certain exceptions. Taxpayers with the tax allowance incentive conducting R&D activities on product development or manufacturing

efficiency may be entitled to the incentive of claiming tax losses for two additional years, if the proportion of investment made in R&D is at least 5% of the total investment within five years. There are 71 business sectors that are eligible for the tax incentives. Additionally, 74 prescribed industries in certain areas and provinces (mostly outside Java) qualify for the tax allowance incentives.

4. IP and jurisdictional requirements

There are no specific jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Indonesia.

6. Role of governmental bodies in administering incentives

- ▶ The Investment Coordinating Board
 - ▶ Businesses applying for the tax allowance incentive are required to submit their application to the Chairman of the Investment Coordinating Board, who will evaluate the applicant's eligibility for the incentive and submit a recommendation to the Minister of Finance via the Directorate General of Taxation.
- ▶ The Directorate General of Taxation
 - ▶ Upon receipt of a recommendation from the Investment Coordinating Board, the Directorate General of Taxation reviews the fulfillment of criteria and requirements of the applicant. Subject to the result of the review, the Directorate General of Taxation issues the decision to accept or reject the request on behalf of the Minister of Finance.
- ▶ The Ministry of Finance
 - ▶ The Minister of Finance issues the decision to accept or reject the request subsequent to recommendation from the head of the Investment Coordinating Board.

7. Administrative requirements

Taxpayers seeking to avail themselves of the tax incentives will require approval from the Minister of Finance with recommendations from the Chairman of the Investment Coordinating Board.

The general application process for the incentives is as follows:

- ▶ The business applying for the tax allowance incentives is required to submit an application to the Chairman of the Investment Coordinating Board, who will evaluate the applicant's eligibility in a trilateral meeting with the Directorate General of Taxation and the relevant ministry that issues the business license/permit. After the meeting, the Chairman of the Investment Coordinating Board will submit a recommendation to the Minister of Finance for final approval.
- ▶ The Minister of Finance accepts or rejects the request upon the recommendation given. In principle, the approval must be obtained for the relevant incentives to apply.

For the additional two years of tax loss carryforward, the qualifying taxpayer must submit an application to the Directorate General of Taxation, which will conduct field verification to confirm that the taxpayer qualifies.

Taxpayers awarded the tax allowance incentive are required to submit an investment realization report to the Directorate General of Taxation on a semiannual basis. Annual tax returns of the eligible taxpayers must be attached with financial statements that have been audited by an independent public accountant.

8. Statutory reference

Article 6, Point 1.f of the Income Tax Law states that only costs relating to R&D activities performed in Indonesia can be claimed as a tax deduction in calculating the taxable income of an entity.



Ireland



Ireland

This chapter is based on information current as of February 2019.

EY contact:

Ian Collins
ian.collins@ie.ey.com
+353 1 221 2638

The Irish Government remains committed to attracting foreign direct investment into Ireland and enabling Ireland to compete with other jurisdictions. In this regard, the Government has introduced key changes to the Irish incentives regime in recent years, including the world's first OECD-compliant patent box regime (the Knowledge Development Box) for accounting periods beginning on or after 1 January 2016. In addition, the R&D 25% tax credit regime moved to a full volume basis from 1 January 2015.

1. Overview

The Irish Government is supportive of the R&D tax credit regime and recognizes its importance as part of the overall package to attract foreign direct investment into Ireland and enable Ireland to compete with other jurisdictions with similar incentives. To further reward and encourage innovation activities in Ireland, the Irish Government introduced the Knowledge Development Box (KDB) in late 2015. It is the first patent box regime in the world to be compliant with the Organisation for Economic Co-operation and Development (OECD), having been designed to comply with the new international guidelines set out in the Action 5 report of the OECD's Base Erosion and Profit Shifting Action Plan.

The R&D tax credit regime provides for a 25% tax credit for expenditures on qualifying R&D activities. Excess R&D credits can be cash-refundable. The 25% tax credit is in addition to the 12.5% corporate tax deduction for these expenses; therefore, the effective tax relief on such expenditures is 37.5%.

The KDB regime offers a 6.25% effective tax rate for profits arising from patents and copyrighted software. It follows the modified nexus approach, thereby aligning the benefits available to where the substantial activity is undertaken by the taxpayer. The KDB regime is in addition to the R&D tax credit regime.

A range of other cash grants/financial supports is also available from Irish governmental agencies in the form of employment grants, capital grants, training grants and R&D grants.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other (R&D tax credit on R&D buildings)	<input checked="" type="checkbox"/>

2. Incentives available

Names of incentives	R&D tax credits incentive*	RDI cash grants/ financial support incentives	Key employee tax credit incentive	R&D tax credit on R&D buildings	Allowances for capital expenditure on scientific research	Knowledge Development Box (KDB)
Types of incentives	<ul style="list-style-type: none"> ▶ Tax credits ▶ Cash refunds 	<ul style="list-style-type: none"> ▶ Cash grants ▶ Financial support 	<ul style="list-style-type: none"> ▶ Reduced tax rates 	<ul style="list-style-type: none"> ▶ Tax credits 	<ul style="list-style-type: none"> ▶ Tax exemptions ▶ Accelerated depreciation 	<ul style="list-style-type: none"> ▶ Reduced tax rates

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D tax credits incentive

Description of benefits

A tax deduction for R&D expenditures incurred and an additional R&D tax credit of 25% of qualifying spending can be relieved against the corporation tax charge for the period. Any excess R&D tax credits can be refunded in cash. Therefore, tax relief of up to 37.5% is available (i.e., 12.5% trading deduction and 25% tax credit), equating to EUR37.5 for every EUR100 spent on R&D.

Any excess R&D tax credits may be carried back for a period of one year, while excess R&D tax credits may be carried forward indefinitely. If the corporation tax liability does not exceed the available R&D tax credit, a cash refund may be available over a 33-month period. The first installment is 33% of the excess. The second installment is 50% of the remaining excess, and the third installment is the remaining balance. If the company does not wish to claim a repayment of the credit, the credit will be carried forward indefinitely. The repayment of the R&D tax credit is limited to the greater of either the corporation tax paid by the company in the preceding 10 years or the aggregate of the total payroll liabilities for the combined current and preceding accounting periods. The company must make a claim for repayment to the Revenue Commissioners within 12 months of the accounting year-end in which the expenditure was incurred. The R&D tax credit regime is a self-assessment regime, and there is no requirement to obtain preapproval from the Revenue Commissioners.

Guidelines around incentive applications

R&D tax credits are applicable for current investments, and the claim should be made on the company's corporation tax return (Form CT1). The claim must be made within 12 months of the accounting year-end in which the expenditure was incurred.

RDI cash grants/financial support incentives

Description of benefits

Enterprise Ireland (EI) offers grants for R&D expenditures incurred by Irish-based manufacturing or internationally traded services companies. Grants for expenditures incurred on research, development and innovation (RDI) are also available from the Irish Industrial Development Authority (IDA) and are offered for both first-time foreign direct investment and companies currently located in Ireland. The level of grant assistance available from both the IDA and EI can vary, depending on numerous factors, including the type of research activity. These grants are typically negotiated on a case-by-case basis, with a primary focus of job creation.

The grant funding is generally paid over the life of the project. The IDA or EI (or a sister company) will approve the grant funding before the company receives any cash payments.

Guidelines around incentive applications

The cash grants are applicable for current and future investments. These are claimed directly with the respective Government bodies by completing the required documentation and providing the relevant information to the Government body. The project for which funding is sought must meet the conditions of eligibility of the Industrial Development Acts and must also comply with EU state aid regulations. The IDA and EI will set out key milestones that will need to be achieved for the company to receive the funding for each of the agreed years. These milestones are usually agreed on a case-by-case basis with the agency in question.

Key employee tax credit incentive

Description of benefits

The R&D tax credit regime allows a company to reward its key R&D employees who perform at least 50% of their duties in the “conception or creation of new knowledge, products, methods and systems” in the relevant accounting period. Part of the R&D tax credit that the company could have used to reduce the company’s corporation tax liability can be allocated to a key R&D employee. Subject to certain conditions, the key R&D employee incentive will effectively allow employees engaged in R&D to claim a credit equal to the amount surrendered by the employer against their income tax. If an employee cannot use the credit in full, it may be carried forward indefinitely until it is used or the employee leaves the company.

The key employee claiming the incentive must not be a director or an individual who holds a 5% or more interest in the company or associated company. The employee must make a claim with the Irish Revenue Commissioners for a refund of income tax paid. The effective tax rate of the employee cannot be reduced below 23%.

Guidelines around incentive applications

The key employee tax credit incentive is applicable for current investments. An individual making a claim under this section is required to file an income tax return (Form 11, Pay and File Income Tax Return) for the year of assessment to which the claim relates.

R&D tax credit on R&D buildings

Description of benefits

A tax credit is available for expenditures on the construction or refurbishment of a building or structure used for R&D activities. A 25% tax credit is available on the expenditure. The credit is in addition to any industrial buildings allowances that may be available. The credit is first used to reduce current-year and prior-year corporation tax. The excess R&D tax credits may be carried forward indefinitely. If the corporation tax liability does not exceed the available R&D tax credit, a cash refund may be available over a 33-month period. The first installment is 33% of the excess. The second installment is 50% of the remaining excess, and the third installment is the balance remaining. A claim for the repayment must be made by the company to the Revenue Commissioners within 12 months of the accounting year-end in which the expenditure was incurred.

To be eligible to claim the R&D tax credit on R&D buildings, at least 35% of the building must be used for R&D purposes over a four-year period. The credit is calculated by reference to the percentage of the building or structure used for qualifying R&D activities. The construction or refurbishment of the R&D building must qualify for industrial buildings allowances from a corporation tax perspective. The repayment of the R&D tax credit is limited to the greater of either the corporation tax paid by the company in the preceding 10 years or the aggregate of the total payroll liabilities for the combined current and preceding accounting periods.

Guidelines around incentive applications

The R&D tax credit on R&D buildings is applicable to current investments. The claim should be made on the company’s corporation tax return (Form CT1). A claim must be made within 12 months of the accounting year-end in which the expenditure was incurred.

Allowances for capital expenditure on scientific research

Description of benefits

Tax depreciation allowances are available with respect to capital expenditure incurred during the course of scientific research. The allowance is equal to the amount of the capital expenditure incurred (i.e., 100%) and is granted in computing the profits of the trade. Unused allowances may be carried forward indefinitely. There is a clawback of the allowances when the assets cease to be used for scientific research. A claim for the tax depreciation allowances is made under the self-assessment regime.

Guidelines around incentive applications

The accelerated depreciation applies to current investments. The claim should be made on the company's corporation tax return (Form CT1). A claim must be made within two years of the end of the chargeable period in which the expenditure was incurred.

Knowledge Development Box (KDB)

Description of benefits

The KDB regime offers a 6.25% effective tax rate for profits arising from qualifying assets. The main categories of qualifying assets are patents (including patents pending) and copyrighted software. The relief operates by providing a 50% deduction from qualifying profits resulting in the effective 6.25% tax rate.

Small and medium enterprises (SMEs) can access the KDB in respect of certain intellectual property (IP) without the need for the IP to be patented, subject to meeting the relevant qualifying criteria and obtaining the appropriate certification.

Guidelines around incentive applications

KDB benefits are available to companies for accounting periods commencing on or after 1 January 2016 and before 1 January 2021. A claim must be made in a company's corporate tax return within 24 months of the end of the relevant accounting period.

3. Eligibility requirements

The R&D activities being carried out must fall within one of the following categories:

- Basic research
- Applied research
- Experimental development

If a company subcontracts its R&D expenditures to a third party or university (or similar institution) to carry on qualifying R&D activities on behalf of the company, the costs that may qualify are restricted. In the case of costs subcontracted to third parties, the costs are restricted to the greater of EUR100,000 or 15% of the qualifying in-house expenditures. If the R&D activities are subcontracted to a university (or similar institution), the costs are restricted to the greater of EUR100,000 or 5% of the qualifying in-house expenditures. If a company subcontracts all its R&D activities to third parties, to the extent that its only function is managing and controlling the R&D activities, these activities are non-qualifying.

Certain activities are specifically non-qualifying and include:

- Market research, market testing, market development, sales promotions or consumer surveys
- Routine testing and analysis for purposes of quality or quantity control
- Alterations of a cosmetic or stylistic nature to existing products, services or processes, regardless of whether these alterations represent some improvement

No industry sectors are specifically excluded. Once a company within the charge to Irish tax is carrying on qualifying R&D activities, it should be eligible to make a claim, provided the necessary conditions are met and the documentation to support the claim is available.

Eligibility requirements for the specific incentive types

R&D tax credits incentive

The R&D tax credit will be available with respect to expenditures incurred by the company while carrying on its qualifying R&D activities. The type of costs that may qualify include salary costs, expenditures incurred directly on R&D materials, subcontracted expenditures (subject to the restrictions set out above) and general overhead expenditures to the extent that it can be demonstrated that they directly support the company's R&D activities. In addition, plant and equipment used in the R&D activities may also be included in the claim.

Certain costs are specifically disallowable and include interest, depreciation, bank charges and marketing-type costs. To receive the R&D tax credit, the following conditions must be met:

- ▶ The company must be within the charge to Irish tax.
- ▶ The company must undertake qualifying R&D activities within the European Economic Area.
- ▶ The expenditure must be incurred by the Irish company and must not qualify for a tax deduction under the law of another territory.
- ▶ The Irish company is not required to own the IP to qualify for the R&D tax credit incentive.
- ▶ Any expenditure met directly or indirectly by the EU or state aid will not be treated as a qualifying expenditure.

RDI cash grants/financial support incentives

The main conditions of this incentive are as follows:

- ▶ The availability of grant aid/financial supports will generally depend on the location, quality and level of investment by the company into Ireland. For aid being sought by a company in relation to research, development and innovation projects in Ireland, the level of the grant depends on the size of the investment, the nature of the research and the level of innovation and risk associated with the research being undertaken.
- ▶ The level of grant aid would be negotiated on a case-by-case basis.

Key employee tax credit incentive

The main conditions of this incentive are as follows:

- ▶ The employee must be a "key employee," which is defined as an employee who performs 50% of his or her

duties in the "conception or creation of new knowledge, products, methods and systems" in the relevant accounting period.

- ▶ The employee must not be a director or an individual holding more than 5% of the ordinary share capital of the company.
- ▶ The effective tax rate of the employee cannot be reduced to below 23% as a result of the surrender of the credit to the employee.
- ▶ The employee must make a claim to the Revenue Commissioners for a refund of any tax paid.
- ▶ The employee may carry forward any unused credits indefinitely. The employee loses the unused credits upon leaving the company.
- ▶ The company may decide which key employees to reward.
- ▶ The company must have a corporate tax liability.
- ▶ If the company has outstanding tax liabilities in the accounting period in respect of which the credit arises, the company is not entitled to surrender any amount to the key employee.

R&D tax credit on R&D buildings

The main conditions of this incentive are as follows:

- ▶ The building must qualify for industrial buildings allowances.
- ▶ At least 35% of the building or structure must be used for R&D purposes over a four-year period. The credit is calculated by reference only to the portion of the building or structure used for R&D activities.
- ▶ The tax credit is clawed back if, within 10 years of the accounting period for which a credit is claimed, the building or structure is sold or ceases to be used for purposes of carrying on R&D activities.
- ▶ Any expenditure met directly or indirectly by EU or state aid will not be a qualifying expenditure.

Allowances for capital expenditure on scientific research

The main conditions of this incentive are as follows:

- ▶ Scientific research is defined as any activities in the fields of natural or applied science for the extension of knowledge. It does not apply to expenditures incurred on exploring for specified minerals, petroleum exploration activities or petroleum extraction activities.
- ▶ If an allowance is granted, no wear-and-tear allowances are available with respect to the plant or machinery.
- ▶ There is a clawback of the tax depreciation allowances if the assets representing capital expenditure on scientific

research cease to be used for research purposes. The amount of the clawback is the lesser of the allowance granted or the value of the asset at the time of cessation.

- ▶ Capital expenditures on scientific research that are met directly or indirectly from money provided by the state or anyone other than the person claiming the allowance must be excluded.

Knowledge Development Box

KDB benefits are available in respect of profits arising from qualifying assets. Companies can obtain benefits if:

- ▶ The company carries on qualifying R&D activities in Ireland or outsources R&D to an unrelated third party anywhere in the world
- ▶ The activities give rise to a qualifying asset (main categories being patents or copyrighted software)
- ▶ The income attributable to the qualifying asset is earned as part of an Irish trade
- ▶ Qualifying profits are then effectively taxed at 6.25%

Qualifying income and expenditure

Qualifying income arising from a qualifying asset includes any royalty or other sum received in respect of the use of that asset. In addition, if the sales price of a product or service includes an amount attributable to the asset, the portion of the income from those sales attributable to the value of the asset on a just and reasonable basis can also be included as income from the asset.

Qualifying expenditure (QE) means expenditure incurred by a company wholly and exclusively in the carrying on of R&D activities, where such activities lead to the development, improvement or creation of the qualifying asset. The definition is identical to the definition of “research and development activities” for the purposes of the R&D tax credit. Excluded from QE are outsourced costs to related parties and amounts paid for the acquisition of IP that are reflected in the value of the qualifying asset.

Robust supporting documentation is required to make a KDB claim, including tracking and tracing the appropriate income and expenditure items to the appropriate qualifying asset.

4. IP and jurisdictional requirements

Effective date

The requirements apply to capital expenditures incurred on qualifying IP (e.g., on internally generated IP, IP acquired from a related party and/or IP acquired from a third party) after 7 May 2009.

Qualifying IP

The definition of qualifying IP is very broad and includes:

- ▶ Brands
- ▶ Brand names
- ▶ Domain names
- ▶ Service marks
- ▶ Publishing titles
- ▶ Secret processes or formulas
- ▶ Trademarks
- ▶ Trade names
- ▶ Trade dress
- ▶ Patents
- ▶ Copyrights
- ▶ Registered designs
- ▶ Design rights
- ▶ Inventions
- ▶ Know-how
- ▶ Some computer software
- ▶ Customer lists
- ▶ Goodwill directly attributable to the above

Types of income

Applicable income is income derived from the IP in the course of an Irish trade (e.g., through the sale of goods/ services and management, exploitation, licensing or development of the IP).

Calculation of income

Capital expenditures incurred on qualifying IP can be fully amortized (in line with the accounting treatment or, upon election, over 15 years). Companies may also opt for a fixed write-down period of 15 years at an annual rate of 7% of qualifying expenditures and 2% in the final year.

Determination of embedded IP income

The relief may be used to offset income of the trade of exploiting the intangible assets, and this “trade” is ring-fenced for the purposes of this relief. Therefore, excess allowances may be carried forward indefinitely, but may only be offset against future trading income of the same trade that is derived from the use of the specified intangible assets.

IP regime rate

For expenditures incurred prior to 11 October 2017, the tax amortization and any associated interest relief may not exceed what would be the amount of trading income from that trade excluding such allowances and/or interest. This effectively means that 100% of taxable profits of that trade can be relieved. For expenditures incurred on or after 11 October 2017, the tax amortization and any associated interest relief are capped at 80% of taxable profits (calculated before tax amortization and interest) for the exploitation of the intangible assets, thus resulting in a minimum net effective cash tax rate of 2.5% (i.e., 20% x 12.5%), in respect of expenditure incurred on or after that date. Any excess allowances and/or interest can be carried forward against future taxable profits of the same trade. From a consolidated group perspective, a book benefit may actually arise following the onshoring of IP previously held offshore in a zero-tax-rate jurisdiction.

Must the IP be registered/owned locally?

Legal ownership is not required, but it must be beneficially owned.

To the extent that expenditures on the development of an intangible asset within a company are regarded as capital expenditure for the purposes of the company's trade, such expenditure will qualify for allowances under the scheme, provided that the asset is recognized as an intangible asset under generally accepted accounting practices and is included on the list of specified intangible assets. Companies claiming relief on the assets under the IP regime may also claim KDB benefits; however, they cannot also claim the R&D tax credit on the same expenditure.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Ireland.

6. Role of governmental bodies in administering incentives

The R&D tax credit regime operates on a self-assessment basis and is administered by the Irish Revenue Commissioners. The Revenue Commissioners may seek the opinion of an external expert to assist them in determining whether the company's activities are qualifying R&D activities. The Revenue Commissioners may also carry out an audit of the R&D tax credit claim, which includes a review of the technical information, supporting documentation and the claim's financial aspect.

The IDA and EI are the two main Government bodies that administer the grant-funding schemes. Depending on the grant funding being sought, there will be various types of documentation that must be provided to the granting body before a company is rewarded with the funding.

7. Administrative requirements

The R&D tax credit is a self-assessment regime. The claim is made on a company's corporation tax return. Companies have 12 months from the end of the accounting period in which the expenditure was incurred to file a claim with the Irish Revenue Commissioners. Companies must maintain contemporaneous records to substantiate their R&D tax credit claim. A company's records must be sufficient to show that the claimed activities took place and that they meet all aspects of the definition of R&D activities. The records maintained by companies are not required to be submitted to the Irish Revenue Commissioners unless formally requested.

8. Statutory reference

- ▶ Statutory reference: Section 765, Section 766, Section 766A, Section 766B, Sections 769G-769R, Section 291A Taxes Consolidated Acts 1997
- ▶ Year of statutory regime for R&D tax credit: 1 January 2004
- ▶ Year of statutory regime for IP regime: 7 May 2009



Israel



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This chapter is based on information current as of February 2019.

EY contacts:

Itay Zetelny
itay.zetelny@il.ey.com
+972 3 6276181

Sigal Griba
sigal.griba@il.ey.com
+972 3 6278250

In December 2016, the Israeli Parliament's Finance Committee approved amendments that introduced an innovation box regime for intellectual property-based companies and enhanced tax incentives for certain industrial companies. The new provisions entered into force on 1 January 2017.

1. Overview

In recent years, the Israeli Ministry of Economy and Industry has expanded the financial support package that is offered to certain companies as part of various national programs defined by the Ministry. On 1 January 2011, a significant reform was introduced to the Law for the Encouragement of Capital Investments, 1959 (the Investment Law)¹ that materially changed the financial support and assistance opportunities prescribed under the Investment Law. Additionally, in December 2016, the Israeli Parliament's Finance Committee approved amendments to the Investment Law that introduced an innovation box regime for intellectual property (IP)-based companies and enhanced tax incentives for certain industrial companies. The new innovation box regime, which entered into force on 1 January 2017, was tailored by the Israeli Government to a post-base erosion and profit-shifting world and is designed to encourage multinationals to consolidate IP ownership and profits in Israel along with existing Israeli research and development functions.

Other incentive opportunities are prescribed under the Law for the Encouragement of Research, Development and Innovation in the Industry, 1984 (the Innovation Law). R&D incentives are controlled by the Israel Innovation Authority (IIA), which is part of the Ministry of Economy and Industry. Tax benefits are controlled by the Israel Tax Authority.

¹ The Investment Law's objective is to attract capital to Israel and encourage economic initiatives and investments by foreign and local investors. Industrial companies, including technology and software companies and R&D centers, generally are eligible for tax incentives under the Investment Law, subject to meeting certain operating and export requirements.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input checked="" type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Preferred Enterprise/Special Preferred Enterprise status	Innovation box regime (Preferred Technology Enterprise/Special Preferred Technology Enterprise status)	Additional tax benefits (including Angels Law*)	Employment grants	R&D, innovation and technology collaboration grants	Investment grant
Types of incentives	▶ Reduced tax rates/preferable tax rates	▶ Reduced tax rates/preferable tax rates	▶ Deduction of investment cost	▶ Cash grants	▶ Cash grants	▶ Cash grants

* Although not based upon scientific analysis, EY clients report that the Angels Law delivers the most beneficial results to investors.

Preferred Enterprise/Special Preferred Enterprise status

Description of benefits

Under the reform of the Investment Law that took effect on 1 January 2011, a new tax incentives regime, the Preferred Enterprise/Special Preferred Enterprise program, replaced the Beneficiary Enterprise program (which itself replaced the Approved Enterprise program as a result of amendments to the Investment Law that took effect on 1 April 2005). To qualify as a Preferred Enterprise or Special Preferred Enterprise, a company must be an industrial company registered in Israel and be "internationally competitive," i.e., having export capability (for specific eligibility criteria, see Section 3).

Companies that qualify for Preferred Enterprise status are entitled to a reduced corporate tax rate with respect to their preferred income (as defined under the Investment Law) as follows:

Year	Companies located in Development Area A	Companies located in rest of the country
2011-12	10%	15%
2013	7%	12.5%
2014-16	9%	16%
2017 onward	7.5%	16%

Companies that qualify for Special Preferred Enterprise status are entitled to a reduced corporate tax rate of 5% in Development Area A and a rate of 8% in the rest of the country with respect to all preferred income for a period of 10 years. After 10 years, the Preferred Enterprise status tax rates apply, unless the company has a new investment program that qualifies it again for Special Preferred Enterprise status.

In addition to a reduced corporate tax rate, companies that qualify for Preferred Enterprise/Special Preferred Enterprise status will be entitled to investment grants (for companies located in Development Area A), accelerated depreciation and reduced withholding tax rates on dividend distributions from preferred income as follows:

- ▶ Distributions to an Israeli-resident company – there is a withholding tax exemption.
- ▶ Distributions to a foreign company or individual – the withholding tax rate is 20%, subject to an applicable double tax treaty.
- ▶ Tax-exempt earnings from previous programs – the withholding tax rate is subject to the Investment Law's transition provisions.

A special withholding tax provision has been introduced for Special Preferred Enterprises. From 1 January 2017 through 31 December 2019, a 5% withholding tax rate applies to dividends paid to a foreign parent company from preferred income.

Companies that perform R&D services for a foreign resident may be able to enjoy the tax benefits available under the Preferred Enterprise/Special Preferred Enterprise program. Qualification is subject to approval from the IIA and compliance with other conditions prescribed in the Investment Law.

Guidelines around incentive applications

Eligible companies may claim the incentive by submitting relevant documentation with their tax return, or by applying for an advance ruling from the Israel Tax Authority.

As set in Amendment 73 to the Law, Preferred Enterprise must apply the nexus formula, according to the transitional provisions.

Innovation box regime (Preferred Technology Enterprise/Special Preferred Technology Enterprise status)

Description of benefits

Two new R&D incentive tracks have been created by the innovation box regime: Preferred Technology Enterprise and Special Preferred Technology Enterprise (a Preferred Technology Enterprise that is part of a group with global consolidated revenue over ILS10 billion). See Section 3 regarding the Preferred Technology Enterprise terms and conditions.

A Preferred Technology Enterprise will enjoy the following benefits:

- ▶ A reduced corporate tax rate of 12% (if the company is located in Development Area A, the tax rate is further reduced to 7.5%). The reduced rates will apply only to the portion of IP developed in Israel, according to the nexus approach.
- ▶ A reduced capital gains rate of 12% for new IP acquired from a foreign company after 1 January 2017 at a minimum cost of ILS200 million (please note that a ruling is required).

- ▶ A reduced withholding tax rate of 4% on dividends distributed to a “qualifying company” (i.e., a foreign company that holds at least 90% of the Preferred Technology Enterprise’s shares). For dividends distributed to a non-qualifying company, a withholding tax rate of 20% applies, subject to an applicable double tax treaty.

A Special Preferred Technology Enterprise will enjoy the following benefits:

- ▶ A reduced corporate tax rate of 6%. This rate will apply only to the portion of IP developed in Israel, according to the nexus approach.
- ▶ A reduced capital gains rate of 6% for new IP developed or acquired from a foreign company after 1 January 2017 (please note that a ruling is required).
- ▶ A reduced withholding tax rate of 4% on dividends distributed to a “qualifying company” (i.e., a foreign company that holds at least 90% of the Special Preferred Technology Enterprise’s shares). For dividends distributed to a non-qualifying company, a withholding tax rate of 20% applies, subject to an applicable double tax treaty.

	Preferred Technology Enterprise		Special Preferred Technology Enterprise
	Companies located in Development Area A	Companies located in rest of the country	
Corporate tax rate	7.5%	12%	6%
Withholding tax rate	20%	20%	20%
Withholding tax rate on dividends distributed to a “qualifying company”	4%	4%	4%

Guidelines around incentive applications

The regulations, published on June 2017, set a specific list of required documentation for Preferred Technology Enterprise, which includes documentation regarding the nexus formula, income and expenses related to specific IP and more.

Eligible companies may claim the incentive by submitting relevant documentation with their tax return, or by applying for an advance ruling from the Israel Tax Authority.

Additional tax benefits (including Angels Law)

Description of benefits

- ▶ **R&D expense deduction:** Section 20A of the Income Tax Ordinance enables companies to deduct their R&D expenses (i.e., expenses incurred in scientific research in industry, agriculture, transportation or energy) on a current basis in the tax year in which they were paid, provided that the IIA confirms that the expenses qualify for the deduction. Expenses incurred in scientific research that are not approved by the IIA are deductible in three annual installments starting from the tax year in which they are paid.
- ▶ **Business asset rollover relief:** Section 104 of the Income Tax Ordinance provides capital gains tax relief to R&D-intensive companies that transfer certain assets to another company to raise capital for R&D activity.
- ▶ **Angels Law:** the so-called Angels Law aims to make it easier for seed-stage companies to raise capital. The law permits individual investors, or individual investors in a partnership under certain conditions, to deduct investments (up to ILS5 million per target) made by 31 December 2019 to a qualifying R&D startup company or target company. The deduction is spread over a three-year period starting with the tax year in which the investment is made. The company should receive an annual approval from the IIA regarding its R&D expenses.
- ▶ **Deduction for the purchase of shares in other R&D companies:** under the Economic Policy Law for 2011-12, a company that purchases shares of a qualifying R&D company may deduct the purchase amount for a period of five years starting from the year following the year of purchase. The aforesaid law prescribes the conditions and limitations for qualifying for the benefit.

Guidelines around incentive applications

Taxpayers must apply for preapproval from the IIA and submit relevant documentation.

Employment grants

Description of benefits

- ▶ **Employment Grant Program for recruitment of additional employees:** this is a program designed for enterprises, either located in national preference areas and/or planning to recruit new employees from populations with low employment rates. The program consists of five schemes, each with a different set of qualifying conditions. The average grant is 20% of the salary cost to the employer (up to a maximum monthly salary of ILS16,000 per employee) for a period of 2.5 years.
- ▶ **Employment Grant Program for High Salaries (R&D Centres):** this is a program designed for enterprises with a consolidated turnover (including a foreign parent company) in excess of ILS25 million, located in national preference areas and planning to recruit 15-100 new employees with a salary cost between the average cost of salary and 2.5 times the average salary in the market. The average grant is 25% of the salary cost to the employer (up to a maximum monthly salary of ILS30,000 per employee) for a period of four years.
- ▶ **“Ogen” employment grants:** this is a program designed for enterprises with a consolidated turnover (including a foreign parent company) in excess of ILS100 million, located in national preference areas and planning to recruit 80-150 new employees with a salary of at least 1.5 times the average salary in the market. The average grant is 25% of the salary cost to the employer (up to a maximum monthly salary of ILS20,000 per employee) for a period of four years.
- ▶ **Employment grants for employers in the National Cyber Arena in Be'er Sheva:** this is a program designed for corporations, including partnerships, that employ (or are considering employing) staff in the field of cybersecurity at the National Cyber Arena in Be'er Sheva. Qualifying companies receive a grant of 20% of their employees' salaries for the first three years (under certain conditions), with the percentage decreasing over the following four years, as follows:

Year	2016	2017	2018	2019	2020	2021	2022
Benefit rate	20%	20%	20%	15%	15%	10%	5%

Additional benefits will be given to corporations that commit to keeping their IP in Israel:

- ▶ For IP stemming from cyber activity in Israel, the corporation is entitled to an additional benefit of 5% per year.
- ▶ Transferring IP held abroad to Israel will increase the bonus by 10% more each year.

The additional benefits are subject to the corporation's commitment to keep the IP in Israel for a further seven years from the end of the benefit period.

Guidelines around incentive applications

The cash grants are applicable for future employment and subject to a governmental budget. An application must be submitted to the relevant Government authorities granting the cash.

Investment grants

Description of benefits

The Investments Law allows companies located in Development Area A cash grants for their capital investment. The grants applicable are 20% of total approved investment plan and up to another 10% for companies located in the northern and southern part of Israel, under certain conditions.

A new protocol recently released sets mitigating conditions for companies that developed innovative products and are looking to establish their manufacturing facility in Israel.

To qualify for grants, a company must receive an approval from the Israeli Investment Authority, be an industrial company registered in Israel and be "internationally competitive," i.e., having export capability.

R&D, innovation and technology collaboration grants

Description of benefits

Under the reform of the Innovation Law that took effect on 1 January 2016, a new authority, the IIA, was established

and replaced the Office of the Chief Scientist as the main Israeli Government body that promotes and supports R&D, innovation and technology collaboration. The IIA provides a variety of practical tools and funding platforms aimed at addressing the dynamic and changing needs of the local and international innovation ecosystems.

As part of this restructuring, the IIA adopted a "client" focused approach by establishing a number of innovation divisions dedicated to a specific target audience, with the goal of developing and delivering solutions to their particular challenges. There are six innovation divisions:

- ▶ Start-Up Division
- ▶ Growth Division
- ▶ Technological Infrastructure Division
- ▶ Advanced Manufacturing Division
- ▶ Societal Challenges Division
- ▶ International Collaboration Division

Each division offers a unique "toolbox" of customized and comprehensive incentive programs designed to address the changing and dynamic needs of the division's primary clients. These divisions likewise serve as a launchpad for successful technology projects, providing entrepreneurs and companies with the most relevant program for them to realize and implement their innovative ideas, develop their products and mobilize private investment.

Start-Up Division

This division offers tools to support the early development stages of technological initiatives. These tools assist entrepreneurs and startup companies in developing their innovative technological concepts at the pre-seed or initial R&D stages, transforming their ideas into reality and reaching significant fundable milestones.

- ▶ **Tnufa Program:** this is a pre-seed fund that supports private entrepreneurs and nascent startups that wish to bring a novel technological idea to proof of concept status and to business feasibility. A grant of up to 85% of the approved budget, with a maximum grant of ILS200,000 for a period of up to two years, is provided, subject to an evaluation of the project's technological and commercial potential, the filing for a patent, building of an initial prototype, drafting of a business plan and initial business development. The grant bears royalties that are contingent on product commercialization.

- ▶ **Early Stage Incentive Program:** this program is designed for pre-seed companies that are looking to develop and promote an innovative technological project and penetrate the market by raising capital from the private sector. A grant of 30% or 50% of the approved budget, with a maximum grant of ILS10 million for a year, is provided. Companies that obtain approval to participate in the program will be given an opportunity to raise the complementary funding needed for the project, up to six months after the date of approval. The grant bears royalties that are contingent on product commercialization.
- ▶ **Incubators Incentive Program:** this program is designed to help entrepreneurs transform an innovative technology idea into a startup company, with the expectation that after the incubation period is over the startup will be capable of raising money from the private sector. A technological incubator provides the entrepreneurs with administrative, technological and business support. Entrepreneurs who wish to participate in the program must apply directly with an incubator operator, who will perform a preliminary screening. If the incubator operator approves the project, it will apply for grant support from the IIA. If the IIA approves, a conditional grant provided as part of this incentive program is 85% of the approved budget, with a budget limit of ILS3.5 million for a period of up to two years or ILS8.1 million for a period of up to three years when part of a biotechnological incubator. No financial investment is required by the entrepreneur, as the supplementary 15% financing is invested by the incubator.
- ▶ **Open Innovation Labs:** this program is designed to incentivize collaborations between technological companies and startups by financing both the construction of a unique technological infrastructure (i.e., an innovation lab) and the ongoing operation of the innovation lab, with an emphasis on advanced production techniques in fields such as automotive, robotics, three-dimensional printing, advanced materials, FinSec and plastics. The companies will receive from the IIA a three-year license, with the possibility for an additional three years, and will receive funding of up to ILS4 million for the lab's establishment (33% of the costs, 50% in periphery) and up to an additional ILS500,000, as 50% of the approved budget, for yearly expenses of the ongoing operating activities. The startup companies will be provided grants of up to 85% of their approved budget (up to ILS1 million) for one year, in addition to comprehensive assistance from the lab team, including physical space and infrastructure, administrative services, technological and business guidance, access to strategic partners, additional investors and potential customers. Non-Israeli corporations can participate in this program.
- ▶ **Renewable Energy (Cleantech) Technology Center:** the center supports technological ventures and R&D projects starting from the stages of applied academic research and early stage entrepreneurship for enabling testing and trials for products undergoing development and demonstration. The center is operated by entities from the private sector, composed of strategic investors and an academic institute. The goal of this program is to support companies and entrepreneurs interested in development of innovative technology in the fields of renewable energy and energy efficacy.

The support is carried out via three sub-programs:

 - ▶ **Primary sub-program:** funding and support of applied R&D activities, via cooperation between academia and industry – receiving financial support of 66% of the approved R&D expenditures for an activity period of up to two years. The participants in this incentive program are exempt from paying royalties to the Authority.
 - ▶ **Advanced sub-program:** funding and support of technological projects of beginning companies in the pre-seed and seed stages – financial support of 60% or 85% of the approved R&D expenditures by the Authority, and supplementary financing up to 100% of the approved R&D expenditures by the center's licensee for an activity period of up to two years. The maximum budget is ILS2.5 million, and the grant is repaid to the IIA by the payment of royalties (only if the project reaches commercialization stage). The grant bears royalties that are contingent on product commercialization.
 - ▶ **Testing areas sub-program:** funding and support of demonstrations and experiments in the fields of renewable energy, through facilitating of testing areas and required infrastructure – financial support of 50% of the approved R&D expenditures for an activity period of up to two years, with no royalties payment obligation.

Growth Division

This division offers incentive programs that promote technological innovation of mature and growth companies. These programs help companies preserve and promote their competitiveness and technological leadership, as well as increase their growth rates and potential.

- ▶ **R&D Fund for Support of Competitive Research and Development:** this is Israel's main incentive program for supporting the development of competitive products and innovative processes for the upgrading of existing

technologies. The grants are not limited in amount but companies whose annual development project budget exceeds ILS15 million are required to submit their application for financial aid at the end of the current year (November or December, depends on the budget) for financing projects in the following year. Projects are measured according to several criteria, the principal of which are the level of technological innovation, business potential and the applicant's capability. The duration of an approved development project is generally up to one year, and the scope of support ranges between 20% and 50% of the approved development budget. The grant bears royalties that are contingent on product commercialization.

- ▶ **Generic R&D Arrangement for Large Companies:** this program is designed to encourage and support the long-term R&D plans of large Israeli companies that invest in the development of infrastructural knowledge that can be implemented in a series of products over a long period of time. Qualifying companies receive a grant of 20%-50% of the approved R&D expenditures for long-term R&D plans. In addition, the R&D plans under the arrangement are exempt from royalties.
- ▶ **Encouragement of R&D for Space Technology:** this program (a joint initiative of the IIA and the Israel Space Agency) is designed to encourage R&D in finding space-related technological solutions, such as the development or upgrading of space-related products. Applicants are eligible for grants of up to 85% of approved R&D expenditures for a period of 36 months.
- ▶ **R&D and pilot programs:** the incentive programs enable Israeli technology companies (early stage, medium or big companies) to receive support in their R&D programs or pilot programs (a trial for assessing feasibility/proving the value of an existing technology in a work surrounding that simulates the target market) in selected fields, according to calls for proposals and submission deadlines that are published by the IIA. The relevant fields for such programs are: transportation, environmental protection, digital health, space technologies, cybersecurity, agrotech, energy efficiency and reduction of greenhouse gas emissions. The execution of the pilot programs are the results of collaboration between the IIA and the various Government ministries that enables the focus of government effort in selected fields, including: funding support for high-risk initiatives; supplementary support of regulatory entities with the regulatory requirements for pilot tests; access to government-owned trial sites and facilities; significant impact on the growth of Israeli companies; and the creation of market influence from technological application in further levels of the local innovation ecosystem. The participating companies

will receive financial support of between 20%-75% of the approved pilot's expenditures, depending on the field of the project and its potential impact. The grant bears royalties that are contingent on product commercialization.

- ▶ **Establishment of Multinational Companies' R&D Centres in the Fields of Biotechnology and Health (pilot):** this incentive program enables large foreign industrial corporations operating in the fields of biotechnology or health to establish or expand their Israeli R&D and technological innovation operations as well as their management and global value chain operations in these fields. The program also aims to increase the number of personnel employed by the company in Israel, including non-R&D employees. The submitting company receives a concession to submit for a period of five years with a financial support of up to 20%-40% of approved R&D expenditures. The R&D plans will be approved in advance for a period of up to three years. R&D centers operating in development areas are entitled to additional support of 10%. R&D centers operating in the Gaza vicinity area are entitled to additional support of 25%. Supported R&D centers will not be required to pay royalties to the Innovation Authority.

Technological Infrastructure Division

This division focuses on collaboration between industry and academia to produce advanced technologies and innovative products. The incentive programs offered by this division promote cooperation, exchange of knowledge and experience and the development of generic groundbreaking knowledge by an integrated group of researchers from academia and industry.

- ▶ **MAGNET instruments:** the MAGNET (acronym in Hebrew for Generic Pre-Competitive R&D) program is designed to encourage collaboration among industrial companies, and between companies and researchers from academic institutions, through several instruments that deal with innovative technologies. MAGNET instruments include:
 - ▶ **MAGNET Consortia** – this instrument supports the formation of consortia consisting of industrial companies and academic institutions to jointly develop generic, pre-competitive technologies. Industrial companies are granted up to 66% of their approved budget, and academic institutions are granted up to 100% (80% as a grant and 20% from the industrial companies in the consortium). The companies are exempt from paying royalties for the repayment of grant funds transferred to them through the consortium. The duration of a MAGNET consortium is three years.

- ▶ **MAGNETON** – this instrument promotes technology transfer from academic research institutions to industrial companies for the development of breakthrough products. Grants are given of up to 66% of the approved budget (up to a total of ILS3.4 million for a period of 24 months). The grant recipients are exempt from paying royalties for repayment of grant funds transferred to them.
- ▶ **Directing Academic Knowledge (former Kamin/ Nofar):** this program, which seeks to bridge the gap between academic knowledge and industry needs, provides support to academic research groups with technologically feasible ideas that are not mature enough for support from the MAGNETON program but need financing in the initial applied research stage. The academic research group is partnered with an industrial company that sees business potential in the project. The goal is to reach significant milestones by the end of the project so that the company can sign a technology commercialization agreement with the research institution. Grants under this program constitute the following: without accompanying corporation, a grant of 75% or 85% (maximum of NIS440,000 per year for a single research group or up to NIS660,000 per year for a collaboration between research institutions); with accompanying corporation, a grant of 90% or 80% of the approved budget (maximum of NIS550,000 per year for a single research group or up to NIS700,000 per year for a collaboration between research institutions). The accompanying corporation serves as a professional guidance partner and participates in financing at a rate of 10% of the project's costs. Projects dealing with drug development will be able to apply for three years of funding instead of two years. Supported programs gain exemption from royalties.
- ▶ **Leveraging Military, Defense and Commercial R&D for Dual-Use Technologies (MEIMAD):** this program is designed to encourage the development of dual-use technologies (i.e., technology that has military and civilian applications) that can benefit the country's national security and at the same time form a basis for potential global civilian and military marketing. The maximum grant per project is ILS5 million, and the grant rate is 50% to 66% for industrial companies and 50% to 90% for research institutions.
- ▶ **Users' Association:** designed for companies engaged in R&D and interested in collaboration in the distribution and implementation of new technologies, this program allows joint activity of a group of industrial corporations as part of the Advanced Technologies Users' Association. The goal of this program is to increase the knowledge and skills of companies through cooperation with other

companies. The association, as a legal entity, receives a grant of up to 66% of the approved expenses. The members of the association complete this sum to 100% of the association's expenses and planned budget. There are no royalty payments under this program.

Advanced Manufacturing Division

This division focuses on promoting the implementation of R&D and innovation processes in companies in the manufacturing sector, in order to strengthen their global competitiveness and improve productivity across a variety of industrial sectors. The programs offered under this division aim to boost manufacturing-oriented industries and encourage the owners of mainly small and medium-sized factories and plants to develop products, technologies and manufacturing processes to realize these goals.

- ▶ **Encouraging Support in Traditional Industries (MOFET):** this program is designed for companies in the traditional industries (such as plastic, rubber, metal, glass, ceramics, hardware, textile, wood, leather, paper, metalwork and food) that have a relatively low investment in R&D and are interested in upgrading their coping capacity in the local and global markets by conducting innovative R&D. These companies are eligible for additional funded expenses that are not approved under the R&D fund for support of competitive research and development and are defined by the nature of their industry (such as manufacturing expenses). Eligible companies will receive a grant of up to 50% of the approved budget.
- ▶ **R&D Preparatory Incentive Program for Companies in the Manufacturing Industry:** to assist companies from the manufacturing industry sectors with no experience in carrying out R&D activities and innovation processes, or companies that require focus and guidance with their R&D activities, the IIA established this incentive program. The preparatory incentive program has four secondary tracks: Basic Support Track (assist in formulating new products or processes), Technological Feasibility Examination Track, Developing Solutions for Flaws in the Production Process and Improved Production Process. A technology consultant will assist the applicant. The participating companies get partial funding for their counseling expenses (66% of the approved budget, maximum budget is ILS75,000 (or 75% of 100,000 budget in area A). The support includes the consultant's fee, market surveys, technology and patents, laboratory tests, purchase of materials and specific equipment, additional technology consultants' fees and other miscellaneous expenditures related to the approved project.

Societal Challenges Division

This division focuses on improving productivity through technological innovation in the public sector and social organizations. This division is also responsible for R&D aimed at dealing with social and environmental challenges, including the diversification of the population employed in the high-tech industry and the creation of appropriate technological solutions for disadvantaged populations in Israel and abroad.

- ▶ **Support in R&D of Assistive Technology for the Disabled:** this program encourages R&D of unique technological solutions for people with special needs (who collectively represent up to 5% of the population), in order to improve their quality of life and better integrate them into society, the community and the labor market. Nonprofit organizations receive support of 85% of approved expenses for R&D, with no repayment of royalties. Commercial companies receive support of 65% of the approved budget as a conditional grant (royalties that are contingent on product commercialization). The conditional grant is up to a total of ILS900,000 per year.
- ▶ **Grand Challenges Israel (GCI) Incentive Program:** this program, which operates as part of the Grand Challenges in Global Health international initiative, is also partnered by Israel's Agency for International Development Cooperation and the National Economic Council of the Prime Minister's Office. The program supports R&D focused on the humanitarian health challenges that exist in developing countries, with products that also have commercial potential in developed countries. It provides financing of up to 90% of the approved budget, up to ILS500,000 with the exemption from the repayment of royalties.
- ▶ **Digital Innovation in Industry Focused on Public Sector Challenges:** this program, which the IIA launched as part of the Ministry for Social Equality's "Digital Israel" project, serves as an additional tool to encourage innovation through the preliminary purchase of innovative technological solutions. Applications will be examined according to the technological innovation criteria and the response to the needs defined as prioritized by the Digital Israel Fund. There are two benefit tracks: (i) preliminary R&D track, which provides support of up to 90% of the approved budget or a conditional grant of ILS300,000 for a period of 12 months, and (ii) R&D track, which provides support of up to 50% of the approved budget or a conditional grant of ILS4 million for a period of 12 months. Applications may only be submitted when there is a call for proposals. The grant bears royalties that are contingent on product commercialization.

- ▶ **Incentive programs for women entrepreneurs, Ultra Orthodox and minorities:** the goal of this program is to provide investors with a positive signal and to create an incentive for investment in early stage companies owned by minority or Ultra-Orthodox entrepreneurs. The program is suitable for companies with at least 33% of their shares owned by an entrepreneur from the Haredi or minorities sector. The grant is up to 75% of the project's approved budget (up to ILS2.5 million) in the first year and 70% (up to ILS4.5 million) in the second year. A company interested in a higher budget may submit under the Early Stage Companies standard program, a budget of up to ILS10 million at a grant rate of 50% or 30% of the approved budget. The grant bears royalties that are contingent on product commercialization.

International Collaboration Division

This division is responsible for creating bridges to new international markets, building platforms for cooperation in innovative R&D and attracting strategic foreign stakeholders to Israel, as well as creating competitive advantages for the Israeli industry in the global market. Incentives are offered through bilateral parallel support programs, in which each party offers financing through existing programs; binational funds that finance joint R&D projects of Israeli and foreign companies; programs jointly funded by the IIA and Horizon 2020, the EU's research and innovation program for 2014-20; and programs jointly funded by the IIA and other European mechanisms that are not directly funded under Horizon 2020.

- ▶ **Bilateral parallel support programs:** the Israeli Government has concluded more than 40 binational R&D agreements with countries, states, provinces and regions that enable Israeli companies to enter into joint R&D projects with foreign companies. The approval and implementation process is carried out by the appropriate authorities in Israel and the corresponding foreign authority, and the project support comes from parallel funding organizations in Israel and the foreign authority. The support includes grants of up to 50% of the approved R&D budget, or in accordance with the incentive program applicable to a joint project. The support is repaid through royalties that are contingent on product commercialization.
- ▶ **Binational funds:** the IIA operates binational funds, whereby Israel and a foreign country allocate dedicated funds to finance joint R&D projects between companies in Israel and in the partner country. The binational funds operate under provisions set out in bilateral agreements. There are currently five binational funds:

- ▶ **BIRD (Israel-US Binational Research and Development) Foundation** – the foundation encourages collaborations between the US private sector and industrial companies in Israel by offering support of up to 50% of the product's development and commercialization costs, up to a maximum of US\$1 million. In addition, BIRD Energy provides support in financing the expenses of joint Israel-US renewable energy development projects sponsored by the US Department of Energy, the Israeli Ministry of National Infrastructures and the BIRD Foundation.
 - ▶ **CIIRDF (Canada-Israel Industrial R&D Foundation)** – the foundation aims to promote and sponsor R&D collaborations between private sector companies in Canada and Israel. This support consists of a grant of up to 50% of joint R&D costs, up to a maximum of CAD800,000. The grant bears royalties that are contingent on product commercialization.
 - ▶ **KORIL (Korea-Israel Industrial R&D Foundation)** – the foundation encourages R&D collaborations between Israeli and South Korean corporations. Financial aid for joint R&D projects is provided through three categories: technological feasibility studies, full-scale projects and mini-scale projects. Full-scale projects are sponsored at a rate of up to 50% of joint R&D expenses, up to a ceiling of US\$1 million. The grant bears royalties that are contingent on product commercialization.
 - ▶ **SIIRD (Singapore-Israel Industrial R&D Foundation)** – the foundation aims to promote and support joint industrial R&D ventures between Singapore and Israeli companies by financing up to 50% of the joint venture's approved costs, up to a ceiling of US\$1 million (and not more than US\$500,000 in one year). The grant bears royalties that are contingent on product commercialization.
 - ▶ **I4F (India-Israel Industrial R&D and Technological Innovation Fund)** – the foundation aims to promote, facilitate and support joint industrial R&D projects between companies from India and Israel that would lead to co-development and commercialization of innovative technologies benefiting both countries. The Israel Innovation Authority will support a minimum of US\$250,000 to a maximum of US\$1.25 million per project or 50% of the Israeli project cost, whichever is lower. The Government of Israel provides financial support of up to 50% in the project. The grant bears royalties that are contingent on product commercialization.
 - ▶ **Horizon 2020:** Israel is an “associated country” to the EU's Horizon 2020 program. Associated country status enables Israel to participate in the Horizon 2020 program under the same conditions as EU Member States. Applications to apply for funding must comply with the requirements set out in the calls for proposals published on the website of the Israel-Europe R&D Directorate (ISERD). For further details on this program, please see the chapter on the EU's Horizon 2020.
- The IIA and the Horizon 2020 are funding several collaboration programs:
- ▶ **EUREKA:** Israel is a member of EUREKA, an intergovernmental network that supports pan-European market-oriented industrial R&D and innovation projects. The network facilitates the international coordination of national R&D and innovation programs, and provides support to companies, research centers and universities. The projects sponsored by the network enjoy access to national financial resources. Israeli companies that take part in this program are entitled to receive royalty-bearing R&D grants from the IIA of up to 50% of an approved budget. The EUREKA network has over 40 member countries and provides support through these instruments:
 - ▶ **EUREKA Network projects** – supports collaborations involving at least two participants from the network. Israeli companies that take part in this program are entitled to receive royalty-bearing R&D grants from the IIA, constituting up to 50% of the approved budget.
 - ▶ **Eurostars** – supports collaborations between small and medium-sized enterprises (SMEs):
 - The SME Instrument offers small and medium-sized businesses the following:
 - Phase I (optional) – business innovation grants for feasibility assessment purposes: EUR50,000 (lump sum) per project (70% of total cost of the project). There are no royalty payments under this program.
 - Phase II – business innovation grants for innovation development and demonstration purposes: an amount in the indicative range of EUR500,000 and EUR2.5 million (70% of total cost of the project as a general rule). There are no royalty payments under this program.
 - ▶ **Clusters** – supports long-term strategically significant projects involving large companies that develop innovative technologies in major high-technology domains.

- ▶ **ECSEL** – the Electronics Components and Systems for European Leadership program supports consortiums in the fields of health, energy, transport, environment, manufacturing, cyber, society, electronics components, nano-electronics, embedded systems, smart devices and more. The consortiums in this program are relatively large (six partners and more), and two budgets are to be submitted (for the EU and for the national funding).
- ▶ **Fast Track to Innovation (FTI)** – FTI supports actions undertaking innovation from the demonstration stage through to market uptake, including activities such as piloting, test-beds, systems validation in real-world working conditions, validation of business models, pre-normative research, and standard setting. The maximum EU contribution per action is EUR3 million (funding rate: 70% for profit entities, 100% for nonprofit entities. There are no royalty payments under this program).

Guidelines around incentive applications

The cash grants are applicable for future investments. An application must be submitted to the relevant Government authorities granting the cash.

3. Eligibility requirements

Preferred Enterprise/Special Preferred Enterprise status

A Preferred Enterprise is an “industrial enterprise” whose main activity in the relevant tax year is industrial activity that is competitive and contributes to Israel’s gross domestic product (i.e., no more than 75% of total income is from sales on any one market in the year concerned, or at least 25% of total income is from sales to a market with at least 15 million residents).

A Special Preferred Enterprise meets the requirements of a Preferred Enterprise and satisfies the following criteria:

- ▶ The company’s total annual income in Israel is at least ILS1 billion.
- ▶ The combined balance sheet of the company is at least ILS10 billion.
- ▶ The company’s business plan includes one of the following:
 - ▶ Investment in productive equipment of at least ILS400 million in a priority area or ILS800 million in the rest of the country over a three-year period
 - ▶ Investment in R&D of at least ILS100 million in a priority area or ILS150 million in the rest of the country
 - ▶ Employment of at least 250 employees in a priority area or 500 employees in the rest of the country

Innovation box

A Preferred Technology Enterprise must meet all terms and conditions, as set forth:

1. The company must have incurred at least 7% of the last three years’ turnover in R&D (or the company had ILS75 million in R&D expense per year over the last three years).
2. The company must meet one of the following conditions:
 - ▶ At least 20% of company employees must be employees whose total salary is classified under R&D expenses (or else, have at least 200 R&D employees).
 - ▶ Venture capital investment of at least ILS8 million was previously made in the company.
 - ▶ It had an average annual growth over the three-year period prior to the tax year of at least 25% in sales, as long as its total turnover during each year exceeded ILS10 million.
 - ▶ It had an average annual growth over the three-year period prior to the tax year of at least 25% in number of employees, as long as during each year its total number of employees was over 50.

Companies not meeting conditions 1 and 2 above may be considered a qualified company under the IIA’s discretion.
3. The company must be an “internationally competitive enterprise,” i.e., having export capability, as set above.

Companies not meeting the above conditions may still be considered as a qualified company under the IIA’s discretion.

Additional tax benefits

- ▶ **Deduction for the purchase of shares in other R&D companies:** the following conditions must be satisfied:
 - ▶ The date of acquisition is between 1 January 2011 and 31 December 2019.
 - ▶ The acquisition is at least 80% of the means of control.

- ▶ The purchasing company and the acquired company are not related companies.
- ▶ The Israeli Tax Authority approved that tax avoidance or an inappropriate tax reduction are not the main objective of the acquisition.
- ▶ During each tax year in the deduction period:
 - ▶ The purchasing company's control and management are exercised from Israel, and the company complies with the conditions of a "purchasing company."
 - ▶ The acquired company's control and management are exercised from Israel, and the company complies with the conditions of a "qualifying company."

Employment grants

- ▶ **Employment Grant Program for recruitment of additional employees:** a company must meet certain conditions, which vary from one scheme to another. Such conditions include: (1) a minimum number of new employees (between 2 to 5), (2) a minimum average salary cost (70%-75% of national average salary, or ILS10,000), (3) new employees mix (at least 50%, 70% or 90% of new employees are from populations with low employment rates), and (4) new employees' place of residence (all new employees who are not from populations with low employment rates must live in national preference areas, or at least 60% of new employees live in the northern district).
- ▶ **Employment Grant Program for High Salaries (R&D Centres):** a company must have a consolidated income turnover (including a foreign parent company) in excess of ILS100 million, be located in national preference areas and planning to recruit 15-100 new employees with a salary cost of at least 2.5 times the average salary in the market.
- ▶ **"Ogen" employment grants:** a company must have a consolidated income turnover (including a foreign parent company) in excess of ILS100 million, be located in national preference areas and planning to recruit 80-150 new employees with a salary of at least 1.5 times the average salary in the market.
- ▶ **Employment grants for employers in the National Cyber Arena in Be'er Sheva:** the grant will be given with respect to salaries for which the employee meets two conditions: (i) at least 60% of his or her working hours are carried out at the National Cyber Arena, and (ii) at least 80% of his or her working hours are in cyber activity. To qualify for the employment grant program, a corporation must meet the following conditions:
 - ▶ It maintains cyber activity.

- ▶ The cyber activity takes place at the National Cyber Arena in Be'er Sheva.
- ▶ The cyber employees are working at least at 50% employment capacity.

R&D, innovation and technology collaboration grants

Start-Up Division

- ▶ **Tnufa Program:** eligible entrepreneurs are those who are (i) a private entrepreneur, or a group of entrepreneurs, (ii) Israeli residents who are permanently residing in Israel, and (iii) are at least 18 years of age at the time of the initial request. Eligible companies are those that are (i) registered in Israel and owned by private individuals, (ii) at a fairly early stage, meaning they have not started selling their product or service and have not received a significant investment yet, (iii) operate in a technological field and develop an innovative product or service, or a product or service that significantly improves an existing one, and (iv) have not received funding from the IIA in the past.
- ▶ **Early Stage Incentive Program:** this program is open to new Israeli startup companies (preferential terms are offered to companies held by minority/Orthodox entrepreneurs). The target companies for this program are companies from all industrial sectors that raised up to US\$10 million and with revenues of up to US\$1 million in the previous year.
- ▶ **Incubators Incentive Program:** this program is open to private entrepreneurs and new Israeli startup companies.
- ▶ **Open Innovation Labs:** this program is for entrepreneurs and startups with an innovative idea in the relevant fields who are interested in establishing proof of concept and developing their idea into a product, as well as multinationals and corporations interested in adopting open innovation through innovation labs and in supporting startups by making their unique technological infrastructure accessible (especially infrastructure not currently accessible in Israel). Non-Israeli corporations can participate in this program.

Growth Division

- ▶ **R&D Fund for Support of Competitive Research and Development:** this program is open to all businesses in Israel and all their branches, at all stages of R&D.
- ▶ **Generic R&D Arrangement for Large Companies:** eligible entities are Israeli companies that have annual revenue exceeding US\$70 million, with total R&D expenditures

that are more than US\$20 million (or, alternatively, Israeli companies that employ at least 200 employees directly in R&D).

- ▶ **Encouragement of R&D for Space Technology:** eligible entities are: (i) companies that develop products in the field of space technology intended for installation in satellites or ground stations for management of satellite operations, (ii) companies that develop products in the field of space technology intended for reception or transmission of data from satellites, or (iii) companies that develop equipment for calibration and testing of products in the fields of space technology intended for installation in satellites, or related to the operation of the satellites, including installation of different versions of the satellites intended for export sale.

Technological Infrastructure Division

- ▶ **MAGNET Consortia:** eligible entities are (i) Israeli manufacturing companies developing competitive products and simultaneously seeking to develop innovative technologies that can be used as a basis to develop a new and advanced generation of products, or (ii) Israeli academic research groups engaged in scientific or technological research that are seeking to promote applied research as part of a consortium, as well as to collaborate with the industry and study the market needs.
- ▶ **MAGNETON:** eligible entities are (i) Israeli industrial companies seeking to incorporate new technologies developed in academia and striving to develop a new product or to improve an existing product based on recent studies, relevant to their field of activity, or (ii) academic research groups from Israeli research institutes and think tanks approved by the Technological Infrastructure Division that seek to carry out innovative and original applied research in collaboration with a leading company interested in the relevant technology. The research should be focused on technological feasibility for the industry and the applying research institute should be the sole owner of knowledge in the project.
- ▶ **NOFAR:** eligible entities are academic research groups in Israel operating as part of a higher education or research institution that seek to carry out applied research that is not mature enough to be supported by the industry or the MAGNET program.
- ▶ **MEIMAD:** eligible entities are SMEs (up to US\$50 million in annual sales) and university research institutes and research centers.

Advanced Manufacturing Division

- ▶ **Encouraging R&D in Traditional Industries:** eligible entities are companies in “traditional industries,” as defined by the Israel Central Bureau of Statistics. They include: mining, non-metal minerals, rubber and plastic, basic metal and metal products, food, beverages and tobacco, textile, garment, leather products, paper, print and wood products.

Societal Challenges Division

- ▶ **Support in R&D of Assistive Technology for the Disabled:** this program is for Israeli companies and nonprofit organizations interested in developing technologies that serve groups with physical, mental or cognitive disabilities, who collectively represent 0.25% to 5% of the population.
- ▶ **GCI:** this program is for companies and entrepreneurs in the areas of health, security and food, as well as entrepreneurs targeting markets in developing countries.
- ▶ **Technological Innovation in Industry Focused on Public Sector Challenges:** this program is for Israeli companies or private Israeli entrepreneurs seeking to develop, manufacture and commercialize products, services, and processes that will support the program’s goals.

International Collaboration Division

- ▶ **Bilateral parallel support programs:** these programs are aimed at technological industrial companies from all industry sectors that wish to develop or upgrade the development of products, services or manufacturing processes with an industrial company from a foreign country, as well as Israeli technology companies and startups seeking to create strategic alliances and partnerships with companies and organizations abroad in order to expand their operations, gain access to innovative R&D infrastructure abroad, locate additional sources of financing, break into new markets and benefit from access to knowledge and technology available abroad. The support provided is subject to the provisions of the Innovation Law applicable to the relevant incentive program, and in accordance with the various bilateral agreements. The criteria for submitting applications to the bilateral programs are provided in the specific calls for proposals.
- ▶ **Binational funds:** the funds are aimed at the same entities as those targeted in the bilateral parallel support programs. The support provided is subject to the provisions set out in the bilateral agreement establishing the fund, including the following:

- ▶ The product, service or process developed within the framework of cooperation must be innovative, made for civilian purposes, intended for commercialization and have benefit for both economies.
- ▶ The partner companies must have the resources and R&D capabilities required to implement and complete the project, as well as the funds available to finance their proportionate share of the project.
- ▶ Research institutes and academic entities are allowed to participate as subcontractors, but not as primary partners (except in the SIIRD fund, where the Singaporean primary partner can be a research entity).
- ▶ The partner companies must demonstrate that the intended cooperation is necessary for the development of value-added technology by, among others, sharing resources, infrastructures, commercial relationships and strategic innovation of proprietary technologies to new markets.
- ▶ The partner companies are required to sign agreements that determine the rights to the IP that will be jointly developed and detail the commercialization of the project's outcome.
- ▶ **Horizon 2020:** eligibility conditions for participating in this program are governed by Regulation (EU) No. 1290/2013 of the European Parliament and of the Council of 11 December 2013. In general, the program is open to any company or legal entity that would benefit from cooperation in European R&D. The specific eligibility criteria and requirements for applying to a Horizon 2020 program are set out in the calls for proposals published on the ISERD website.
- ▶ **EUREKA Network projects (a EUREKA instrument):** projects require at least two partners from two different EUREKA countries. Partners can be of any type: SMEs, large companies, research institutions and universities.
- ▶ **Eurostars (a EUREKA instrument):** applicants must satisfy the following criteria:
 - ▶ The project leader is an R&D-performing SME.
 - ▶ The project leader is from a Eurostars country.
 - ▶ The project contains at least two legal entities that are independent of one another.
 - ▶ The consortium is a partnership hosted by at least two different Eurostars countries, where at least one of the countries must be a EUREKA member country.
 - ▶ The budget (excluding subcontracting) of the R&D-performing SME(s) located in Eurostars countries is equal to at least 50% of the total project budget.
- ▶ No single entity is responsible for more than 75% of the project budget.
- ▶ The participant(s) from a given country may not be responsible for more than 75% of the total project budget.
- ▶ Market introduction is within 24 months of the project's completion.
- ▶ Market introduction is within 24 months of the project's completion.
- ▶ The project meets the EUREKA criteria and has a civilian purpose.
- ▶ Each of the participating organizations in the consortium is a legal entity in the host country.
- ▶ None of the participating organizations have convictions for fraudulent behavior, other financial irregularities or illegal business practices.
- ▶ None of the participating organizations have been declared bankrupt or are in the process of being declared bankrupt.
- ▶ **Clusters (a EUREKA instrument):** open to all research, development and innovation stakeholders. The specific eligibility criteria are set out in the calls for projects launched annually by the various clusters.

4. IP and jurisdictional requirements

For incentives that are subject to the Innovation Law, the IP must be owned by the Israeli company with some adjustments in programs that involved non-Israeli corporations. For innovation box incentives, the Israeli company must have a preferred intangible asset.

5. Technology or innovation zones

R&D incentives are offered through the National Cyber Arena in Be'er Sheva (see "Employment grants" in Section 2).

6. Role of governmental bodies in administering incentives

R&D incentives are controlled by the IIA, which is part of the Ministry of Economy and Industry. Tax incentives are controlled by the Israel Tax Authority.

7. Administrative requirements

Described above under each incentive.

8. Statutory reference

- Law for the Encouragement of Capital Investments, 1959
- Law for the Encouragement of Industrial Research and Development, 1984
- Income Tax Ordinance

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Italy



Italy

This chapter is based on information current as of February 2019.

The new Italian R&D incentives derive from a reshaping of existing tax measures and from adhering to international best practices, including OECD recommendations. The benefits appear to be more attractive now than in the past, due to the fact that the overall potential tax benefit can be derived from a combined application of the different incentives, which could generate considerable and long-lasting tax savings. Procedurally, in certain cases taxpayers will have to consistently engage with the tax administration in order to obtain a final assessment concerning the benefits due (e.g., through a ruling).

1. Overview

The Italian Government has always appreciated the necessity of providing adequate stimulus to R&D activities and investments. Currently, Italian tax law sets forth various forms of R&D tax incentives and operational rules, some of which have been recently introduced or amended by the Italian legislature to draw more interest. The process has also been largely inspired by similar provisions adopted in other countries, as well as by the work of the Organisation for Economic Co-operation and Development (OECD) in the field of R&D tax benefits (e.g., BEPS Action 5).

Currently, the Government considers:

- ▶ R&D tax credits for eligible R&D expenses
- ▶ Tax deductions for the use of qualifying intellectual property (IP) (Patent Box)

These benefits can be combined with the other additional tax incentives related to innovation and advanced technologies introduced (i.e., super and hyper-depreciation).

In addition, tax deductions from the Italian Regional Tax (IRAP) taxable basis, for employees hired and involved in R&D activities, are available. Such benefits are less important than the others.

The laws currently in force set forth different regimes and operational rules. Certain incentives can be granted on a regular basis and with no time limits, while other forms of tax benefits must be claimed and obtained within a specific time frame.

EY contacts:

Bologna
Mario Ferrol
mario.ferrol@it.ey.com
+39 051 278434

Florence
Angelo Rabatti
angelo.rabatti@it.ey.com
+39 055 5524441

Milan
Marco Magenta
marco.magenta@it.ey.com
+39 02 85143529

Marta Pensotti Bruni
marta.pensotti-bruni@it.ey.com
+39 02 85143260

Rome
Domenico Borzumato
domenico.borzumato@it.ey.com
+39 06 85567111

Giacomo Albano
giacomo.albano@it.ey.com
+39 06 85567338

Treviso
Valeria Mangano
valeria.mangano@it.ey.com
+39 0422 625165

Turin
Guido Sodero
guido.sodero@it.ey.com
+39 011 5165297

Verona
Alexia Pinter
alexia.pinter@it.ey.com
+39 045 83929526

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D tax credit	Patent Box*	Regional tax (IRAP) deduction for R&D employees
Types of incentives	► Tax credit	► Tax deduction related to the use of qualifying IP/ execution of qualifying R&D expenses	► IRAP deduction for costs related to personnel employed in R&D activities

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors. Some changes in the Patent Box regime enacted during 2017 might slightly reduce the attractiveness of this incentive. The R&D tax credit is the most appreciated incentive by Italian taxpayers.

R&D tax credit

(Credito d'imposta per attività di ricerca e sviluppo)

Description of benefits

Italian taxpayers (including a network of companies, permanent establishments of nonresident companies and associations of companies) investing in R&D activities are entitled to a tax credit to offset tax liabilities.

The structure of the benefit remains unchanged with respect to the past years, even though some changes have been introduced – in particular, the extension granted by the budget law for FY17. Specifically, the R&D tax credit has been extended to include R&D expenses incurred in connection with agreements entered into with non-Italian providers residing in the European Union (EU), European Economic Area and whitelist countries. Therefore, R&D expenses outsourced by foreign entities to Italian companies are eligible for the tax credit.

The following description takes into account all the changes and applies from FY19 onward. A different set of rules is applicable for previous years.

The purpose of the provision is to grant a tax credit to business investments in eligible R&D activities and expenses carried out between financial years 2015 and 2020. The tax credit now equals up to 25% or 50% of the annual increase of the average R&D expenses (the different applicable percentage depends on the nature of expenses incurred) carried out during an observation period set between FY12 and FY14 (i.e., the amount of the eligible R&D expenses incurred during a specific financial year shall exceed the average of the same expenses incurred between FY12 and FY14). Eligibility for the benefit depends on a minimum annual investment of EUR30,000. Specific provisions are established for companies with less than three financial years of activity.

The maximum annual credit for each beneficiary is established at EUR10 million. All taxpayers, irrespective of their juridical form, accounting system adopted, activity or turnover, may benefit from the R&D tax credit.

Types of incentives

Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

The 2019 budget law has introduced some important requirements. Specifically, starting from FY18, the following items become mandatory: (a) audit certification to certify the effectiveness of the costs; (b) technical report to describe the R&D activities carried on by the company.

Guidelines around incentive applications

The incentive is applicable to current and future investments within the time frame indicated above (2015-2020). The benefit is automatic (i.e., no explicit request shall be presented to the tax authorities). The credit must be claimed in the tax return and shall be used to offset tax liabilities (corporate tax, VAT, etc.) only once the company obtains the audit certification.

The tax credit must be indicated in the tax return (i.e., the income tax return for FY18 "Redditi 2019" should show the tax credit deriving from expenses borne during FY18).

The tax credit is not refundable and it is also available if the company is in a loss tax position.

The R&D tax credit may be used only for the financial year following the financial year in which the R&D expenses have been borne (i.e., the tax credit accruing in FY18 may be used starting from 1 January 2019, after obtaining the abovementioned audit certification).

Further guidance has been provided by a ministry decree, by a circular and various rulings issued by the tax authorities.

Unless otherwise stated, the benefit in question can be combined with the other tax incentives set forth by law (including the Patent Box regime).

Patent Box

(Regime di tassazione agevolata dei redditi derivanti dall'utilizzo di beni immateriali)

Description of benefits

The Patent Box regime is an elective tax regime granting a 50% exemption from corporate income tax and local tax (IRES and IRAP) on income derived from the licensing or the direct exploitation of qualifying IP. The regime is

eligible for taxpayers who perform R&D activities and is characterized by a five-year lock-in period. The election is renewable.

Relevant changes to the regime in question have been brought by Law Decree No. 50/2017, which also amended the implementing instructions. The following provisions have been put in place:

- ▶ Removal of trademarks from the list of qualifying IP
- ▶ Introduction of specific coordination measures (the so-called "grandfathering")
- ▶ Introduction of exchange of information rules related to the options that include the trademarks

Guidelines around incentive applications

The Patent Box benefits can be granted in cases involving direct use or exploitation of the qualifying IP, as well as in cases involving an indirect (licensing) use of the same intangibles.

The computation of the applicable tax benefit is based on the calculation of the income deriving from the use (either direct or indirect) of the qualifying IP, multiplied with a nexus ratio (determined from the R&D costs). The calculation of the income in question differs, depending on whether direct or indirect use of the IP is used. In the case of direct use of the IP, the computation of the related income benefiting from the Patent Box should be made on the basis of the accounting data booked in the profit and loss statement and as adjusted for corporate income tax purposes. In the case of indirect use of the IP, the income calculation is normally based on the net consideration received for the license to use the qualifying IP (e.g., a royalty income).

For the determination of the above, the preferred valuation methodologies are the ones recommended by the OECD. The comparable uncontrolled price (CUP) and the profit split method (PSM), with specific reference to the residual PSM approach, are the preferred and more reliable methods to use when computing the IP-related return qualifying for the Patent Box benefit.

Any relevant transfer pricing considerations supporting the computation of the IP income should be duly supported by an adequate analysis describing the functions, risks and assets involved in the exploitation of the IP.

Taxpayers may also refer to valuation techniques based on the financial practice. However, an adequate justification should be provided to demonstrate the unreliability of using the preferred criteria, and that the income computation obtained by using an alternative methodology is in line with OECD principles. For complex cases where the adoption of only one valuation method does not allow a reliable result, the use of multiple methods is suggested.

The qualifying income is determined, for each IP, on the basis of the ratio between the following:

- (a) Costs sustained for the development, maintenance and improvement of the IP
- (b) Overall relevant costs for the production of the IP

The costs under (a) are those related to R&D activities carried out (i) directly by the entities electing for the regime; (ii) by outsourcing them to universities and other research institutes; or (iii) by outsourcing them to other third parties, including certain startup companies.

The abovementioned costs also include: (i) the costs incurred by a related party in connection with the outsourcing of R&D activities to third parties and simply recharged to the company; and (ii) the costs related to R&D activities sustained by the company under a cost-sharing agreement at least to the extent of the proceeds arising from the recharge of the costs.

The costs mentioned under (b) include all the above expenses increased by (i) any relevant costs sustained with related parties for the development, maintenance and improvement of the IP related to R&D activities; and (ii) the quota of the overall intangible's acquisition or licensing cost in each tax period.

Furthermore, the amount of the costs under the (a) group could be additionally increased ("uplift") by an amount equal to the difference between the costs under (b) and the costs under the (a) group. Such uplift is, in any case, capped up to 30% of the (a) costs.

A ruling is mandatory in the case of internal use of any qualifying IP; it may be electively sought in the case of royalty income derived in intercompany transactions. The option for the regime and the associated ruling (if any) must be filed before the end of the relevant financial year. As of the date of the ruling, taxpayers have 120 days to file supporting documentation.

In compliance with the OECD recommendations, both the direct nexus between the R&D activities and the qualifying IP and the nexus between the qualifying IP and the related qualifying income must be traceable through a proper accounting or non-accounting system.

Unless otherwise stated, the benefit in question can be combined with other tax incentives set forth by law (e.g., the R&D tax credit).

Regional tax (IRAP) deduction for R&D employees

(Deduzione IRAP per personale addetto a ricerca e sviluppo)

Description of benefits

Costs related to the personnel employed in R&D activities may be deducted from regional tax (IRAP) taxable basis. IRAP is calculated on the taxpayer's net production value (NPV), and the IRAP tax rate is generally 3.9% to 5%. The tax deduction is an alternative to other IRAP tax deductions related to labor costs and may not be used if the taxpayer elects other deductions. The deduction amount is limited to the employees' direct costs related to R&D activities. The benefit has been granted since 2005. As of FY15, labor costs related to employees hired under a permanent contract are fully deductible from IRAP taxable basis. The deduction is granted for the amount exceeding the other deductions related to labor costs, already operated by the taxpayer in the computation of the NPV.

Guidelines around incentive applications

The incentive is applicable to current and future investments. The incentive may be obtained via a direct tax deduction from IRAP taxable basis, and taxpayers may claim the incentive via the taxpayer's annual IRAP tax return (Modello IRAP).

According to the current tax regulations, the deadline for submitting the Modello IRAP is generally the end of the ninth month following the financial year the return refers to (i.e., for periods ending at 31 December, the deadline is 30 September).

3. Eligibility requirements

R&D tax credit

Qualifying activities include the following:

- ▶ Experimental or theoretical works, aimed at acquiring new knowledge on fundamentals of observable phenomena and facts, with no direct practical applications or uses
- ▶ Planned research or critical analyses aimed at acquiring new knowledge, to be employed to develop new products, processes or services, or to allow an improvement of existing products, processes and systems, or the creation of components of complex systems, necessary for the industrial research with the exclusion of the prototypes listed under the following point
- ▶ Acquisition, combination, structuration and use of the existing knowledge and capacities having scientific, technological and commercial nature, with the purpose of producing plans, projects or designs related to products, processes or services, either new, modified or improved; activities aimed at the conceptual definition, planning and documentation concerning new products, processes or services; such activities may include the elaboration of projects, designs, plans and other documentation, provided that no commercial exploitation will be carried out; realization of prototypes to be used for commercial purposes and of pilot projects for commercial or technological experiments, when the prototype is necessarily the final commercial product having an elevated production cost for simple demo and validation purposes
- ▶ Production and tests of products, processes or services, provided that no commercial use will be carried out

Ordinary or periodical changes to products, production lines, assembly processes, existing services and other ongoing operations, even when considered improvements, are not considered R&D activities.

However, significant modifications to production lines and/or production techniques or products (e.g., experimentation of a new production line, modification of both technical and functional characteristics of a product) have been specifically included within the definition of "research and development activities."

Besides the verification of the eligibility of the R&D activities, it is worth noting that not all the expenses can benefit from the tax advantage. The R&D tax credit is computed based on the following expenses:

- ▶ Either skilled or non-skilled personnel employed in the R&D activities (including staff leasing), provided that administrative or support personnel are excluded from the benefit computation
- ▶ Depreciation quotas of the acquisition or use expenses for R&D equipment or other laboratory installations, within the limits provided by law, having a unit cost higher than EUR2,000 net of VAT
- ▶ Expenses related to research contracts with universities, research bodies and similar entities, and with other companies including innovative startup companies
- ▶ Technical competencies and industrial knowledge, even acquired from third parties, related to industrial or biotechnological inventions, or to semiconductor, or to product topography, or to a new vegetable variety
- ▶ Materials, industrial supplies and similar products utilized for the accomplishment of prototypes and pilot plants

Patent Box

Eligible IP includes the following:

- ▶ Software protected by copyright
- ▶ Industrial patents, already granted or in the process of being granted, including invention patents encompassing biotechnological inventions and relevant complementary protection certificates; patents for utility models; and patents and certificates for vegetable varieties and topographies of semiconductor products
- ▶ Models and designs capable of being legally protected
- ▶ Business and technical-industrial know-how, including commercial or scientific, capable of being protected as confidential information and capable of being legally protected¹

The Italian Patent Box regime initially included trademarks. Such provision was deemed not to be in line with OECD's commonly adopted standards, which expressly excluded trademarks from the list of eligible intangible assets.

¹ Same as above.

The abovementioned misalignment has been corrected with Law Decree No. 50/2017, which aligned the domestic Patent Box rules with international best practices. The decree, which includes implementing instructions related to the Patent Box, reflects the noted changes.

According to the grandfathering provisions, the exercise of the option related to trademarks is valid for five financial years, and shall not in any case be allowed past 30 June 2021. Such option is non-renewable.

Starting from the third financial year following the financial year ending 31 December 2014, and for each of the financial years in which the option is valid, taxpayers opting for trademarks, in addition to the eligible IP and related eligible income, must report in the tax return, in addition to the number of trademarks and relevant income, the foreign jurisdictions of residency for:

- ▶ The taxpayers' direct shareholder
- ▶ The taxpayers' indirect shareholder that in turn is exclusively controlled by the state or other public entities or natural persons or is not controlled by anyone
- ▶ The related companies that pay consideration to the taxpayer for the exploitation of its trademarks

With reference to the last point, two entities are considered as related parties if:

- ▶ Either party holds directly or indirectly at least 25% of voting or profit rights of the other entity
- ▶ A third party holds directly or indirectly at least 25% of voting or profit rights in both entities

In addition, within the BEPS framework, the Italian Revenue Agency communicates the name of each Italian taxpayer whose Patent Box option also includes trademarks to the tax authorities of the countries that have an exchange of information agreement with Italy.

As eligible IP and the requirements for their existence and protection are concerned, reference should be made to the Italian, EU and international provisions as well as to those contained in EU regulations, treaties and international agreements on intellectual property, as applicable in the relevant jurisdictions.

Qualifying use of IP includes the following:

- ▶ Licensing for the use of any qualifying IP
- ▶ Direct use of any of the mentioned IP within the limit of the activities allowed to the taxpayer under the relevant IP rights

Qualifying activities include the following:

- ▶ Fundamental research to be intended as theoretical and experimental works aimed at obtaining new information to be used in the applied research and design field
- ▶ Applied research to be intended as research aimed at obtaining new information and know-how to be used for the development of new products, processes or services as well as for the improvement of existing products, processes and services in every scientific or technological field; experimental and competitive development work to be intended as the acquisition, the combination, the structuring and the use of existing commercial, technological and scientific know-how in order to develop or improve products, processes and services
 - ▶ The definition also includes the activities aimed at the conceptual definition, the planning and documentation of new products, processes and services, as well as the tests and the experimentations aimed at obtaining the authorization to commercialize such products, processes and services. The experimental development also includes the creation of prototypes, the evidence, the realization of pilot products, the tests and the verification of new or improved products, processes and services and the realization of the necessary plants and equipment.
- ▶ Design to be intended as the conception and planning of products, processes and services, including their external appearance (and of every component), and the brand development activities
- ▶ The conception and the realization of software protected by copyright
- ▶ The preventive research, test, market survey and other studies and actions also aimed at the adoption of systems to avoid counterfeiting, the deposit, the achievement and maintenance of the relevant rights, their renewal and their protection even in an associate form and with reference to the activities to prevent counterfeiting and the handling of litigation and relevant contracts

- ▶ Presentation, communication and promotion activities, able to increase the distinctive features and the prestige of the brand and to contribute to the commercial success and the image of products or services, of design or of any other intangible capable of legal protection

IRAP deduction for R&D employees

- ▶ Eligible expenses include costs related to the employees directly involved in R&D activities. The employees can be hired under either a permanent or temporary contract. Eligible activities are either the basic research or R&D activities.

4. IP and jurisdictional requirements

According to the jurisdictional requirements related to IP, Patent Box rules set forth that the IP shall be directly owned by the taxpayer or used by the taxpayer (e.g., through a rent or lease), provided that R&D activities are carried out. No requirements are imposed for the IRAP deduction and for the R&D tax credit.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Italy. However, the 2017 budget law introduced some tax benefits related to technological investments. These benefits have also been modified by the 2019 budget law. In particular an extra-amortization regime (so-called hyper-depreciation), from 50% to 170% of the cost of acquisition, has been introduced for some listed "smart equipment" that is allowed to benefit from specific digital and technological transformation processes under the model promoted by the Government's Industrial National Plan 4.0 for 2017-20. An additional

40% extra-amortization has also been introduced for certain intangible assets such as software, IT systems and platforms related to the Government's plan. A self-declaration or (for assets with a value higher than EUR500,000) a third-party sworn appraisal is required.

Starting from 2018, a new tax credit for all companies carrying out 4.0 training activities has been introduced for FY18 and FY19.

Eligible activities taken into account relate to training investments aimed at acquiring or consolidating knowledge and know-how related to the Industry 4.0 development plan, such as big data, cloud and fog computing, cybersecurity, visualization systems, enhanced reality systems, etc.

The eligible activities shall be applied in the areas listed by the 2018 budget law, such as sales and marketing, IT, production techniques and technologies, etc. Training activities shall also be agreed with collective or territorial contracts/agreements. Ordinary or periodic activities shall not be considered for the benefit in question (e.g., Health Safety and Protection (HSP) activities or environment protection).

The tax credit is equal to 40% of the expenses related to the cost of the employees engaging in training activities, and is allowed up to maximum EUR300,000 for each beneficiary. The tax credit may be used to offset tax liabilities through F24 Payment Form, starting from the financial year following the one in which the eligible training costs have been borne (i.e., 2019).

The tax credit shall be indicated in the tax return related to the financial years in which the eligible expenses have been borne and in the following tax returns until its exhaustion, and it is not relevant for IRES and IRAP purposes. The expenses borne shall also be duly certified by an auditor/accountant/audit firm depending on whether the beneficiaries are subject to a mandatory FS audit.

6. Role of governmental bodies in administering incentives

The National Revenue Agency administers the R&D tax credits (i.e., the eligibility for tax credits or benefits in general is scrutinized by tax authorities upon future tax audit). As for the Patent Box, under certain cases the taxpayer may be required to file a ruling before the tax authorities to obtain an explicit approval.

R&D tax credit

The competent authority is the Italian Revenue Agency (IRA) on behalf of the Ministry of Finance. The possibility to benefit from the R&D tax credit is no longer subject to a prior administrative approval and can automatically be exercised by the taxpayer. IRA is also entitled to verify *a posteriori* the effectiveness of the expenses borne and to carry on all the inspections and assessments deemed necessary, including the application of all the corresponding tax penalties.

Patent Box

The competent authority is the IRA. In cases involving a direct use of the IP, the tax deduction is subject to the submission of a ruling aimed at identifying the economic contribution derived from the use of the qualifying IP, while in other cases the ruling is not mandatory. The administrative authority is also entitled to verify *a posteriori* the computation of the nexus ratio required to determine the tax allowance and to carry on all the inspections deemed necessary.

Regional tax deduction for R&D employees

The competent authority is the IRA. The tax authorities are entitled to carry on all the assessments deemed necessary to verify whether the annual tax return has been correctly filed and submitted. The areas that could be analyzed might also evaluate whether the benefit in question has been correctly determined and calculated.

7. Administrative requirements

R&D tax credit

The possibility to benefit from the R&D tax credit is automatic and can be directly exercised by the taxpayer, provided that eligible activities and investments have been carried out.

Starting from fiscal year 2018:

- ▶ Qualifying R&D expenses shall be certified by an auditor
- ▶ Beneficiary companies must prepare and retain a technical report concerning scope, objectives and results of the R&D activities performed (internally or externally commissioned) in each FY, which should be signed by the R&D responsible and the legal representative (for R&D internal activities)

Patent Box

A specific advance pricing agreement ruling procedure applies to the following cases:

- ▶ Determination of the economic contribution of the intangible to the overall income or loss, in case of direct use
- ▶ Determination of the income arising from the IP licensing to related parties
- ▶ Determination of the capital gain in the case of IP disposal between related parties

The procedure is elective in the cases listed under the second and third points.

Starting from FY17, the election for the tax benefit must be communicated in the tax return and takes effect starting from the year to which the tax return refers. In the past (for FY15 and FY16) the election was communicated by means of a specific form.

Regional tax deduction for R&D employees

- ▶ Compliance: specific documentation aimed at supporting the eligible expenses and activities must be prepared.
- ▶ Certification report: the documentation for the item above shall be certified by the taxpayer's board of auditors or by the taxpayer's auditing company or by an external independent auditor.

8. Statutory reference

R&D tax credit

Law Decree (*Decreto Legge*) No. 145/2013, Article 3 and subsequent changes and integrations

Patent Box

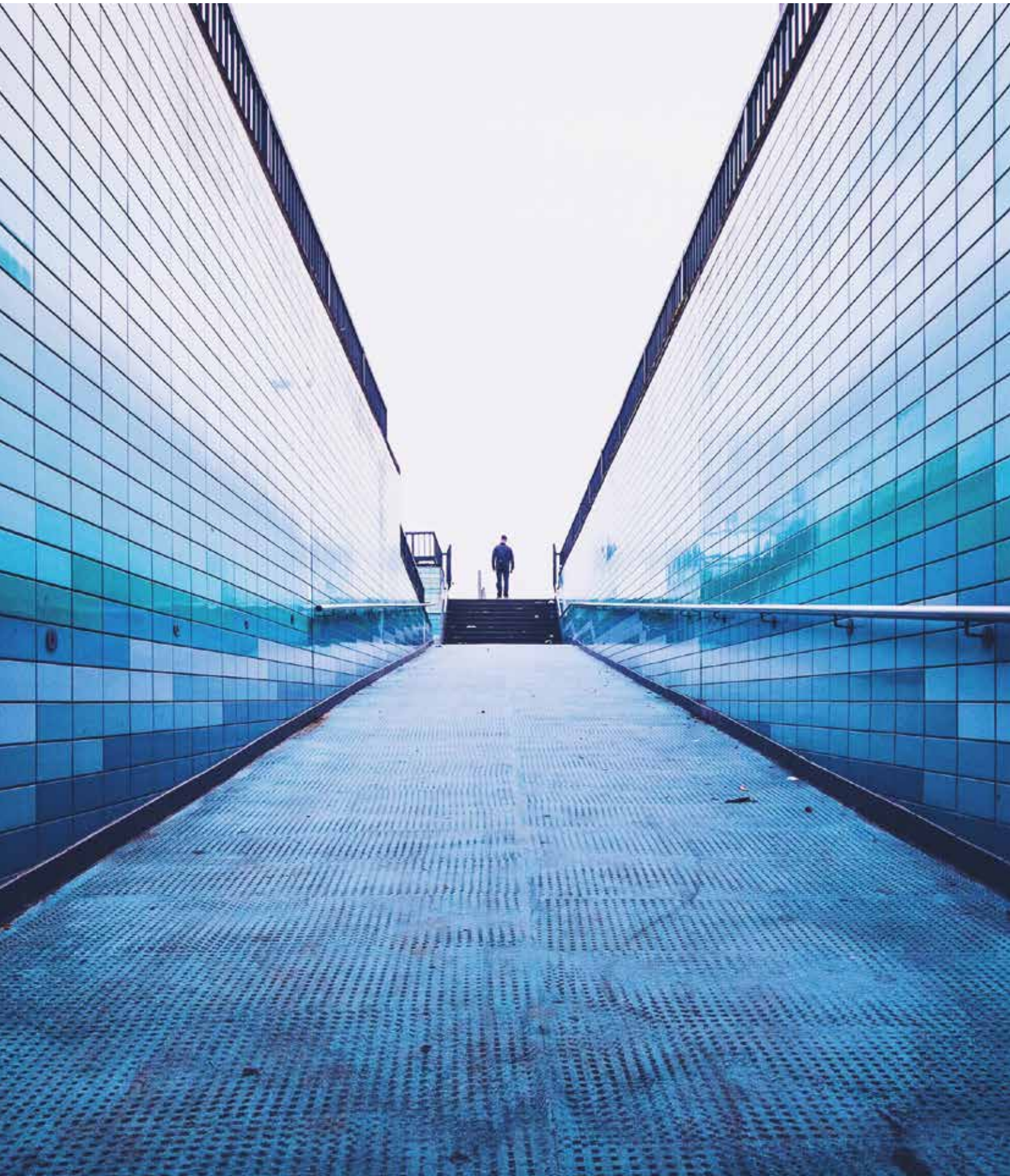
Article 1, paragraph 37-45 Law No. 190/2014, and subsequent changes and integrations

Regional tax deduction for R&D employees

Legislative Decree (*Decreto Legislativo*) No. 446/1997, Article 11, paragraph 1, No. 5) and subsequent changes and integrations

J

Japan



Japan

This chapter is based on information current as of February 2019.

EY contacts:

Koichi Sekiya
koichi.sekiya@jp.ey.com
+81 3 3506 2447

Balazs Nagy
balazs.nagy@jp.ey.com
+81 90 2149 1351

Tax reform in 2019 brought substantial changes to Japanese R&D tax credit-related legislation. The new rules increase the available R&D tax credit rates, introduce the concept of R&D venture companies and expand the scope of R&D expenses for special open innovation R&D expenses. It is important for corporate taxpayers to consider these new rules regarding the availability of R&D credits going forward for financial years starting on or after 1 April 2019.

1. Overview

R&D tax incentives are a cornerstone of Japanese industrial policy and are designed to increase the competitiveness of Japanese industry. With the highest nominal corporate income tax rate in the world (and also the highest effective corporate tax rates), Japan's R&D incentives are an important policy measure for business. The Japanese R&D tax regime may be considered mature, as it was introduced in 1967. Initially, tax credits had been applied to incremental R&D expenditures. A tax credit of up to 10% was introduced in 2003 and applies generally on qualified R&D expenditures. The credit has been consistently granted over the past 10 years.

R&D incentives are granted in the form of tax credits against the national corporate tax liability and are subject to certain limitations. To promote the globalization and integration of Japanese companies in international markets and academic programs, offshore activities are also eligible for R&D incentives.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Name of incentive	R&D tax credit
Type of incentive	► Tax credit

R&D tax credit

(Shikenkenyu no sogaku ni kakaru zeigaku kojo seido)

Description of benefits

Under the current legislation, there are two layers of R&D credits available in Japan based on eligible R&D expenses: the base credit and the additional credit. The 2019 tax reform abolishes the additional credit, but will expand the scope of the base credit itself. There are two types of base credits: a tax credit for general R&D expenses and a tax credit for special open innovation R&D expenses. The tax credit for general R&D expenses can be used up to 25% of the corporate tax liability or up to 35% of the corporate tax liability under a two-year temporary measure. The tax credit for special open innovation R&D expenses can be used up to 10% of the corporate tax liability. The taxpayer can therefore potentially utilize a combined R&D base credit up to 35% (45%) of its corporate tax liability.

The 2019 tax reform also introduced the concept of an R&D venture company. An R&D venture company is a company with investment from a venture fund certified under the Act of Strengthening Industrial Competitiveness or a company with investment from a national university or research institute meeting specific conditions. In case of an R&D venture company, the available base credit is 40% or up to 50% of the corporate tax liability under a two-year temporary measure and up to 10% on special open innovation R&D expenses (i.e., total of 50% (60%) of the annual corporate tax liability).

The base credit is a permanent measure in Japanese tax legislation.

Base credit

The base credit consists of the credit for general R&D expenses and the credit for special open innovation R&D expenses.

The credit for general R&D expenses is the amount of general R&D expenses multiplied by a certain ratio. The R&D credit ratio is determined as follows: the taxpayer calculates the incremental R&D ratio, which is (current R&D expenses minus average R&D expenses over the past three financial years) divided by average R&D expenses over the past three financial years. The taxpayer uses this incremental ratio in a specific formula to calculate the R&D credit ratio. Under the 2019 tax reform, the allowed range of the R&D credit ratio is 6% to 14% as a temporary measure for financial years starting between 1 April 2019 and 31 March 2021 and 6% to 10% for the following financial years (small and medium-sized enterprises can use R&D credit ratios between 12% and 17% for financial years starting between 1 April 2019 and 31 March 2021 and 12% for the following financial years). If a company is newly established, or a company starts R&D activities in a financial year without R&D expenses over a certain period of time in previous financial years, the R&D credit ratio is 8.5% of the R&D expenses incurred (12% in case of small and medium-sized enterprises).

For financial years before the 2019 tax reform (i.e., financial years ending on or before 31 March 2019), the base credit for general R&D expenses can be used up to 25% of the corporate tax liability under general rules or up to 35% of the corporate tax liability under a two-year temporary measure if certain conditions are met, provided the taxpayer decides not to use the additional excess-type credit. Excess-type credit equals excess R&D expenses over 10% of the average annual sales amount of the current fiscal year and the past three fiscal years multiplied by a certain percentage. Excess-type credit is a temporary measure and can be used up to 10% of the corporate tax liability.

The 2019 reform simplifies and changes these rules. Excess-type credit as a separate tax credit will be abolished, but there will be an additional tax credit built into the base credit as a permanent measure. This additional tax credit will be based on current R&D expenses over the annual average sales amount of the current fiscal year and the past three fiscal years multiplied by a certain percentage. The combined base credit can be used up to 25% under general rules or up to 35% of the corporate tax liability under a temporary two-year measure.

The credit for the special open innovation R&D expenses regime aims to enhance innovation in Japan. Special open innovation R&D expenses are R&D expenses incurred in joint research with special R&D institutions or universities and research outsourced to such institutions (not including private companies). The 2019 tax reform has expanded the definition of special open innovation R&D expenses. Under the new rules, the taxpayer can calculate special R&D expenses on research outsourced to private companies as well. Regarding joint research, the tax credit is special R&D expenses multiplied by 30% (for expenses incurred in

joint research with special R&D institutions or universities) or 20% (for expenses incurred in joint research with private corporations but 25% in case of an R&D venture company). Regarding research outsourced to other parties, the tax credit is 30% (for expenses in research outsourced to special R&D institutions or universities) or 20% (for expenses in research outsourced to other parties including private corporations but 25% in case of an R&D venture company). The credit will be available for up to 10% (currently 5%) of the corporate tax liability amount for financial years starting on or after 1 April 2019.

Carryforward/carryback of the excess credit is not permitted.

For contract R&D activities, the ability to take R&D credits can be limited. The taxpayer has to deduct fees received for contract R&D activities from R&D expenses to calculate R&D expenses for R&D credit purposes.

3. Eligibility requirements

Eligible R&D expenses include the cost of material, salaries and wages and other related expenses of employees who have expert knowledge and skills and are engaged exclusively in experimental and research work, as well as a depreciation allowance for machinery and equipment used for such work. Personnel who have expert knowledge and skills refers to those having a technical background and who are directly involved in R&D activities (e.g., managers and assistants in charge of R&D activities). Administrative staff, janitors, security guards, etc., who may be involved in some way with R&D activities do not qualify.

Qualifying research expenses (QRE) are defined as expenses incurred in experimental and research work to manufacture products or to improve, design or invent techniques. Research activities may occur within or outside of Japan. Contract fees received do not qualify and are to be netted against QREs, while for contract fees paid, R&D credits may be taken.

The 2017 tax reform expanded the scope of eligible R&D expenses to include development costs for the Internet of Things (IoT), big data and artificial intelligence (i.e., service R&D or R&D for Industry 4.0).

Under a temporary measure for financial years starting between 1 April 2018 and 31 March 2021, if certain indicators are not met (for example, there is no increase in average salaries and in taxable income and a specific investment ratio does not reach a certain level), the access to R&D credits can be restricted in that financial year.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to the location of intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Japan.

6. Role of governmental bodies in administering incentives

The National Tax Agency administers the R&D tax credit (i.e., eligibility for the tax credit is scrutinized by tax authorities upon future tax audits).

7. Administrative requirements

To claim a tax credit, certain forms (schedules 6(6), 6(7), 6(8) and/or 6(9)) must be attached to the corporate tax returns, which are due two months after the fiscal year-end (a one-month extension is generally allowed).

8. Statutory reference

Article 42-4 of the Special Taxation Measures Law

L

Lithuania



Lithuania

This chapter is based on information current as of February 2019.

EY contact:

Indrė Zakalskytė
indre.minkuviene@lt.ey.com
+ 370 5 274 2130

The Lithuanian Government takes into account investors' needs and also offers financial support; therefore, the R&D incentive and patent-related incentive (introduced starting in 2018) contribute to the creation of a business-friendly environment. There are no official plans to eliminate the R&D incentive in the near future. Taxpayers are encouraged to approach the Agency for Science, Innovation and Technology for explanations and guidance on what constitutes R&D, where such inter-institutional cooperation contributes to the maturity of the incentive.

1. Overview

The Lithuanian R&D incentives were introduced starting 1 January 2008. In this respect, the tax authorities have already gathered knowledge regarding the practical application of the R&D incentive. Moreover, taxpayers are encouraged to approach the Agency for Science, Innovation and Technology (MITA) for explanations and guidance on what constitutes R&D, where such inter-institutional cooperation contributes to the maturity of the incentive.

When calculating corporate income tax (CIT), a super deduction of 300% of qualifying R&D costs – excluding depreciation or amortization costs of fixed assets – may be deducted from income for the tax period during which they were incurred, if the performed scientific research and/or experimental development is related to the usual or intended activities of the entity that generated or will generate income or economic benefit.

Moreover, the Law on Corporate Income Tax allows accelerated depreciation of assets used in R&D activities.

To expand R&D investments in Lithuania and encourage the commercialization of products created in the R&D process, starting 1 January 2018, a new relief was introduced for taxpayers who have created intangible assets while being engaged in R&D activities. The taxpayer may apply a 5% tax rate to the taxable profit from the use, sale or other transfer of an intangible asset.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	The scientific research and experimental development incentive*	The scientific research and experimental development incentive	Patent-related incentive
Types of incentives	<ul style="list-style-type: none"> ▶ Super deduction 	<ul style="list-style-type: none"> ▶ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▶ Reduced CIT rate for taxable profit derived from intangible assets

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

The scientific research and experimental development incentive: super deduction

(Mokslinių tyrimų ir eksperimentinės plėtros lengvata: padidinti leidžiami atskaitymai)

Description of benefits

When calculating corporate income tax, R&D costs – except for depreciation or amortization costs of fixed assets – may be deducted three times from income for the tax period during which the costs were incurred. The amount of tax losses resulting from the super deduction may be carried forward for an unlimited period of time provided that the entity carries out the activity due to which the losses were incurred; however, loss carryback is not permitted under current tax legislation. No preapproval is required to receive the incentive.

Guidelines around incentive applications

The incentive applies only with respect to R&D costs incurred during the current period. The super deduction is claimed in the annual corporate income tax return for the tax period during which the R&D costs were incurred. The statutory period for adjusting the annual corporate income tax returns is five preceding tax periods.

The scientific research and experimental development incentive: accelerated depreciation on qualifying R&D assets

(Mokslinių tyrimų ir eksperimentinės plėtros lengvata: pagreitintas nusidėvėjimas)

Description of benefits

Certain fixed assets used in the R&D activity may be depreciated with accelerated terms. Depending on the type of fixed asset, the depreciation period might be shortened from eight, five, four or three years to two years. The depreciation and/or amortization period shall not be shorter than stipulated by the Law on Corporate Income Tax. The amount of tax losses resulting from the accelerated depreciation may be carried forward for an unlimited period of time, provided that the entity carries out the activity due to which the losses were incurred; however, loss carryback is not permitted under current tax legislation.

Guidelines around incentive applications

The incentive applies only with respect to R&D costs incurred during the current period. The accelerated depreciation is claimed in the annual corporate income tax return for the tax period during which R&D costs were incurred. The statutory period for adjusting the annual corporate income tax returns is five preceding tax periods.

Patent-related incentive: reduced CIT rate for taxable profit derived from intangible assets

(Lengvatinis pelno mokesčio tarifas pelnui iš nematerialaus turto)

Description of benefits

A patent-related incentive is an additional incentive next to the scientific research and experimental development incentive. Taxable profit from the use, sale or other transfer of an intangible asset may be taxed at a reduced 5% rate. The intangible asset should be created in an R&D process and qualify for the scientific research and experimental development incentive described above. A separate formula for the precise calculation of profit taxable at 5% has been established. No preapproval is required to apply the incentive. Losses resulting from the use, sale or any other transfer of an intangible asset may be carried forward for an unlimited period of time, but such losses may cover only the taxable profit from the use, sale or any other transfer of the intangible asset.

Guidelines around incentive applications

The relief shall apply when calculating the taxable profit for 2018 and subsequent tax periods. The reduced tax rate is claimed in the annual corporate income tax return for the tax period during which the taxpayer incurred profit from the use, sale or other transfer of the intangible asset. The statutory period for adjusting the annual corporate income tax returns is five preceding tax periods.

3. Eligibility requirements

To claim the R&D incentive, the performed R&D activity must be related to the usual or intended activities of the entity that generated or will generate income or economic benefit. In addition, the R&D activities performed must have an element of novelty and address scientific and/or technological uncertainty. The aim of an R&D project shall be scientific or technological progress, and the results shall be significant for not just the person that initiated and executed the project.

The following expenses may be included in calculating R&D incentives:

- ▶ Wages and business trips of employees who are directly involved in R&D works
- ▶ Costs of stock, materials and other current assets used for R&D activities
- ▶ Costs of acquisition of services directly related to R&D activities (consulting, leasing, repair, warehousing, telecommunications, etc.)
- ▶ Costs of acquisition of R&D activity from other natural persons or legal entities if the acquired R&D activity has been carried out in a state of the European Economic Area or a state with whom Lithuania has a treaty for the avoidance of double taxation
- ▶ Import and input value-added tax (VAT) from the abovementioned costs that may not be deducted for VAT purposes
- ▶ Costs of R&D activities that are based on accounting documents

Three types of R&D activity may qualify for the R&D incentive:

1. Basic research carried out in the acquisition of new knowledge about the essence of phenomena and/or observed reality without aiming, at the time of research, to use the obtained results for a specific purpose
2. Fundamental research carried out for acquiring knowledge and aimed at acquiring specific practical objectives or at solving tasks
3. Experimental development aimed at creating new materials, products and equipment; developing new processes, systems and services or essentially improving those already created or developed; and creating, developing or essentially improving solutions to problems based on the knowledge acquired through research and practical experience

4. IP and jurisdictional requirements

To apply a reduced tax rate of 5% for the profit from the use, sale or other transfer of an intangible asset, the following conditions should be met:

1. The intangible asset should have been created by the taxpayer while engaged in qualifying R&D activities
2. Only the entity that created such intangible asset should receive income from the use, sale or other transfer of the intangible asset and incur all related expenses
3. The asset should consist of a computer software protected by copyright or an invention that meets patentability criteria
4. The copyrights have emerged, a patent application has been filed, a patent has been obtained, a supplementary protection certificate has entered into force or an exclusive license has been granted

As a general rule, the amount of taxable profit from the use, sale or other transfer of an intangible asset shall be calculated separately for each intangible asset (an exception applies for assets that were created using multiple intangible assets).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Lithuania.

6. Role of governmental bodies in administering incentives

The MITA determines the eligibility of R&D projects.

The State Tax Inspectorate governs R&D and patent-related incentives applications for tax purposes.

7. Administrative requirements

No prior review or approval of the tax authorities is required to claim an R&D tax incentive. R&D incentives are claimed in the annual corporate income tax return for the tax period during which R&D costs were incurred. The taxpayer must possess R&D documentation (with certain methods and targets stipulated by the legislation) confirmed by the CEO or its authorized person. However, the taxpayer is not required to submit the documentation until the request of the tax authorities in case of a tax audit. Also, a taxpayer may apply for approval from the MITA that a certain project meets R&D eligibility requirements. However, such approval is not required.

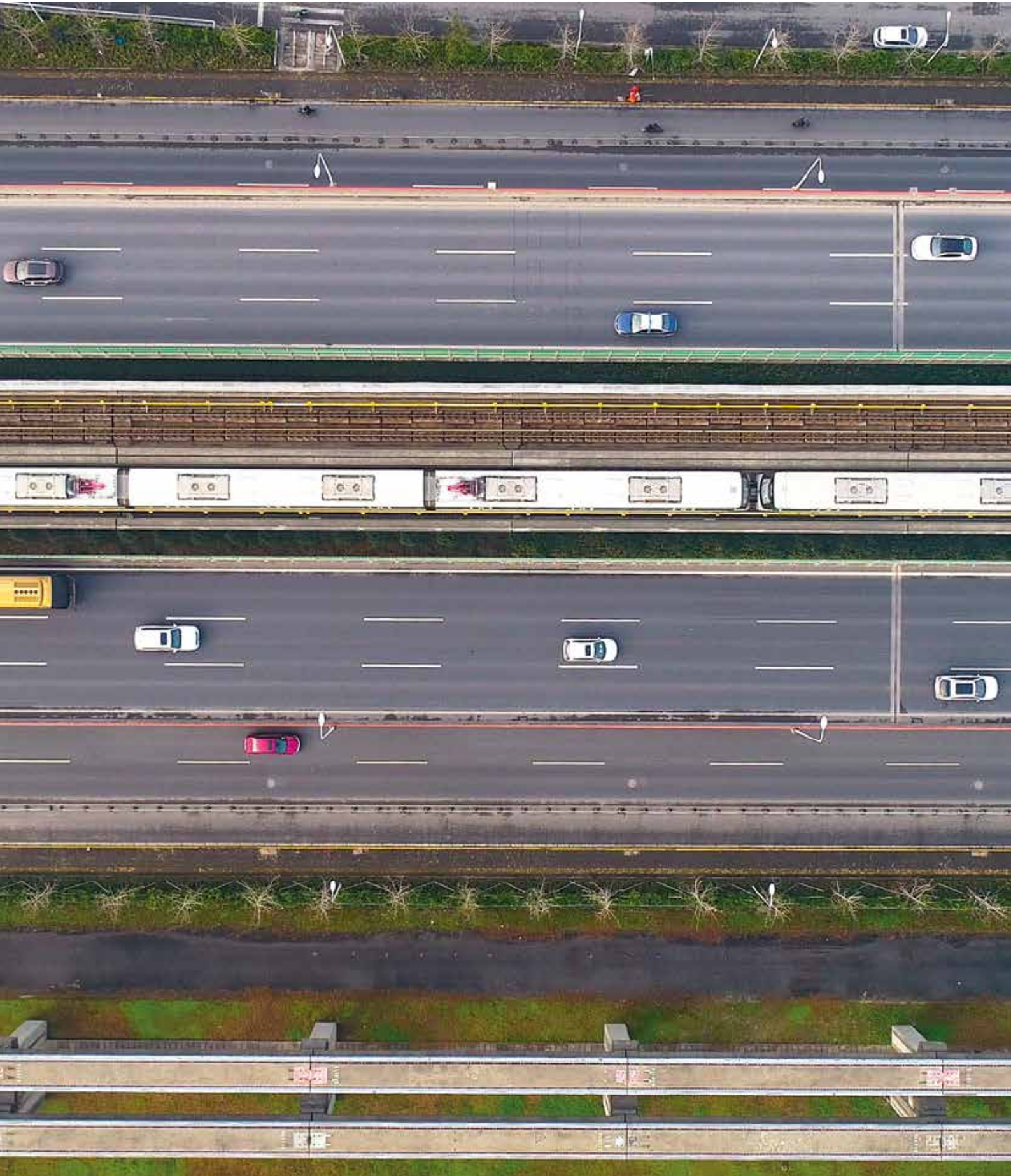
There is no prior review or approval of the tax authorities to claim the patent-related incentive. The patent-related incentive is claimed in the annual corporate income tax return for the tax period during which the taxpayer earned profit from the use, sale or other transfer of an intangible asset. As such incentive is new and no detailed explanations are provided by the tax authorities, currently it is not clear what kind of documentation should be prepared to ground the application of such incentive; however, the taxpayer should have a separate calculation prepared.

8. Statutory reference

The Lithuanian R&D incentive was introduced in a new Article 17-1 of the Lithuanian Law on Corporate Income Tax, with effect from 1 January 2008. The additional tax relief related to patent regime was introduced in Article 5(7) of the Lithuanian Law on Corporate Income Tax, with effect from 1 January 2018. No changes are expected in the near future.

L

Luxembourg



Luxembourg

This chapter is based on information current as of February 2019.

EY contacts:

Bart Van Droogenbroek
bart.van.droogenbroek@lu.ey.com
+352 42 124 7456

Christian Schlessler
christian.schlessler@lu.ey.com
+352 42 124 7500

The Luxembourg Government has fostered a proactive entrepreneurial policy that, among other things, aims to promote entrepreneurship and define and implement support instruments and financing measures. Consequently, the number of budget measures dedicated to R&D and innovation has increased consistently over the years in an effort to encourage Luxembourg companies to develop their technological know-how, create new economic activities and generate additional added value.

1. Overview

The common Luxembourg incentives framework grants aid from 25% up to 100% of investments made in the context of R&D projects or programs. In addition to the R&D project or program incentive, the Luxembourg legislation provides for further incentives, including:

- ▶ A regime for technical feasibility studies (up to a maximum of 50%, 60% or 70% of total investment for large enterprises, medium-sized enterprises and small enterprises, respectively)
- ▶ Support for the construction or modernization of research infrastructures (up to a maximum of 50% of total investment)
- ▶ Support for young innovative companies (up to a maximum of EUR800,000 or up to EUR1.2 million when located in determined assisted geographical areas)
- ▶ Innovation aid for small and medium-sized enterprises (SMEs) of 50%; up to 100% with a maximum of EUR200,000 for innovation advisory and support services
- ▶ Aid for process and organizational innovation (15% for large companies effectively collaborating with SMEs in the aided activity and the collaborating SMEs incurring at least 30% of the total eligible costs; 50% for SMEs)
- ▶ Support for the construction or modernization of innovation clusters (up to a maximum of 50% of eligible costs, respectively 55% for clusters located in determined assisted geographical areas) and for the operation of innovation clusters (up to a maximum of 50% of eligible costs)

These measures demonstrate the Luxembourg Government's general intention to promote Luxembourg as an attractive jurisdiction for R&D as well as intellectual property (IP) management activities.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D projects or programs*	Medium-term and long-term loans granted by the <i>Société Nationale de Crédit et d'Investissement</i> (SNCI)	Direct loan for research, development and innovation granted by the SNCI	Loans for innovative enterprises granted by the SNCI	Accelerated depreciation	Special depreciation	Partial tax exemption of income derived from qualifying IP
Types of incentives	<ul style="list-style-type: none"> ▶ Cash grants, recoverable advances 	<ul style="list-style-type: none"> ▶ Investment tax credit ▶ Tax credit for hiring of unemployed persons 	<ul style="list-style-type: none"> ▶ Loans 	<ul style="list-style-type: none"> ▶ Loans 	<ul style="list-style-type: none"> ▶ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▶ Special depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▶ Tax exemptions

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Promotion of R&D and innovation

(*Régimes de promotion de la recherche, du développement et de l'innovation*)

The benefits are currently set out by the law of 17 May 2017 on the renewal of aid schemes for R&D and innovation (all enterprises). The allocation of aid is conducted by the Ministers of the Economy and of Finance, and aids are granted on a case-by-case basis.

R&D projects or programs

(*Projets ou programmes de recherche-développement*)

Description of benefits

When an enterprise (not considered to be in financial difficulty) or a private research organization, properly established on the territory of the Grand-Duchy of Luxembourg, realizes an R&D project or program consisting of fundamental, industrial or experimental development research activities, it may benefit from an aid that may not exceed the following amounts:

- ▶ Fundamental research: maximum 100% of eligible expenses
- ▶ Applied industrial research: maximum 50% of eligible expenses
- ▶ Experimental development activities: maximum 25% of eligible expenses

Provided that it does not exceed 80% of eligible costs, the aforementioned aid for industrial research and experimental development can be increased by:

- ▶ 10% when the beneficiary is a medium-sized enterprise or a private research organization fulfilling the criteria of a medium-sized enterprise
- ▶ 20% when the beneficiary is a small enterprise or a private research organization fulfilling the criteria of a small enterprise
- ▶ 15% if one of the following conditions is fulfilled:
 - (1) The project or program is based on an effective collaboration:

Between enterprises among which there is at least one SME, or is conducted in at least two EU Member States, or in one Member State and a contracting party to the Agreement on the European Economic Area (EEA), and no single company bears alone more than 70% of eligible costs

Or

Between a company and one or several research and knowledge dissemination organizations bearing at least 10% of the eligible costs and having the right to publish the results of their own research

- (2) The results of the project or program are widely broadcast through conferences, publications, open repositories, or free or open software

It is granted under the form of a capital subsidy or a recoverable advance (i.e., a loan granted in one or several tranches and for which conditions of reimbursement depend upon the outcome of the project or program).

In principle, capital subsidies and recoverable advances are paid in a lump sum after completion of the project or program. However, payments in one or more tranches may be granted in specific cases as the project or program progresses.

Guidelines around incentive applications

The application and the required appendices must be submitted before the start of the project or program, both in electronic format and in paper format, to the Ministry of Economy. The forms, as well as guidelines for filling in the forms, are available online.¹

Other incentives in relation with R&D and innovation

The law of 17 May 2017 provides for further incentives:

Technical feasibility studies

(Etudes de faisabilité technique)

When an enterprise (not considered to be in difficulty) or a private research organization, properly established on the territory of the Grand-Duchy of Luxembourg, realizes a feasibility study prior to an R&D project or program, it may benefit from an aid capped at 50% of the amount of eligible costs. The amount of the aid may be increased by 10% for medium-sized enterprises and medium-sized private research organizations and by 20% for small enterprises and small private research organizations.

The aid is granted under the form of a capital subsidy or a recoverable advance.

Support for the construction or modernization of research infrastructures

(Investissement en faveur des infrastructures de recherche)

Upon conditions, aid of up to 50% of eligible costs can be granted for the construction or modernization

of research infrastructures that perform economic activities. The access to the infrastructure shall be open to several users and shall be granted on a transparent and nondiscriminatory basis. Enterprises that have financed at least 10% of the investment costs of the infrastructure may be granted preferential access under more favorable conditions. To avoid overcompensation, such access shall be proportional to the undertaking's contribution to the investment costs, and these conditions shall be made publicly available.

The aid is granted under the form of a capital subsidy, a recoverable advance, an interest subsidy, a guarantee or a loan.

Support for young innovative companies

(Aides aux jeunes entreprises innovantes)

Unlisted small enterprises or private research organizations, which are registered for less than five years, which have not been formed through a merger (unless the enterprises that merged fulfilled the conditions to benefit from the support), which have not taken over the activity from another enterprise and which have not yet distributed any profits, may be granted an aid up to a maximum of EUR800,000 or up to EUR1.2 million when located in determined assisted geographical areas.

The aid is granted under the form of a capital subsidy, a recoverable advance or an equity contribution.

Innovation aid for small and medium-sized enterprises

(Aides à l'innovation en faveur des PME)

Small and medium-sized enterprises may be granted an innovation aid of up to 50% of the eligible costs, which includes external consultancy costs, costs related to protecting patents and other intangibles, and secondment costs of highly qualified personnel coming from a research or knowledge dissemination organization or from a large enterprise (upon conditions). Aid may further be increased to 100% with a maximum of EUR200,000 for innovation advisory and support services.

The aid is granted under the form of a capital subsidy or a recoverable advance.

¹ <http://www.innovation.public.lu/en/financer/competitivite/grants/meco-projets-programmes-rd/index.html>

Guidance on definitions of small and medium-sized enterprises for the purposes of the above aid can be found online.²

Aid for process and organizational innovation

(Innovation de procédé et d'organisation)

Enterprises or private research organizations realizing process or organizational innovation may be granted aid of up to 15% for large companies or private research organizations and 50% for small and medium-sized enterprises or private research organizations. Large companies or private research organizations may, however, only benefit from this aid if they effectively collaborate with one or several small or medium-sized enterprises or small or medium-sized private research organizations, provided that the latter bear at least 30% of the eligible costs.

The aid is granted under the form of a capital subsidy or a recoverable advance.

Guidelines around incentive applications

Further details as well as guidelines on how to apply for the various aid are available online.³ It should also be noted that specific rules for cumulating aid apply.

Tax credits

Investment tax credit

(Bonification d'impôt pour investissement)

A tax credit of 13% is granted for additional investments in qualifying assets made during the tax year. Qualifying assets consist of depreciable tangible fixed assets other than buildings physically used in EU Member States, or in Iceland, Liechtenstein and Norway (the EEA). Certain assets are excluded from this tax credit, such as motor vehicles, assets that have a useful life of less than three years and secondhand assets. In addition, an 8% credit is granted for qualifying new investments up to EUR150,000, and a

2% credit is granted for investments over that amount. If investments are made to create jobs for disabled persons, these rates are increased to 9% and 4%, respectively. Investments may qualify for both credits.

As of 1 January 2018, the grant of investment tax credit was extended to:

- ▶ Electric cars, i.e., passenger cars with zero emissions, functioning exclusively on electricity or on hydrogen fuel cells. The measure applies only to those cars whose date of first registration is after 31 December 2017.
- ▶ Acquired software, subject to certain limits and conditions. The investment tax credit on the acquisition of software is 8% for investment amounts not exceeding EUR150,000 and 2% for the investment exceeding that amount. The maximum amount of the tax credit for the acquisition of software cannot exceed 10% of the corporate income tax due for the tax year in which the financial year of the acquisition of the software ends.

The rates for the general investment tax credit (see General investment tax credit) are increased from 8% to 9% and from 2% to 4% for certain investments intended to protect the environment.

The above credits reduce corporate income tax and may be carried forward for 10 years.

Tax credit for hiring unemployed persons

(Bonification d'impôt en cas d'embauchage de chômeurs)

A monthly tax credit of 10% calculated on the monthly gross remuneration paid to persons who were unemployed can be offset against corporate income tax under certain conditions. The person hired must have been unemployed, registered with the National Employment Agency (*Agence pour le développement de l'emploi*, or ADEM) for at least the last six months, and the person must have been proposed by the agency's placement service. The employment contract must be either a permanent contract, a temporary contract of a minimum of 18 months or a temporary contract aiming to replace an employee who is on parental leave. Furthermore, the contract must be for at least 16 hours per week.

² <http://www.innovation.public.lu/en/financer/competitivite/grants/index.html>

³ <http://www.innovation.public.lu/en/financer/competitivite/grants/index.html>

The tax credit is granted for a period of 12 months starting with the month of employment.

Guidelines around incentive applications

The tax credits are claimed through the completion of specific forms to be included in the annual tax return of the enterprise. In addition, regarding the tax credit for hiring unemployed persons, a certificate issued by the ADEM and confirming the placement and the continuation of the job must be joined to the tax return.

Special tax regime for expatriate highly skilled employees

(Encadrement fiscal des dépenses et charges en relation avec l'embauchage sur le marché international de salariés)

Description of benefits

A beneficial income tax regime is available for expatriate highly skilled employees, i.e., employees who are sent to work temporarily in Luxembourg on an assignment between intragroup entities. It also applies to employees who are directly recruited abroad by a Luxembourg company to work in Luxembourg. Under certain conditions, various costs directly related to the expatriation are not considered taxable employment income. Under the special tax regime, the following expatriate benefits and allowances are not taxable:

- ▶ Moving costs (transportation of goods, transfer travel expenses, furnishing costs and similar expenses)
- ▶ Costs related to housing in Luxembourg and expatriation (rent and utilities if the former accommodation is maintained in the home country or the housing differential if the former accommodation is not maintained), one home-leave trip and tax-equalization costs – these costs are limited to EUR50,000 per year (EUR80,000 for married couples or partners sharing accommodation) or 30% of the fixed total annual remuneration, whichever is less
- ▶ School fees for children in primary and secondary education

- ▶ Cost-of-living allowance and miscellaneous expenses (not specifically provided for) linked to the expatriation – these costs are limited to EUR1,500 per month or 8% of the fixed monthly remuneration (EUR3,000 and 16%, respectively, for married couples or partners sharing accommodation provided that they are not performing a professional activity), whichever is less

Guidelines around incentive applications

At the beginning of each calendar year (at the latest on 31 January) the employer must send a list of employees who benefited from the regime to the Luxembourg tax authorities.

Medium-term and long-term loans granted by the SNCI

(Prêts à moyen et à long terme octroyés par la SNCI)⁴

Description of benefits

The SNCI (National Loan and Investment Body, a public-law banking institution that aims to encourage business investments, startups and research initiatives) grants medium-term and long-term loans to industrial enterprises and service providers whose activity represents a significant impact on economic development and whose equity amounts to at least EUR25,000. The loans are intended to finance:

- ▶ Tangible and intangible assets that are subject to depreciation
- ▶ Land used for professional purposes only

Parts of buildings used for nonprofessional purposes, automotive equipment and inventory may not be financed by medium-term and long-term loans.

Medium-term and long-term loans may only be requested for investment projects with a value of at least EUR100,000.

⁴ <https://www.snci.lu/products/>

Guidelines around incentive applications

The loans are applicable to future investments. To receive loans, the applicant must send an application to SNCI with the following documentation:

- ▶ Description of the enterprise making the investment (including identity of shareholders and management, description of activities, main clients and suppliers, etc.)
- ▶ Detailed description, illustrated with figures, of the planned investment
- ▶ Financing plan
- ▶ Three- to five-year business plan
- ▶ (Audited) annual accounts of the business for the last three financial years

Direct loan for Research, Development and Innovation granted by the SNCI

(Prêt direct Recherche, Développement et Innovation octroyés par la SNCI)

Description of benefits

The SNCI grants direct loans for research, development and innovation (RD&I) to innovative SMEs that possess a business license for at least four years and have a substantial impact on national economic development.

The loans are intended to be granted to “innovative enterprises,” i.e., to enterprises that can demonstrate on the basis of a business plan that they will develop and commercialize products, services, processes or organizational methods that are new or substantially improved or changed as compared to the state of the art in the concerned industry sector, and which carry a risk of technical or industrial failure. The innovative character of the processes and organizational methods should be of a technological nature, except for the measures in favor of the protection of the environment, natural habitats, human and work environments. The innovative character of products or services should be of a technological, commercial and/or organizational nature.

The amount of the RD&I loans takes into account the extent of the project and the size of the company, without exceeding, however, EUR250,000 and 40% of eligible costs. The company must co-finance with its own resources at least 35% of the investments and expenses. Additionally, the amount of the SNCI loan or loans cannot exceed the total amount of equity of the loan beneficiary. The maximum loan duration is 10 years and is fixed on the basis of the project requirements.

Guidelines around incentive applications

The loans are applicable to future investments. To obtain a loan, the applicant must send an application to SNCI before the start of the innovation project with the following documentation:

- ▶ Information regarding the applicant (creation date, shareholders, activity, main suppliers/clients, team)
- ▶ Project description (new product or service created, marketing strategy, project team, market, competition, and/or competitive advantage, project impact)
- ▶ Financial statements for the past three financial years (including liabilities owed to banking institutions and evolution of investments)
- ▶ Business plan or budget of the company covering at least three years that contains an income statement and cash flow analysis (operational cash flow, investment and financing)
- ▶ Plan of financing and/or disbursement for the said project

Loan for innovative enterprises granted by the SNCI

(Prêt entreprises novatrices octroyé par la SNCI)

Description of benefits

The SNCI grants loans for “innovative enterprises” to young innovative SMEs that have a business license, have been in existence for less than eight years and have a substantial impact on national economic development.

The loans are intended to be granted to “innovative enterprises,” i.e., enterprises that can demonstrate on the basis of a business plan that they will develop and commercialize products, services, processes or organizational methods that are new or substantially improved or changed as compared to the state of the art in the concerned industry sector, and that carry a risk of technical or industrial failure. The innovative character of the processes and organizational methods should be of a technological nature, except for the measures in favor of the protection of the environment, natural habitats, human and work environments. The innovative character of products or services should be of a technological, commercial and/or organizational nature.

The incentive cannot be combined with other SNCI instruments, including the direct SNCI loan for RD&I.

The amount of the loan takes into account the extent of the project and the size of the company, without exceeding EUR1.5 million and 35% of eligible costs. Additionally, the amount of the loans cannot at any time exceed the amount of capital contributions made in the form of equity or subordinated loans. The maximum loan duration is 10 years and is fixed on the basis of the project requirements.

Guidelines around incentive applications

The loans are applicable to future investments. To receive loans, the applicant must send an application to SNCI with the following documentation:

- ▶ Presentation of the applicant (creation date, shareholders, activity, main suppliers/clients, team)
- ▶ Project description (new product or service created, marketing strategy, project team, market, competition, and/or competitive advantage, project impact)
- ▶ Financial statements for the past three financial years (including liabilities owed to banking institutions and evolution of investments)
- ▶ Business plan or budget of the company covering at least three years that contains an income statement and cash flow analysis (operational cash flow, investment and financing)
- ▶ Plan of financing and/or disbursement for the said project

Accelerated depreciation

(Amortissement par annuités décroissantes)

Description of benefits

Standard depreciation for wear and tear may be taken using the annual declining balance depreciation method, which may be calculated by applying a fixed rate to the book value (remaining value). The rate of the accelerated depreciation applicable to materials and equipment used exclusively in scientific or technical research activities may not exceed four times the rate that would be applied for straight-line depreciation, and it may not be greater than 40%.

If a taxpayer does not choose the method of the accelerated depreciation, but instead opts for the method of the linear depreciation (straight-line depreciation over the useful life of the asset), the depreciation of an asset for a given year can, upon request, be deferred until at the latest the end of the useful life of such asset. Using this option, for example, allows taxpayers to pay corporate income tax and therefore to use investment tax credits or other credits that are about to expire because the 10-year carryforward period is about to expire.

Guidelines around incentive applications

The accelerated depreciation on the R&D assets is applicable to current investments. To use the accelerated depreciation on the R&D assets, a specific appendix must be included in the annual income tax return with the following information:

- ▶ Acquisition or production date
- ▶ Acquisition or production price
- ▶ Ordinary useful life
- ▶ Amount of annual depreciation

Special depreciation

(Amortissement spécial)

Description of benefits

Special depreciation is *inter alia* applicable to fixed assets purchased or constructed for the purposes of protecting the environment, reducing waste or saving energy (e.g., implementation of new techniques for rational use of energy or implementation of new and renewable energy sources, as well as recovery of energy from industrial processes).

The acquisition or production cost of the investment must be at least EUR2,400 (excluding VAT). The special depreciation may not exceed 80% of the acquisition or production costs of the qualifying assets, and it may be taken during the financial year in which the purchase or formation of the fixed assets occurs, during one of the four subsequent years or on a straight-line basis in installments over five years. The special depreciation does not exclude the application of standard depreciation for wear and tear. Standard depreciation should be calculated on the net book value remaining after deduction of the special depreciation and should be based on the ordinary useful life.

The accelerated depreciation (see above) is excluded if special depreciation is used.

Furthermore, the application of the special depreciation does not exclude the grant of the investment tax credit.

Guidelines around incentive applications

The incentive is applicable to newly acquired or constructed fixed assets. To benefit from the special depreciation, the existence and conformity of the qualifying fixed assets must be certified by the ministers whose areas of responsibility include the environment, energy and labor, pursuant to an application to be filed with the tax authorities no later than three months after the close of the financial year in which the fixed assets were purchased or formed.

Furthermore, a specific application for the special depreciation must be appended to the annual income tax return and supported by the certificate of approval described above.

Value-added tax (VAT) incentives and considerations

Description of benefits

Franchise regime for small enterprises

In principle, a Luxembourg VAT-taxable person that supplies goods or renders services, who has an annual turnover, which does not exceed EUR30,000 on an annual basis and only realizes domestic supplies, may benefit from a franchise of VAT. This VAT-taxable person has no right to recover input VAT, but should not charge VAT on the invoices they issue and should inform the VAT authorities on an annual basis about the evolution of his turnover. The aim of this measure is to release small enterprises from the VAT compliance burden.

VAT exemption for education under conditions

The provision of children's or young people's education, school and university education, vocational training or retraining, including the supply of services and of goods closely related thereto, by private organizations recognized by the competent Luxembourg authorities are exempt from VAT. As such, no VAT should be charged by the qualifying organizations for the education. This exemption also covers tuition given privately by teachers and covering school or university education.

Subsidies not directly linked to a supply

Subsidies, when not directly linked to a supply, fall outside the VAT scope. Hence, if a company receives a subsidy that is not directly linked to the price of its supplies, no VAT is due. No VAT should, for instance, be due on the subsidy received to support the construction or modernization of research infrastructures.

Partial tax exemption of income derived from qualifying IP

(Exonération partielle des revenus produits par certains droits de propriété intellectuelle)

Description of benefits

The “old” IP regime, Article 50 bis of Income Tax Law

The law of 21 December 2007 introduced an IP regime (codified in Article 50 bis of the Income Tax Law) under which 80% of the net income derived from qualifying intellectual property rights is exempt from income tax (Luxembourg corporate income tax and municipal business tax) and net wealth tax, under certain conditions. Capital gains derived from the disposal of qualifying IP rights also benefit from the exemption regime. The regime covers patents, trademarks, designs, domain names and software copyrights.

The “new” IP regime, Article 50 ter of Income Tax Law

The Law of 17 April 2018 introduces a new IP regime (new Article 50 ter of the Income Tax Law), which provides for an 80% tax exemption of the net income derived from qualifying IP, provided certain conditions are met.

In line with the nexus approach, qualifying IP assets are patents and other IP assets that are functionally equivalent to patents if those IP assets are legally protected under national or international provisions. Functionally equivalent assets comprise utility models and supplementary protection certificates on patents for pharmaceutical and plant protection products, as well as extensions of supplementary protection certificates for products intended for pediatric use, plant breeders' rights and orphan drug designations. Article 50 ter also includes copyrighted software in the list of qualifying IP assets, whereas marketing-related intangible assets such as trademarks or domain names no longer qualify under the new IP regime.

Under the nexus approach, the aforementioned assets are only eligible for the new IP regime if they result from an actual R&D activity undertaken by the taxpayer itself.

Based on the agreed nexus approach, the formula to be applied broadly corresponds to the proportion of qualifying expenditures compared to overall expenditures (nexus ratio) applied to an adjusted and compensated net eligible income from IP asset. The net eligible income is defined as the gross eligible income minus (i) the overall expenditures and (ii) the expenditures that are indirectly linked to a qualifying IP asset. The determination of the latter must be made in line with the general rules applicable to the determination of taxable income, taking into account all relevant facts and circumstances for a given case. The net eligible income must further be adjusted and compensated. According to the commentaries of the Law, the adjustment aims at ensuring that the net eligible income benefits from the partial tax exemption only insofar as it exceeds the amount of (direct and indirect) expenses in relation with the qualifying IP asset, while the compensation aims at offsetting the losses incurred by one qualifying IP asset with the profits incurred by another qualifying IP asset.

The provisions of the new IP regime apply from tax year 2018.

Transition period – a period of coexistence of two regimes

To comply with the nexus approach, as agreed at the level of the Organisation for Economic Co-operation and Development (OECD) under Action 5 (Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance) of the Base Erosion and Profit Shifting (BEPS) plan, and at the EU level, the Budget Law of 18 December 2015 (the Budget Law) abolished the abovementioned regime as of 1 July 2016 for corporate tax and as of 1 January 2017 for net wealth tax.

However, the five-year transitional period, in line with a measure proposed by the UK and German governments and endorsed by the OECD and the G20, applies. The old IP regime is thus maintained for income tax purposes for a transitional period starting on 1 July 2016 and expiring on 30 June 2021. This means that the regime will continue to apply, until the abovementioned expiration date, to any qualifying IP that has been created or acquired before 1 July 2016, including improvements made to such IP, provided that they were completed before 1 July 2016. Similarly, for net wealth tax purposes, the current regime will continue to apply to the abovementioned IP until 1 January 2021 (inclusive) as a key date for the calculation of the unitary value.

The transitional period, however, includes a safeguard measure (in line with the OECD recommendations on Action 5), which states that the transitional period will expire on 31 December 2016 if:

- ▶ The IP has been acquired after 31 December 2015 from a related party. For the definition of related party, the Budget Law refers to Article 56 of the Income Tax Law. Acquisition is defined as any acquisition for value of IP, including acquisitions resulting from a tax-neutral restructure, such as merger, demerger and business contribution.
- ▶ The IP has, at the time of its acquisition, not already qualified for the Luxembourg IP regime or for a foreign tax regime corresponding to the Luxembourg IP regime.

An additional safeguard measure, adopted from the OECD Final Report on Action 5, applies, being the automatic communication by the Luxembourg tax authorities to the competent authority of another country of the identity of any taxpayer who is considered to be a new entrant to the IP regime, i.e., any taxpayer that benefits from the IP regime for IP created or acquired after 6 February 2015, which corresponds to the release date by the OECD of a document (Action 5: Agreement on the Modified Nexus Approach for IP Regimes) describing the consensus on the approach for a substantial activity requirement for IP regimes. The information is communicated, regardless of whether a ruling is provided, no later than the earlier of three months after the date on which the information becomes available to the Luxembourg tax authorities or one year after the date of filing of the tax return by the taxpayer.

Guidelines around incentive applications

The tax exemption is claimed via the filing of a specific form to be added to the annual income tax return.

As mentioned above, the old IP regime continues to apply, subject to certain conditions, until 30 June 2021, while the new regime applies as from tax year 2018. As a consequence, both regimes will coexist during a certain period. Article 50 ter leaves it to the taxpayer to choose to apply the provisions of one or the other regime; however, once decided, the election made in the framework of the income tax return is irrevocable from the tax year in which it is exercised. Furthermore, the option for the new

IP regime will apply to all qualifying IP assets; it is thus not possible to apply the provisions of the new regime to determined qualifying assets only, whereas the provisions of the old IP regime would continue to apply to other qualifying assets. There is one exception: if a determined IP asset does not qualify for the new IP regime, the provisions of the old IP regime will continue to apply during the transitional period to the income generated from such IP asset, regardless of an option for the new IP regime to apply to other qualifying IP assets.

3. Eligibility requirements

The following R&D activities are eligible for the various R&D incentives:

- ▶ R&D projects or programs:
 1. Fundamental research that aims primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct commercial application or use in view.
 2. Industrial research that aims to acquire new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services. It comprises the creation of component parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation.
 3. Experimental development activity that consists of acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This includes, among others, activities aiming at the conceptual definition, planning and documentation of new products.
- ▶ Technical feasibility studies: The evaluation and analysis of the potential of a project, which aims at supporting the process of decision-making by objectively and rationally uncovering its strengths and weaknesses, opportunities and threats, as well as identifying the resources required to carry it through and, ultimately, its prospects for success.

- ▶ Support for the construction or modernization of research infrastructures: Research infrastructures are facilities, resources and related services that are used by the scientific community to conduct research in their respective fields and covers scientific equipment or sets of instruments, knowledge-based resources such as collections, archives or structured scientific information, enabling information and communication technology-based infrastructures such as grid, computing, software and communication, or any other entity of a unique nature essential to conduct research. Such infrastructures may be “single-sited” or “distributed” (an organized network of resources) in accordance with Article 2(a) of Council Regulation (EC) No. 723/2009 of 25 June 2009 on the community legal framework for a European Research Infrastructure Consortium (ERIC).
 - ▶ Support for young innovative companies: The beneficiary of the aid must demonstrate, by means of an evaluation carried out by an external expert, that it will in the foreseeable future develop products, services or processes that are new or substantially improved compared to the state of the art in its industry, and which carry a risk of technological or industrial failure; or whose R&D costs represent at least 10% of its total operating costs in at least one of the three years preceding the granting of the aid or, in the case of a startup enterprise without any financial history, in the audit of its current fiscal period, as certified by an external auditor.
 - ▶ Aid for process and organizational innovation:
 1. Process innovation aims to implement a new or significantly improved production or delivery method (including significant changes in techniques, equipment or software), excluding minor changes or improvements, increases in production or service capabilities through the addition of manufacturing or logistical systems that are very similar to those already in use, ceasing to use a process, simple capital replacement or extension, changes resulting purely from changes in factor prices, customization, localization, regular, seasonal and other cyclical changes and trading of new or significantly improved products.
 2. Organizational innovation aims to implement a new organizational method in an enterprise's business practices, workplace organization or external relations, excluding changes that are based on organizational methods already in use in the undertaking, changes in management strategy, mergers and acquisitions, ceasing to use a process, simple capital replacement or extension, changes resulting purely from changes in factor prices, customization, localization, regular, seasonal and other cyclical changes and trading of new or significantly improved products.
- Eligible expenses include:
- ▶ R&D projects or programs:
 1. Costs of buildings and land, to the extent and for the duration period used for the project. With regard to buildings, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles, are considered eligible. For land, costs of commercial transfer or actually incurred capital costs are eligible.
 2. Personnel costs (researchers, technicians and other supporting staff to the extent employed on the project)
 3. Costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's-length conditions, as well as consultancy or similar services used exclusively for the project
 4. Costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles, are considered eligible.
 5. Additional overheads and other operating expenses, including costs of materials, supplies and similar products, incurred directly as a result of the project
 - ▶ Technical feasibility studies: costs of the study
 - ▶ Support for the construction or modernization of research infrastructures: investment costs in intangible and tangible assets

- ▶ Innovation aid for small and medium-sized enterprises:
 1. Costs for obtaining, validating and defending patents and other intangible assets
 2. Costs for secondment of highly qualified personnel from a research and knowledge-dissemination organization or a large enterprise, working on research, development and innovation activities in a newly created function within the beneficiary and not replacing other personnel
 3. Costs for consultancy services provided by external consultants that are neither a continuous or periodic activity nor relate to the enterprise's usual operating costs, such as routine tax consultancy services, regular legal services or advertising
 4. Innovation advisory and support services
- ▶ Aid for process and organizational innovation:
 1. Personnel costs
 2. Costs of instruments, equipment, buildings and land to the extent and for the period used for the project
 3. Costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's-length conditions
 4. Additional overheads and other operating costs, including costs of materials, supplies and similar products, incurred directly as a result of the project

Costs and expenses relating to the launch and marketing of the products, services or procedures developed as well as interest payable on the financing obtained for research projects are excluded.

These aids are intended for craft and commercial businesses with a business permit granted by the Ministry of Small and Medium-Sized Businesses. They also apply to engineers and architects during their first three years of business (as of the date of their first Luxembourg or foreign business permit). However, certain activities are excluded from eligibility for the aid.

Specific eligibility requirements for each incentive are as below:

- ▶ Medium-term and long-term loans
 - ▶ Eligible entities include industrial enterprises and service providers with a significant impact on economic development and whose equity amounts to at least EUR25,000. The loans are intended for the financing of:
 - i. Professional equipment needed for the production or service provision activities, including safety or environmental protection equipment
 - ii. Land used for professional purposes only
 - ▶ Parts of buildings used for non-professional purposes, private automotive equipment and inventory cannot be financed by medium-term and long-term loans. Medium-term and long-term loans may only be requested for investment projects with a value of at least EUR100,000.
- ▶ Accelerated depreciation on the R&D assets
 - ▶ Eligible entities include all entities or individual subjects exercising a commercial activity in Luxembourg and liable with this income to Luxembourg income tax, provided that the taxpayer who uses the asset is also the owner of the asset. Eligible assets include all assets except buildings. Higher depreciation rates for materials and equipment used exclusively in scientific or technical research activities are available.
- ▶ Tax exemptions
 - ▶ Eligible entities include all entities or individual subjects exercising a commercial activity in Luxembourg and with income liable to Luxembourg income tax. Eligible assets under the old IP regime include software copyrights, patents, trademarks, designs, models and domain names. Under the new IP regime, eligible assets include patents and other IP assets that are functionally equivalent to patents, including copyrighted software. Note, however, that trademarks and domain names do not qualify under the new regime.

- ▶ Direct loan for RD&I
 - ▶ Eligible entities are any innovative SME, provided they have a valid business permit (issued in accordance with the law of 2 September 2011) for at least four years.
 - ▶ Eligible costs relate to investments made in depreciable assets and negative operational cash flows carried out within the project of business development. This includes costs related to equipment, machinery and professional facilities, personnel expenditures, patent filing fees, expenses related to contract research, use of data banks, technical libraries and laboratories, acquisition of patents/licenses, project feasibility studies, innovation support services like market research, implementation of new regulatory standards, testing and certification as well as a one-year budget related to marketing/promotion of new products/services. Production, distribution costs, land and buildings are, however, excluded.
- ▶ Loan for innovative enterprises
 - ▶ Eligible entities are young, innovative SMEs, provided they have a valid business permit (issued in accordance with the law of 2 September 2011), have been in existence for less than eight years and have a substantial impact on national economic development.
 - ▶ Eligible costs relate to investments made in depreciable assets and negative cash flows resulting from the business plan presented by the innovative enterprises. Eligible costs include, in particular, land, buildings or parts of buildings used exclusively for professional purposes, equipment, machinery and professional facilities, materials/supplies, personnel expenditures, patent filing fees, expenses related to contract research, use of data banks, technical libraries and laboratories, acquisition of patents/licenses, innovation support services like market research, implementation of new regulatory standards, testing and certification and costs of the commercial launch, as well as the required working capital.
- ▶ Special depreciation
 - ▶ Eligible entities are any commercial, industrial, mining or craft enterprises established in the territory of the Grand Duchy of Luxembourg.

- ▶ Eligible costs are fixed assets purchased or constructed for the purposes of protecting the environment, reducing waste or saving energy (e.g., implementation of new techniques for rational use of energy or implementation of new and renewable energy sources, as well as recovery of energy from industrial processes). The acquisition or production costs of the investment must be at least EUR2,400 (excluding VAT). The depreciation may not exceed 80% of the acquisition or production costs of the qualifying assets.

4. IP and jurisdictional requirements

Effective date

The qualifying IP right must have been acquired or developed after 31 December 2007. This date is maintained under the new IP regime; however, since acquired IP assets no longer qualify, the eligible asset must have been constituted, developed or improved after 31 December 2007 in the framework of R&D activities.

Qualifying IP

Qualifying IP includes the following:

- ▶ Software copyrights
- ▶ Patents
- ▶ Trademarks (no longer qualifying under new IP regime)
- ▶ Designs (no longer qualifying under new IP regime)
- ▶ Models (utility models under new IP regime)
- ▶ Domain names (no longer qualifying under new IP regime)
- ▶ Supplementary protection certificates on patents for pharmaceutical and plant protection products (under new IP regime)
- ▶ Extensions of supplementary protection certificates for products intended for pediatric use (under new IP regime)
- ▶ Plant breeders' rights (under new IP regime)
- ▶ Orphan drug designations (under new IP regime)

Under the old IP regime, the IP may not have been acquired from a person that is assimilated by an affiliated company. Company A is considered affiliated with Company B in the meaning of the law if:

- ▶ Company A directly holds at least 10% of the share capital of Company B.
- ▶ Company B holds at least 10% of Company A's share capital.
- ▶ At least 10% of the share capital of Company A and of Company B is directly held by a third company.

Under the new IP regime, only assets resulting from an actual R&D activity undertaken by the taxpayer itself are eligible.

Types of income

The old IP regime covers:

- ▶ Royalties
- ▶ Capital gains

In addition, Luxembourg tax law provides for a deemed deduction for patents developed in-house. This exemption is limited to registered patents only.

Under the new IP regime, eligible income includes:

- ▶ Income received for the use or the right to use a qualifying IP asset
- ▶ Capital gains derived from the sale of a qualifying IP asset
- ▶ Embedded IP income derived from the sale of products or services
- ▶ Indemnities received in the framework of a judicial proceeding or an arbitration involving a qualifying IP asset

Calculation of income

- ▶ Income from IP
 - ▶ Under the old IP regime, net income is defined in law as the gross royalty income received by the taxpayer

(or deemed income for self-developed IP) reduced by the amount of expenses in direct economic connection with this income, including annual depreciations and write-downs. The taxable base is reduced by 80% of the net income. Under the new IP regime, the net eligible income is defined as the gross eligible income minus (i) the overall expenditures and (ii) the expenditures that are indirectly linked to a qualifying IP asset. The net eligible income is then adjusted and compensated, and multiplied by the nexus ratio and the result hereof is reduced by 80%.

- ▶ Capital gains on the disposal of IP
 - ▶ Capital gains realized on the disposal of qualifying IP will benefit from an 80% exemption. The capital gain will remain taxable up to the extent of the expenses in direct connection with the income as well as depreciations and write-downs that have reduced the tax base of the taxpayer in the tax year of the disposal or any previous tax year. For the rules applicable under the new regime, please refer to the section above.
- ▶ IP regime rate
 - ▶ Corporate income tax/municipal business tax: for 2019, the general aggregated tax rate (consisting of corporate income tax, solidarity surtax and municipal business tax) applicable to the Luxembourg tax base amounts to 24.94% for companies registered in the municipality of Luxembourg.
 - ▶ Net worth tax: full exemption for qualifying IP rights both under the old and the new IP regimes.

Can work be performed outside the country?

There is no specification in the old IP tax law as to the place of work performance leading to the IP. Under the new IP regime, there are some restrictions regarding expenditures to be considered as qualifying expenditures.

Must the IP be registered or owned locally?

Yes

5. Technology or innovation zones

Specific aid is foreseen for (i) the construction or modernization of innovation clusters and (ii) the operation of innovation clusters. An innovation cluster is defined as a structure or organized group of independent parties (such as innovative startups, SMEs, as well as research and knowledge dissemination organizations, nonprofit organizations and other related economic actors) designed to stimulate innovative activity through promotion, sharing of facilities and exchange of knowledge and expertise and by contributing effectively to knowledge transfer, networking, information dissemination and collaboration among the undertakings and other organizations in the cluster.

Its aim is to promote innovation by encouraging interaction, the sharing of facilities and the exchange of knowledge and expertise for the purpose of R&D or innovation as well as to contribute to technology transfer, networking and the dissemination of scientific and technical information between the enterprises and research organizations that compose the grouping. The aid can cover two types of expenses, such as investments in an innovation cluster and/or the costs for the operation of an innovation cluster. All enterprises and all private research and knowledge dissemination organizations established in Luxembourg are eligible for these schemes.

The recipient of the aid for the construction or modernization of an innovation cluster must be responsible for managing the installations and activities of the innovation cluster as well as access to the premises. Access to the cluster's premises, facilities and activities must be open to several users and be granted on a transparent and

nondiscriminatory basis. Enterprises that have financed at least 10% of the investment costs of the innovation cluster may be granted preferential access under more favorable conditions. To avoid overcompensation, such access shall be proportional to the enterprise's contribution to the investment costs, and these conditions shall be made publicly available. The fees charged for using the cluster's facilities and for participating in the cluster's activities shall correspond to the market price or reflect their costs.

The eligible costs to the investment aid for the construction or modernization of innovation clusters shall be the investment costs in intangible and tangible assets. The eligible costs for the investment aid for the operation of innovation clusters comprise personnel costs and administrative expenses related to the following activities:

- ▶ Animation of the cluster to facilitate collaboration, information sharing and the provision or channeling of specialized and customized business support services
- ▶ Marketing of the cluster (e.g., promotion campaigns) to attract new members to the innovation cluster and to increase visibility
- ▶ Management of the cluster's facilities
- ▶ Organization of training programs, workshops and conferences to facilitate the transfer of knowledge, networking among the innovation cluster members and transnational cooperation

The investment aid for the construction or modernization of innovation clusters, as well as the investment aid for the operation of innovation clusters, shall not exceed 50% of the total eligible costs during the period over which the aid is granted. The investment aid for the construction or modernization of innovation clusters could, however, be increased by 5% if the cluster is located in certain assisted geographical areas.

Both the investment aid for innovation clusters as well as the investment aid for the operation of innovation clusters are applicable to the future project of the innovation clusters' operation. To receive the aid, the applicant must fulfill and submit the aid application to the Ministry of Economy before the start of the project in the company. Guidelines related to the aid application are available at the bottom of the following webpage: <http://www.innovation.public.lu/en/financer/competitivite/grants/infrastructures-recherche/index.html>.

6. Role of governmental bodies in administering incentives

Ministry of the Economy

The Directorate of Research, Intellectual Property and New Technologies within the Ministry of the Economy is, together with the Ministry of Finance, in charge of granting incentives for research and innovation projects according to the law of 17 May 2017. Applications for R&D projects must be sent to this department. The Ministry of the Economy and the Ministry of Finance will jointly decide to grant an incentive after soliciting the opinion of a consulting commission if required. The Ministry of the Economy, together with the Ministry of Finance, is also in charge of aid schemes as provided for by the law of 9 August 2018 on aid schemes in favor of SMEs.

Luxinnovation GIE (National Agency for Innovation and Research)

Luxinnovation is an agency that offers support at all stages of innovation and research projects and provides customized services for project applicants (e.g., identification of the needs of the enterprise or the research organization, guidance on the appropriate funding tool, support for putting together aid application files).

Luxembourg Institute of Intellectual Property

The Luxembourg Institute of Intellectual Property (IPI) is an economic interest group whose mission is to coherently bring together national and international expertise on IP and make that expertise available to the economic and institutional actors to be a driver of growth for Luxembourg. As part of its mission, the IPI, among others, conducts studies and projects to advise the Government and develops and provides support services to companies, research actors, public institutions and any other interested audience.

SNCI

The SNCI is a public-law banking institution with legal personality whose capital is fully owned by the state of Luxembourg. The SNCI specializes in medium- and long-term financing of Luxembourg-based companies. The SNCI's financing instruments are investments in fixed assets, innovation and exports.

7. Administrative requirements

Applicants must submit a duly completed application for financial aid to the Directorate of Research, Intellectual Property and New Technologies within the Ministry of the Economy. Aid is, in general, paid out after completion of the investment program; one or several installments may, however, be paid as the investments or operations progress.

Detailed information and application forms may be accessed via the following links:

- ▶ <http://www.innovation.public.lu/en/financer/competitivite/index.html>
- ▶ <http://www.guichet.public.lu/entreprises/en/financement-aides/aides-recherche-developpement/index.html>

For loans, the applicant must send an application to SNCI with the following documentation:

- ▶ Description of the enterprise making the investment
- ▶ Detailed description, illustrated with figures, of the planned investment
- ▶ The relevant financing plan
- ▶ Three- to five-year business plan
- ▶ Audited annual accounts of the business for the last three financial years

8. Statutory reference

The state aid for R&D and innovation for the benefit of Luxembourg's economy is covered by the new law of 17 May 2017 relating to the promotion of R&D and innovation.

The application of the regime of medium-term and long-term loans, direct loans for RD&I and loans for innovative enterprises granted by the SNCI, and the accelerated depreciation (Article 32 of the Income Tax Law) is indefinite. As previously mentioned, the application of the existing IP tax regime provided for by the law of 21 December 2007 terminates as from 1 July 2016 for corporate income tax and municipal business tax purposes and 1 January 2017 for net wealth tax purposes, unless the grandfathering period applies. The Law of 17 April 2018 providing for a new IP regime applies as from tax year 2018.

M

Malaysia



Malaysia

This chapter is based on information current as of February 2019.

EY contacts:

Amarjeet Singh
amarjeet.singh@my.ey.com
+60 3 7495 8383

Shalini Chandrarajah
shalini.chandrarajah@my.ey.com
+60 3 7495 8281

Malaysia, as an associate member of the Organisation for Economic Co-operation and Development (OECD), in principle has committed to implement and to adhere to the Base Erosion and Profit Shifting (BEPS) Action Plan as the international taxation standard. Various tax incentives have been identified for Forum of Harmful Tax Practice (FHTP) evaluation, and guidelines were provided to ease the transition into the new regime.

The two notable changes to Malaysian tax incentives due to the FHTP requirements are as follows:

(i) Substantive requirements

The company must:

- a. Have an adequate number of full-time employees
- b. Incur an adequate amount of annual operating expenditures or have an approved adequate investment in fixed assets

(ii) Exclusion of intellectual property (IP) income

IP income would not qualify for the tax exemption (as of January 2019, no guidelines on the tax treatment of IP income have been issued by the authorities).

1. Overview

A wide range of incentives and financial assistance is offered to attract investments in R&D activities.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input checked="" type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

Companies providing R&D services are eligible for pioneer status (PS) or an investment tax allowance (ITA) for qualifying R&D capital expenditures. A double deduction is available for R&D revenue expenditures incurred by companies carrying out in-house R&D or expenditures related to the services of approved R&D service providers. There is also a variety of local Government funding

programs to support companies in various industries. Some tax incentives, especially PS, ITA and other tax incentives, are generally mutually exclusive, and taxpayers may apply for only one of the incentives. For the incentives mentioned below to be available, the R&D activities must be carried out in Malaysia.

2. Incentives available

Names of incentives	Pioneer status	ITA	Special incentive scheme*	Incentives for researchers to commercialize research findings	Double deductions	Financial assistance	R&D grants
Types of incentives	▸ Tax holiday	▸ Tax allowance	▸ Tax exemption ▸ Tax allowance ▸ Cash grants	▸ Tax exemption	▸ Super deduction (200%)	▸ Financial support	▸ Cash grants

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Pioneer status

Description of benefits

Qualifying taxpayers are eligible for a 70% to 100% income tax exemption for 5 to 10 years (Pioneer Period) on eligible R&D income; therefore, the cash savings value potential depends on the amount of statutory income (income after deduction of allowable expenses and capital allowances) generated during the tax relief period. There may be certain conditions imposed, such as investments in fixed assets, local spending and/or R&D expenditures. Generally, no specific IP requirements are imposed. However, in practice, IP ownership requirements may be imposed depending on the facts of each case.

If the taxpayer suffers business loss during the Pioneer Period (pioneer loss), any unabsorbed pioneer loss after the end of the Pioneer Period is allowed to be carried forward up to a maximum of seven years of assessment.

Pioneer status requires taxpayers undertaking the R&D activities to seek approval from the authorities. Some of the activities that qualify for PS are:

- Contract R&D and R&D services
- Industrial design services

Pursuant to Malaysia's participation in the FHTP, the following IP income would not qualify for the tax exemption:

- (i) From 1 July 2018 to 30 June 2021, royalty and other income derived from new IP rights that the qualifying company* owns
- (ii) From 1 July 2021, royalty and other income derived from all IP rights which the qualifying company* owns

* Qualifying companies are companies that have applied for Pioneer status on or after 1 January 2019.

Guidelines around incentive applications

Pioneer status is applicable to future investments only (i.e., only projects that have not yet commenced at the time of application are eligible). If projects have already commenced, the authorities take the view that the projects do not require an incentive. Therefore, the application for the incentive should be submitted before the commencement of the respective R&D activity or production of the product concerned. The incentive is claimed when the company files its corporate income tax return (i.e., Form C) for the particular year of assessment (YA). The deadline to submit the income tax returns for companies is seven months from the close of the accounting period.

ITA

Description of benefits

Taxpayers are eligible for 60% to 100% of ITA on qualifying capital expenditures incurred within 10 years. The ITA can be offset against 70% to 100% of statutory income, and the cash savings value potential depends on the amount of qualifying capital expenditures expected to be incurred. There may be conditions imposed, such as investments in fixed assets, local spending and/or R&D expenditures. Generally, no specific IP requirements are imposed. However, in practice, IP ownership requirements may be imposed depending on the facts of each case. Unused ITA can be carried forward indefinitely. ITA requires taxpayers undertaking the R&D activities to seek approval from the authorities.

Guidelines around incentive applications

ITA is applicable to future investments. If projects have already commenced, the authorities take the view that the projects do not require an incentive. Therefore, the application of the incentives should be submitted before the commencement of the R&D activity or production of the promoted product.

The incentive is claimed when the company files its Form C for the particular YA. The deadline to submit tax returns for companies is seven months from the close of the accounting period.

For both PS and ITA, the Malaysian Investment Development Authority (MIDA) has identified a long list of activities and manufactured products as “promoted activities” and “promoted products.” The list is under constant review and is updated from time to time to bring it in line with the Government’s investment policies.

Special incentive scheme

Description of benefits

The special incentive scheme is a pre-packaged incentive scheme approved by the Minister of Finance (MOF). It offers two types of incentives:

- ▶ Income tax exemption – for PS: taxpayers may be able to negotiate up to 100% income tax exemption for a specific period (e.g., 10 years). Unabsorbed pioneer loss after the end of the Pioneer Period is allowed to be carried forward up to a maximum of seven years of assessment.
- ▶ Qualifying capital expenditure – for ITA: taxpayers may be able to negotiate up to a 100% allowance on qualifying capital expenditures incurred for a specific period (e.g., 10 years). The allowance can be offset against up to 100% of statutory income. Any unused tax allowance may be carried forward indefinitely.

Pursuant to Malaysia's participation in the Forum of Harmful Tax Practice, following IP income would not qualify for the tax exemption:

- From 1 July 2018 to 30 June 2021, royalty and other income derived from new IP rights that the qualifying company* owns
- From 1 July 2021, royalty and other income derived from all IP rights which the qualifying company* owns

* Qualifying companies are companies that have applied for Pioneer status on or after 1 January 2019.

Guidelines around incentive applications

The special incentive scheme is applicable to future investments only. If projects have already commenced, the authorities take the view that the projects do not require an incentive. Therefore, the application for the incentive should be submitted prior to commencement of the R&D activity or production of the promoted product.

The incentive will be claimed when the company files its Form C for the particular YA. The deadline to submit tax returns for companies is seven months from the close of the accounting period.

Incentives for researchers to commercialize research findings

Commercialization of R&D findings

Description of benefits

Taxpayers are eligible for a 100% income tax exemption on income received from the commercialization of R&D findings for a period of 10 years. Generally, no specific IP requirements are imposed. However, in practice, IP ownership requirements may be imposed depending on the facts of each case. The incentive requires the entity undertaking the R&D activities to seek approval from the authorities.

Guidelines around incentive application

The incentive is applicable to future investments only and for commercialization of resource-based and non-resource-based R&D findings of approved public research institutions. The commercialization includes the process of transforming ideas, knowledge or an invention into a product or process that has an industrial application or that is marketable. Approved public research institutions include the Malaysian Agricultural Research and Development Institute (MARDI), the Malaysian Palm Oil Board (MPOB), Lembaga Getah Malaysia (LGM), the Malaysian Cocoa Board (MCB) and Forest Research Institute Malaysia (FRIM), as well as public institutions of higher learning, such as universities approved by the Ministry of Finance (MOF).

The incentive will be claimed when the company files its Form C for the particular YA. The deadline to submit tax returns for companies is seven months from the close of the accounting period.

Investment in companies undertaking commercialization of R&D findings

Description of benefits

A company that invests in its subsidiary company engaged in the commercialization of the R&D findings will be given a tax deduction equivalent to the amount of investment made in the subsidiary company. This investment is to be in the form of equity or a cash contribution. Any loan or advance made by the investing company to the subsidiary is not eligible unless converted to equity before the commencement of the tax relief period of the subsidiary.

Guidelines around incentive application

The incentive will be claimed when the company files its Form C for the particular YA. The deadline to submit tax returns for companies is seven months from the close of the accounting period.

Double deductions

Description of benefits

Taxpayers are eligible for a 200% deduction of qualifying R&D revenue expenditures for eligible R&D activities excluding capital expenditure. The double deduction is applicable only to revenue expenditures including cash contributions or donations made to approved research institutes and payments for the use of the services of approved research companies, contract R&D companies and R&D companies. Approval of each research project has to be obtained before claiming a double deduction on qualifying R&D revenue expenditures.

From YA 2016 to YA 2018, a double deduction is allowed automatically (i.e., no prior Malaysian Inland Revenue Board (MIRB) approval required) for in-house R&D project expenditures of up to MYR50,000 for each YA for a Malaysian resident company incorporated under the Companies Act 1965, with paid-up capital not exceeding MYR2.5 million subject to submission of the R&D project application to the MIRB.

Guidelines around incentive applications

The double deduction is claimed when the company files its Form C for the particular YA. The deadline to submit tax returns for companies is seven months from the close of the accounting period. R&D revenue expenditures that qualify for double deduction include raw materials and manpower used in research; technical services procured; travel costs; maintenance; and rental of motor vehicles, buildings and equipment.

Financial assistance

Description of benefits

Financial assistance schemes currently include ScienceFund, Pre-Commercialization Funds, Commercialization of Research and Development Fund, and the Cradle Investment Programme. The amount of funding approved will be determined based on the merits of each application and the value potential varies depending on the fund approved. Applicants for the financial assistance schemes are required to submit their application to the respective authorities as follows:

- ▶ Research and Development Fund from Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC)
- ▶ Commercialization of Research and Development Fund: Malaysian Technology Development Corporation Sdn Bhd (MTDC)
- ▶ Cradle Investment Programme: Cradle Fund Sdn Bhd

Guidelines around incentive applications

Financial assistance schemes are applicable to future investments only, and only for projects approved by the relevant authorities. Applications for financial assistance should be submitted before the commencement of the proposed project. The majority of the financial assistance will be received based on the percentage of work done, and claims must be submitted to the relevant authorities.

R&D grants

Description of benefits

R&D grants are available under the special incentive package, which is a reimbursable dollar-for-dollar grant on qualifying R&D expenditures. There may be conditions imposed on R&D expenditures. To obtain a cash grant, taxpayers undertaking the R&D activities must gain approval from the authorities.

Guidelines around incentive applications

R&D grants are applicable to future investments. Grants are made based on a reimbursement basis and only for projects approved by the relevant authorities. The Government may impose conditions based on the type of projects, such as percentage of R&D personnel involved, minimum level of fixed asset investment and/or minimum local spending levels. R&D grant claims are based on a reimbursement basis and must be submitted when the company incurs the expenditure.

3. Eligibility requirements

Under the Promotion of Investments Act 1986, R&D is defined as any systematic or intensive study carried out in the field of science or technology with the objective of using the results of the study for the production or improvement of materials, devices, products, produce or processes, but it does not include:

- ▶ Quality control of products or routine testing of materials, devices, products or produce
- ▶ Research in the social sciences or humanities
- ▶ Routine data collection
- ▶ Efficiency surveys or management studies
- ▶ Market research or sales promotion

Qualifying expenditures include those incurred in R&D on the condition that the research is scientific in nature and is related to the business of the company.

Eligibility requirements for specific incentives are set out below.

3.1 Pioneer status

Eligibility criteria vary across different types of projects, and the Government may impose additional conditions based on the type of project, such as percentage of R&D personnel involved, minimum level of fixed asset investment and/or minimum local spending levels. Eligibility requirements for specific types of R&D operations are listed below:

Contract R&D and R&D companies

Contract R&D and R&D companies that fulfill the following criteria can apply for the various incentives:

- ▶ Research undertaken should be in accordance with the needs of the country and bring benefits to the economy.
- ▶ At least 70% of the income of the company should be derived from R&D activities.
- ▶ For manufacturing-based R&D, at least 50% of the workforce of the company must be appropriately qualified personnel performing research and technical functions.

- ▶ For agriculture-based R&D, at least 5% of the workforce of the company must be appropriately qualified personnel performing research and technical functions.

3.2 ITA

Eligibility criteria vary across different types of projects, and the Government may impose additional conditions based on the type of project, such as percentage of R&D personnel involved, minimum level of fixed asset investment and/or minimum local spending levels. Eligibility requirements for specific types of R&D operations are listed below:

Contract R&D and R&D companies

Research undertaken should be in accordance with the needs of the country and bring benefits to the economy. The conditions are the following:

- ▶ At least 70% of the income of the company should be derived from R&D activities.
- ▶ For manufacturing-based R&D, at least 50% of the workforce of the company must be appropriately qualified personnel performing research and technical functions.
- ▶ For agriculture-based R&D, at least 5% of the workforce of the company must be appropriately qualified personnel performing research and technical functions.

3.3 Special incentive scheme

- ▶ To receive benefits from the incentive, the company must be incorporated and resident in Malaysia.
- ▶ The benefits will be subject to conditions as stated by the MOF in the approval letter.
- ▶ The MOF or the Minister of International Trade and Industry will determine the commencement of the exempt period.

3.4 Incentives for researchers to commercialize research findings

Commercialization of R&D findings

The application for approval of the commercialization project for resource-based research received from 11 September 2004 is eligible for deduction.

To receive the benefit, the company should be incorporated in Malaysia.

The effective date of the incentive shall be determined by the MOF or the Minister of International Trade and Industry.

Investment in companies undertaking commercialization of R&D findings

- ▶ At least 70% of the investing company (holding company) and the company undertaking the commercialization projects must be owned by Malaysian nationals.
- ▶ The company that invests should own at least 70% of the equity of the company that commercializes the R&D findings.
- ▶ The commercialization of the R&D findings should be implemented within one year of the date of the incentive's approval.

3.5 Double deduction

- ▶ Research undertaken must be in accordance with the needs of the country and bring benefits to the Malaysian economy.
- ▶ Foreign researchers may be employed. However, the company should endeavor to train Malaysian nationals.
- ▶ Activities that involve only testing a product to conform its properties to the required standards for compulsory registration of the product as required by any laws in Malaysia (such as for agricultural chemicals and pharmaceutical products) are not considered R&D project activities for the purposes of claiming a double deduction.
- ▶ All R&D activities must be undertaken in Malaysia.

3.6 R&D grants

The levels of benefits for the grants are subject to conditions as stated in the approval letter.

4. IP and jurisdictional requirements

There is no restriction at this time on where the IP must be held except for those conditions imposed by the authorities.

5. Technology or innovation zones

Multimedia Super Corridor (MSC) Malaysia is the country's national information and communications technology (ICT) initiative designed to attract world-class technology companies while developing the local ICT industry. Fully supported by the Malaysian Government, MSC Malaysia has led the nation's transformation toward a knowledge economy over the past decade and a half.

Companies undertaking MSC qualifying activities (such as software development or hardware design) qualify for the following incentives:

- ▶ Pioneer status: 100% income tax exemption for up to 10 years
- ▶ ITA: 100% allowance on qualifying capital expenditures incurred within five years, which can be offset against up to 100% of statutory income

Companies may also enjoy other incentives, including:

- ▶ Duty-free importation of multimedia equipment
- ▶ Unrestricted employment of foreign workers
- ▶ Freedom of ownership
- ▶ Freedom to source capital globally for MSC infrastructure and the rights to borrow funds globally

- ▶ Withholding tax exemption on technical advice or technical services, licensing fees and interest payments to nonresidents

To be eligible for MSC Malaysia status, a company must:

- ▶ Provide or heavily use information technology and multimedia products and services
- ▶ Employ a substantial number of knowledge workers
- ▶ Have a strong value proposition that specifies how operations will contribute to the development of MSC Malaysia
- ▶ Establish a separate legal entity for MSC-qualifying activities
- ▶ Locate in MSC Malaysia-designated Cybercities or Cybercentres
- ▶ Comply with environmental guidelines

Applications must be submitted to the Malaysia Digital Economy Corporation.

6. Role of governmental bodies in administering incentives

Various Government agencies are involved in administering the R&D incentives. The main agencies are the following:

- ▶ **MIDA:** The MIDA is the Government's principal agency for the promotion of the manufacturing and services sectors in Malaysia. It assists companies intending to invest in the manufacturing and services sectors and facilitates the implementation of their projects. The MIDA also evaluates tax incentive applications for projects in the manufacturing and related services sectors.
- ▶ **MIRB:** The MIRB acts as an agent of the Government and provides services in administering, assessing, collecting and enforcing payment of income tax and other taxes. It advises the Government on matters relating to taxation and works with the appropriate ministries and statutory bodies on such matters.

The other Government agencies include:

- ▶ **MOF:** The MOF formulates and implements fiscal and monetary policies in Malaysia. The MOF has the authority to grant tax incentives including Pioneer status, ITA, special incentive scheme, incentives for research and commercialization of research findings, double deductions and R&D grants.
- ▶ **MOSTI:** The MOSTI leads the National Information and Communication Technology Department's function, multimedia and innovation. MOSTI evaluates and approves applications for ScienceFund and the Pre-Commercialization Fund.
- ▶ **MTDC:** The MTDC was set up in 1992 to promote the adoption of technologies by local companies via commercialization activities of local inventions or acquisition of foreign technologies. The MTDC evaluates and approves applications for commercialization of R&D fund applications from companies.
- ▶ **Cradle Fund Sdn Bhd:** Cradle Fund Sdn Bhd was set up to encourage, support, stimulate and nurture the development of Malaysian entrepreneurship in ICT, biotechnology and life sciences, material sciences and high-growth technology industries, and the generation of ideas for an innovative knowledge-based society and economy. Cradle Fund Sdn Bhd evaluates and approves applications for Cradle Investment Programme applications.

7. Administrative requirements

- ▶ Applications for PS, ITA incentives or the special incentive scheme are required to be submitted to the MIDA.
- ▶ Applications for financial assistance should be submitted to the relevant authorities highlighted above.
- ▶ All double deduction claims should be submitted to the MIRB.
- ▶ The MIRB monitors and processes PS, ITA claims and certain incentive claims.

8. Statutory reference

- Promotion of Investments Act 1986
- Income Tax Act 1967 and its relevant rules, regulations and guidelines

M

Mexico



Mexico

This chapter is based on information as of March 2019, but is very likely to change during 2019.

EY contacts:

Francisco Bautista Plancarte
francisco.bautista@mx.ey.com
+52 55 5283 1454

Pablo Macías Calleja
pablo.macias@mx.ey.com
+52 55 5283 1300 ext. 3604

The new Government has not published the rules of operations for R&D programs for 2019; the information described below is based on the 2018 rules of operations. It is highly probable that these incentive programs will no longer be available as we know them, as they may undergo major rule changes or even be completely canceled.

1. Overview

The Mexican Government offers R&D incentives in the form of grants, subsidies and public funds for the development of research, development and innovation projects that aim to increase the productivity and competitiveness of the Mexican economy, strengthen the domestic market and attract domestic and foreign investment. The more significant R&D incentive programs (in terms of the resource pools available) are:

- ▶ The Innovation Incentive Program (PEI), managed by the National Council of Technology & Science (CONACYT)
- ▶ The Industrial Productivity and Competitiveness Program (PPCI), managed by the Ministry of Economy (SE)
- ▶ The Software Industry and Information Technology Services Development Program (PROSOFT), managed by the SE
- ▶ The R&D Tax Credits, managed by CONACYT

Each entity annually announces a public call (Convocatoria Pública) inviting individuals and companies to apply for financial support or a fiscal stimulus in the form of a tax credit for projects that meet specific objectives (call for submissions). These public calls are valid only during specific periods of time (open filing periods).

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Innovation Incentive Program (PEI)*	Industrial Productivity and Competitiveness Program (PPCI)	Software Industry and Information Technology Services Development Program (PROSOFT)	R&D Tax Credit
Types of incentives	▶ Cash grants	▶ Cash grants	▶ Cash grants	▶ Tax credits

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

PEI

(Programa de Estímulos a la Innovación)

Description of benefits

PEI subsidies come in the form of cash grants as a percentage of eligible expenses incurred during the year following the publication of CONACYT's call for PEI submissions.

PEI's main objective is to promote company investment in activities and projects related to research, technological development and innovation in collaboration with the national academia through complementary stimulus. The incentive is granted to technologically innovative initiatives that provide high levels of added value. The following are the program's criteria:

- ▶ Micro, small and medium-sized companies (MIPYMES) with at least one year of economic activities
- ▶ Companies that present projects related to the

development of new or improved products, processes or services based on technological development

- ▶ Companies with a valid registration in the National Register of Scientific and Technological Institutions and Companies (RENIECYT)

PEI offers three support modalities:

- ▶ High Added Value Technological Innovation for Technological Research, Development and Innovation (INNOVAPYME) – for MIPYMES, with grants of up to MXN15 million per company.
- ▶ Technological Innovation to Enhance Competitiveness for Technological Research, Development and Innovation (INNOVATEC) – for large companies, with grants of up to MXN25 million per company.
- ▶ Development and Innovation of Precursor Technologies for Technological Research, Development and Innovation (PROINNOVA) – for projects that involve the collaboration of at least two research centers or universities, with grants of up to MXN19 million per company.

The benefits provided under each modality are:

PEI – Benefits provided under each modality

Modality	Individual projects	Projects linked to research centers or universities	
	Percentage of expenses covered by the program	Percentage of expenses covered by the program	Percentage of expenses dedicated to activities with research centers or universities covered by the program
INNOVAPYME	30%	35%	70%
INNOVATEC	25%	30%	70%
PROINNOVA, MYPIMES	N/A, this modality does not accept unlinked projects	50%	70%
PROINNOVA, large companies	N/A, this modality does not accept unlinked projects	35%	70%

For each modality, the percentage not covered by CONACYT must be assumed by the company.

Guidelines around incentive applications

The incentive is applicable to investments and expenses incurred in the next calendar year following the call for PEI submissions. Taxpayers are required to submit their proposals by an October deadline, with the results made public by February of the following year.

The taxpayer must sign a Resource Allocation Agreement to formalize the allocation of resources for the benefited projects. The deadline for signing the agreement is usually around next April after PEI's results publication. By signing the agreement, taxpayers will receive benefits as determined by CONACYT.

PPCI

(Programa para la Productividad y Competitividad Industrial)

Description of benefits

PPCI subsidies are granted in the form of cash grants of 50% of eligible expenses incurred in the calendar year following the publication of the SE's call for PPCI submissions. The incentive is granted to projects related to investments that improve productivity or allow the company to insert itself into a specific value chain. The following are the program's criteria:

- ▶ The company must be legally incorporated in Mexico and perform activities related to the subsectors defined in each call for PPCI submissions
- ▶ The presented projects must include the involvement of a business organization or a civil organization

- ▶ The expenses presented must not be supported by another federal program
- ▶ The company must be up-to-date in its tax obligations

Guidelines around incentive applications

The incentive is applicable to expenses dated after it has been granted. Taxpayers are required to submit their proposals to the Ministry of Economy in accordance with the rules set out in the call for submissions and sign a Resource Allocation Agreement to receive formalized support for the allocation of resources to selected projects. The deadline for signing the agreement is usually 45 calendar days after the results have been announced. By signing the agreement, taxpayers will receive the grant as determined by the PPCI's rules of operation.

The SE announces a call for PPCI submissions twice a year, once in May and again in September.

PROSOFT

(Programa para el Desarrollo de la Industria del Software)

Description of benefits

PROSOFT subsidies come in the form of cash grants of 20% or 50% of eligible expenses incurred during the calendar year in which the SE's call for PROSOFT submissions is announced. The incentive is granted to projects related to the development of innovation ecosystems based on the triple-helix model (university-industry-government). Since the projects must be related to the development of innovation ecosystems, each project must be presented by a group of at least 10 companies. These companies must be legally incorporated in Mexico and perform activities related to one of the strategic sectors described in the Innovative Development Program (PRODEINN) document:

- ▶ Mature sectors: metalworking, textile-dressing, leather-footwear, wood and furniture, iron and steel, food and beverages
- ▶ Dynamic sectors: automotive and auto parts, aerospace,

electrical, electronic and chemical

- ▶ Emerging sectors: biotechnology, pharmaceuticals, information technologies, digital creative industries and medical equipment

The percentage of the project budget that will be allocated as a cash grant will be defined after the SE's evaluation and will be established on a case-by-case basis.

Guidelines around incentive applications

The PROSOFT fund is managed through several promoting bodies (OP); these are independent of SE and are in charge of receiving and validating the project documentation, as well as managing the cash grants. Although PROSOFT is a federal program, there are some OPs that contribute with additional economic resources to those allocated by the federation. In some cases, the OP decides the type of projects that will be received during the call for submissions.

Each OP manages its own calendar and applications deadline, and could be different from the one established by SE. The deadline for signing the Resource Allocation Agreement depends on the OP. By signing the agreement, taxpayers will receive the grant as determined by the PROSOFT rules of operation.

The incentive is applicable to expenses incurred during the same calendar year of the call for submissions. Taxpayers are required to submit their proposals to the OP and SE through an electronic platform and sign a Resource Allocation Agreement to receive formalized support for the allocation of resources to selected projects.

A call for PROSOFT submissions is announced once a year, with at least four cutoff dates during the months of April, June, August and September.

R&D Tax Credits

(Estímulo Fiscal a la Investigación y Desarrollo de Tecnología, EFIDT)

Description of benefits

The 2018 Mexican Income Law (LISR) will provide a stimulus in the form of a tax credit of 30% of the expenses and investments made for research and technological development, creditable against the corporate income tax. The credit will be calculated based on the positive difference from the average of the expenses and investments made in the previous three years in R&D against the expenses and investments made by those items in the corresponding year. The maximum amount granted per taxpayer is MXN50 million.

Guidelines around incentive applications

- ▶ Taxpayer must be up-to-date on tax obligations.
- ▶ There will be a list of deliverables that the taxpayer must produce: prototypes, patents, etc. Deliverables must demonstrate a viable project.
- ▶ The taxpayer must present in February of each year a declaration detailing the tax credit application.
- ▶ The tax credit must not be applied in parallel with other tax benefits to the same activities or investments (e.g., accelerated depreciation).

3. Eligibility requirements

PEI

Eligible companies must be incorporated in Mexico and maintain operations in the country for tax purposes; they must currently perform R&D activities in Mexico. Also, to qualify, the company must be current on its tax obligations. No industry sectors are excluded.

Qualifying expenses are defined as follows:

- ▶ R&D activities outsourced to research centers or universities
- ▶ Wages and salaries of the project team
- ▶ Tickets and travel expenses incurred by staff engaged in the project
- ▶ Expenditure records of titles of protection of intellectual property
- ▶ Studies, technological analysis, diagnostic, audit or surveillance technology
- ▶ Expenditures of incorporation of teachers and/or doctors related to the project
- ▶ Expenses incurred in the provision of infrastructure
- ▶ National and foreign consulting and technology consulting
- ▶ Prototypes, models and their evaluation

The company must not duplicate incentives for the expenses presented from other federal or state programs.

PPCI

Eligible companies must be incorporated in Mexico, maintain operations in the country for tax purposes, be registered with the Tax Authority and perform activities related to the included sectors (see "Description of benefits" above) for at least 12 months before the open filing period. The eligible companies must present projects that include the involvement of a business organization or a civil organization. Also, to qualify, the company must be current on its tax obligations.

Qualifying expenses are defined as follows:

- ▶ Specialized trainings and certifications
- ▶ Processes and products specialized certifications
- ▶ Design of methodologies for product differentiation
- ▶ Design and implementation of sectoral promotion strategies
- ▶ Equipment for training centers
- ▶ Equipment for design and innovation centers

The listed qualifying expenses do not apply to all subsectors. Each call for PPCI submissions will determine which expenses are valid for each subsector.

The company must not duplicate incentives for the expenses presented from other federal or state programs.

PROSOFT

Eligible companies must be incorporated in Mexico, maintain operations in the country for tax purposes, be registered with the Tax Authority and perform activities either related to the production of goods or services for the IT sector or related to the strategic sectors defined in each call for the open filing period. Also, to qualify, the company must be current on its tax obligations.

Qualifying expenses are defined as follows:

- ▶ Equipment of innovation centers
- ▶ Development and adoption of technical and information technology (IT) tools (Industry 4.0)
- ▶ Training and specialization of operators, technicians and professionals
- ▶ Strengthening innovation funds
- ▶ Consultancy services, norms and models, and value-added services

The company must not duplicate incentives for the expenses presented from other federal or state programs.

Note that, in previous years, the qualifying expenses were changed without prior notice.

R&D Tax Credits

Eligible companies must be incorporated in Mexico and maintain operations in the country for tax purposes; they must currently perform R&D activities in Mexico.

Qualifying expenses are defined as follows:

- ▶ External investigator fees
- ▶ Experimental tests and tools
- ▶ External services to third parties (i.e., wages and salaries of the project team payable through a different legal entity)
- ▶ Related fieldwork
- ▶ Training expenses in techniques or use of equipment that is essential to the project

- ▶ Purchase of specialized equipment that is necessary for the realization of the investment project
- ▶ Laboratory equipment
- ▶ Plants or animals used for testing
- ▶ Specialized machinery
- ▶ Reagents, materials, and supplies for experimental designs
- ▶ R&D activities outsourced to research centers and/or universities
- ▶ Pilot plants

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to IP.

Although most qualified R&D activities must be performed within Mexico, a percentage of them can be outsourced.

5. Technology or innovation zones

There are no technology or innovation zones that provide R&D incentives in Mexico.

6. Role of governmental bodies in administering incentives

PEI

CONACYT is the Government entity responsible for project evaluation and allocation of incentive resources.

PPCI

The SE is the Government entity responsible for project evaluation and allocation of incentive resources.

PROSOFT

The SE is the Government entity responsible for project evaluation and allocation of incentive resources. The project documentation and cash grants are managed through promoting bodies, which usually are local secretaries of economic development and chambers of commerce related to the telecommunications and IT industries.

R&D Tax Credit

The incentive is managed by an interinstitutional committee formed by CONACYT, SE, SAT (Mexican tax authority), SHCP (Tax Ministry) and the Mexican presidency. The technical components of the incentive are managed by CONACYT.

7. Administrative requirements

PEI

Taxpayers are required to obtain preapproval from CONACYT to receive cash grants. The following information must be submitted to CONACYT for a taxpayer to receive preapproval:

- ▶ Taxpayer ID number
- ▶ Valid registration in the RENIECYT
- ▶ Presentation of the R&D project in accordance with the rules set out in the call for submissions
- ▶ Required information in accordance with the rules set out in the call for submissions
- ▶ A legal representative who has the capacity to subscribe debt securities and possesses an electronic tax signature (FIEL)
- ▶ CVs of the legal, administrative and technical representatives and the project personnel in the CONACYT system (CVU)

After the decision to grant the funds has occurred and in order to formally receive the grant, taxpayers must carry out the procedures described in the Rules of Operation and deliver the legal documents as set out in the call for submissions. For delivery of the resources, the company must obtain and maintain a security or guarantee instrument determined by CONACYT during the formalization process, as well as sign the Resource Allocation Agreement as mentioned in the call for submissions.

CONACYT may perform technical visits during the execution of the project, to confirm that the expenses and activities are being performed as described in the application submitted.

At the end of the project, the taxpayer must present a technical report describing the technical accomplishments and a financial report of the project expenses that clarifies the use of the resources provided by CONACYT. This report must be validated by an accounting firm registered with the Mexican tax authority.

PPCI

Taxpayers are required to present legal and fiscal information to participate in the program. The following information is required to be submitted to the SE for a taxpayer to present the project and participate in the program:

- ▶ Taxpayer ID number and proof of tax situation
- ▶ One quote for each expense for which the taxpayer is requesting support (each quote must fulfill the requirements set out in the call for submissions)
- ▶ Presentation of the project in accordance with the rules set out in the call for submissions
- ▶ A legal representative who has the capacity to perform administrative actions and possesses the FIEL
- ▶ Physical presentation of the project in the SE office
- ▶ Required information in accordance with the rules set out in the call for submissions

After the decision to grant the funds has occurred and in order to formally receive the grant, taxpayers must carry out the procedures described in the Rules of Operation and deliver the legal documents as set out in the call for submissions. For delivery of the resources, the company must sign the Resource Allocation Agreement, among other agreements, as mentioned in the call for submissions.

PROSOFT

Taxpayers are required to present technical, legal and fiscal documentation to participate in the program. The following information must be submitted to the SE for a taxpayer to present the project and participate in the program:

- ▶ Taxpayer ID number and proof of tax situation
- ▶ Three quotes for each expense for which the taxpayer is requesting support (each quote must fulfill the requirements set out in the call for submissions)
- ▶ Presentation of the project in accordance with the rules set out in the call for submissions
- ▶ A legal representative who has the capacity to perform administrative actions and possesses the FIEL
- ▶ Additional required information in accordance with the rules set out in the call for submissions

Applications must be submitted via the PROSOFT platform.

After the decision to grant the funds has occurred and in order to formally receive the grant, taxpayers must carry out the procedures described in the Rules of Operation and deliver the legal documents as set out in the call for submissions. For delivery of the resources, the company must sign the Resource Allocation Agreement, among other agreements, as mentioned in the call for submissions.

R&D Tax Credit

Taxpayers are required to present technical, legal and fiscal documentation to participate in the program. The following information must be submitted to CONACYT for a taxpayer to receive preapproval:

- ▶ Taxpayer ID number and proof of tax situation
- ▶ Valid registration in the RENIECYT

- ▶ Copies of annual tax returns from the last three years
- ▶ Annual integration of investments and expenses in R&D projects from the last three fiscal years
- ▶ Estimated R&D investments and expenses grouped accordingly. These are the necessary expenses upon which the tax credit will be evaluated
- ▶ If authorization to pay in installments has been granted, the taxpayer will provide a manifest attesting that it is not in a situation of revocation
- ▶ Technical memorandum describing the main characteristics and deliverables of the projects
- ▶ A legal representative who has the capacity to subscribe debt securities and possesses an electronic tax signature
- ▶ CVs of the legal, administrative and technical representatives and the project personnel in the CONACYT system

After the decision to grant the funds has occurred and in order to formally receive the grant, taxpayers must carry out the procedures described in the Rules of Operation and deliver the legal documents as set out in the call for submissions.

At the end of the project, taxpayers must submit to the committee a report of the impacts and benefits obtained by their approved investment projects.

8. Statutory reference

PEI

There is no regulation related to this program; however, the Government provides guidelines through the Federal Expenditure and National Plan of Development 2013-2018. The call for submissions issued annually by CONACYT sets out the reference terms and details the specific rules to be applied in the following year for requesting PEI support.

PPCI

There is no regulation related to this program; however, the Government provides guidelines through the Federal Expenditure and National Plan of Development 2013-2018. The Rules of Operation are set usually by an annual decree. The call for submissions issued twice a year by the SE sets out the reference terms and details the specific rules to be applied in the following year for requesting PPCI support.

PROSOFT

There is no regulation related to this program; however, the Government provides guidelines through the Federal Expenditure and National Plan of Development 2013-2018. The Rules of Operation are set usually by an annual decree. The call for submissions issued annually by the SE sets out the reference terms and details the specific rules to be applied in the following year for requesting PROSOFT support.

R&D Tax Credit

Income Tax Law (Year 2018) and the Rules of Operation and Guidelines provided by CONACYT on a yearly basis.

N

Netherlands



Netherlands

This chapter is based on information current as of February 2019.

EY contacts:

Ben Kiekebeld
ben.kiekebeld@nl.ey.com
+31 88 40 78457

Bram de Nies
bram.de.nies@nl.ey.com
+31 88 40 78461

The best-known Dutch tax incentives are the R&D tax credit (WBSO) and the innovation box. The innovation box reduces the effective tax rate, whereas the R&D tax credit reduces the wage tax costs by allowing innovative businesses a partial reduction of wage tax.

1. Overview

The Dutch program of incentives to stimulate R&D activities covers the whole R&D life cycle, from development to the exploitation of successful R&D. The Government emphasizes the importance of R&D and its willingness to stimulate these activities. This is underlined by the cooperative attitude of the Government organizations that are involved with implementing the various incentives. Dutch R&D incentives make a distinction between costs and investment-based incentives on the one hand, and a profit-based incentive on the other hand.

The Netherlands has several incentives to lower R&D costs and investments for an entrepreneur and/or company. This includes the R&D tax credit, which reduces wage tax on qualifying wage costs and other costs and expenses; an R&D deduction that allows for a fixed additional deduction for entrepreneurs; and the possibility of an innovation credit for small and medium-sized enterprises (SMEs) with technologically innovative projects.

Furthermore, qualifying profits can be taxed in the innovation box. Effectively, these profits would be taxed at a rate of 7% (as of 1 January 2018).

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input checked="" type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D tax credit (WBSO)	Innovation credit	Innovation box*	SME Innovation Incentive Scheme for Top Sectors (MIT)	Private-public partnerships project allowance for research and innovation (PPS)	One-time full amortization for R&D intangible assets	R&D deduction
Types of incentives	<ul style="list-style-type: none"> ▶ Tax credit ▶ Wage tax withholding incentives ▶ Reduced wage tax and social security contributions ▶ Based on wage costs and other costs and expenses 	<ul style="list-style-type: none"> ▶ Direct loans for technologically innovative projects 	<ul style="list-style-type: none"> ▶ Reduced corporate income tax rate 	<ul style="list-style-type: none"> ▶ Cash grants for SMEs for feasibility studies and R&D collaboration projects ▶ Knowledge vouchers 	<ul style="list-style-type: none"> ▶ Cash grants for partnerships between private and public parties 	<ul style="list-style-type: none"> ▶ Full amortization for R&D intangible assets (available for personal and corporate income tax) 	<ul style="list-style-type: none"> ▶ Fixed super deduction for personal income tax

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D tax credit (WBSO)

(Afdrachtvermindering Speur- & Ontwikkelingswerk)

Description of benefits

The R&D tax credit reduces the wage withholding tax payable by the employer based on qualifying wage costs and other costs and expenses. The R&D tax credit is accumulated in 2019 as follows:

- ▶ The benefit for R&D entities from the R&D tax credit is 32% for the first EUR350,000 of the qualifying R&D wage costs and other costs and expenses for R&D. For (wage) costs and expenses that exceed EUR350,000, the deduction rate is 16%.
- ▶ Startups are eligible for an increased deduction of 40% of the R&D wage costs and other costs and expenses for R&D. An entity qualifies as a startup if it has been taxable for less than five years and has not received an R&D tax credit for a period of two years or more.

For other costs and expenses (such as for (raw) materials, prototype construction, investments in equipment) in an R&D project, taxpayers can calculate the amount of the tax credit by choosing one of two approaches: a fixed sum or actual costs and expenses. Under the fixed-sum approach, the amount is calculated by reference to the number of allocated R&D hours. The fixed-sum amount per calendar year is:

- ▶ EUR10 per R&D hour for the first 1,800 R&D hours
- ▶ EUR4 per R&D hour for all R&D hours exceeding 1,800

Startups can apply an hourly rate of EUR29. Repayment is required in cases in which realized R&D hours and costs and expenses are less than forecast.

Under the actual costs and expenses approach, the amount is calculated on the basis of the estimated costs and expenses incurred by R&D work. Whether the fixed sum or actual costs and expenses approach is chosen, only those costs/expenses incurred as a result of carrying out "own R&D" (i.e., in-house) are eligible for the R&D tax credit.

Guidelines around incentive applications

The R&D tax credit is applicable for future activities and costs and expenses. To claim the R&D tax credit, an application should be filed with the Netherlands Enterprise Agency (*Rijksdienst voor Ondernemend Nederland*), a department within the Ministry of Economy and Climate. The application should be filed in advance, no later than one month prior to the start of the period covered by the application. Three applications may be filed per calendar year. These applications must cover a minimum period of 3 months and a maximum period of 12 months within the same calendar year. Only one application can be filed per month; therefore, no overlap of months is allowed. The R&D tax credit for future activities can be claimed as long as the qualifying activities are performed.

Innovation credit

(*Innovatiekrediet*)

Description of benefits

With the innovation credit, the Ministry of Economic Affairs can help SMEs by granting a direct loan for “risky” innovation projects. Only projects that are technologically innovative and unique to the Netherlands are eligible. The credit is risk-bearing and therefore only has to be repaid if the development succeeds.

- ▶ Small companies can qualify for a 45% credit of the development costs.
- ▶ Medium companies can qualify for a 35% credit of the development costs.
- ▶ Large companies can qualify for a 25% credit of the development costs.

The maximum credit amount for clinical research projects is EUR5 million. The maximum credit for technical research projects is EUR10 million. Qualifying development costs are, among others, own labor costs, materials, depreciation, outsourcing costs, travel expenses and charges for patent applications. In the case of joint ventures, the maximum credit rates are raised to 50% (for SMEs) or 40% (for large companies).

If the project is successful, the credit, including interest, must be paid back over a period of 10 years. Interest percentages are 7% or 10%, depending on the risk. If the investment project is unsuccessful, the credit may not need to be repaid.

Guidelines around incentive applications

The incentive is applicable to current and future investments. Applications can be submitted throughout the year. Most of the requirements relate specifically to the project: it must be technologically innovative, have an outstanding business perspective, make a positive contribution to the Dutch economy and have a cost threshold of EUR150,000, and its phase of technical feasibility and market introduction should be completed within four years. The credit is granted by the Netherlands Enterprise Agency (RVO).

Innovation box

(*Innovatiebox*)

Description of benefits

Under the innovation box incentive, eligible R&D income will effectively be taxed at 7% instead of the statutory corporate income tax (CIT) rate of 25%. Losses are deductible at the statutory rate of 25%, but future profit will be taxed at 25% for the amount of the loss related to the R&D allocated to the innovation box. Any net operating losses (NOLs) resulting from the incentive can be carried back for one year (for CIT) and carried forward for six years.

Guidelines around incentive applications

The innovation box is applicable to retroactive, current or future investments. The incentive can apply retroactively as long as the tax return has not yet been finalized, or the finalized tax return is still open for appeal. The innovation box is ultimately claimed in the CIT return. However, it is advisable to conclude an advance tax ruling with the Dutch tax authorities on the application for use of the innovation box.

Legislation was changed to bring the Dutch innovation box regime in line with the Action 5 (Harmful Tax Practices) recommendations of the Organisation for Economic Co-operation and Development's (OECD's) Base Erosion and Profit Shifting Action Plan. This legislation applies as of 1 January 2017. Grandfathering rules allow taxpayers to make use of the 2016 innovation box regime until the end of the last financial year prior to 1 July 2021.

SME Innovation Incentive Scheme for Top Sectors (MIT)

(Mkb-innovatiestimulering Regio en Topsectoren [MIT-regeling])

Description of benefits

MIT is the predominant Dutch incentive scheme for innovative SMEs. It is aimed in particular at SMEs that will engage in innovation and/or R&D collaboration projects and envisages stimulating innovation across regional boundaries. Cash grants are available for technical and commercial feasibility studies, knowledge vouchers and R&D collaboration projects. MIT applications are commonly submitted to and processed by regional authorities (apart from knowledge vouchers, which are processed at the national level by the Netherlands Enterprise Agency).

Guidelines around incentive applications

MIT provides funding for the following activities:

- ▶ Feasibility studies: a cash grant of EUR25,000 to assess the technical and economic risks and opportunities of an intended innovation project are available on a "first come, first served" basis
- ▶ Knowledge vouchers: a EUR3,750 "voucher" with which an SME can have a technical or scientific challenge addressed by a knowledge institution (e.g., a university) is available on a first come, first served basis
- ▶ R&D collaboration projects: a grant of up to EUR350,000 is available for collaboration R&D and innovation projects between at least two SMEs

Calls for proposals are announced nationally by the Dutch Enterprise Agency as well as regional authorities. Commonly, a two- to three-month submission window exists for each scheme every year.

Private-public partnerships project allowance for research and innovation (PPS)

(PPS-toeslag Onderzoek en Innovatie)

Description of benefits

The PPS is a partnership between public entities and private parties or investors. Cash grants of 40% are available on the private investment costs for the first EUR20,000, and 30% for the excess. To receive funding for the PPS, the cash grant has to be invested in the R&D project of the partnership. Companies are required to seek preapproval to obtain PPS.

Guidelines around incentive applications

The PPS is applicable for future investments. A specific form should be filed in advance with the Netherlands Enterprise Agency. The program consists of three instruments:

- ▶ PPS program allowance for the Top Consortia for Knowledge and Innovations (PPS-programma toeslag voor het TKI) – application deadline 30 May 2019
- ▶ PPS project allowance for TKI (PPS-projecttoeslag voor TKI) – application deadline 31 December 2019
- ▶ PPS project allowance for a partnership (PPS-projecttoeslag voor een samenwerkingsverband) – application deadline 31 December 2019

PPS may be claimed for investments made by the private party, and the grants have to be invested during the R&D project.

One-time full amortization for R&D intangible assets

(Afschrijving ineens voor zelf ontwikkelde immateriele activa)

Description of benefits

Under this incentive, self-developed intangibles are fully amortized at the moment they are realized, instead of amortization over the intangible's entire life cycle. Any NOLs resulting from the amortization may be carried back one year (for CIT) or three years (for personal income tax) and be carried forward for six years.

Guidelines around incentive applications

The incentive is applicable to retroactive investments. The incentive should be claimed in the tax return. As long as the final tax assessment has not been issued, amendments to apply should be possible.

R&D deduction

(Afdrachtvermindering Speur- & Ontwikkelingswerk [WBSO] for individuals)

Description of benefits

The lump-sum deduction for an individual (entrepreneur) who performs R&D activities is EUR12,775 or EUR19,166 (2019 amounts) for the first five years of an enterprise's life. Full adjustment of the deducted amount will take place if the total R&D hours are less than 500 per calendar year. Individuals (entrepreneurs) are required to seek preapproval (similar to the R&D tax credit) in order to obtain the R&D deduction. Any NOLs resulting from the deduction may be carried back for three years and carried forward for six years.

Guidelines around incentive applications

The R&D deduction is applicable for future activities. The R&D deduction should be claimed in the tax return. As long as the final tax assessment has not been issued, amended returns to apply for the deduction should be possible. To claim the incentive, an R&D declaration is required.

3. Eligibility requirements

R&D tax credit

Eligible expenses include any R&D costs (i.e., wage costs for R&D employees, other R&D-related costs, R&D investment expenses) and other expenses that are directly related to the R&D projects. R&D-related costs and R&D investment expenses must be linked exclusively to activities performed under an R&D declaration. Examples of such costs include specific equipment or instruments for R&D, specific equipment or instruments for the manufacturing of models,

and trial batches or prototypes. Any specific software and computer equipment used for R&D also qualify. Investments in land are excluded.

Costs that are linked to activities performed under an R&D declaration include costs related to consumer goods, materials and raw materials; costs related to experiments, the production of trial batches, materials and parts regarding the manufacturing of prototypes by the taxpayer or by third parties; acquisition of licenses for specific software packages or information and communication technologies (ICT) tools; carrying out of measurements or testing of prototypes; and rental of equipment from third parties. Eligible costs exclude costs with respect to outsourced R&D, costs of hiring labor, financing costs, costs of acquiring or improving land, and costs forming a remuneration for the disposition of capital equipment for which the taxpayer was already awarded an R&D declaration.

Eligibility is not limited to specific industries.

Specific eligibility for each incentive requires employee performance of the following R&D activities:

- Technical scientific research
- Development of new or partially new technical products, processes or software

Innovation credit

Loans will be granted only if the project is technologically innovative and fulfills the other requirements.

Innovation box

A distinction is made between "smaller taxpayers"¹ and other taxpayers. For smaller taxpayers, the incentive is granted for self-developed intellectual property (IP) for which the R&D activities are covered by an R&D declaration. For larger taxpayers, in addition to the R&D declaration, the taxpayer must be covered by one of the conditions listed below in Section 4 under "Qualifying intellectual property."

¹ A net turnover – calculated on the global group level if the taxpayer is part of a group – of less than EUR250 million over a five-year period and less than EUR37.5 million in gross revenues over a five-year period from all qualifying intellectual assets (calculated on the taxpayer level).

PPS

Funds will be granted only to an entity approved in advance, in which private and public parties cooperate to perform R&D activities.

MIT

Grants will be provided only to SMEs to perform feasibility studies, have knowledge questions addressed or engage in R&D collaboration projects (minimum of two SMEs). The EU definition of SMEs applies when determining eligibility.

One-time full amortization for R&D intangible assets

The taxpayer has to self-develop the intangible asset.

R&D deduction

The individual has to obtain an R&D declaration, which may be granted if the hours spent on the enterprise amount to at least 1,225 hours, of which a minimum of 500 hours per calendar year are spent on R&D.

4. IP and jurisdictional requirements (innovation box)

Effective date

January 2019

Qualifying intellectual property (IP)

A distinction is made between “smaller taxpayers”¹ and larger taxpayers. For smaller taxpayers, a self-developed IP for which an R&D declaration has been granted to the taxpayer is sufficient. For larger taxpayers, in addition to the R&D declaration, one of the following requirements should be met:

- ▶ Their IP can be classified as software.
- ▶ A patent or a plant variety right has been granted to the taxpayer.
- ▶ An application for a patent or a plant variety right has been filed by the taxpayer.
- ▶ A license to trade and use certain non-chemical methods for crops protection has been granted to the taxpayer.
- ▶ A license to distribute medication for human or animal application within the EU has been issued to the taxpayer.
- ▶ A Supplementary Protection Certificate has been issued to the taxpayer by the Netherlands Patent Office.
- ▶ A registered utility model has been granted for the purpose of the protection of the innovation.
- ▶ A non-chemical method within the meaning of Article 18, Crop protection law and biocides, has been approved.
- ▶ An exclusive license has been granted to the taxpayer for the use of one of the abovementioned IPs, in either a certain way, during a certain term or certain geographical area.

Types of income

Embedded income in turnover derived from finished product, royalty income and capital gains realized by the sale of the IP.

Calculation of income

Based on the modified nexus approach, qualifying IP income = (qualifying expenditures x 1.3/overall expenditures) x IP income.

IP regime rate

7% on qualifying income instead of statutory CIT rate (25%).

Can work be performed outside the country?

Yes, under certain circumstances. Because of the modified nexus approach, outsourcing more than 30% of the R&D to related entities will effectively reduce the qualifying IP income.

Must the IP be registered/owned locally?

No, it is sufficient if an exclusive license has been granted to the taxpayer which meets the requirements described under the header “Qualifying intellectual property.”

Other requirements

Companies must demonstrate their R&D activities to assess the actual amount of the profit that can be allocated to the innovation box. It is common practice that the amount of income that can be allocated to R&D (and thus the basis for the nexus calculation) is discussed with the tax authorities and confirmed in a ruling.

Grandfathering rules apply to taxpayers making use of the 2016 innovation box regime until the end of the last financial book year of the taxpayer prior to 1 July 2021 insofar as the pre-1 July 2016 IP still generates income, subject to meeting one of the following requirements:

- ▶ The 2016 innovation box regime remains applicable to IPs self-developed before 1 July 2016 if the taxpayer ultimately opts to apply the innovation box in the tax return for the fiscal year that includes 1 July 2016.
- ▶ IP developed before 1 January 2017 but after 31 December 2006 for which a patent or a plant variety right has been granted qualifies for the new regime; no additional R&D declaration will be required.
- ▶ A decree was published in relation to innovation box rulings concluded under 2016 legislation, entered into by “smaller taxpayers”¹ with the Dutch tax authorities (BLKB 2016/225266 M). Normally, these rulings are discontinued in the event of a change in legislation. Upon request, innovation box rulings concluded by small taxpayers remain valid after 2016 for the remaining effective time of the ruling.

The grandfathering rules are applicable no later than the final fiscal year ending before 1 July 2021. As of 1 July 2021, only the new innovation box regime will be applicable.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in the Netherlands.

6. Role of governmental bodies in administering incentives

The innovation box, one-time full amortization for R&D intangible assets and R&D deduction fall under the jurisdiction of the Dutch tax authorities. Especially for the innovation box, the Dutch tax authorities are cooperative in obtaining a ruling that provides certainty for several years on applying the innovation box.

The R&D tax credit, innovation credit and PPS fall under the Netherlands Enterprise Agency.

7. Administrative requirements

The R&D tax credit, innovation credit and PPS have to be obtained in advance by filing a request with the Netherlands Enterprise Agency. After the incentive is granted, progress in terms of realized worked hours, costs and investment has to be administrated and filed at the agency after the financial year has ended.

8. Statutory reference

- ▶ R&D declaration (1994): Dutch stimulation for R&D act
- ▶ Innovation credit: National Framework of the Ministry of Economic Affairs grants (*Kaderbesluit EZ – subsidies*)
- ▶ SME Innovation Incentive Scheme for Top Sectors (MIT): National Framework of the Ministry of Economic Affairs grants (*Kaderbesluit EZ – subsidies*)
- ▶ PPS (2016): Decree of Ministry of Economic Affairs, WJZ/16174370
- ▶ Innovation box (2007): articles 12b through 12bg and 34d, Dutch CIT act 1969 and Innovation Box Decree nr. 2018 - 68661 dated 20 December 2018
- ▶ Full depreciation at once of R&D intangible (2007): Article 3.30, section 3, Dutch income tax act 2001
- ▶ R&D deduction (1994): Article 3.77, Dutch income tax act 2001

N

New Zealand



New Zealand

This chapter is based on information current as of April 2019.

EY contact:

Tim Benbow
tim.benbow@nz.ey.com
+64 27 2071 073

New Zealand has two key R&D tax incentives: the R&D tax incentive and the R&D loss tax offset.

The introduction of the R&D tax incentive in 2019 is moving New Zealand's support for R&D from a grants-based system to a tax-based approach. The R&D Growth Grant is being phased out over the next two years.

1. Overview

The Government has announced a commitment to raise New Zealand's R&D expenditure to 2% of GDP over 10 years. To help achieve this goal, it has introduced an R&D tax incentive. The R&D tax incentive will apply from the start of a business's 2019-20 income year. Most businesses operating within New Zealand should be eligible to claim a credit at a rate of 15% if they incur expenditures on qualifying R&D activities (other criteria apply, see "Eligibility" section). While limited refundability is currently only available in the 2019-20 income year for companies in a tax loss position, the Government intends to expand refundability from the 2020-21 income year.

The R&D loss tax offset was introduced in 2015. It is intended to allow businesses with an R&D focus to refund tax losses resulting from R&D expenditures. Eligible companies are allowed to cash out up to 28% of any tax losses associated with their eligible R&D activities, subject to the restrictions specified below.

The R&D grants regime is a targeted R&D incentive aimed at increasing long-term economic growth by providing funding to businesses with eligible R&D activities. The R&D grants regime consists of the Growth, Project and Student grants. The Growth Grant, however, is being phased out by 31 March 2021 with the introduction of the R&D tax incentive. Businesses that receive a Growth Grant are ineligible for the R&D tax incentive.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D tax incentive	R&D loss tax offset	R&D grants
Types of incentives	▶ Tax credit	▶ Refundable tax credit	▶ Cash grant

R&D tax incentive

Description of benefits

- ▶ A 15% tax credit is available to most businesses undertaking R&D in New Zealand.
- ▶ R&D expenditures of NZD50,000 to NZD120 million per year will typically qualify (pathways exist to spend more or less but specific requirements apply).
- ▶ Foreign-owned R&D can qualify as long as the overseas associate resides in a jurisdiction that has a double tax agreement with New Zealand.
- ▶ Up to 10% of expenditures per year can be incurred outside New Zealand.
- ▶ R&D tax credits can be refunded in cash for certain high-R&D-intensity companies in a tax loss position. For the 2019-20 income year, the maximum cash refund a business can receive is NZD255,000 (NZD1.7 million of R&D expenditures).
- ▶ Remaining R&D credits may be carried forward indefinitely.

R&D loss tax offset

Description of benefits

To be eligible, a company must be an unlisted tax loss-making resident of New Zealand that spends at least 20% of labor expenditures on qualifying R&D.

A company may cash out the lesser of:

- ▶ The legislative cap (which started at NZD500,000 for 2015-16 and is increasing by NZD300,000 a year until 2021-22, when it is capped at NZD2 million)
- ▶ A company's net loss for the year
- ▶ A company's total eligible R&D expenditures for the year, or 1.5 x a company's eligible R&D labor costs for the year

Certain events may trigger the repayment of any offset received. These events can include the sale of R&D assets or the liquidation, migration or sale of a company.

R&D grants

Description of benefit

Callaghan Innovation is currently offering two R&D grant programs: Project Grants and Student Grants.

- ▶ Project Grants are aimed at assisting businesses undertaking R&D for the first time. Businesses can receive multiple Project Grants. The grants normally provide funding of 40% of eligible R&D expenditures on a project. Project amounts beyond NZD800,000 are funded at 20%.
- ▶ Student Grants are aimed at helping university students gain and develop skills in a business with an ongoing R&D program.
- ▶ Growth Grants have been discontinued with the introduction of the R&D tax incentive. While a transition period applies, no new Growth Grants are being awarded.

3. Eligibility requirements

R&D tax incentive

Eligibility of businesses

- ▶ Businesses cannot be controlled by a Crown Research Institute, District Health Board or Tertiary Research Organisation.
- ▶ A business needs to perform a core R&D activity in New Zealand and own the results or be able to use the results of the R&D activities without further consideration.

Eligible activities

Eligible R&D activities include “core” or “supporting” activities. Core R&D activities utilize a systematic approach to generate new knowledge or a new/improved good, process or service and require the resolution of a scientific or technological uncertainty. Core R&D activities must occur in New Zealand.

Supporting activities include other activities that are solely or mainly in support of and integral to a core R&D activity.

Eligible expenditures

Eligible expenditures include most costs incurred on an eligible R&D activity. This typically includes salaries, materials, contractor payments and depreciation loss incurred on R&D assets while used in R&D. Expenditure on the development of internal use non-administrative software development is capped at NZD25 million per year.

Ten percent of the total R&D expenditure can be incurred overseas.

R&D loss tax offset

New Zealand-resident unlisted loss-making companies that meet certain wage intensity criteria are eligible. The NZ IAS 38 definition of R&D applies, subject to certain activity and expenditure exclusions.

The R&D loss tax offset regime and the new R&D tax incentive are not mutually exclusive but currently have different R&D definitions and eligibility criteria. The Government may ultimately reconcile these incentives to aid usability and reduce administrative complexity.

R&D grants

Eligibility requirements are specific to each grant.

4. IP and jurisdictional requirements

- ▶ **R&D tax incentive:** IP resulting from R&D activities must be owned by the company, an associate that resides in a jurisdiction that has a double tax agreement with New Zealand, or the company must have access to the R&D results at no further consideration. Where applicable, the IP requirements can be met by a joint venture.

- ▶ **R&D loss tax offset:** IP resulting from R&D activities must vest (solely or jointly) in the company.
- ▶ **R&D grants:** There are no specific IP requirements.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in New Zealand.

6. Role of governmental bodies in administering incentives

The R&D tax incentive and R&D loss tax offset regimes are administered by Inland Revenue.

The R&D grants are administered by Callaghan Innovation.

7. Administrative requirements

R&D tax incentive: For the 2019-20 income year, businesses must complete a supplementary form with their end-of-year income tax return.

For the 2020-21 income years onward, businesses that are likely to spend less than NZD2 million of R&D activities must apply for in-year approval of their R&D activities before completing a year-end supplementary form with their income tax return. Businesses that spend NZD2 million or more on R&D activities can opt out of the in-year approval process, but will need to obtain a certificate that their R&D activities and expenditures meet the requirements of the R&D tax incentive. This R&D certificate will need to be submitted alongside a business' supplementary form.

R&D loss tax offset: Applications must be made by the due date of a company's corresponding income tax return.

R&D grants: Requirements depend on the grant received.

8. Statutory reference

R&D tax incentive: Income Tax Act 2007 and Tax Administration Act 1994

R&D loss tax offset: Income Tax Act 2007, subpart MX

R&D grants: Crown Entities Act 2004 and Ministerial Direction (December 2015)

Year of statutory regime:

R&D tax incentive: From 2019-20 income year

R&D loss tax offset: For income years beginning on or after 1 April 2015

N

Norway



Norway

This chapter is based on information current as of February 2019.

EY contacts:

Arild Vestengen
arild.vestengen@no.ey.com
+47 24 00 25 92

Marcel Sikkema
marcel.sikkema@se.ey.com
+46 73 340 77 82

Håkon Kristian Solberg
hakon.k.solberg@no.ey.com
+47 40 21 60 95

Chris Peck
cpeck@uk.ey.com
+44 20 7980 0936

The SkatteFUNN scheme is a tax incentive for companies carrying out qualifying research and development (R&D) and rewards both internal R&D as well as procured R&D from an approved research institution. Internal R&D costs up to NOK25 million can be claimed, and there is a separate cap of NOK50 million imposed on procured R&D. The scheme is designed to motivate businesses to carry out more R&D, ultimately for the benefit of the public. The incentive is provided through a tax credit of 20% for SMEs and 18% for large companies on qualifying expenditure subject to the internal and procured R&D caps. If the company is not in a taxpaying position, or the deductions claimed through SkatteFUNN exceed tax payable, the excess amount will be contributed as a cash payment to the taxpayer.

1. Overview

Norway introduced a tax credit scheme in 2002 as part of its R&D incentives framework, making it the first Nordic country to include such a scheme in its tax law. Taxpayers may claim deductions of up to 20% of the qualifying expenditure. The deduction is either used to obtain reduced tax liabilities and social security contributions, or contributed as a cash payment if the taxpayer is not in a taxpaying position. This direct deduction is calculated in accordance with the rules provided by the Research Council of Norway for user-led R&D projects. To benefit from the deduction, the council must approve the R&D project. The deduction may be taken in addition to regular deductions for taxable income.

The introduction of the tax credit scheme was the result of a proposition made by the Hervik Commission¹ in a green paper for the Ministry of Trade, Industry and Fisheries in 2000 (NOU 2000:7). Prior to this green paper, there had been a political consensus to focus on R&D incentives to facilitate investment and innovation in Norwegian industry and to reach the Organisation for Economic Co-operation and Development (OECD) R&D average.

¹ The Hervik Commission was appointed by the Norwegian Government to suggest policy measures aimed at encouraging industry to invest more in R&D.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Tax credit scheme (SkatteFUNN)*	Cash grants/financial support	Loans and warranties
Types of incentives	<ul style="list-style-type: none"> ▶ Tax credit and reduced social security contributions 	<ul style="list-style-type: none"> ▶ Cash grants 	<ul style="list-style-type: none"> ▶ Loans

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

Tax credit scheme

(SkatteFUNN)

Description of benefits

Taxpayers may claim deductions of up to 20% of the qualifying expenditure. The deduction is either used to obtain reduced tax liabilities and social security contributions or contributed as a cash payment if the taxpayer is not in a taxpaying position.

Guidelines around incentive applications

The incentive is applicable to current, future and retroactive investments. To secure the tax deduction, taxpayers are required to submit an application for preapproval to the Research Council of Norway. The deduction is claimed within the corporate income tax return (Form RF-1053). Qualifying expenditures can only be claimed from the tax year in which the application was approved. To guarantee that an application will be processed ahead of the tax year end (31 December) an application must be submitted to the Research Council by 1 September.

Cash grants/financial support

(Økonomiske tilskudd)

Description of benefits

Governmental agencies or partially state-owned organizations, such as Innovasjon Norge (Innovation Norway), provide cash grants or financial support. The

amount granted varies with the development phase and the kind of project, business and subject area. Giving a general estimate is therefore difficult. However, such grants must be in compliance with the European Free Trade Association (EFTA) Surveillance Authority guidelines on state funding, based on the EU regulation on state funding, thus limiting the amount.

As an example, this means that the cost coverage regarding Industrial Research and Development Contracts (*Industrielle Forsknings-og Utviklingskontrakter*, or IFU) and Public Research and Development Contracts (*Offentlige forsknings-og utviklingskontrakter*, or OFU) is limited to 70% for small businesses, 60% for medium-sized businesses and 50% for large businesses in the preliminary project phase. In the development/prototyping phase, it is limited to 45% for small businesses, 35% for medium-sized businesses and 25% for large businesses.

Guidelines around incentive applications

The incentive is applicable to current and future investments. To receive the incentive, taxpayers are required to obtain preapproval from Innovation Norway.

Loans and warranties

(Lån og garantier)

Description of benefits

Innovation Norway also offers support, such as loans and warranties. The same benefit applies as cash grants/financial support.

Guidelines around incentive applications

The incentive is applicable to current and future investments. To receive the incentive, taxpayers are required to obtain preapproval from Innovation Norway.

3. Eligibility requirements

Qualifying expenses include all expenses that are deductible according to the general tax rules, provided that the expenses are related to R&D projects. Qualifying activities include development of new goods, services or manufacturing processes. There is no limitation regarding types of industries, and the incentives are available as long as the projects meet with the requirements as presented.

Tax deduction schemes through SkatteFUNN have certain eligibility requirements:

- ▶ The company must be subject to taxation in Norway, although if it is in a tax loss position, the allowance is paid in cash.
- ▶ The projects must be in compliance with the requirements in Sections 16-40 and 16-41 of the Norwegian Taxation Act and related regulations.
- ▶ The projects must be purposeful, limited and beneficial to the company applying.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Norway.

6. Role of governmental bodies in administering incentives

The SkatteFUNN tax credit scheme is administered by the Research Council of Norway in collaboration with the Ministry of Trade, Industries and Fisheries and Innovation Norway.

Cash grants, financial support, loans and warranties are administered by Innovation Norway, 51% of which is owned by the Ministry of Trade, Industries and Fisheries. Innovation Norway also manages funds from the Ministry of Local Government and Modernisation, the Ministry of Agriculture and Food, the Ministry of Foreign Affairs and the county governors.

7. Administrative requirements

The Research Council of Norway deals with the preapproval process for tax deduction schemes. The council also manages the submission of the annual reports, which has a deadline of 1 March annually, for tax deduction schemes. Innovation Norway manages the preapproval processes for cash grants, financial support, loans and warranties.

8. Statutory reference

- ▶ Statutory reference - Sections 16-40 and 16-41 in the Norwegian Taxation Act
- ▶ Year of statutory regime - 2002

P

Philippines



Philippines

This chapter is based on information current as of February 2019.

EY contacts:

Jules E. Riego
jules.e.riego@ph.ey.com
+632 8948117

Fidela T. Isip-Reyes
fidela.t.isip-reyes@ph.ey.com
+632 8948204

Although R&D activities have been delisted from the 2014-16 Investment Priorities Plan (IPP), the same have been re-listed in the approved 2017 IPP as "Innovation Drivers." This covers R&D activities, conduct of clinical trials including drug trials (e.g., Contract Research Organization or CRO) and the establishment of Centers of Excellence, innovation centers, business incubation hubs and fabrication laboratories (fablabs)/co-working spaces. This also covers commercialization of new and emerging technologies and products of the Department of Science and Technology or government-funded R&D.

1. Overview

The Philippine Government recognizes the economic benefits of undertaking R&D activities and grants incentives to encourage R&D investments in the Philippines. Incentives are granted to promote specific industries and generally to benefit all persons engaged in R&D activities. R&D incentives in the Philippines have been in force since the early 1990s and are being reinvented to suit the needs of developing industries and preferred areas of investment.

Even with the passage of the Tax Reform for Acceleration and Inclusion (TRAIN) Law, the provisions on deductibility of R&D expenditures were retained. In general, R&D expenditures may be treated either as ordinary and necessary expenses deductible from gross income at 100% or as deferred expenses ratably distributed over a period of no less than 60 months, at the election of the taxpayer. Donations to research institutions or organizations accredited by the Philippine Council for NGO Certification (PCNC) are exempt from donor's tax provided that no more than 30% of the donation is used for administrative expenses, and under certain conditions. Donations for R&D activities of the Government and accredited non-governmental organizations (NGOs) are also deductible against the donor's gross income, subject to certain conditions.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

Enterprises engaged in information technology (IT) R&D activities may register with the Philippine Economic Zone Authority (PEZA) to enjoy an income tax holiday or a special income tax regime and other incentives. Pursuant to the 2017 IPP, enterprises engaged in activities that drive innovation may also register with the Board of Investments (BOI) to enjoy incentives.

Also pending before the Philippine Congress are various versions of the fiscal incentives rationalization bill, which

aims to discontinue all tax incentives that are either misaligned with the Government's goals, or benefit industries that are already mature. Once enacted into law, incentives will be performance-based, time-bound, targeted to specific industries and/or subjected to a reduced corporate income tax rate in lieu of the 5% gross income tax rate. The specific provisions of this bill, however, will still be deliberated upon before the bill is passed into law.

2. Incentives available

Names of incentives	R&D expense deduction	Income tax holiday (ITH)*	Exemption from donor's tax
Types of incentives	▶ Tax deductions	▶ Tax holiday for R&D enterprises	▶ Tax exemptions for donations to accredited research institutions

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D expense deduction

Description of benefits

In general, R&D expenditures paid or incurred during a tax year in connection with the taxpayer's trade, business or profession may be treated as ordinary and necessary expenses, which are not chargeable to a capital account, or as deferred expenses ratably distributed over a period of no less than 60 months (beginning with the month in which the taxpayer first realizes benefits from such expenditures), at the election of the taxpayer.

R&D expenditures may be treated as deferred expenses if the following three conditions are met:

- ▶ They are paid or incurred in connection with the taxpayer's trade, business or profession.
- ▶ They are not treated as ordinary and necessary expense.
- ▶ They are chargeable to the capital account, but not chargeable to the property of a character that is subject to depreciation or depletion.

No deduction for R&D expenditures shall be permitted unless the taxpayer provides sufficient evidence, such as official receipts or other adequate records, showing the amount of the expense being deducted and the direct connection or relation of the expense being deducted to the development, management, operation and/or conduct of the trade, business or profession of the taxpayer. Further, the claimed deduction will be permitted only if the appropriate withholding tax due has been remitted to the Bureau of Internal Revenue (BIR).

Guidelines around incentive applications

The tax deduction applies to current investments. The R&D expense is shown as an allowable deduction from gross income in the taxpayer's income tax return and its attachments (i.e., schedule of itemized deductions). The annual income tax return is filed on or before the 15th day of the fourth month following the close of the taxpayer's taxable year. The deduction must be claimed in the year when the expense is paid or incurred.

ITH

Description of benefits

Enterprises engaged in IT R&D activities and registered with the PEZA as an IT Ecozone Enterprise may be entitled to a four-year ITH for non-pioneer projects, as well as other fiscal and non-fiscal incentives. To enjoy ITH, the PEZA IT Ecozone Enterprise should invest in brand-new IT equipment. ITH may be claimed only on income derived from the registered activity of the PEZA IT Ecozone Enterprise. Income derived from non-registered activities shall be subject to the 30% regular corporate income tax. Taxpayers are required to seek PEZA preapproval in obtaining the ITH.

BOI-registered enterprises engaged in R&D may be entitled to a six-year ITH for pioneer firms and four-year ITH for non-pioneer firms, as well as other fiscal and non-fiscal incentives. The income qualified for ITH shall be limited to the income directly attributable to the eligible revenue generated from the registered activity.

Guidelines around incentive applications

ITH is applicable to current investments. ITH is claimed by filing with the BIR a copy of the taxpayer's PEZA Certificate of Registration and Certificate of ITH Entitlement. The same are filed with the taxpayer's annual income tax return on or before the 15th day of the fourth month following the close of the taxpayer's tax year.

Exemption from donor's tax

Description of benefits

In general, gifts in favor of an accredited research institution or organization shall be exempt from donor's tax provided that no more than 30% of the gift is used by the research institution or organization for administration purposes. Donations to an accredited NGO organized and operated exclusively for scientific, research and educational purposes shall be 100% deductible from the taxable business income of the donor subject to the accredited NGO's compliance with the level of administrative expense and use requirements. If the accredited NGO fails to comply with the level of administrative expense and use

requirements, its donors shall be entitled to a limited deduction in an amount not exceeding 10% in the case of an individual, and 5% in the case of a corporation, of the donor's taxable income derived from trade, business or profession as computed without the benefit of the deduction claimed. Preapproval is required to obtain the incentive.

Guidelines around incentive applications

The tax exemption is claimed by filing with the BIR a Certificate of Donation stating that no more than 30% of the donation will be used by the accredited NGO for administration purposes. The Certificate of Donation must be filed with the donor's tax return within 30 days of the date the donation is made.

3. Eligibility requirements

The tax code does not provide for a specific definition of R&D allowable as a deduction or deferred expense. R&D expenditures incurred in connection with the taxpayer's trade, business or profession are generally deductible from gross income, except for the following:

- ▶ Any expenditure for the acquisition or improvement of land, or for the improvement of property to be used in connection with R&D of a character that is subject to depreciation and depletion
- ▶ Any expenditure paid or incurred for the purpose of ascertaining existence, location, extent or quality of any deposit of ore or other mineral, including oil or gas

For resident foreign corporations, the R&D activity must relate to a trade or business conducted in the Philippines.

Nonresident foreign corporations that are taxed based on their gross income may not claim a deduction.

4. IP and jurisdictional requirements

There is no specific jurisdictional requirement on the location of intellectual property (IP).

5. Technology or innovation zones

There are several IT zones throughout the Philippines. An enterprise engaged in IT service activities, such as IT R&D, may register with the PEZA to enjoy the incentives under Republic Act No. 7916 or the Special Economic Zone Act of 1995, provided it physically locates inside a PEZA-registered IT park, building or special economic zone. Incentives available to these enterprises include an ITH, and after the ITH period, the option to pay a special 5% tax on gross income earned in lieu of all national and local taxes, exemption from import duties and taxes on imported machinery and equipment and raw materials, an additional deduction equivalent to 50% of training expenses, and other incentives as determined by the PEZA Board.

6. Role of governmental bodies in administering incentives

The BIR may evaluate claims for R&D expense deductions and exemptions from donor's tax as part of a tax audit investigation.

The grant of incentives to enterprises engaged in IT R&D activities is evaluated by the PEZA or the BOI on a case-by-case basis. However, the BIR may evaluate the proper administration of the incentives in a tax audit investigation.

7. Administrative requirements

No BIR preapproval is required to claim R&D expense deductions as provided under the tax code. However, the following requirements must be complied with:

- ▶ The expense is directly attributable to the development, management, operation and/or conduct of the trade or business of the taxpayer.
- ▶ The expense was incurred during the taxable year.

- ▶ The expense is substantiated with sufficient evidence, such as official receipts or other adequate records, showing the amount of the expense being deducted and the direct connection or relation of the expense being deducted to the development, management, operation and/or conduct of the taxpayer's trade, business or profession of the taxpayer.
- ▶ The withholding tax due on the expense must be paid.

For PEZA registration, the R&D enterprise must locate in a PEZA economic zone and must engage in IT service activities that are generally rendered to foreign clients. Branches of foreign corporations may also register with the PEZA. If qualified for ITH, the PEZA will issue a certification confirming entitlement to the ITH incentive. This Certificate of ITH Entitlement must be secured annually from PEZA for the duration of the ITH period.

For exemption from donor's tax and full deduction of the donation to a qualified institution, Section 13(C) of Revenue Regulations No. 02-03 states that the donor engaged in business shall give a Notice of Donation on every donation worth at least PHP50,000 to the Revenue District Office that has jurisdiction over its place of business within 30 days after receipt of the qualified institution's duly issued Certificate of Donation. The certificate shall be attached to the said Notice of Donation, stating that no more than 30% of the donation/gifts for the tax year will be used by such qualified institution for administration purposes.

For BOI registration, the enterprise shall engage in any of the eligible activities under the current IPP. The extent of entitlement to incentives is generally based on the project's net value added, job generation, multiplier effect and measured capacity, and other conditions prescribed in the BOI guidelines. For R&D activities under the current IPP, the specific guidelines to take advantage of incentives require the submission of certain documents including a copy of Permit to Conduct Clinical Trial from Food and Drug Administration before the conduct of each clinical trial, an endorsement from the Commission on Higher Education or other concerned government agencies, or a Fairness Opinion report from an independent third-party body, where applicable. A branch of a foreign corporation may not register with the BOI. If qualified, the BOI shall issue a Certificate of Entitlement to the ITH incentive to be presented by the registered enterprise to the BIR upon filing its income tax return.

8. Statutory reference

R&D expense deduction

- ▶ Statutory reference: Section 34 (I) of the National Internal Revenue Code of 1997, as amended by Republic Act No. 10963 (TRAIN Law)
- ▶ Year of statutory regime: 2018, 1997

Exemption from donor's tax and contribution expense deduction

- ▶ Statutory reference: Sections 101(A)(3), 101(B)(2) and 34(H)(2)(c) of the National Internal Revenue Code of 1997, as amended by Republic Act No. 10963 (TRAIN Law)
- ▶ Year of statutory regime: 2018, 1997

ITH

- ▶ Statutory reference: 2017 Investment Priorities Plan, BOI Memorandum Circular No. 2017-004 (General Policies and Specific Guidelines to Implement the 2017 Investment Priorities Plan), Executive Order No. 226 (or the Omnibus Investment Code of the Philippines), Republic Act No. 7916 (or the Special Economic Zone Act), as amended, and Guidelines for the Registration of Information Technology (IT) Enterprises and the Establishment and Operation of IT Parks/Buildings (2000)
- ▶ Year of statutory regime: 2017, 2000

P

Poland



Poland

This chapter is based on information current as of February 2019.

EY contact:

Pawel Tynel
pawel.tynel@pl.ey.com
+48 660 440 169

The year 2018 marked a significant step in terms of R&D grants and incentives rules in Poland. It brought several changes that will attract new investors or encourage companies already present in Poland to implement further undertakings.

Many instruments were transformed into new schemes, offering a higher volume of support (e.g., R&D tax relief – from 2018, the amount of qualifying R&D expenses that may be deducted has increased; taxpayers may now deduct up to 100% of eligible expenses) or the possibility to receive a corporate income tax (CIT) exemption regardless of the location of an investment.

In the year 2019, the package of incentives was also extended by the Innovation Box regime, aimed at incentivizing innovative R&D activities by taxing profits from qualifying intellectual property rights (qualifying IP) at a preferential 5% rate instead of standard CIT rate of 19%.

1. Overview

The R&D incentives system in Poland provides for tax incentives and cash grants (direct grants). The National Research and Development Center is responsible for the implementation of several measures dedicated to supporting R&D projects in specific areas and industries.

The R&D incentives regime is still under development in Poland. However, positive changes are being observed both in terms of direct grants and tax incentives, making the Polish R&D support system competitive and attractive for entrepreneurs. R&D tax relief and the Innovation Box regime have been implemented, and various cash grants schemes are available from European Union (EU) funds to support R&D projects conducted by entrepreneurs independently or in cooperation with research units, as well as for the creation or development of an R&D center.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

In terms of R&D tax relief, for the year 2017 it was possible to claim retrospectively additional deductions up to 50% of costs borne by the taxpayer conducting R&D activities (which means that up to 150% of R&D costs could be treated as tax-deductible). As of 2018, the level of additional deduction was raised to 100%, which makes the

incentive more attractive. PLN1 spent on R&D activity can be treated as PLN2 for tax purposes.

Cash grants from the EU funds, reimbursing up to 80% of R&D costs or 50% of R&D investment costs, are also available.

2. Incentives available

Names of incentives	Incentives under the framework of Polish Investment Zone (PIZ)	Multi-Annual Support Program (MASP)	Research and Development Center (RDC) status	R&D tax relief – additional decrease in tax base by R&D costs	Innovation box	Grants from EU funds*
Types of incentives	▶ Tax exemption	▶ Cash grant	▶ Tax deduction	▶ Tax deduction	▶ Preferential tax rate	▶ Cash grant

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Incentives for new investments under the framework of PIZ

(Polska Strefa Inwestycji)

Description of benefits

This new concept to support investments was introduced in mid-2018. There is a possibility to receive a CIT exemption throughout Poland after fulfilling certain criteria – specific for a given location. The instrument allows for CIT exemption for income generated by activities covered by a decision on support and conducted within the territory of the investment. This new approach toward tax incentives allows for up to 15 years of CIT exemption when quantitative, but also qualitative, criteria are met.

Guidelines around incentive applications

Taxpayers may apply for a decision on support, which is issued by an area administrator, to obtain the incentive.

The incentive is applicable for future investments, as they cannot start before a decision on support is issued. Tax exemption must be disclosed in the annual tax return submitted to the tax authorities (form CIT-8 or PIT-36).

Cash grant under MASP – support scheme is undergoing changes

(Wieloletni Program Wsparcia)

Description of benefits

The Government provides cash grants from the MASP. The MASP is designated for large investments that are considered crucial to the Polish economy and that depend on receiving grants from the state budget in order to be implemented in Poland. Support may be granted, among other things, to entrepreneurs planning to create an R&D center. The level of support is based on:

- ▶ Costs of new investment expenditures
- Or
- ▶ Two-year employment costs of newly created jobs

In general, the support consists of:

- ▶ In terms of investment costs: up to 10% of eligible investment expenditures for an R&D center
- ▶ In terms of two-year employment costs: from US\$900 to US\$4,500 per job created

Taxpayers are required to seek preapproval to obtain the cash grant.

Guidelines around incentive applications

The cash grants are applicable for future investments, as they cannot start before the offer for support is granted. The grants are paid in accordance with a schedule agreed to with the Ministry of Entrepreneurship and Technology. Projects can be commenced after the application is submitted to the Polish Investment and Trade Agency (PITA) and a so-called confirmation of incentive effect is issued to a beneficiary.

R&D tax relief

(Ulga podatkowa B+R)

Description of benefits

R&D tax relief allows for an additional decrease in tax base by certain categories of R&D expenses already borne by a taxpayer undertaking R&D activities. The deduction is calculated with reference to the amount of costs incurred for conducting R&D.

One hundred percent of R&D-eligible expenses may be additionally deducted directly from the tax base (150% for entities holding the R&D center status). Taking into account the 19% CIT rate, cash savings (due to lower tax base) amount to 19% of eligible expenses for 2018 (for entities holding R&D center status: 28.5% of eligible costs).

If the additional deduction exceeds the company's tax base for a given year, the excess can be carried forward for six consecutive years after a year in which costs were incurred.

Starting from 2018, this form of support is available, under conditions, also to companies running business actions in the PIZ.

Guidelines around incentive applications

Claims for R&D tax relief are made through the annual tax return. A tax exemption must be disclosed in the annual tax return submitted to the tax authorities (form CIT-8 or PIT-36).

RDC status

(Centrum badawczo-rozwojowe)

Description of benefits

The Ministry of Entrepreneurship and Technology may grant RDC status for entrepreneurs who carry out R&D activities, which brings the benefit of higher tax deductions and additional categories of eligible costs for R&D tax relief purpose.

Guidelines around incentive applications

Claims for R&D tax relief are made through the annual tax return. A tax exemption must be disclosed in the annual tax return submitted to the tax authorities (form CIT-8 or PIT-36).

Grants from EU funds

(Wsparcie z funduszy Unii Europejskiej)

Description of benefits

From 2014 to 2020, Poland is implementing new operational programs (with a total budget of about EUR82.5 billion) to provide support for various types of projects. A significant part of the budget is available to R&D projects carried out by companies independently or via a consortium of scientific units and companies, etc.

EU cash grants for R&D works

Support is granted according to the EU's rules on support for R&D projects. The maximum aid level depends on the company's size and the type of R&D work that is conducted by the entity. The grant is calculated based on the volume of R&D expenditures.

The basic maximum levels of support are as follows:

	Entity size					
	Micro/small		Medium		Large	
	Basic	With additional bonus*	Basic	With additional bonus*	Basic	With additional bonus*
Industrial research	70%	80%	60%	75%	50%	65%
Experimental development	45%	60%	35%	50%	25%	40%

* Maximum aid levels may be reached if additional requirements regarding the dissemination of results of the project are met.

EU funds for R&D infrastructure

The EU funds also provide an excellent opportunity to obtain cash grants for R&D projects. This instrument applies either to the creation or development of R&D centers, units and laboratories. In such projects, investment expenses (in tangible and intangible assets) are co-financed. The levels of support may be up to 70% (depending on the location and size of the company) of the eligible investment costs.

Guidelines around incentive applications

The support is applicable to future investments, as they cannot start before the application for support is filed. The grants are paid in accordance with a schedule agreed upon between the aid beneficiary and the institution responsible for granting support.

3. Eligibility requirements

Incentives for new investments: PIZ and the MASP

In principle, the following capital expenditures may be treated as eligible:

- ▶ Investment expenditures:
 - ▶ Purchase of land
 - ▶ Purchase of construction works and materials
 - ▶ Purchase of fixed and intangible assets
 - ▶ Financial lease of other fixed assets
 - ▶ Lease of land and buildings
- Or
- ▶ Two-year employment costs of newly created jobs

The main entry conditions for PIZ are as follows:

- ▶ The new investment must be executed.
- ▶ Minimal investment costs are required within a PIZ and vary depending on the unemployment rate in a location (in comparison to the average unemployment rate in the country), the type of investment (industrial, in the business services sector or in R&D) and the enterprise size, from PLN200,000 to even PLN100 million.

Investors in the business services sector or R&D activity are obliged to incur minimum eligible costs from PLN500,000 to PLN5 million depending on the location.

The main entry conditions for the MASP are as follows:

- ▶ The new investment must be executed.
- ▶ Incurred investment costs for an R&D center must amount to at least PLN1 million (aid is calculated on the basis of two-year employment costs) or PLN10 million (aid is calculated on the basis of investment expenditures) and – in both cases – create at least 35 new jobs for employees with a higher education, regardless of the basis for aid calculation.

RDC status

Conditions that must be met to be granted RDC status are as follows:

- ▶ The status of RDC may be granted to entities with net revenues generated on sales of goods and products and on financial operations worth at least PLN5 million per year, in which a minimum of 20% is generated on sales of their own R&D activity results (in the year prior to the year of filing the application) or revenues of at least PLN2.5 million but not more than PLN5 million, in which 70% is generated on sales of their own R&D activity results.
- ▶ Additionally, there must not be any outstanding tax and social security liabilities.

R&D tax relief

The taxpayer must conduct activities falling within the scope of R&D works that are defined in the tax law.

Eligible expenses include costs borne during R&D work covering:

- ▶ Research (fundamental research and applied research)
- ▶ Development works (prototypes, pilot projects and demonstration projects)

R&D tax relief allows for an additional decrease in tax base by certain categories of R&D expenses that were incurred and treated by a taxpayer as tax-deductible:

- ▶ Wages and social contributions of employees involved in R&D activities
- ▶ Commodities and raw materials
- ▶ Expertise, opinions, advisory services and similar services, as well as results of research conducted by scientific units (related to R&D activities)
- ▶ Costs of using the R&D equipment (also, purchase of services related to the usage of R&D equipment)
- ▶ Tangible and intangible assets depreciation
- ▶ Administrative costs of obtaining and maintaining a patent (e.g., payments to Patent Office for prolongation of patent)

Taxpayers with granted RDC status may additionally treat as eligible:

- ▶ Depreciation of buildings used to conduct R&D activity
- ▶ Expertise, opinions, advisory services and similar services, as well as results of research conducted by entities other than scientific units

The R&D tax relief may be applied once company processes fall within R&D activity and the costs connected to them have been identified and properly evidenced.

Grants from EU funds

EU cash grants for R&D works

In principle, the following categories of R&D-related expenses may be treated as eligible:

- ▶ Wages and social contributions of employees involved in R&D activities
- ▶ Subcontractors' works related to R&D activities
- ▶ Other direct costs, including:
 - ▶ Depreciation and the use of research equipment, intangible assets, buildings and land
 - ▶ Materials and products used in R&D works
 - ▶ Other operating costs
- ▶ Indirect costs (e.g., administrative costs, costs of remuneration of management staff, traveling expenses)
- ▶ Some pre-implementation costs (e.g., expertise, certification needed to implement results on the market)

EU cash grants for R&D infrastructure

In principle, the following capital expenditures may be treated as eligible:

- ▶ Purchase of land and building (with some limitations)
- ▶ Purchase of construction works and materials
- ▶ Purchase of fixed and intangible assets
- ▶ Lease of fixed assets

4. IP and jurisdictional requirements

The Innovation Box regime (IBR) was implemented in 2019 into the Polish tax system.

The IBR is aimed at incentivizing innovative R&D activities by taxing profits from qualifying intellectual property rights (qualifying IP) at a preferential 5% rate instead of standard CIT rate of 19%.

The preferential 5% tax rate will apply to the "qualified income" obtained from the qualifying IP created, developed or improved by a taxpayer as part of R&D activity.

Qualifying IP rights, protected under national or international law, will include:

- ▶ Rights for inventions (patents)
- ▶ Protection rights for utility models
- ▶ The rights in registration for industrial designs
- ▶ The rights in registration for topographies of integrated circuits
- ▶ Additional protection rights for patents for medicinal products and plant protection products
- ▶ The rights in registration for authorized medicinal and veterinary products
- ▶ The rights in registration for new varieties of plants or animals
- ▶ The rights to computer software

"Qualified income" is calculated according to the formula:

Qualified income = nexus indicator x income from qualified IP rights

Nexus is calculated in the following way:

$$\frac{(a + b) * 1.3}{a + b + c + d}$$

Where the letters correspond to:

- a. costs of conducting R&D activity related to qualified intellectual property rights
- b. costs of acquisition of results of R&D works from an unrelated entity
- c. costs of acquisition of results of R&D works from related entity
- d. costs of acquisition of qualified intellectual property rights

The types of income from qualifying IP rights include:

- ▶ Fees and royalties under license agreement for qualifying IP
- ▶ Income from sale of qualifying IP
- ▶ Income from the qualified IP embedded in the sale price of products and services
- ▶ Compensation for infringement of rights arising from qualifying IP obtained in litigation, including court proceeding or arbitration

5. Technology or innovation zones

There are no technology or innovation zones in Poland; however, tax incentives are provided through PIZ.

6. Role of governmental bodies in administering incentives

Incentives for new investments under the framework of PIZ

Exemption can be granted on the basis of a decision on support within PIZ issued by 1 of 14 area administrators (on behalf of the Ministry of Entrepreneurship and Technology). Investors apply for the decision on support on an individual basis.

Cash grant under MASP

To benefit from the MASP, a company should begin negotiations with PITA and the Ministry of Entrepreneurship and Technology. Support is granted in the form of a cash grant based on a bilateral agreement between the Ministry and the investor.

RDC status

The Ministry of Entrepreneurship and Technology grants this support. Investors apply for RDC status on an individual basis, as there is no formal call or invitation involved.

R&D tax relief

There is no formal call or invitation involved. The deduction is disclosed in the annual tax return by taxpayers. Tax authorities may review the deduction during a regular tax audit. In Poland, the statutory limitation period is five years.

Innovation Box

There is no formal call or invitation involved. The deduction is disclosed in the annual tax return by taxpayers. Tax authorities may review the deduction during a regular tax audit. In Poland, the statutory limitation period is five years.

7. Administrative requirements

Incentives for new investments under the framework of PIZ

To allow monitoring of the status of meeting the conditions set in the decision on support within PIZ, the company must submit reports to the area administrator, including information on progress in achieving the level of eligible costs and level of new jobs created in accordance with the investment. The period covered by each report may differ but usually is submitted on a quarterly basis.

Cash grant under MASP

By 30 September of each year in which the support is granted, the investor shall submit to the Ministry of Entrepreneurship and Technology a financial and substantive report covering the period from the date of the beginning of the investment to the date of the report, including the performance of contractual obligations prognosis.

By 31 March of each year in which the support is granted, the investor shall submit to the Ministry of Entrepreneurship and Technology a financial and substantive report for the previous year that covers the number of jobs created, maintained employment and the total amount of incurred eligible costs from the date of the beginning of the investment.

R&D status

Each year, entrepreneurs must submit to the Ministry of Entrepreneurship and Technology financial statements with auditor reports, a description of the R&D activities of the past year, and statements confirming they have no outstanding tax or social security liabilities.

R&D tax relief

A company reports deductions resulting from R&D tax relief together with the annual CIT settlements. There is no specific separate reporting apart from having internal justification and documentation supporting classification of certain costs as R&D expenditures.

Grants from EU funds

Support is available through calls for proposals, followed by an application evaluation done according to specified evaluation criteria.

Reports on project progress and the refund of incurred costs should be submitted up to every three months.

8. Statutory reference

Incentives for new investments in PIZ

PIZ regulations are introduced by the Act on supporting new investments of 10 May 2018 (Journal of Laws of 2018, item 1162).

Cash grant under MASP

MASP regulations are introduced in the "Program of support of investments of considerable importance for the Polish economy for years 2011-2023," adopted by the Council of Ministers on 8 June 2016. The current program is at present subject to review and update.

RDC status

Regulation on RDC status is provided by the Act on Some Forms of Support for Innovative Activity Act of 30 May 2008 (Journal of Laws of 2015, item 1710 with further amendments).

R&D tax relief

R&D tax relief is regulated in Polish CIT Act (O.J. 2014, item 851 with further amendments).

Innovation Box

Innovation Box regime is regulated in Polish CIT Act (O.J. 2014, item 851 with further amendments).

Grants from EU funds

Rules for grants from EU funds are stated in the Operational Program documents and implementing documentation.

P

Portugal



Portugal

This chapter is based on information current as of February 2019.

EY contacts:

Pedro Paiva
pedro.paiva@pt.ey.com
+35 122 607 9694

Francisco Hamilton Pereira
francisco.hamilton-pereira@pt.ey.com
+35 122 607 9699

The Portuguese Government is very supportive of R&D activities, and the related incentives programs are being maintained and reinforced. R&D and innovation are seen as the cornerstones of Portuguese economic development.

1. Overview

The Portuguese Government has introduced several R&D incentive programs to attract investors to the country and encourage companies to undertake R&D activities. The incentives in force may be provided in the form of cash grants, tax credits or income from the sale or granting of the temporary use of industrial intellectual property (IP) rights. Pharmaceutical companies can benefit from these and other specific incentives.

To stimulate R&D activities, Portugal has created a competitive package of cash grants and tax incentives, which may be applied simultaneously. It is possible to receive a non-refundable cash grant with the R&D tax credit.

The cash grant program (SI I&DT) set for R&D projects is based on European Union-funded incentives. The program is available for the period from 2014 to 2020. The program awards a cash grant of 25% to 80% of the eligible R&D expenses. The cash grant is awarded by project and per call and is non-refundable for amounts up to EUR1 million. For cash grants above EUR1 million, the program awards a non-refundable cash grant of up to EUR1 million and a hybrid form of an incentive for the portion exceeding EUR1 million. This hybrid includes a non-refundable cash grant for 75% of the incentive exceeding EUR1 million and a refundable incentive for the remaining 25%.

The R&D tax credit (SIFIDE) consists of a tax deduction to companies' tax burden of 32.5% of expenses incurred in that period plus an incremental rate of 50% of the increase in expenses incurred during that period compared to the average from the previous two fiscal years up to EUR1.5 million.

These incentives have been in place for a significant amount of time. SIFIDE is one of the most mature regimes, dating back to 1997. Cash grants were approved in 2007.

Types of incentives	
Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

In 2012, the Ministries of Health and Finance signed an agreement with the pharmaceutical industry to reduce the expenses of the National Health System (commonly known as SNS) for drugs used in an ambulatory environment. To reduce SNS' expenses, pharmaceutical companies are granting a special discount on the medicine that they sell to the SNS, which is known as the Special Contribution on the Pharmaceutical Industry (SCPI).

The agreement between the Ministries of Health and Finance and the pharmaceutical industry foresees the possibility of deducting the full amount of R&D expenses related to the SCPI, in order to stimulate investment in R&D activities in Portugal.

Portugal has also introduced a patent box regime that follows the "modified nexus approach" set out by Action 5 of the Organisation for Economic Co-operation and Development's (OECD's) Base Erosion and Profit Shifting (BEPS) Action Plan. Accordingly, the gains obtained from the disposal or lease of patents and other industrial IP rights subject to registration and developed in Portugal will benefit from a reduced tax rate since the eligible income will be adjusted downward by up to 50%.

2. Incentives available

Names of incentives	R&D cash grant (SI I&DT)*	R&D tax credit (SIFIDE)	Portuguese non-habitual resident individuals regime	Deduction from income derived from patents and industrial IP developed in Portugal	R&D deduction regarding the SCPI
Types of incentives	▶ Cash grant	▶ R&D tax credit	▶ Portuguese non-habitual resident individuals regime	▶ Patent-related incentives	▶ Tax deduction

* Although not based upon scientific analysis, EY clients report that the R&D cash grant delivers more beneficial results to investors.

R&D cash grant (SI I&DT)

(Sistema de Incentivos à Investigação & Desenvolvimento Tecnológico)

Description of benefits

Portuguese legislation includes a financial incentive for research and technological development (R&TD) activities promoted by companies. This measure aims to promote the development of R&TD and demonstration projects at individual companies or consortia led by companies. The measure also aims to support company activities related to training and building capacity of internal R&TD competencies and valorization of R&TD results. The measure is meant to strengthen R&D in businesses, as well as the relationship between companies and knowledge

centers, accelerating the transfer and use by companies of R&TD technologies, knowledge and results.

The conditions of this incentive are:

- ▶ Minimum investment of EUR100,000
- ▶ Minimum incentive rate of 25%, which can be increased by 20% for micro and small companies, 10% for medium companies, 25% for industrial investigation activities and 15% when verified as one of the following situations:
 - ▶ Collaboration (coordination) with other companies
 - ▶ Collaboration (coordination) with research organizations
 - ▶ Wide dissemination of research results
- ▶ Non-refundable grant for attributed incentive amounts below EUR1 million

- ▶ For attributed incentives above EUR1 million, a non-refundable grant of up to EUR1 million is awarded; for the exceeding amounts, 75% of the exceeding amount is granted as a non-refundable incentive and the remaining 25% is conceded as a refundable loan

The refundable amount will be attributed as a non-interest-bearing loan, which will be refundable after three years on a semester basis for four years. Prior application and approval are required to benefit from this cash grant.

Guidelines around incentive applications

The incentive is applicable to future investments. The deadlines are related to the application periods set by the grants managing authority.

R&D tax credit (SIFIDE)

(Sistema de Incentivos Fiscais à Investigação e Desenvolvimento Empresarial)

Description of benefits

SIFIDE is a tax incentive system for corporate R&D that aims to provide companies in Portugal with a way to promote R&D, especially to boost productivity, economic development and the qualifications of the workforce. The SIFIDE tax credit consists of two components:

- ▶ A base rate of 32.5% applicable to R&D expenses of the current tax year
- ▶ An incremental rate of 50% on expenses incurred during the period, in comparison with the simple average of the two previous tax years, with a limit of EUR1.5 million

According to the Portuguese tax legislation, for taxpayers that are small and medium-sized enterprises (SMEs) that have not completed two fiscal years or benefited from this incremental rate, an increase of 15% to the base rate will apply. Tax credits that are not deductible because of insufficient tax payable in the period in which they were granted may be deferred up to the eighth immediate tax year. Preapproval from the Portuguese Innovation Agency (ANI) is required to obtain the incentive. SIFIDE is an incentive that should be maintained by the Government until at least 2020.

Guidelines around incentive applications

The incentive is applicable to current investments and may be applied retroactively. The SIFIDE tax credit can be claimed through the annual corporate income tax return (Formulário Modelo 22 de IRC). The application for the SIFIDE tax credit has to be submitted by 31 May of the year following the year in which the expenditure was incurred.

Portuguese non-habitual resident individuals regime

(Regime dos Residentes não Habituais em Portugal)

Description of benefits

Portuguese tax legislation grants a favorable tax regime applicable to foreign employees engaged in R&D activities who may relocate to Portugal.

This special tax regime is applicable to individuals who become tax residents in Portugal under Portuguese domestic legislation in a given year, if they have not been considered and taxed as tax residents in Portugal in the previous five years.

The status of non-habitual resident is not automatically granted. Individuals should file a request with the Portuguese tax authorities.

According to the Portuguese Personal Income Tax (PIT) Code, individuals are deemed resident for tax purposes in Portugal if, among other conditions:

- ▶ They are physically present in Portugal for more than 183 days in any calendar year, continuously or not
- ▶ They have a home in Portugal on 31 December that appears to be their permanent residence

Or

- ▶ Their spouse is tax resident in Portugal

This special regime applies for a consecutive 10-year period that is non-renewable.

The main feature of the Portuguese non-habitual resident individuals regime is that the employment and business or professional income arising from a Portuguese source and

derived from “high-added-value” activities of a scientific, artistic or technical nature is taxed at a flat rate of 20% on net income plus an extraordinary surcharge between 0% and 3.5%, depending on the amount of the net income. Stated differently, there is no income cap. The regime may be applied for a period of 10 years. From the moment in which the individual is taxed at a flat tax rate of 20% plus the extraordinary surcharge on net income, it is no longer possible to make deductions from taxable income. If the individual has other types of income taxed at a higher rate, it is possible to make a deduction related to the same income. Preapproval is required from the Taxpayers Registration Services’ Administration (DSRC) to obtain the incentive.

Guidelines around incentive applications

To receive the incentive, the applicant should file the formal non-habitual tax residents form. The deadline for filing the application is 31 March of the year following the year in which the individual becomes a non-habitual resident.

Patent box – deduction from income derived from patents and industrial IP developed in Portugal

(Rendimentos de patentes e outros direitos de propriedade industrial)

Description of benefits

The patent box regime was amended to align it with the “modified nexus approach” contained in the OECD’s BEPS Action 5 recommendations. The new patent box regime provides (in proportion to incurred eligible expenses) for an exclusion of up to 50% from the taxable basis in relation to income derived from contracts of transfer or of temporary use of patents and industrial designs or models.

To benefit from this regime, several conditions should be met, namely:

- ▶ IP is effectively used for activities carried out by the licensee

- ▶ If the licensee is a related company, the IP cannot be used to create deductible expenses for the taxpayer
- ▶ The licensee is not domiciled in a tax haven

This regime should apply only to patents and industrial designs or models registered on or after 1 July 2016. For eligible IP registered previously (from January 2014 to July 2016), the previous patent box regime rules will apply until 2021.

Guidelines around incentive applications

The incentive is applicable for investments made after 1 July 2016. To receive the deduction, the IP should be registered, but no application is needed to benefit from this tax deduction. The deduction can be claimed through the annual corporate income tax return (Formulário Modelo 22 de IRC). The tax return has to be submitted by the end of the fifth month after the end of the company’s fiscal period.

R&D deduction regarding the SCPI

(Certificação de Despesa em I&D na Indústria Farmacêutica)

Description of benefits

The Ministries of Health and Finance in 2012 signed an agreement with the pharmaceutical industry to reduce the expenses of the SNS for drugs used in an ambulatory environment. Under the agreement, pharmaceutical companies are granting a special discount, the SCPI, for the medicine that they sell to the SNS.

The agreement between the Ministries of Health and Finance and the pharmaceutical industry foresees the possibility of deducting R&D expenses related to the SCPI to stimulate investment in R&D activities in Portugal.

The amount of the deduction must be certified by the last day of January of the following year by a Big Four accounting firm.

Guidelines around incentive applications

To benefit from this incentive, the company must formalize its adherence in writing to the Portuguese Pharmaceutical Industry Association (APIFARMA) if the company is an associate of APIFARMA, or to the National Authority of Medicines and Health Products (INFARMED I.P.) if the company is not an associate of APIFARMA.

3. Eligibility requirements

R&D cash grant (SI I&DT)

Eligible expenses include:

- ▶ Costs of specialized personnel of the promoter dedicated to R&TD, including contracted fellows
- ▶ Acquisition of patents from external sources or by those so licensed
- ▶ Raw materials and components needed for the construction of pilot plants and for the construction of prototypes
- ▶ Acquisition of services from third parties, including technical, scientific and consulting assistance
- ▶ Acquisition of instruments and technical and scientific equipment indispensable to the project (only the amount with respect to the value of depreciation related to its period of use in the project is eligible)
- ▶ Acquisition of specific software for the project (only the amount with respect to the value of depreciation related to its period of use in the project is eligible)
- ▶ Costs associated with the promotion and disclosure of the results of projects related to the process or product innovation that has commercial application
- ▶ Travel and stays abroad that result from needs strictly related to scientific and technological development of the project activities
- ▶ Costs associated with the certification of the system by Management of Research, Development and Innovation, such as consulting fees and training
- ▶ Expenses resulting from the services of chartered accountants (TOC) or statutory auditors (ROC)
- ▶ Allocation of indirect costs

Qualifying activities include:

- ▶ Industrial investigation – planned or critical investigation intended for the acquisition of new knowledge; e-capacities for developing new products, processes or services; or for the introduction of significant improvements in existing products, processes or services, including the creation of complex system components necessary for industrial investigation for validation of generic technology
- ▶ Experimental development – acquisition, combination, conception and use of existing knowledge, scientific techniques and technologies for the elaboration of plans and devices or the conception of new or improved products, processes and services

Qualifying industries include entities that are identified according to the Portuguese Classification of Economic Activities (CAE) as pertaining to industry, commerce, services, tourism, energy, transport and logistics, or construction.

In addition, to apply for the R&D cash grant (SI I&DT), a company must meet the following eligibility requirements:

- ▶ The company must be established in Portugal; some limitations may apply to non-convergence regions, such as Lisbon or Algarve.
- ▶ The company must present a balanced economic situation by meeting a financial autonomy ratio higher than 15% (if SME) or 20% (if non-SME).
- ▶ The company must have no tax or social security debts.
- ▶ The project should correspond to a minimum eligible expense of EUR100,000.
- ▶ The project will qualify for the cash grant for a maximum length of two years in individual projects or three years in projects developed by a company consortium (the project can continue after these time limits, but the cash grant will not cover it).
- ▶ The company must assign a technical manager to the project.
- ▶ The project must start after the submission of the application.

R&D tax credit (SIFIDE)

Eligible expenses include:

- ▶ The acquisition cost of new tangible fixed assets, with the exception of buildings and land, connected with R&D activities
- ▶ Expenses related to personnel directly involved in R&D activities (PhD costs are eligible at 20%)
- ▶ Expenses involving directors and professionals participating in the management of R&D institutions
- ▶ Operating expenses of up to 55% of wages of personnel directly involved in R&D activities
- ▶ Costs regarding the subcontracting of R&D activities from public entities or from entities recognized as possessing R&D capabilities
- ▶ Expenses incurred to raise capital for institutions that perform R&D and contributions to investment, private or public funds that are targeted to finance entities dedicated to R&D
- ▶ Costs regarding registry and maintenance of patents
- ▶ Costs associated with the acquisition of patents that are related to the development of R&D activities (only eligible for SMEs)
- ▶ Costs of R&D audits
- ▶ Expenses with demonstration actions that result from supported R&D projects

Qualifying activities include:

- ▶ Basic research
- ▶ Applied research
- ▶ Experimental development

Qualifying industries include entities that are engaged in agricultural, industrial, commercial or service-related activities as a core or supplementary business.

In addition, the company must meet the following eligibility requirements to apply for R&D tax credits (SIFIDE):

- ▶ Companies must be established in Portugal.
- ▶ Companies must have no debts to the tax authorities or social security.
- ▶ Indirect methods cannot determine taxable income.

Portuguese non-habitual resident individuals regime

Eligibility requirements are as follows:

- ▶ The R&D employees are physically present in Portugal for more than 183 days in any calendar year, continuously or not
- ▶ They have a home in Portugal on 31 December that appears to be their permanent residence
- ▶ The individual's spouse is tax resident in Portugal
- ▶ R&D employees must perform a "high-value-added" activity for the purposes of applying for this regime; this includes architects, engineers, artists, auditors and tax advisors, physicians, teachers, psychologists, dentists, other professionals, board members of certain companies and senior executive employees

Deduction from income derived from patents and industrial IP developed in Portugal

To be eligible for the deduction, patents and industrial designs or models must be registered.

R&D deduction regarding the SCPI

Eligible expenses include:

- ▶ The acquisition cost of new tangible fixed assets, with the exception of buildings and land, connected with R&D activities
- ▶ Expenses related to personnel directly involved in R&D activities
- ▶ Expenses involving directors and professionals participating in the management of R&D institutions
- ▶ Operating expenses of up to 55% of wages of personnel directly involved in R&D activities
- ▶ Costs regarding the subcontracting of R&D activities from public entities or from entities recognized as possessing R&D capabilities
- ▶ Costs regarding registry and maintenance of patents
- ▶ Costs associated with the acquisition of patents that are related to the development of R&D activities (only eligible for SMEs)
- ▶ Costs of R&D audits

4. IP and jurisdictional requirements

Effective date

The patent box regime applies to assets related to qualifying IP that is registered (e.g., on internally generated IP, IP acquired from a related party and/or IP acquired from a third party) after 1 July 2016.

For eligible IP registered previously (from January 2014 to July 2016), the previous patent box regime rules will apply until 2021.

Qualifying IP

The qualifying IP includes:

- ▶ Patents
- ▶ Drawings or industrial models

Types of income

Income derived from IP, such as royalties, compensation and capital gains.

Calculation of income

Only 50% of income contributes to the determination of taxable income. This income must proceed from the assignment or temporary use of patents, drawings and industrial designs subject to registration, including those resulting from IP infringement. Income is defined as the positive difference between the income and gains earned in the tax period in question and expenses or losses incurred or borne in that same tax period by the taxable person for carrying out R&D activities that have resulted, or have benefited, from the industrial property right to which the income is attributable.

The deduction to taxable income must not exceed the amount obtained by applying the following formula:

$$DQ / DT \times RT \times 50\%$$

DQ = eligible expenses incurred to develop the assets protected by the industrial IP, which correspond to the expenses and losses incurred or borne by the taxpayer with R&D activities conducted by the taxpayer that resulted, or which have benefited from, the industrial IP rights concerned, as well as concerning the employment of such activities with any other entity, provided it is not in a special relationship

DT = total expenses incurred to develop the assets protected by the industrial IP, which correspond to the expenses and losses incurred or borne by the taxpayer with R&D activities conducted by the taxpayer that resulted, or which have benefited from, the industrial IP rights concerned, as well as concerning the employment of such activities with any other entity, including with entities with which it has a special relationship, as well as, when applicable, the expenses for the acquisition of the industrial IP rights

RT = total income derived from IP, which means the positive difference between income earned from contracts whose purpose is the sale or temporary use of industrial IP rights and the expenses incurred in the development of R&D activities, in the same tax year and in previous periods of taxation

IP regime rate

From July 2016 onward, corporate income derived from contracts related to the transfer or temporary use of property rights on patents and industrial designs will contribute to the determination of taxable profit for just half of its value.

Can work be performed outside the country?

Yes, the work can be performed outside of Portugal.

Must the IP be registered/owned locally?

It is not a requirement to have local ownership. However, the regime will not be applied if the buyer is resident in a tax haven.

IP and jurisdiction requirements

From July 2016 onward, corporate income derived from contracts related to the transfer or temporary use of property rights on patents and industrial designs will contribute to the determination of taxable profit for just half of its value.

To benefit from this regime, several conditions must be met, including:

- ▶ The buyer must use the rights in an activity of commercial, industrial or agricultural nature.
- ▶ The use of rights by the purchaser does not materialize on goods or services that result in deductible expenses to the selling entity (or another entity that forms part of the same Consolidated Group of Taxation) if the purchaser is a related entity.
- ▶ The purchaser must not be resident in a tax haven.
- ▶ Patents and industrial designs or models must be registered after 1 July 2016.
- ▶ Capital gains can benefit from the reinvestment regime.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Portugal.

6. Role of governmental bodies in administering incentives

The R&D tax credit (SIFIDE) operates on a self-assessment basis, through an application, and is administered by the ANI (*Agência Nacional de Inovação*, or National Innovation Agency). The ANI determines whether the company's activities qualify.

The AICEP (*Agência para o Investimento e Comércio Externo de Portugal*, or Agency for Investment and Foreign Trade) and IAPMEI (*Agência para a Competitividade e Inovação*, or Agency for Competitiveness and Innovation) are the two main governmental bodies that administer the cash grant funding schemes. These entities collect and decide on the applications for the R&D cash grant (SI I&DT).

7. Administrative requirements

For the R&D cash grant, companies must present an application prior to the start of the R&D project.

For the R&D tax credit, companies must present an application each year, up to seven months after their fiscal year-end.

The status of non-habitual resident is not automatically granted. Individuals should file a request with the Portuguese tax authorities.

8. Statutory reference

Código Fiscal do Investimento, approved by Decree-Law No. 249/2009 and subsequent amendments.

R

Romania



Romania

This chapter is based on information current as of February 2019.

EY contacts:

Miruna Enache
miruna.enache@ro.ey.com
+40 21 402 41 89

Răzvan Ungureanu
razvan.ungureanu@ro.ey.com
+40 21 204 79 37

Andreea Cosmănescu
andreea.cosmanescu@ro.ey.com
+40 21 402 40 00

A salary income tax exemption has been introduced for salary income earned as a result of performing activities in applied R&D or technological development fields. In addition, a 50% super deduction for corporate income tax purposes in respect of qualifying R&D expenses is available, and 50% of the fiscal value of an asset used for R&D purposes may be deducted during the first year of use under the accelerated tax depreciation regime. Moreover, a corporate income tax exemption is available for taxpayers that exclusively perform R&D and innovation activities, as well as related activities.

1. Overview

Currently, there are four R&D incentive programs in Romania:

- ▶ Corporate income tax exemption for taxpayers that exclusively perform R&D and innovation activities, as well as related activities
- ▶ Super deduction (for corporate income tax purposes) on qualifying R&D expenses
- ▶ Accelerated depreciation on qualifying R&D assets
- ▶ Salary income tax exemption in respect of activities performed in applied R&D or technological development fields

The provisions regulating the corporate income tax exemption were introduced in the Romanian Tax Code in January 2017; currently, no guidelines or norms to apply these provisions have been issued.

The super deduction on R&D consists of an additional deductible allowance for corporate income tax purposes of 50% for eligible expenses related to R&D activities (which must belong to the category of applied research and/or technological development). The incentive has been available for some time; however, due to the lack of clarity of the legislative provisions (e.g., the related application norms were not aligned with the provisions of the Tax Code), it was often not applied by companies performing R&D activities. The updated application norms that were published in July 2016 brought several amendments and clarifications.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

The salary income tax exemption with respect to activities performed in applied R&D or technological development fields is available for employees carrying out an R&D activity based on an individual labor contract, a work relationship, a special statute provided by law, or an assignment agreement concluded with or at a public or private entity/institution included in the national system for R&D. This incentive, which was included in Emergency Government Ordinance No. 32/2016 published in the Official Gazette of Romania on 30 June 2016, applies to salary income derived from August 2016.

For fiscal depreciation purposes, taxpayers subject to corporate income tax may opt to use the accelerated depreciation method for technological equipment, machinery, tools and installations, computers and peripherals, and patents. Both companies and the Government are familiar with administering the accelerated depreciation provision, as it has been available for a long time (not only for assets used for R&D activities).

2. Incentives available

Names of incentives	Corporate income tax exemption	Accelerated depreciation method	Additional deductions for eligible R&D expenses*	Income tax exemption on salary income attributable to activities performed in applied R&D or technological development fields
Types of incentives	<ul style="list-style-type: none"> ▶ Corporate income tax exemption for companies that exclusively perform R&D and innovation activities 	<ul style="list-style-type: none"> ▶ Accelerated depreciation on R&D assets 	<ul style="list-style-type: none"> ▶ Super deduction 	<ul style="list-style-type: none"> ▶ Tax exemption

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

Corporate income tax exemption

(Scutirea de la impozitul pe profit)

Description of benefits

In January 2017, a corporate income tax exemption was introduced for taxpayers that exclusively perform R&D and innovation activities, as well as related activities. The exemption is available for newly set-up taxpayers for the first 10 years of their activity; or, for taxpayers that were already set up when these provisions entered into force, for 10 years from the entry into force of these provisions.

Guidelines around incentive applications

The corporate income tax exemption provision was introduced in the Romanian Tax Code since January 2017. So far, no norms or guidelines for applying this provision have been issued.

Accelerated depreciation method

(Metoda amortizării accelerate)

Description of benefits

Under the accelerated depreciation method, a maximum of 50% of the fiscal value of the asset may be deducted during the first year of use, while the rest of the asset's value may be depreciated over the remaining useful life. The accelerated depreciation applies also to equipment used for R&D purposes.

Guidelines around incentive applications

The accelerated depreciation incentive applies to future investments. The accelerated depreciation method is claimed in the quarterly or annual corporate income tax (CIT) returns (i.e., Forms 100 and 101). The depreciation method should be chosen before the assets start to be depreciated.

Additional deductions for eligible R&D expenses

(Deducere suplimentară pentru cheltuieli eligibile aferente activităților de cercetare-dezvoltare)

Description of benefits

By law, the 150% super deduction can be applied only to expenses incurred in relation to applied research and technological development. Under the incentive, the taxpayer would benefit from an additional deduction for CIT purposes representing 50% of R&D expenses.

Guidelines around incentive applications

As a condition for being granted the supplementary deduction, the R&D activity must belong to the category of applied research and/or technological development. The super deduction is claimed in the quarterly or annual CIT returns (i.e., Forms 100 and 101). In general, the super deduction should be claimed upon the recognition of the R&D expenses.

Income tax exemption on salary income attributable to activities performed in applied R&D or technological development fields

(Scutirea de la plata impozitului pe venit pentru veniturile realizate din salarii și asimilate salariilor ca urmare a desfășurării activității de cercetare-dezvoltare aplicativă și/sau de dezvoltare tehnologică)

Description of benefits

Income earned as a result of performing activities in applied R&D or technological development fields will be exempt from Romanian salary income tax (10%).

Guidelines around incentive applications

The exemption is available for employees carrying out an R&D activity based on an individual labor contract, a work relationship, a special statute provided by law or an assignment agreement concluded with or at a public or private entity/institution included in the national system for R&D. This incentive applies to salary income derived from August 2016.

To benefit from the tax exemption on salary income and assimilated income, several conditions specifically provided by the law must be cumulatively met (see eligibility requirements below). For assigned personnel who are carrying out R&D activities in Romania, the eligibility requirements must be fulfilled by the income payer.

3. Eligibility requirements

Corporate income tax exemption

To benefit from the corporate income tax exemption, taxpayers must exclusively perform R&D and innovation or other related activities.

R&D and innovation activities include:

- ▶ Scientific research, which in turn includes fundamental and applied research. Fundamental research implies experimental or theoretical activities undertaken mainly for acquiring new knowledge regarding fundamental phenomena and observable facts, without the particular aim of immediate practical application or use. Applied research implies the original investigation undertaken for acquiring knowledge with a specific practical objective.
- ▶ Experimental development, which is defined as the systematic activity, starting with knowledge resulting from research and/or practical experience, that has the purpose of developing new materials, products or devices, the setup of new processes, systems and services or the substantial improvement of the existing ones.
- ▶ Innovation based on scientific research and experimental development. Innovation is defined as the implementation of a new product, service or process or the substantial improving of it, or involves the implementation of a new marketing or business method in practice, in the workplace organization or external relationships.

Accelerated depreciation method

The accelerated depreciation method can be applied in connection with technological equipment, machinery, tools and installations, computers and peripherals, and patents. There is no specific limitation on the activity in applying the incentive.

Additional deductions for eligible R&D expenses

For additional deductions, eligible expenses include the following:

- ▶ Depreciation expenses of new tangible fixed assets created or acquired by taxpayers that are used in R&D activities and related expenses regarding maintenance of and repairs to such assets performed by third parties
 - ▶ Expenses incurred with salaries of personnel directly involved in R&D activities
 - ▶ Depreciation expenses of intangible assets acquired by taxpayers that were used in R&D activities
 - ▶ Operating expenses, including costs of consumables, expenses for materials that are included in inventory, raw materials expenses, expenses with animals used in experiments, and similar products used in R&D activities
- ▶ Overhead expenses, which can be allocated directly or proportionally (considering an allocation key) to the results of an R&D activity

The R&D activities should be included in a project detailing at least the following: the objective of the R&D activities, the time period, the field of R&D, financing sources and the category of the expected result (e.g., studies, technologies, IT products).

If the R&D expenses are carried out by several taxpayers through collaboration, association or agreement, the tax incentives are individually computed for each taxpayer, depending on each member's eligible expenses.

The R&D activities can be performed in Romania or in another EU or European Economic Area (EEA) Member State. No industry sectors are specifically excluded.

Given that the allowance is applicable only to certain specific types of R&D activities, a detailed analysis should be performed before reaching a conclusion with respect to eligibility (as the eligibility criteria are not straightforward). Moreover, *The Registry of Experts for Research & Development Activities* will be set up by the Government for classifying the R&D activities.

Income tax exemption on salary income attributable to activities performed in applied R&D or technological development fields

To benefit from the tax exemption on salary income and assimilated income, several conditions must be cumulatively met, including the following:

- ▶ R&D project details as defined by the law
- ▶ Time sheet related to the R&D project
- ▶ The applicable legislation defines the term "R&D project," which must contain the following elements: the purpose, the domain of R&D, the objective, the period when the R&D project is undertaken, the type of funding sources (public/private/national/external), the budget expressly mentioning the expenses with the salary income and assimilated income related to the allocated personnel, the novelty or innovation of the result, the result indicators defined by the law (which should be quantified through the R&D project).

The tax exemption is allowed even if the objectives of the R&D project are not accomplished.

Also, details are provided with respect to the supporting documentation that must be prepared and made available to apply the exemption.

4. IP and jurisdictional requirements

Regarding the additional deduction, R&D activities can be performed in Romania or in another EU or EEA Member State.

5. Technology or innovation zones

There are no technology or innovation zones related to R&D incentives in Romania.

6. Role of governmental bodies in administering incentives

Incentives are applied directly by relevant taxpayers. Appropriate application of these incentives by taxpayers is checked by the tax authorities during profits tax audits.

The Registry of Experts for Research & Development Activities will be set up by the Government, which will be responsible for classifying the R&D activities.

7. Administrative requirements

Additional deductions related to R&D expenses must be presented on a distinct row in the annual profits tax return and also separately in the Corporate Income Tax Register. Also, please refer to the requirements detailed in the Eligibility requirements section above in relation to the *Additional deductions for eligible R&D expenses* and for the *Salary income tax exemption in respect of activities in applied R&D or technological development fields* (e.g., the requirement that the R&D expenses be included in a project). There is no specific administrative requirement for the accelerated depreciation method.

8. Statutory reference

- ▶ Corporate income tax exemption: Article 22¹ of the Tax Code and Government Ordinance No. 57/2002
- ▶ Accelerated depreciation method: Article 28 of the Tax Code
- ▶ Additional deductions: Article 20 of the Tax Code and the norms regarding the deductions for R&D expenses in the computation of the tax result, approved via Order 1056/4435 of 5 July 2016
- ▶ Salary income tax exemption: Article 60, point 3 of the Tax Code and Order No. 2326/2855/2017, effective 5 September 2017, on qualifying as applied R&D and/or technological development activity

R

Russia



Russia

This chapter is based on information current as of February 2019.

EY contact:

Ivan Rodionov
ivan.rodionov@ru.ey.com
+7 495 755 9719

The development of R&D tax incentives in Russia has increased the number of companies that will invest in R&D activities. More companies are interested in becoming residents of special economic technology innovative zones, and the trend of investing in R&D activities is positive and continues to grow. The Government is considering the development of new R&D tax incentives and extension of existing ones.

1. Overview

Russia progressively develops the innovative sector via the use of internationally accepted leading practices, and the President has declared a goal of gradually changing from a resource-based economy to one characterized as knowledge and technology-led.

In recent years, Russia has made significant progress in developing its innovation base. R&D tax incentives now play an important role in stimulating investment in innovation and modernization of the Russian economy, and are considered a key element of further economic growth.

In 2011, Russia set its innovation strategy for the period to 2020 as a basis of state policy in the areas of talent support, intellectual property (IP) protection, administrative barriers reduction, provision of tax incentives, increase in demand for intellectual products, and R&D activity stimulation. Russia also managed to implement practical measures to support an increase in innovative activities. In particular, for a number of new state innovative institutions, funds were created to support investments in innovative companies.

Many of the current R&D incentives appeared starting from 2010 and are related to innovation activity in the energy efficiency and energy savings area. Current trends show that the Government is gradually reducing direct support of R&D activities in favor of providing indirect stimulation by increasing the list of R&D incentives and reducing administrative barriers.

Also, in 2017 the Federal development program on digital Economy of the Russian Federation was adopted.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

Current tax legislation provides the following group of investments and R&D incentives:

- ▶ Federal incentives provided by the Tax and Customs Codes
- ▶ Regional incentives provided by local legislation with respect to regional taxes or as part of federal tax payable to the regional budgets
- ▶ Innovative special economic zones with favorable tax regimes for R&D activities

2. Incentives available

Names of incentives	Super deduction*	Investment tax credit	Reduced profits tax and assets tax rates*	Reduced rate of social insurance contributions	Accelerated depreciation on the R&D assets	VAT exemptions	Tax holiday
Types of incentives	▶ Super deduction	▶ Tax credits	▶ Reduced tax rates	▶ Reduced social security contributions	▶ Accelerated depreciation on qualifying R&D assets	▶ VAT exemptions	▶ Tax holiday

* Although not based upon scientific analysis, EY clients report that these incentives deliver more beneficial results to investors.

Super deduction

(Применение повышенного коэффициента по расходам на НИОКР)

Description of benefits

Benefits include a 150% super deduction of eligible R&D expenses incurred for activities in accordance with the Government-approved list. In general, unused expenses may be carried forward no more than 50% of the tax profits for a current tax period.

Guidelines around incentive applications

Super deduction of eligible R&D expenses is claimed in the profits tax return in the period when R&D research is completed or when a stage of research is completed. Together with the filing of the annual profits tax return (which is required to be filed on 28 March of the year following the reporting year), a taxpayer shall provide the tax authorities with a report on R&D research.

Investment tax credit

(Инвестиционный налоговый кредит)

Description of benefits

The investment tax credit constitutes a tax rescheduling arrangement under which a taxpayer is allowed to reduce its tax payments for a certain period, with subsequent payment of the amount of the tax credit and accrued interest. The investment tax credit may be provided for one to five years and shall not exceed 50% of a taxpayer's total payment for the period. In addition, the investment tax credit shall not exceed 100% of the acquisition value of fixed assets that are to be used in R&D activity or can be negotiated with the authorities.

Guidelines around incentive applications

The investment credit is applicable to current investments. In order to claim the investment credit, a taxpayer is required to submit a request to the tax authorities to provide an investment tax credit. The tax authorities have 30 days to make a decision.

Reduced profits tax and assets tax rates

(Пониженные ставки по налогу на прибыль и налогу на имущество)

Description of benefits

Regional governments may provide a reduced profits tax rate (from 20% to 15.5%) for taxpayers engaged in certain types of R&D activities. These reduced profits tax rates may be increased by the laws of regional governments for the 2019-2022 tax periods. They also may provide a reduced assets tax rate below the ordinary 2.2% rate (some regions provide assets tax exemption) on assets used in such R&D activities.

Guidelines around incentive applications

The incentive is applicable to current investments. To claim the incentive, larger taxpayers usually negotiate directly with the local governments. Small and medium-sized businesses declare a reduced tax rate in their tax return and provide documentation supporting their eligibility for the reduced rate to the tax authorities upon request.

Reduced rate of social insurance contributions

(Пониженные ставки по страховым взносам)

Description of benefits

Reduced rates of social security contributions are available to information technology (IT) companies at the following rates: 14% on annual compensation up to RUB865,000; 12% on annual compensation up to RUB1.15 million; and 4% on annual compensation exceeding RUB1.15 million.

Guidelines around incentive applications

The incentive is applicable to current investments. The incentives are declared in the social security contribution computation, with documentation supporting their eligibility for the incentive provided upon request by the authorities. The reduced rates of 14%, 12% and 4% will be applicable until 2023.

Accelerated depreciation on the R&D assets

(Ускоренная амортизация основных средств, используемых в научно-технической деятельности)

Description of benefits

Taxpayers may apply a special coefficient, but no higher than three, to the basic depreciation norm in relation to amortizable fixed assets that are used exclusively to carry out scientific and technical activities. Generally, the expenses may be carried forward for 10 years.

Guidelines around incentive applications

Accelerated depreciation on eligible R&D assets is claimed in the profits tax return for current investments. Taxpayers must retain all supporting documentation and tax registers and be ready to provide them to the tax authorities.

VAT exemptions

(Освобождение от НДС)

Description of benefits

VAT exemption is available for certain R&D production activity.

Guidelines around incentive applications

The incentive is claimed in the VAT return for current supply of R&D works. Taxpayers must retain all supporting documentation and tax registers and be ready to provide them to the tax authorities.

Tax holiday

(Налоговые каникулы)

Description of benefits

This incentive allows individual entrepreneurs performing R&D activities and applying simplified or patent taxation systems to apply 0% tax rate for two years.

Guidelines around incentive applications

The incentive is claimed in the assets tax return for current investments. Taxpayers must retain all supporting

documentation and tax registers and be ready to provide them to the tax authorities.

3. Eligibility requirements

R&D expenditures must relate to the development of new products, the improvement of production processes or the development of new services. Qualifying costs include labor costs, R&D contractor expenses, and depreciation of equipment used for R&D and certain other expenses (with limitations). For reduced profits tax and assets tax rates and tax holiday, eligibility conditions are set out in regional legislation. Regarding the VAT exemption, the incentives are provided for the following operations:

- ▶ R&D activity on the development of technologies for production of new goods and provision of new services
- ▶ R&D activities financed from budgets and special scientific funds
- ▶ Transfer of IP rights for software, databases, inventories and know-how, including transfer under license agreements
- ▶ Import of technologic equipment (the analogs of which are not produced in Russia) included in the list approved by Government Decree No. 372

4. IP and jurisdictional requirements

There are no jurisdictional requirements on the location of IP.

5. Technology or innovation zones

Currently, Special Economic Technology Innovative Zones (SEZ TIPs) and the Skolkovo Innovation Center are available in Russia.

Special Economic Technology Innovative Zones

There are six SEZ TIPs: Tekhnopolis (Moscow), Dubna (Moscow Region), Istok (Moscow Region), St. Petersburg, Tomsk and Innopolis.

The following benefits and preferences are basically established for the SEZ residents under the current legislation:

- ▶ 10-year property tax exemption
- ▶ 5-year land tax exemption
- ▶ Corporate income tax equals 2% (3% from 2017 to 2020) by federal government and from 0% to 13.5% (12.5% from 2017 to 2020) by regional governments
- ▶ Social insurance contributions reduced to 28% in 2019
- ▶ Free customs area

To become a resident of an SEZ TIPs, the taxpayer must:

- ▶ Be registered with the territory of the SEZ
- ▶ Conclude a special agreement with the managing bodies of the SEZ on the performance of eligible technological and innovation activities

For SEZ TIPs purposes, technological and innovation activities include the creation of software products, data collection systems and related services.

Skolkovo Innovation Center

The Skolkovo Innovation Center is a Russian Government initiative designed to encourage innovation and technical research within Russia. A Russian legal entity that is approved as a Skolkovo Innovation Center resident can be entitled to receive different tax incentives, cash grants, tax holidays and tax exemptions for the purpose of exercising specific R&D activities. Under Skolkovo Law No. 244-FZ, eligibility requires that the R&D activities include, but are not limited to, R&D of strategic computer technologies and software for commercial purposes. The status of the project participant is provided for a maximum of 10 years from the date of registration.

A Russian company may become a participant of the Skolkovo Innovation Center provided that:

- ▶ It is engaged only in R&D activities in accordance with foundation documents.
- ▶ Executive management of the company is permanently based in the territory of the Skolkovo Innovation Center.

Under the initiative, those companies' employees who would become residents of the territory (three to four miles southwest of Moscow) are entitled to approximately US\$150,000 to millions of dollars' worth of grant funds. Regional support in the form of exemptions is based on legislation.

R&D incentives provided by SEZ TIPs and the Skolkovo Innovation Center include VAT tax incentives, profit tax incentives, 150% super deduction and reduced social security contributions.

	Criteria	General corporate tax rules	SEZ TIPS	Skolkovo Innovation Center
1	Income tax	▶ 20%	▶ Up to 15.5%, with varying periods of application of the reduced rate across SEZ TIPS	▶ Income tax exemption (if annual proceeds do not exceed RUB1 billion) ▶ Zero tax rate (if accumulated profits do not exceed RUB300 million from the beginning of the year when the amount of proceeds exceeded RUB1 billion)
2	VAT	▶ 18% (10%, 0% for certain operations)	▶ N/A	▶ Exemption from VAT obligations (if accumulated profits do not exceed RUB300 million from the beginning of the year when the amount of proceeds exceeded RUB1 billion)
3	Property tax	▶ Not exceeding 2.2%	▶ Tax exemption ▶ Generally applied for 5 years to the assets in SEZ used in technological and innovation activities	▶ Tax exemption (application criteria the same as for VAT)
4	Social contributions	▶ 30%	▶ 28%	▶ 14% (same application criteria as VAT)
4.1	RF Pension Fund	▶ 22%	▶ 20%	▶ 14%
4.2	Social Insurance Fund	▶ 2.9%	▶ 2.9%	▶ 0%
4.3	Federal Compulsory Medical Insurance Fund	▶ 5.1%	▶ 5.1%	▶ 0%

6. Role of governmental bodies in administering incentives

Certain tax incentives have subjective criteria for the application and may be withdrawn by the Government without any changes in law. For example, the list of R&D expenses that qualify for the increased deduction is established by Governmental decrees without guarantee of their long-term availability. Regional tax incentives have certain subjective criteria such as a contribution to the social development of the region, which may be difficult to prove.

7. Administrative requirements

Corporations are required to qualify and be advanced in their R&D planning to feel comfortable in claiming certain deductions. Supporting documentation is also required. Such documentation may be subject to evaluation by research institutes engaged in specific fields of R&D. Tax inspection offices deal with the preapproval and annual compliance procedures.

8. Statutory reference

- ▶ Tax Code of the Russian Federation Part One and Part Two
- ▶ Federal law No. 244-FZ Concerning Innovative Centre Skolkovo of 28 September 2010
- ▶ Federal law No. 116-FZ Concerning Special economic zones in the Russian Federation of 22 July 2005

S

Singapore



Singapore

This chapter is based on information current as of February 2019.

EY contacts:

Bin Eng Tan
bin-eng.tan@sg.ey.com
+65 6309 8738

Johanes Candra
johanes.candra@sg.ey.com
+65 6309 8158

Mark Thompson
mark.thompson@sg.ey.com
+65 6309 8232

The tax deduction for qualifying R&D expenditure incurred on qualifying R&D projects performed in Singapore has recently increased from 150% to 250% from year of assessment 2019 to 2025. All other conditions of the scheme remain unchanged.

1. Overview

Since 2008, the Government has strengthened its focus on R&D and has continually revisited the available R&D programs and support mechanisms. These R&D incentives are used as a key policy enabler to boost productivity and also recognize the significant contribution that R&D plays in building globally competitive companies.

Discretionary R&D incentives in Singapore have been in existence for more than 20 years and are relatively mature in terms of the underlying policy and drivers. By contrast, statutory R&D incentives have only been around since year of assessment 2009 and are still maturing.

The Government currently offers a super deduction for qualifying R&D expenditures on R&D activities performed in Singapore. Government grants are also available to cover a portion of costs for approved R&D projects undertaken in Singapore.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Enhanced R&D deduction*	RISC, IDS and FSTI cash grants	Double tax deduction for R&D expenses
Types of incentives	▶ Super deduction	▶ Cash grants	▶ Super deduction

*Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

Enhanced R&D deduction

Description of benefits

As a primary R&D incentive in Singapore, the enhanced R&D deduction currently provides a 250% enhanced deduction on qualifying R&D expenditures from years of assessment 2019 to 2025 incurred on qualifying R&D projects performed in Singapore. Unused losses may be carried forward indefinitely, subject to satisfaction of the shareholding test.

Guidelines around incentive applications

The enhanced R&D deduction is applicable to current investments. As the incentive is statutory-based, the claims follow the corporate tax filing timeline. The enhanced tax deduction is claimed against taxpayers' taxable profits in the year the expenditure was incurred. Corporate tax returns are filed on a preceding-financial-year basis.

Cash grants

Description of benefits

Some of the common grants applicable to R&D, such as the Research Incentive Scheme for Companies (RISC), Innovation Development Scheme (IDS) and Financial Services Technology Innovation (FSTI) grant are Government cash grant co-funds to encourage and assist companies in setting up R&D centers in Singapore and developing their in-house R&D capabilities. The support is typically 30% to 50% of total qualifying costs, such as manpower-related costs, equipment and materials, professional services and intellectual property rights. The grants have been provided selectively to innovation labs/centers and large projects in certain strategic technology areas identified by the Singapore Government. However, projects awarded the cash grant are not announced or made public. Taxpayers are required to seek preapproval in order to obtain the incentive.

Guidelines around incentive applications

RISC, IDS and FSTI are applicable for future investments and, typically, approval is granted only on projects that have not commenced.

Double tax deduction for R&D expenses

Description of benefits

The incentive provides a 200% tax deduction on R&D expenditures incurred on approved projects. Under the current law, no R&D projects may be approved for this incentive after 31 March 2020. Unused losses can be carried forward indefinitely and are subject to the satisfaction of the shareholding test. Taxpayers are required to seek Government preapproval in order to obtain the incentive.

Guidelines around incentive applications

The double tax deduction for R&D expenses is applicable to future investments and, typically, approval is granted only on projects that have not commenced.

Intellectual Property Development Incentive

Description of benefits

The incentive was introduced to encourage the use and commercialization of intellectual property (IP) rights arising from R&D activities. An approved Intellectual Property Development Incentive (IDI) company is eligible for a reduced corporate tax rate of either 5% or 10% on a percentage of qualifying IP income derived by it during the qualifying incentive period. For further details, please refer to Section 4 below.

3. Eligibility requirements

Enhanced R&D deduction

R&D is defined as any systematic, investigative and experimental study that involves novelty or technical risk carried out in the field of science or technology with the objective of acquiring new knowledge or using study results for the production or improvement of materials, devices, products, produce or processes (with specified exclusions). Activities that directly support core R&D activities may also qualify.

Eligible expenditure includes staff costs, consumables and contracted R&D expenditure, net of Government grants or subsidies. Where the R&D work is contracted to an R&D organization or is performed under an R&D cost-sharing arrangement (CSA) and a breakdown of the expenditure is not available, the eligible R&D expenditure is deemed to be 60% of the payments made to the R&D organization or under the CSA.

Any business carrying on qualifying R&D projects in Singapore is eligible for the enhanced tax deduction. No industry sectors are specifically excluded. However, research in the social sciences or the humanities cannot be claimed unless they are activities that support a qualifying project.

For the enhanced R&D deduction, the claimant must be the beneficiary of the R&D activities. From year of assessment 2019 to 2025, only those activities performed in Singapore are eligible for the 250% enhanced deduction. However, qualifying R&D expenditures associated with overseas activities are eligible for a 100% base R&D deduction, so long as the R&D activities performed are related to the claimant's trade or business. For RISC, IDS, FSTI and double tax deduction for R&D expenses, there are no specific IP requirements.

Cash grants

There is no specific definition of R&D for cash grants. Eligible expenditures typically include manpower-related costs, equipment and materials, professional services and intellectual property rights. There is no eligibility restriction on specific industries; however, as it is a discretionary incentive, grants are provided selectively to R&D labs/centers and large projects in certain strategic technology areas identified by the Singapore Government.

Double tax deduction for R&D expenses

The definition of R&D is the same as that provided for the enhanced R&D deduction. Eligible expenditure may cover various types of expenditures (other than capital costs), subject to agreement by the relevant authority. This may include staff costs, consumables, overheads, testing costs, professional services and more. No industry is specifically excluded. However, as it is a discretionary incentive, approvals to claim double tax deductions are provided selectively to large projects in certain strategic technology areas identified by the Singapore Government.

4. IP and jurisdictional requirements (patent box regime)

IDI

The IDI was introduced with effect from 1 July 2018 to encourage the use and commercialization of IP rights arising from research and development (R&D) activities. An approved IDI company is eligible for a reduced corporate tax rate of either 5% or 10% on a percentage of qualifying IP income derived by it during the qualifying incentive period. The IDI is aligned to the OECD modified nexus approach and uses R&D expenditures incurred by the approved company (includes outsourced third-party R&D

expenditures and R&D undertaken by the company itself) as a proxy to determine the level of benefits accorded under the IDI.

Qualifying IP income refers to royalties or other income receivable by the approved IDI company as consideration for the commercial exploitation of qualifying IP rights (IPR) (i.e., patents and copyrights subsisting in software) elected into the IDI. As the IDI is a discretionary incentive administered and awarded by the Singapore Economic Development Board, eligible companies are required to fulfill substantive commitments in areas of business spending, fixed assets expenditures, skilled jobs and the requisite qualitative aspects such as contributing to the advancement of capabilities and other ancillary economic spin-offs for the wider Singapore economy.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Singapore.

6. Role of governmental bodies in administering incentives

The expenditure claimed is processed by the Singapore tax authority – i.e., the Inland Revenue Authority of Singapore (IRAS) – for the enhanced R&D deduction. The IRAS also monitors the activities that are claimed to ensure compliance with the enhanced R&D deduction regime.

The Singapore Economic Development Board (EDB) administers discretionary incentives, including cash grants and the double tax deduction, while the Monetary Authority of Singapore (MAS) administers the FSTI cash grant.

7. Administrative requirements

Companies are not required to seek Government preapproval for the enhanced R&D tax deduction. For the other discretionary tax incentives, approval must be granted by the EDB (MAS for the FSTI grant). To be eligible for the enhanced tax deduction, a company must submit the claim in its income tax return and tax computation with the completed R&D claim form, by the annual filing deadline of 30 November (or 15 December if submitting the income tax return electronically). All claimants are required to complete an R&D claim form, which includes a detailed description of each R&D project claimed based on prescribed guidelines. If a company wishes to claim more than 60% of the sum payable to an R&D organization or a CSA as eligible R&D expenditures, the claimant must submit to the IRAS copies of invoices issued by the R&D organization detailing a breakdown of the expenditure items.

For the R&D cash grant, companies must submit documentation in relation to making claims and reporting on the progress of the project. Claims may be made on a quarterly basis using the prescribed format as provided by the relevant authority once the R&D cash grant has been

awarded. Companies are also required to submit a yearly progress report and a final report at the end of the project.

For the double tax deduction for R&D expenses, companies must, in the first year of assessment when a new tax incentive commences, complete and submit with their income tax return, the Evaluation Checklist for a Company Awarded with Tax Incentive (s) form. For subsequent years of assessment, the completed checklists are required to be submitted only when requested by the IRAS.

For certification, the EDB (MAS for FSTI) must grant approval for the discretionary incentives. For discretionary incentives, in addition to the negotiation process, the relevant application forms must be completed. These forms are not publicly available but will be provided by the EDB/MAS during the negotiation process.

8. Statutory reference

Income Tax Act, Sections 2, 14D, 14DA, 14E and 15

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Slovak Republic



Slovak Republic

This chapter is based on information current as of February 2019.

EY contacts:

Richard Panek
richard.panek@sk.ey.com
+421 2 333 39109

Cyril Chovanec
cyril.chovanec@sk.ey.com
+421 2 333 39182

Slovakia recently significantly amended its legislative framework for investment incentives. The change was made to create a more investment-friendly environment by providing clearer definitions, setting strict deadlines and providing a more robust framework for the approval process of the investment aid. Further, amendment to the Income Tax Act introduced the so-called patent box, under which the selected income for commercial use of some intangible assets and embedded royalties may be exempt in case the asset is developed by the company in the territory of Slovakia. Finally, the super deduction of R&D costs was broadened from 25% to 100% of incurred R&D costs.

1. Overview

Slovakia has long been overlooked as a location for performing R&D activities in the European Union due to undercapitalization of the R&D sector. Nevertheless, foreign direct investment has accelerated the pace of innovation in industry and services in Slovakia. Moreover, the Slovak Government has strengthened its focus on R&D in recent years, offering targeted stimuli to support R&D activities with the aim of supporting projects with high added value to increase the development of a knowledge-based economy.

As of 2009, a unified system to stimulate R&D was introduced through Act No. 185/2009 Coll. on Research and Development Incentives, setting rules and procedures for providing incentives for R&D activities carried out by business entities (micro, small, medium-sized and large enterprises) in all industries. According to the act, the eligible costs of R&D projects that qualify for incentives can be supported either by cash grants from the state budget or income tax relief (via a tax credit). The Ministry of Education (for cash grants) and Ministry of Finance (for tax credits) are responsible for administering and providing the incentives.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input checked="" type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Besides the direct stimuli on R&D, an enterprise may apply for stimuli from the state budget under general investment aid, upon which the establishment or expansion of a center for innovation and technology may be supported by various types of incentives including cash grants, tax credits, transfer of immovable assets or exchange, replacement of immovable assets or rent at a price lower than the market price.

As of 1 January 2015, taxpayers can apply for an additional deduction (the so-called super tax deduction) of R&D costs via their corporate income tax (CIT) return, thereby decreasing their tax base and final tax liability. This deduction is not subject to an approval process and

requires preparation of an R&D project plan, which does not have to be submitted to the tax authorities in advance.

As of 1 January 2018, Slovak legislation introduced a special tax regime related to some intangible assets consisting of partial tax exemption of revenues generated from such assets as a result of the taxpayer's own development activities. The exemption applies in tax periods during which the intangibles are tax depreciated. Similar to the super tax deduction, no prior approval is needed for this incentive; however, taxpayers should share some information about the patent/developed software and be ready to present evidence of incurred costs and additional details within eight days upon the request.

2. Incentives available

Names of incentives	R&D subsidy	R&D income tax relief	Investment aid for technological centers*	Subsidy on scientific and technical services	Super tax deduction for R&D costs	Patent box
Types of incentives	<ul style="list-style-type: none"> ▶ Cash grant 	<ul style="list-style-type: none"> ▶ Tax credit 	<ul style="list-style-type: none"> ▶ Cash grants ▶ Tax credits ▶ Transfer or rent of immovable property or exchange of immovable property at a price lower than market price 	<ul style="list-style-type: none"> ▶ Cash grants 	<ul style="list-style-type: none"> ▶ Tax deduction 	<ul style="list-style-type: none"> ▶ Tax exemption

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

R&D subsidy

(Dotácia na výskum a vývoj)

The maximum amount of grants ranges from 25% to 100% of eligible costs, depending on the type of R&D project and size of the enterprise.

Description of benefits

The R&D subsidy is designed to:

- ▶ Support basic and applied research and experimental development
- ▶ Develop project feasibility studies

Guidelines around incentive applications

The R&D subsidy is applicable to future investments. To claim a subsidy, taxpayers must submit a request to the Ministry of Education, which has the discretion to accept or deny the request. Work on the project should not begin prior to the submission of the incentive request to the Ministry of Education. The maximum duration of basic and applied research and experimental development is three years.

R&D income tax relief

(Úľava na dani z príjmu)

Description of benefits

Similar to the R&D subsidy, R&D income tax relief is available (in the form of a tax credit) to companies that pursue projects involving basic and applied research, experimental development and feasibility studies. In determining the amount of the tax credit, the Government takes into account the direct and indirect R&D expenses incurred by the taxpayer, the size of the company and the type of project. Once the credit amount is determined, it is applied proportionally to the tax base.

The tax credit may be applied for up to three consecutive tax years (the first tax year is the year when the decision on the approval of granting the incentive is issued by the Ministry of Finance).

Guidelines around incentive applications

The R&D tax credit is applicable to future investments. Taxpayers must submit a request to apply the credit to the Ministry of Finance. The credit is claimed via the CIT return. The deadline for filing the CIT return is the end of the third month following the relevant fiscal year. Work on the project should not begin prior to submission of the request to the Ministry of Finance. The maximum duration of basic and applied research and experimental development is three years.

Investment aid for technological centers

(Investičná pomoc pre technologické centrá)

Description of benefits

Investment aid may be granted upon the submission of a request for investment aid for the establishment or expansion of a center for innovation and technology and its approval by the Ministry of Economy and the Slovak Government. Because there is no legal entitlement to the provision of state aid, the Ministry of Economy and the Government have the discretion to accept or deny the request.

Investment aid can be provided in the form of:

- ▶ Income tax relief
- ▶ A subsidy for the acquisition of tangible and intangible fixed assets
- ▶ A contribution for the creation of new jobs
- ▶ A transfer or rent of immovable assets from the state or municipality at a price lower than the general value of the asset or rent lower than according to official appraisal

The investor may request aid in one or several forms; the total aid, however, may not exceed the maximum amount of aid permissible in the given region.

The amount of aid can be up to 35% of eligible costs and depends on the region where the project is realized and on the size of the enterprise.

Guidelines around incentive applications

The incentive is applicable to future investments. Work on the investment project should not begin prior to submission of the investment plan to the Ministry of Economy. Investment project requirements stipulated by legislation should be met by the end of three years after the investment aid was approved (an extended period of five years should apply to large investment projects in the sense of Commission Regulation (EU) No 651/2014).

Subsidy on scientific and technical services

(Dotácia na vedecko-technické služby)

Description of benefits

A subsidy on scientific and technical services may be granted upon successful application to the specific funding programs of the Ministry of Education, usually administered by the Slovak Research and Development Agency.

Specific funding programs have predefined amounts of funds, and the funding amounts vary by the type of program. Taxpayers are required to obtain approval from the Ministry of Education to obtain the subsidy.

Guidelines around incentive applications

The incentive is applicable to future investments. The subsidy is available for scientific activities such as the collection, monitoring and analysis of data; consultancy in the R&D; patenting and licensing activities; and activities supporting international scientific cooperation. Specific funding programs are published on the website of the Central Information Portal for research, development and innovations. Based on the published programs, a request is filed with the relevant authority, i.e., the Ministry of Education, the Slovak Academy of Sciences or other central state authority. There is no legal entitlement to the subsidy.

"Super tax deduction" for R&D costs

(Odpočet výdavkov (nákladov) na výskum a vývoj)

Description of benefits

The super tax deduction of R&D costs was introduced as of 1 January 2015 and is designed to support entities performing R&D. Legislation provides for additional deduction of qualified R&D costs, which could be added to the taxpayer's tax base.

Qualified costs can be increased by:

- ▶ 100% of expenses incurred in connection with R&D
- ▶ 100% from year-on-year increase in the R&D costs

If the allowance cannot be applied due to the tax loss reported by the taxpayer, the allowance can be carried forward to the next tax period up to a maximum of four consecutive tax years.

Guidelines around incentive applications

The deduction is applied in the CIT return, and no approval process is necessary beforehand. In other words, if a taxpayer has fulfilled the required conditions, it can apply the tax deduction without the difficulties associated with the administratively burdensome request and approval process.

Taxpayers interested in the super tax deduction of R&D costs must prepare a written R&D project plan and have it signed by an authorized signatory prior to the start of incurring the qualified costs. The R&D project plan must define the object of R&D (the starting and expected completion dates of the project, the objectives of the project which are attainable during the implementation period and measurable after its completion, total estimated costs of the project, etc.). The project plan is not required to be submitted to the tax authorities, but the taxpayer must be ready to provide it within eight days upon request in case of a tax audit.

For the deduction to be applied, separate accounting evidence must be kept documenting all costs related to the R&D project.

Patent box

Description of benefits

Based on the amendment to the Income Tax Act effective from 1 January 2018, a so-called patent box has been introduced into the Slovak tax environment. Based on new provisions, taxpayers can enjoy a partial tax exemption of revenues generated from some intangible assets created by a taxpayer's own development activities in the territory of Slovakia.

The exemption of 50% applies to revenues generated from provision of right to use (licensing) a patent, design, utility model or computer program (software) created by a taxpayer in Slovakia.

The same exemption of 50% also applies to revenues generated from the sale of products in which a patent, utility model or design created in Slovakia has been used. These intangibles could be used in own production or in production by third parties that were provided the right to use the intangibles in their manufacturing process.

The exemption applies in tax periods during which the respective intangibles are tax depreciated.

Guidelines around incentive applications

The deduction is applied in the CIT return, and no approval process is necessary beforehand. In other words, if a taxpayer has fulfilled the required conditions, it can apply the tax exemption without the difficulties associated with the administratively burdensome request and approval process.

Taxpayers interested in the patent box regime must maintain evidence of development costs, activated development costs and costs for intangibles developed by third parties that were used in the development process. The evidence is not required to be submitted to the tax authorities, but the taxpayer must be ready to provide it within eight days upon request (even outside the tax audit procedure).

3. Eligibility requirements

Generally, incentives may be granted to any entity from any industry; however, specific requirements regarding entity and industry may be stipulated by the particular funding program.

Specific eligibilities for each incentive are below.

R&D subsidy and R&D income tax relief

Qualifying expenses include direct costs (e.g., wage costs, costs of business trips, costs of repairs, procurement, expenses) and indirect costs (e.g., depreciation of assets or costs of utilities), depending on the type of R&D project.

Companies are required to meet one of the following conditions after incentive approval:

- ▶ The entity applying for an incentive creates a new working position, whereby the new workplace focuses on R&D and will continue to carry out such activity for at least five years after provision of the incentive

Or

- ▶ An existing workplace focusing on R&D is expanded using the funds of the entity applying for an incentive, whereby the expanded workplace must continue to carry out such activity for at least five years after provision of the incentive and the recipient of the incentive must not decrease its own annual R&D-related expenses below the level spent before provision of the incentive

Investment aid for technological centers

Qualifying activities include the establishment or expansion of a center for innovation and technology. Specific conditions for granting investment incentives are as follows:

- ▶ The acquisition of tangible and intangible assets is in an amount specified differently for each type of requested investment aid and depending on whether the region should be considered as a priority region or not (at least EUR100,000).
- ▶ Realization of the investment project leads to the creation of new jobs, the number of which is specified differently for priority regions (10 employees) or other regions (20 employees).
- ▶ Employees must be remunerated by the multiple of average gross monthly wage in a specific Slovak district, with the multiplier being set differently for priority regions (2 times the average gross salary) or other regions (1.7 times the average gross salary).

Further, the following conditions should be met:

- ▶ The project must comply with all conditions attached to the approval of the investment aid, no later than within three years (five for investments over EUR50 million) from issuance of the approval.

- ▶ All subsidized job positions must be filled in line with the decision issued (however, no later than within three years from the project completion) and maintained for a period of five years (or three years in case of SME).
- ▶ The project operation must be maintained for a minimum period of five years (three years in case of SME) from its completion without change of its location.

Qualifying expenses include:

- ▶ Capex on or rental costs of new tangible fixed assets (e.g., land, buildings and plant/machinery) acquired under market conditions
- ▶ Capex on intangible fixed assets (e.g., patents, licenses, know-how or unpatented technical knowledge), acquired under market conditions, excluding intangible fixed assets acquired from related parties
- ▶ Salaries of employees employed with connection to the investment project (calculated as the total salary costs for 24 months)

Subsidy on scientific and technical services

Qualifying activities include scientific and technical services (e.g., scientific knowledge sharing, licensing, advisory, research, technical standardization and education). Qualifying expenses include direct costs (e.g., wage costs and costs of business trips).

“Super tax deduction” for R&D costs

Qualified costs include costs directly associated with the R&D project, e.g., salaries, asset depreciation charges, materials, utilities, software licenses and certifications. On the other hand, indirect costs are those such as general overheads (HR, finance) and costs for outsourced services, licenses and results of R&D acquired from other than certain eligible persons would not qualify for an additional deduction. Incurred costs that are only partially related to the implementation of the R&D project are only partially qualified for the R&D allowance.

Patent box

The exemption is applicable during the tax periods in which the activated costs of development of intangible assets are tax amortized. Thus, the condition for application of the exemption is the correct accounting of development costs and their subsequent amortization. The exemption is applicable only when intangibles are developed in the territory of Slovakia.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Slovakia.

6. Role of governmental bodies in administering incentives

The decision on the amount of R&D incentives is at the discretion of the Government and depends on available state budget resources, with the exception of the super tax deduction for R&D costs and application of the patent box, which can be applied without prior consent and with no connection to budget resources. The Ministry of Education administers the R&D subsidy, R&D income tax relief and the subsidy on scientific and technical services, with help from the Slovak Innovation and Energy Agency (SIEA) and the Slovak Research and Development Agency. The Ministry of Economy administers investment aid for technological centers. Any incentives granted in the form of a tax credit are granted by the Ministry of Finance.

7. Administrative requirements

The approval process of an application for R&D subsidy and R&D income tax relief includes the following:

- ▶ The application is filed under particular funding programs with the Ministry of Education before commencement of work on the project (the application should meet all conditions stipulated by law, including all obligatory attachments).

- ▶ The Ministry of Education evaluates the project and seeks two independent expert opinions in determining its decision on approval of the incentives.
- ▶ If the amount of incentives does not exceed EUR2 million, the Ministry of Education issues the decision on whether the incentives are granted.
- ▶ If the amount of incentives exceeds EUR2 million, the Government is required to make the approval.
- ▶ If the project exceeds the state aid notification threshold, the granting of the incentive is subject also to approval by the European Commission.
- ▶ Agreement for granting incentives is concluded with the Ministry of Education.

Moreover, draft legislation has been introduced recently, obliging the applicant for R&D subsidy, and R&D income tax relief to register with the Public Partners Register held by the Ministry of Justice. If approved, this should come into effect on 1 June 2019.

The approval process for an application of investment aid for technological centers includes the following:

- ▶ The investment project is filed with the Ministry of Economy (the investment project should meet all conditions stipulated by law, including all obligatory attachments) prior to the commencement of work on the respective project.
- ▶ The Ministry of Economy will evaluate the regional impact of the investment and arrange for an independent expert to prepare a report evaluating whether the conditions for investment aid have been met.
- ▶ The Ministry of Economy issues a proposal for investment aid.
- ▶ The Ministry consults on the requested aid with the Ministry of Finance and/or Ministry of Labor, Social Affairs and Family. The Ministry will then prepare an overall report on the investment aid.
- ▶ If supported by the other ministries, the Ministry of Economy issues the offer, which includes the actual amount of investment aid offered.

- ▶ The beneficiary files a request for investment aid based on the offer received.
- ▶ The Ministry of Economy approves the request.
- ▶ The Government approves the request if not subject to state aid notification to the European Commission.
- ▶ If the project exceeds the state aid notification threshold, the granting of the incentive is also subject to approval from the European Commission.
- ▶ The decision is issued to the beneficiary.
- ▶ The beneficiary is required to prepare and present annual monitoring reports on realization of the project and a final evaluation report within three months of the conclusion of the investment project. Furthermore, the annual reports on the use of investment are required to be submitted for at least five years after the investment project is finalized, and also during the entire period of use of the tax credit (i.e., up to 10 years). The annual monitoring reports and final evaluation report must be reviewed and confirmed by an external auditor. The audited financial statements are required to be enclosed with annual reports on use of the investment.

8. Statutory reference

- ▶ Act No. 185/2009 Coll. on Research and Development Incentives
- ▶ Act No. 172/2005 Coll. on the organization of state support of R&D
- ▶ Act No. 57/2018 Coll. on Regional Investment Aid
- ▶ Act No. 595/2003 Coll. on Income Tax Act
- ▶ Commission regulation (EC) No. 651/2014 declaring certain categories of aid compatible with the common market in application of Articles 107 and 108 of the Treaty (general block exemption regulation)
- ▶ Regulation No. 195/2018 Coll. on maximum intensity of investment aid (amended regulation approved by the Government)

S

Slovenia



Slovenia

This chapter is based on information current as of February 2019.

EY contact:

Lucijan Klemenčič
lucijan.klemencic@si.ey.com
+386 1 583 17 21

R&D and investment allowances are corporate income tax reliefs that may reduce a company's tax bill if the company is liable for corporate income tax in Slovenia. When claiming R&D tax relief, the taxpayer has to prove to the tax authorities that the project and its expenses qualify as R&D. Given that this can be challenged by the tax authorities, taxpayers more often use the general investment tax relief (40% of investments, excluding office furniture and certain vehicles), for which no supporting documentation is required and cannot be used together with the R&D tax relief. According to the Financial Administration of the Republic of Slovenia (FURS), less than 1% of taxpayers used the R&D tax relief in 2017, compared with 21% who used investment tax relief, mainly due to the substantial supporting documentation requirement.

1. Overview

R&D incentives are used to recognize the significant contribution that R&D plays in building globally competitive companies and as a tool to attract foreign investors. There are several incentives to attract R&D activity in Slovenia.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input checked="" type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	General R&D tax relief*	Cash grants	Financial support – reimbursable means	Loans
Types of incentives	▸ Super deduction	▸ Cash grants	▸ Financial support	▸ Loans

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

General R&D tax relief

(*Olajšava za vlaganja v raziskave in razvoj*)

Description of benefits

As of 2012, taxpayers can receive a double tax deduction for investments in R&D. Under this incentive, a 100% corporate income tax (CIT) base deduction is available on R&D investments and certain expenses incurred. The R&D tax relief and general investment tax relief cannot be claimed at the same time. Similarly, any R&D investments funded from the budgets of the Republic of Slovenia or the European Union (EU) should also be excluded. The unused amount of the tax relief can be carried forward for five tax periods, where the tax base shall first be reduced by the oldest unused tax relief. The taxpayer has to evaluate whether the project and its expenses qualify for R&D tax relief.

Guidelines around incentive applications

R&D tax relief is applicable for investments in a tax period and is claimed with the CIT return. As the incentive is statutory-based, the claims follow the corporate tax filing timeline. In order to claim R&D tax relief, a prescribed form (in Slovene: "Podatki v zvezi z olajšavo za vlaganja v raziskave in razvoj") should be submitted with the CIT return. The form specifies all costs from various projects and programs and is filed as an appendix to the CIT return. Additionally, a taxpayer should provide a more detailed report on relevant R&D investments, to be submitted on request by the tax authorities.

Cash grants

(*Nepovratna sredstva*)

Description of benefits

Cash grants are a form of state aid. Therefore, in line with common European rules on state aid, a cash grant should be implemented as a public tender. Every public tender is published in the Official Gazette of the Republic of Slovenia. Cash grants are usually provided as a subsidy. The Ministry of Finance regularly publishes a list of open state aid (please see this [link](#)).

In December 2014, the European Commission approved the Slovenian operational program for the implementation of the EU Cohesion Policy for the period 2014-20. The program includes various cash grants and financial support for R&D activities. The operational program was slightly changed on 21 December 2017 based on the proposal submitted by the Slovenian Government Office for Development and European Cohesion Policy (FARC) to Brussels on 11 July 2017. In line with the amendments, some part of the foreseen funds from financial instruments totaling EUR180 million in the Eastern Cohesion region were channeled into cash grants to promote investment in research and innovation, entrepreneurship and energy efficiency. Moreover, according to the revision of the program and provision of European legislation, the Partnership agreement for 2014-20 was also amended/aligned on 15 February 2018 with the decision of the European Commission. The Partnership agreement is an agreement between the European Commission and the Member State regarding the implementation of European funds by 2020.

Additionally, on 4 August 2017, the public agency SPIRIT¹ introduced a public tender to co-finance the implementation of research, development and innovation operations (hereinafter stated as RRI) (in Eastern and Western Slovenia) relating to the development of new or improved products, processes or services of those micro, small and medium-sized enterprises that have received the "Seal of Excellence" certificate as part of the EU's Research and Innovation Framework Program Horizon 2020 at stage 2 of the SME Instrument. Under this public tender, some grants are available for micro, small and medium-sized enterprises that are headquartered or have a branch or a permanent establishment in Slovenia. Benefits are different for each case. In general, different eligible costs can be reimbursed (staff salaries in the scope of employment in R&D activities carried out directly under the RRI operation, costs of using fixed assets, the cost of investment in the tangible fixed and intangible assets, costs of outsourcing services and some other indirect costs). The share of reimbursement depends on the number of points achieved in the tender and on the size of the investor (small/micro/medium), as the total amount of funds is limited. The deadline for submitting application is 12 September 2019.

Guidelines around incentive applications

Cash grants are intended for new investments or activities that will take place in cohesion regions of Eastern and Western Slovenia that are not yet started or realized. To qualify for a specific cash grant, the company must fulfill conditions specified in a public tender.

Financial support – reimbursable means

(Povratna sredstva)

Description of benefits

All forms of financial support are a form of state aid. Therefore, in line with common European rules on state aid, financial support should be implemented as a public tender. Every public tender is published in the Official Gazette of the Republic of Slovenia. The Ministry of Finance regularly

publishes a list of open state aid. Financial support can be provided as a loan, guarantee or capital increase (venture capital funds).

On 23 November 2017, Slovenia launched implementation of financial instruments within a framework of the implementation of the cohesion policy of the 2014-20 period. In this respect, EUR253 million is earmarked from reimbursable European funds. These funds will be managed by the SID Bank. In accordance with the financing agreement, SID Bank prepared the business financial plan of the funds for 2018, which was also endorsed by the Steering Committee of financial instruments at its meeting on 25 January 2018. Financial instruments are expected to promote investments and current operations with debt and equity financing. Accordingly, private operators will transfer all the benefits (e.g., lower interest rate, lower required insurance, a moratorium on repayment of a loan, longer maturity of loans) that they will obtain from the SID Bank to the final recipients (companies, public institutes, municipalities and individuals). The funds will be transferred to research, development and innovation projects and investments, small and medium-sized enterprises (for the startup of the company and the early-growth phase and for the growth and development of the company) and energy efficiency and urban development projects.

Guidelines around incentive applications

Financial support is intended for new investments or activities that are not yet started or realized. To qualify for specific financial support, the company must fulfill conditions specified in a public tender. No preapproval is required before the start of the activities.

Loans

(Posojila)

¹ SPIRIT is a public agency of Slovenia for the promotion of entrepreneurship, innovation, development investment and tourism.

Description of benefits

Legal entities established in Slovenia that are performing R&D activities (industrial research and experimental development) and/or investing in tangible and intangible assets for the purpose of R&D activity and that aim to introduce new products or solutions to the existing market (or when entering new markets) may obtain a loan from SID Bank with more favorable terms and conditions. Loans granted are regarded as state aid. The interest rate is usually based on the rating of the company, the quality of the submitted insurance collateral, loan maturity and other risk parameters.

Representatives of the Ministry of Economic Development and Technology and SID Bank signed a contract on the establishment of the "Loan fund 4" in April 2018, which will contribute to the developmental breakthrough of Slovenian companies. Loans will have interest rates lower than market rates and, consequently, state aid status and considerably longer maturities.

Guidelines around incentive applications

Loans are applicable to future investments. The eligible company must submit an application to the specified institution before the project has started. The project must be carried out in Slovenia.

If the conditions specified in the tender are fulfilled, an application without preapproval is sufficient. The amount of the incentives is usually limited, hence the tender may be closed before the end of the calendar year.

3. Eligibility requirements

General R&D tax relief

The design of the R&D regime is strongly based on the Organisation for Economic Co-operation and Development's (OECD's) 2015 Frascati Manual and interpretations contained therein.² For R&D to qualify for tax relief, a company must be carrying on a project that seeks an

advance in science or technology. The company must be able to state what the intended advance is and to show how, through the resolution of scientific or technological uncertainty, the project seeks to achieve this.

The advance being sought must constitute an advance in the overall knowledge or capability in science or technology, not a company's own state of knowledge or capability alone. Once the advance in science or technology has been articulated, the scope of the R&D project has been defined and the project activities falling within the definition of R&D for tax purposes have been identified, the tax rules in the Slovenian Corporate Income Tax Act set out expenditures that may be eligible for relief and conditions that must be satisfied for the expenditure to qualify for relief. Any business carrying on qualifying R&D projects may claim general R&D tax relief.

Qualifying expenses for the general R&D tax relief are those incurred for internal and external R&D activities. For internal R&D activities, the following costs should be stated:

- ▶ Costs of material
- ▶ Service costs
- ▶ Labor costs
- ▶ Purchasing cost of R&D equipment

For external R&D activities, the following costs should be stated:

- ▶ Costs of contracts with external experts and researchers performing the work on R&D projects or programs
- ▶ Costs of contracts for performing R&D activities concluded with R&D organizations and other parties that are registered for performing R&D activities

Cash grants and financial support

Eligibility requirements are different for each tender. Usually, a cash grant is given up to a certain percentage of the total value of the investment or project; therefore, an applicant has to secure a portion of the resources. Additionally, eligible costs, which can be included in a cash grant or financial support request, are defined.

Loans

Any legal entity established in Slovenia that is carrying out eligible activities in Slovenia may file an application for a loan at the SID Bank. The loan may cover up to a specific percentage of the eligible costs for a project.

² OECD (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264239012-en>

4. IP and jurisdictional requirements (patent box regime)

There are no jurisdictional requirements related to intellectual property (IP). Slovenia has not implemented a patent box regime.

5. Technology or innovation zones

Incubators have been developed in Slovenia in the past 20 years. Among the different types of incubators, technological parks are especially important for R&D activities because mostly high-tech companies are incubated. University incubators focused on applied technologies and the transfer of theory into practice are also especially important. Incubators can apply for specific allocated funds from the Slovene Enterprise Fund (SPS) and for other public tenders organized by SPS or SPIRIT. Additionally, they can apply for EU funds. Incubators provide business premises for newly established companies on more favorable conditions and provide them with advisory, management and administrative services.

The Slovene Association of Technology Parks and Incubators integrates eight business or entrepreneurship incubators, three university incubators and two technological parks. The purpose of the organization is the formation of common interests and representation to the competent ministries, experience and knowledge exchange and transfer among members, cooperation in EU projects, and comparison to related institutions in developing environments and common promotion.

Only newly established high-tech companies can apply to be integrated into technological parks. Entrepreneurial incubators are designed for all other types of newly established companies. To receive incentives, the incubators have to meet conditions set in the Supportive Environment for Entrepreneurship Act to apply for state funds. Newly established companies can benefit from more beneficial conditions and services provided by an incubator only for a limited period, usually up to three years.

An incubator must be registered in the record of innovative environment subjects, led by SPIRIT. Subscription or renewal should be done on an annual basis based on a public invitation.

6. Role of governmental bodies in administering incentives

General R&D tax relief

Eligible projects are not subject to prior evaluations or approvals by the tax authorities or other Governmental bodies. However, if in the course of a tax audit the tax authorities determine that R&D expenses were unjustified (i.e., that those expenses should not be deducted from the taxpayer's taxable base), they may reassess the tax base and impose late-payment interests on underpaid tax. Penalties for a tax offense may also be imposed in certain circumstances. The relative statute of limitations for the reassessment of the tax base is five years, while the absolute statute of limitations is 10 years. The relative statute of limitations for the right to assess a penalty depends on the gravity of the offense and varies from 3 years for a tax offense to 5 years for a severe tax offense, while the absolute statute of limitations is 6 to 10 years.

Cash grants and financial support

Cash grants and financial support programs are run by different public institutions (different public funds or agencies or SID Bank) and/or by the competent ministry.

The SPS was established to improve access to financial resources for different development – business investments of micro, small and medium-sized enterprises – via financial engineering, which is mainly based on financial instruments with refundable means (loans, guarantees for loans, subsidized interest rates, venture capital), allowing for the combination of financial resources from different financial institutions.

The Slovenian Research Agency (ARRS) was established to select and finance research and infrastructure programs that provide a public service in the research field and to manage young researchers' projects and other projects assigned to ARRS as part of the National Research and Development Programme and the annual plan of the Ministry of Education, Science and Sport.

Loans

The terms and conditions of every public tender for loans (program of public tender) require approval from the Ministry of Finance before being published on the website of SID Bank and before becoming binding. Applications are, however, approved by SID Bank.

7. Administrative requirements

General R&D tax relief

To be eligible for R&D tax relief, the company must submit the prescribed form with the CIT return. However, the company must have prepared a special business plan or development project documentation, which should be submitted to the tax authorities only upon request. If the tax authorities are not sure whether specific costs or investments can be classified as investment in R&D, they may request a preliminary opinion from the ministry competent for technology, which should issue the opinion within 30 days of the request.

According to information obtained from the tax authorities, an option to request prior opinion regarding eligibility of the project for R&D tax relief should be available to taxpayers. In such a case, the taxpayer would submit a request for opinion to the tax authorities, and the tax authorities would forward the request to the ministry responsible for technology to obtain the opinion for the taxpayer.

Cash grants, financial support and loans

The Slovenian Ministry of Economic Development and Technology regularly publishes information about international or EU public tenders focused on innovation projects and related research. Eligibility requirements for each tender are different and subject to prior approval by the European Commission or other designated body (please see this [link](#)).

At the national level, subsidies for innovative companies, guarantees for bank loans, and refundable or non-refundable funding for companies performing R&D activities are offered by specified institutions (the competent ministry, SPIRIT, ARRS, SPS, SID Bank). Similarly, eligibility requirements for tenders depend on a particular tender and competent body offering the incentive.

The objective of such incentives is to increase business investments in R&D to promote the integration of the Slovenian economy into international scientific research programs, to promote employment and training of researchers and developers, and to construct a proper national innovation system.

- ▶ Cash grants and financial support
 - ▶ All cash grant and financial support requests must be sent to the institution that runs the applicable program by the specified date. In accordance with the rules of specific public tender, the institution may approve the grant application within the set deadline after the final date for sending the request.
- ▶ Loans
 - ▶ An application for a loan with the accompanying enclosures has to be submitted to the specified institution (SID Bank or SRS).

8. Statutory reference

- ▶ Slovenian Corporate Income Tax Act ("*Zakon o davku od dohodkov pravnih oseb – ZDDPO-2*," Official Journal 117/2006 and subsequent amendments)
- ▶ Rules on exercising the rights to relief concerning investments in R&D ("*Pravilnik o uveljavljanju davčnih olajšav za vlaganja v raziskave in razvoj*," Official Journal 138/2006, 75/2012)
- ▶ Act Regulating Supportive Environment for Entrepreneurship (Official Gazette of RS, No. 102/07, 57/12, 82/13, 17/15 and 27/17)
- ▶ Every public tender has its own legal framework

S

South Africa



South Africa

This chapter is based on information current as of February 2019.

EY contacts:

Heleen Etzebeth
heleen.etzebeth@za.ey.com
+27 11 772 3435

Marinda Fourie
marinda.fourie@za.ey.com
+27 11 502 0740

R&D incentives in South Africa aim to provide an enabling environment for research and knowledge production that promotes the strategic development of basic sciences and priority science areas, through science promotion, human capital development, the provision of research infrastructure and relevant research support, in pursuit of South Africa's transition to a knowledge economy.

1. Overview

Regarding the super deduction and accelerated depreciation incentives, the South African Government's objective is to incentivize R&D that represents innovation coming out of the country and to encourage businesses to invest in R&D in South Africa. Advancements and improvements are not incentivized if they cannot be proven to be innovative and representative of global advancement.

The R&D regime has been available since November 2006, and legislation has since been updated to require preapproval for the super deduction. The regime is perceived as not very mature, as the regulating authorities are still trying to overcome administration issues.

Currently, taxpayers incurring expenditures directly attributable to scientific or technological R&D can claim an additional 50% of qualifying expenditures preapproved by the Department of Science and Technology (DST), resulting in a total deduction of 150%. New and unused R&D machinery or plants will qualify for a four-year write-off (50%, 30% or 20%) if they meet certain criteria.

The incentive is available to businesses of all sizes and in all sectors of the economy as long as they are registered in South Africa. To qualify for the deduction, the R&D activities against which the expenditure is incurred must be preapproved by the Minister of Science and Technology.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

With regard to cash grants, the Support Programme for Industrial Innovation (SPII) is designed to promote technology development in South Africa's industry, through the provision of financial assistance for the development of innovative products and/or processes. SPII is focused on the development phase, which begins at the conclusion of basic research and ends at the point when a pre-production prototype has been produced.

The Technology and Human Resources for Industry (THRIP) program is intended to leverage collaborative partnerships between government and industry (working with academia) for research and development in science, engineering and technology on a cost-sharing basis, to produce highly skilled human resources and technology solutions for improved industry competitiveness.

2. Incentives available

Names of incentives	Section 11D*	Section 12C(1)(gA)	Support Programme for Industrial Innovation (SPII)	Technology and Human Resources for Industry (THRIP)
Types of incentives	▶ Super deduction	▶ Accelerated depreciation on qualifying R&D assets	▶ Cash grants	▶ Cash grants

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Section 11D

Description of benefits

Since November 2006, a super deduction equal to 150% is allowed per year for qualifying direct R&D costs. The incentive is contained in Section 11D of the Income Tax Act, No. 58 of 1962 (Income Tax Act). As a result of amendments to Section 11D that took effect on 1 October 2012, taxpayers must obtain preapproval of projects from an R&D Adjudication Committee to qualify for the super deduction. If a company is in an assessed loss position, the additional deduction will increase the assessed loss. The loss can be used against future taxable income and can be carried forward indefinitely.

Guidelines around incentive applications

The super deduction is applicable for current and future investments. Since the preapproval process was introduced, retrospective claims can only be included in tax returns covering periods before October 2012. Once tax returns have been assessed, they expire after three years.

Preapproval needs to be obtained from the DST; upon approval, certain expenditures incurred on the approved project(s), applicable from the date of filing the application, will be eligible for the additional 50% deduction at the time of filing the tax return.

Section 12C(1)(gA)

Description of benefits

Under Section 12C(1)(gA) of the Income Tax Act, capital expenditures incurred to develop, construct or purchase new and unused assets used in the conduct of qualifying R&D activities qualify for accelerated depreciation at a rate of:

- ▶ First year asset is in use: 50%
- ▶ Year two: 30%
- ▶ Year three: 20%

If a company is in an assessed loss position, the allowance deduction will increase the assessed loss. The loss can be used against future taxable income and can be carried forward indefinitely.

Guidelines around incentive applications

The incentive is applicable for current and future investments. The accelerated depreciation commences in the year the asset was brought into use. No preapproval is required to claim the accelerated allowance.

SPII

Description of benefits

The SPII, which is administered by the Department of Trade and Industry (DTI), provides financial assistance in the form of cash grants for the development of innovative products and/or processes. The SPII is focused specifically on the development phase, which begins at the conclusion of basic research and ends at the point when a pre-production prototype has been produced. The SPII offers two schemes as described below.

- ▶ SPII Product Process Development (PPD) scheme: this scheme applies to small, very small and micro enterprises and to individuals in the form of a non-taxable and non-repayable grant. It provides for a grant (maximum ZAR2 million per project) that ranges between 50% and 85% of the qualifying costs incurred during the technical development stage. The percentage is based on the percentage ownership by certain disadvantaged groups.
- ▶ SPII Matching scheme: this scheme is available to all enterprises and individuals. It provides for a non-taxable and non-repayable grant (maximum ZAR5 million per project) that ranges between 50% and 75% of the qualifying costs incurred during the technical development stage. The percentage is based on the percentage ownership by certain disadvantaged groups.

Guidelines around incentive applications

The incentives are applicable for qualifying future projects. A complete application must be submitted to the DTI.

THRIP

Description of benefits

The THRIP, which is administered by the DTI, provides financial assistance in the form of cash grants for research and development in science, engineering and technology

that is conducted collaboratively between industry and government (working with academia). The THRIP is focused specifically to increase the number of people with appropriate skills in the development and management of research-based technology for industry.

THRIP is a cost-sharing grant of up to ZAR8 million per year for a period of three years for approved projects engaged in applied research and development in science, engineering and/or technology.

Guidelines around incentive applications

The incentives are applicable for qualifying future projects. A complete application must be submitted to the DTI.

3. Eligibility requirements

Section 11D

Eligible expenditures include all expenditures actually incurred by a taxpayer directly and solely with respect to R&D undertaken in South Africa if those expenditures are incurred in the production of income and in the carrying out of any trade.

No deduction shall be allowed for expenditures incurred with respect to the following:

- ▶ Market research, market testing or sales promotion
- ▶ Routine testing, analysis, collection of information or quality control in the normal course of business
- ▶ Development of internal business processes, unless they are mainly intended for sale or for granting the use of or right of use or for granting permission to use thereof to persons who are not connected persons in relation to the person carrying on the R&D
- ▶ Social science research, including the arts and humanities
- ▶ Oil and gas or mineral exploration or prospecting, except R&D carried on to develop technology used for that exploration or prospecting
- ▶ The creation or development of financial instruments or products
- ▶ The creation or enhancement of trademarks or goodwill
- ▶ Patent, trademark and other intellectual property (IP) registration costs

The criteria to qualify for the R&D super deduction are as follows:

- ▶ Discovery of non-obvious scientific or technological knowledge, related to discovery of something that already exists in nature (e.g., the genetic makeup of a virus); qualification of activities under this category appears to be rare, based on authorities' interpretation
- ▶ The development of:
 - ▶ Functional designs related to design of physical objects (e.g., the design of a piece of equipment)
 - ▶ Inventions related to new products or processes (most R&D activities in South Africa fall under the invention category)
 - ▶ Computer programs related to developing software (the software must be developed for license or sale)
 - ▶ Knowledge essential to the use of such invention, design or computer program
- ▶ Development or significant improvement of any invention, design, computer program or knowledge if that development or improvement relates to any of the following:
 - ▶ New or improved function
 - ▶ Improvement of performance
 - ▶ Improvement of reliability
 - ▶ Improvement of quality
- ▶ Creating or developing a multi-source pharmaceutical product as defined in the World Health Organization Technical Report Series, No. 937
- ▶ Conducting a clinical trial as defined in the guidelines for good practice in the conduct of clinical trials with human participants in South Africa issued by the Department of Health (2006)

Section 12C(1)(gA)

The criteria to qualify for the accelerated depreciation incentive are as follows:

- ▶ Assets need to have been acquired by the taxpayer under an agreement formally and finally signed by all parties on or after 1 January 2012.
- ▶ Assets were thereafter brought into use by the taxpayer for purposes of Section 11D R&D.

SPII

The criteria to qualify for cash grants are as follows:

- ▶ Development should represent a significant advancement in the field of technology
- ▶ Development and subsequent production must take place within South Africa
- ▶ IP must reside in a South African-registered company
- ▶ Participating businesses must be South African-registered enterprises
- ▶ Government-funded institutions (e.g., the Council for Scientific and Industrial Research) do not directly qualify for support but may participate as a subcontractor
- ▶ There may be no simultaneous applications from the same company

The qualifying costs in SPII are as follows:

- ▶ Personnel-related costs
- ▶ Travel expenses (defined maximum)
- ▶ Direct material
- ▶ Capital items and tooling
- ▶ Software (not general software)
- ▶ Documentation
- ▶ Testing and trials
- ▶ Licensing costs
- ▶ Quality assurance and certification
- ▶ Patent costs
- ▶ Subcontracting and consulting

The following are non-qualifying costs/projects:

- ▶ Projects receiving other government funding
- ▶ Military projects
- ▶ Projects in which SPII contribution is not significant (at least 20% of project costs)
- ▶ Production and commercialization costs
- ▶ Marketing and administrative costs
- ▶ Costs for product/process development for a single client
- ▶ Costs for basic and applied research
- ▶ Costs for projects that, at the time of application, are more than 50% (70% for PPD) complete
- ▶ All costs incurred prior to submitting a duly completed application

THRIP

The criteria to qualify for cash grants is as follows:

- ▶ The project must be applied research in the fields of science, engineering and/or technology whose outputs could make a significant contribution toward improving the applicant's competitive edge.
- ▶ The project intention should be to innovate in terms of either of the following:
 - ▶ Lead to the creation and transfer of new knowledge into a process or product (prototype)
- Or
 - ▶ Transfer of existing knowledge into a new process or product to benefit the applicant
- ▶ The project must have clearly defined scientific and technology outputs plus human resource outputs expected for each year of support.
- ▶ The project must demonstrate all of the following:
 - ▶ Causality (demonstrable output or outcome)
 - ▶ Implementation (the way in which the output or outcome will be used by the applicant)
 - ▶ Additionality (the degree to which the research would not have been undertaken without THRIP) that will follow from THRIP support

The qualifying costs in THRIP are as follows (all are subject to certain limitations):

- ▶ Personnel
 - ▶ Technical research assistant remuneration
 - ▶ Remuneration for the research leader at the Higher Education Institute (HEI)
 - ▶ Specialist, technical, scientific, consultation or contracting personnel
- ▶ Running cost and overheads
 - ▶ Overheads (printing, fax and telephone)
 - ▶ Material/consumables
 - ▶ Local travel
 - ▶ International travel
- ▶ Bursary grants
- ▶ Costs of registration and litigation of applicants

The following are non-qualifying costs/projects:

- ▶ Value-added tax
- ▶ Rental of facilities
- ▶ Journal/literature subscription fees
- ▶ Professional organization subscription fees
- ▶ In-kind contributions
- ▶ Contributions from companies owned wholly or partly (more than 25%) by the HEI receiving the grant
- ▶ Donations
- ▶ Services and/or products (including salary cost) provided by the project's industrial partners and their shareholders and/or employees

4. IP and jurisdictional requirements

Effective date

- ▶ Super deduction: November 2006
- ▶ Accelerated depreciation: November 2006
- ▶ Cash grants: April 1993

Qualifying IP

Inventions, functional designs and computer programs qualify as IP.

Can work be performed outside the country?

Expenditures related to work done outside the country will not be eligible for the super deduction. Only expenditures incurred in South Africa will be eligible.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in South Africa.

6. Role of governmental bodies in administering incentives

Under the amendments to Section 11 made by the Taxation Laws Amendment Act, No. 24 of 2011 (effective 1 October 2012), the R&D Adjudication Committee consisting of officials from the National Treasury, DST and South African Revenue Service is required to preapprove projects before the super deduction can be claimed. The Department of Trade and Industry administers the SPII and THRIP programs.

7. Administrative requirements

Section 11D

Taxpayers may still claim the deduction under the previous legislation to the extent that the expenditure is incurred prior to 1 October 2012. Any expenditure thereafter has to pass through a preapproval process. The preapproval process consists of the submission of a preapproval application form, approval or rejection by the adjudication committee, and the submission of progress reports.

The compliance process is detailed below:

- ▶ Submission of preapproval application form to the DST
- ▶ Progress update report filed annually for approved projects still ongoing 12 months after the close of the year of assessment in which approval was granted:
 - ▶ Progression of the project (what stage it is in)
 - ▶ Technological uncertainties overcome or advancement achieved
 - ▶ Type of R&D activities performed
 - ▶ Universities and contractors used in the process
- ▶ Description of work performed in and outside of South Africa
- ▶ Types of records kept
- ▶ R&D expenditure to date
- ▶ The R&D's sources of funding
- ▶ Employment created
- ▶ Skills developed (training)
- ▶ Notification of change document indicating any material change(s) made to any ongoing project, program or technological area that has been approved, with the form only needing to be submitted for any material changes in the project before the progress report is due

SPII

All South African-registered enterprises engaged in pre-competitive development activity in manufacturing, services or related industrial fields, or software development, that intend to lead to commercialization of the product being developed, may apply for SPII assistance.

- ▶ Application form must be submitted to the DTI
- ▶ If approved, claims are on achievement of milestones as agreed in the contractual terms and conditions with the DTI

THRIP

All South African-registered enterprises that have a partnership with at least one partner being a South African research institution:

- ▶ Higher education institutions (public)
- ▶ Science engineering and technology institutions
- ▶ National research facilities

The duration of the partnership must be equal to or more than the period of the THRIP project.

The project must include at least four registered South African students at fourth-year level of study or higher who must be involved or trained through the research being conducted.

8. Statutory reference

- ▶ Super deduction: Section 11D of the Income Tax Act, No. 58 of 1962, as amended by the Taxation Laws Amendment Act, No. 24 of 2011
- ▶ Accelerated depreciation: Section 12C(1)(gA) of the Income Tax Act

S

South Korea



South Korea

This chapter is based on information current as of February 2019.

EY contact:

Min Yong Kwon
min-yong.kwon@kr.ey.com
+82 2 3770 0934

R&D tax incentives in South Korea aim to encourage R&D activities and investment in R&D facilities that enhance productivity and competitiveness of the country's industries. Of the various R&D tax incentives available, the tax credit for R&D expenditures and tax credit for investment in R&D facilities are the most notable. The South Korean Government is increasingly promoting investment in R&D, innovation and value creation to respond to the significant changes in both the domestic and global economy.

1. Overview

The R&D tax incentives regime in South Korea is mature, having existed for more than 10 years. The Tax Incentives Limitation Law (TILL) that currently governs R&D tax incentives was enacted on 1 January 1999.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Tax credit for R&D expenditures	Tax credit for investment in R&D facilities
Types of incentives	▶ Tax credit	▶ Tax credit

Tax credit for R&D expenditures

Description of benefits

The following two types of tax credits are available under the tax credit regime for qualifying R&D expenditures for companies in South Korea:

- ▶ Tax credit for R&D expenditures in new growth sectors or to secure source (original) technologies (which applies to R&D expenditures incurred until 31 December 2021):
 - (a) 20% (25% for certain qualified medium-sized mature enterprises (MMEs) listed on the KOSDAQ Stock Market) of R&D expenditures; 30% of R&D expenditures for small and medium-sized enterprises (SMEs)
 - (b) 3 times the share of R&D expenditure to total sales amount, which is capped at 10% (15% for certain qualified MMEs listed on the KOSDAQ Stock Market) of R&D expenditures
- ▶ Ordinary tax credit for R&D expenditures (*)(**):
 - ▶ Large corporations: the tax credit would equal the greater of (i) 25% of current-year R&D expenditures exceeding the prior-year R&D expenditures, or (ii) 50% of the share of R&D expenditures out of total revenue, which is capped at 2% of R&D expenditures.
 - ▶ MMEs: the tax credit would equal the greater of (i) 40% of current-year R&D expenditures exceeding the prior-year R&D expenditures, or (ii) 8% of current-year R&D expenditures.

- ▶ SMEs: the credit would equal the greater of (i) 50% of current-year R&D expenditures exceeding the prior-year R&D expenditures, or (ii) 25% of current-year R&D expenditures. In the first fiscal year where companies no longer qualify as an SME, a tax credit of 15% applies for the tax years ending within three years from the date of the tax year in which the SME does not qualify for the first time; a tax credit of 10% then applies for the tax years ending within two years from the end of the aforementioned period.

(*) A company is allowed to elect to apply "tax credit for R&D expenditures in new growth engine sectors or to secure source (original) technologies" or "ordinary tax credit for R&D expenditures."

(**) Please note, (ii) should apply if companies incurred no R&D expenditures during the four preceding fiscal years, or the R&D expenditures made during the immediately preceding year is less than the average annual R&D expenditures during the four preceding fiscal years.

Unused tax credits for R&D expenditures can be carried forward for up to five years. In cases where a startup SME cannot use the R&D tax credit carryforward within five years from its setup, such unused tax credits can be carried forward for up to 10 years. Amendment of a prior tax credit applied for and claimed is available so long as the amended corporate income tax (CIT) return for claiming a refund of the tax credit is filed within five years of the original filing due date.

Guidelines around incentive applications

A domestic corporation may apply for the tax credit for qualifying R&D expenditures made during the current fiscal year. To apply for and claim the tax credit for R&D expenditures, a domestic corporation is required to file, along with its annual CIT return, an application form (Form 1 under the TILL), a detailed statement of R&D expenditures (Form 3 under the TILL) and an R&D plan to the competent tax office within three months of the end of its fiscal year.

Tax credit for investment in R&D facilities

Description of benefits

To encourage investment in new R&D facilities, an additional tax credit (7% for SMEs, 3% for MMEs and 1% for large corporations) of the qualifying investment amount in new R&D facilities may be available in the year that the construction or deployment of R&D facilities is completed.

Unused tax credit for investment in R&D facilities can be carried forward for up to five years. Amendment of a prior tax credit applied for and claimed is available so long as the amended CIT return for claiming a refund of the tax credit is filed within five years of the original filing due date.

Guidelines around incentive applications

A domestic corporation may apply for a tax credit for investment in R&D facilities that has been made to construct or deploy qualifying R&D facilities during the current fiscal year. To apply for and claim the tax credit for investment in R&D facilities, a domestic corporation is required to file, along with its annual CIT return, the application form (Form 1 under the TILL) to the competent tax office within three months of the end of its fiscal year.

3. Eligibility requirements

Qualifying R&D activities include those conducted in a dedicated R&D center of the corporation or the corporation's internal R&D department, both of which should be registered with the Government (i.e., Ministry of Science, Information & Communication Technology and Future Planning in South Korea).

Eligible R&D expenditures are defined as contracted, salary and materials expenditures that are directly related to R&D. Additionally, manpower development expenditures are also viewed as qualifying R&D expenditures so long as they are incurred by dedicated R&D centers or R&D departments. Ineligible expenditures include (but are not limited to) the following:

- ▶ General management and supporting activities
- ▶ Market research and promotional activities or general quality testing

- ▶ Repetitive information gathering activities
- ▶ Activities to improve management or staff efficiency
- ▶ Legal and administrative activities such as protection of patent rights, etc.
- ▶ Exploration and investigation activities related to reserves of natural resources including minerals
- ▶ Research activities on contract basis

For the tax credit for investment in R&D facilities, qualifying R&D facilities include (but are not limited to) the following:

- ▶ Facilities for qualified research and experiments
- ▶ Facilities for qualified vocational training

4. IP and jurisdictional requirements

R&D activities resulting in new intellectual property (IP) may be performed outside of South Korea, and the IP does not have to be registered or owned locally. However, the company claiming the R&D incentives must be the beneficiary of the results of the R&D activities and be incorporated in South Korea.

Temporary tax benefits for technology transfers among Korean residents are available (Korean patent box regime). Under this regime, when SMEs and qualified MMEs transfer qualified patents, technologies, etc., to a Korean resident, 50% of the transfer gain from such transfer is exempt from tax. In cases where SMEs lend qualified patents, technologies, etc., 25% of the related income from such lending is exempt from tax. The temporary tax benefit applies to transfers and leases that take place until 31 December 2021.

5. Technology or innovation zones

If qualified, the companies located within an R&D Special Zone as prescribed under the Special Law on the Promotion of R&D Special Zones are able to enjoy certain tax exemptions.

6. Role of governmental bodies in administering incentives

Each year, the Korean National Tax Service reviews R&D tax incentive applications that have been submitted with a CIT return and processes the R&D tax credit claims. The R&D tax credit claims may also be subject to written information requests or a tax audit in the future.

7. Administrative requirements

According to the Basic Research Promotion and Technology Development Support Act, a dedicated R&D center or R&D department set up by a company should be registered with the Ministry of Science, Information & Communication Technology and Future Planning to benefit from R&D tax incentives.

8. Statutory reference

- Tax credit for R&D expenditures – Article 10 of the TILL
- Tax credit for investment in R&D facilities – Article 25 of the TILL

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Spain



Spain

This chapter is based on information as of February 2019.

EY contacts:

Víctor Gómez de la Cruz Talegón
victor.gomezdelacruztalegon@es.ey.com
+ 34 915 727 385

Jorge Baztarrica Ochoa
jorge.baztarricaochoa@es.ey.com
+ 34 917 493 157

Tax benefits regarding R&D and innovation activities have always received preferential treatment in the Spanish tax system. In-depth reform of the Spanish Corporate Income Tax (CIT) Law has taken place for tax periods starting as of 1 January 2015, which not only maintained the previous R&D tax regime, but also introduced some improvements.

1. Overview

Spanish R&D tax/labor incentives take the following forms:

- ▶ Tax deferrals and accelerated depreciation on the R&D assets
- ▶ Tax credits provided for expenses and investments related to R&D and technological innovation (TI) activities
- ▶ Patent-related incentives consisting of a partial exemption and tax allowances
- ▶ Reduced social security contributions

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Tax credit for R&D expenses*	Reduced social security contributions	Patent box regime*
Types of incentives	▶ Tax credits	▶ Partial exemption	▶ Partial tax exemption

* Although not based upon scientific analysis, EY clients report that these incentives deliver the most beneficial results to investors.

Tax credit for R&D expenses

(Deducción por actividades de investigación y desarrollo e innovación tecnológica)

Description of benefits

- ▶ Spanish companies may benefit from a tax credit equal to 25% of R&D expenses incurred in the tax year. If the expenses incurred exceed the average amount of those costs in the preceding two years, the rate of 25% applies to an amount equal to the average, while a rate of 42% applies to the excess.
- ▶ The tax credit base is formed of R&D expenditures and amounts invested in fixed and intangible assets (excluding real estate and land) directly related to R&D activities.
- ▶ For investments made in tangible and intangible assets (excluding buildings and land), an additional tax credit is applicable equal to 8% (applicable to the aforementioned investments) as long as such investments exclusively relate to R&D activities.
- ▶ There is an additional 17% tax credit available against the gross tax due for the company's staff expenses related to skilled researchers exclusively assigned to R&D activities.
- ▶ The expenditure must be individualized by projects. The amount of R&D expenses will be reduced by 100% of the subsidies received to encourage such activities, which are allocated to the tax period as income.

- ▶ The Spanish CIT Act also states that the execution of technological innovation (TI) activities gives the right to apply a tax credit on the expenses incurred in a tax period related to TI activities. The percentage of the tax credit applicable is 12%.
- ▶ If the amount of the R&D tax credits for the fiscal year exceeds 10% of the tax due, the tax credits may offset up to 50% of the gross tax due. Otherwise, the tax credits may offset only up to 25% of the gross tax due. Unused credits may not be carried back but may be carried forward for 18 years.
- ▶ As of 2015, the CIT Law sets forth a new statute-of-limitations period of 10 years (previously four years).

Option to exclude the limit and get the refund of the tax credit (monetization procedure)

- ▶ As of 1 January 2013, if the taxpayer complies with certain specific requirements, it can apply the following option regarding the R&D tax credits generated (monetization procedure): the taxpayer may elect not to be subject to the annual limitation on tax credits (25%-50%) but apply the full tax credit with a 20% discount. Additionally, the non-applied tax credits (after the 20% discount and due to the lack of CIT due) can be claimed for reimbursement to the Spanish tax administration. In such a case, interest for late payment will not apply.
- ▶ The limit established for this option is EUR1 million for TI activities and EUR3 million for R&D activities plus TI activities, at the level of the group of entities in terms of Article 42 of the Spanish Commercial Code.

To apply this option, certain conditions should be met:

- ▶ Only up to one year must have elapsed from the period in which the R&D tax deduction was generated without applying the tax credit.
- ▶ The company must maintain or increase (i) its general average workforce size or (ii) the specific average workforce exclusively carrying out R&D activities, from the end of the period where the tax incentive was generated until 24 months elapsed from the tax year when this option (monetization procedure) is applied.
- ▶ During the following two periods since the CIT return where this option was applied, an amount at least equal to the tax credit to be applied or refunded under this option (monetization procedure) must be assigned to R&D expenses or fixed or intangible assets that are exclusively assigned to R&D activities.
- ▶ Finally, the company must obtain a duly reasoned report, issued by the competent authority, about the qualification of the activities carried out by the company as R&D/TI activities.
- ▶ As of 2015, an additional amount of EUR2 million can be subject to this option (monetization procedure) annually for those taxpayers whose R&D expenses are higher than 10% of the turnover.

Guidelines around incentive applications

Incentive credits are applied in the annual CIT return. Corporate income tax is filed during the 25 days following the six-month period from the taxpayer's financial year-end.

Reduced social security contributions

(Bonificaciones en la cotización a la Seguridad Social del personal investigador)

Description of benefits

- ▶ This is a government incentive regulated by Royal Decree 475/2014 that allows firms to reduce 40% of social security payments for employees dedicated full-time to research, development and technological innovation activities.

- ▶ The relief is compatible with other government-aided R&D and innovation programs (subsidies and subsidized loans), except aid programs exclusively related to hiring of personnel. This reduced contribution is compatible with other social security incentives. Also, the relief is compatible with R&D tax credits when the reduced social security contribution and the tax credit are not applied to the same expense (the taxpayer can elect the incentive to be applied). However, as an exception, the reduced social security contributions and R&D tax credits can be applied over the same expense for entities qualified as "Innovative SME" (*PYME innovadora*).

Guidelines around incentive applications

- ▶ The reduced social security contributions can be applied automatically by informing the Social Security Treasury of the date the company wants to apply this benefit, as stated in Royal Decree 475/2014.
- ▶ Companies applying this incentive to 10 or more employees need to undergo a validation process with a certification entity registered with the National Accreditation Body (ENAC) and then request a motivated report from the Ministry of Economy and Competitiveness guaranteeing compliance with exclusive dedication to research, development and technological innovation activities. The motivated report must be submitted to the Social Security Treasury no later than six months after the end of the fiscal year in which the relief was applied.

Patent box regime

(Reducción de ingresos procedentes de determinados activos intangibles)

Description of benefits

In accordance with the Spanish CIT Law, revenues deriving from the assignment of the right to use or exploit certain intangible assets benefit from a reduction in the CIT taxable base up to 60%. The qualifying intellectual property (IP) must have been developed (at least partially) by the licensor.

There is patent box relief, provided that:

- ▶ The assigning entity has created the assets to be assigned.
- ▶ The rights to use the assets are used by the assignee in the pursuit of an economic activity.
- ▶ The assignee is not resident in a country or territory that does not levy taxes or is considered a tax haven.
- ▶ If a single assignment agreement includes the provision of accessory services, a distinction must be made therein of the consideration payable for those services.
- ▶ The assignor must make the necessary book entries to determine the income and expenses, direct and indirect, corresponding to the assets under assignment.
- ▶ The relief is calculated on the basis of income (positive difference between revenues derived from the assignment of the right of use/exploit of certain intangibles and certain deductible amounts as amortization, impairments or expenses related to the intangible).
- ▶ The general framework is based on the “nexus or link approach” endorsed by the G20/OECD: the tax incentive (up to 60% reduction) will be linked to the “qualifying costs” (i.e., excluding the outsourcing costs with related parties and the intangible assets acquisition costs), meaning that the qualifying income should be multiplied by the following ratio:
 - ▶ The expenses (excluding any financial expenses and the depreciation of buildings) incurred by the licensing entity directly related to the creation or development of the IP assets, including those derived from the outsourcing to third parties. These expenses will be increased by 30% with the limit of the amount included in the denominator; divided by
 - ▶ The expenses (excluding any financial expenses and the depreciation of buildings) incurred by the licensing entity related to the creation of the IP, including those derived from the outsourcing, and if applicable, from the acquisition of such IP.
- ▶ The income is calculated on a cumulative basis, meaning that the income subject to the incentive must be calculated considering all the expenses (capex and opex) and revenues related to the asset from its inception.
- ▶ The patent box regime may also apply to income deriving from the transfer of the intangible asset, unless the transfer is carried out between group entities in terms of article 42 of the Spanish Commercial Code.

- ▶ The assignee may be a resident in a territory that does not levy taxes or is a tax haven, provided such jurisdiction is a Member State of the European Union (EU) and the taxpayer proves that the transaction is carried out for valid business reasons.

Guidelines around incentive applications

Incentive credits are applied in the annual CIT return, which is filed during the 25 days following six months from the taxpayer’s financial year-end.

3. Eligibility requirements

R&D tax credits

Qualifying activities are those dealing with scientific investigation and research for the manufacture of new materials or products, technological improvement of existing methods, new software, etc. Activities that do not entail significant scientific or technological novelty; activities relating to industrial production and the provision of services or distribution of goods and services; or activities relating to exploration, drilling or prospecting for minerals and oil and gas are not deemed to be R&D or technological innovation activities.

R&D investments must take place in Spain or in a Member State of the EU or European Economic Area (EEA). R&D expenses connected to the production of income generally qualify as R&D expenses without restriction, except for investments made in land or property. Expenses incurred by the taxpayer, including the depreciation/amortization of the assets used in R&D activities, shall be deemed to be R&D expenses if they are directly related to and are specifically and separately recorded against a specific project. As of 2015, the CIT Law broadens the requirements to be eligible in respect of software developments.

Regarding TI activities, eligible expenses include those that are connected with technological diagnosis; industrial designs; acquisitions related to patents, know-how and designs; and attainment of certificates (e.g., ISO 9000, GMP). Expenses incurred in IT activities shall be deemed IT expenses if they are directly related to and are specifically and separately recorded per project. As of 2015, the CIT Law includes animation and video games projects as an eligible activity for the tax benefit as IT activities.

All industries that are incorporated in Spain (or a permanent establishment) are qualified when the R&D investments take place in Spain, in a Member State of the EU or EEA. No industry sectors are specifically excluded.

Reduced social security contributions

The relief applies to any personnel/researcher with at least 85% of annual working hours dedicated to R&D and innovation activities. Eligible research, development and innovation activities are regulated by article 35 of the CIT Law. Management, administration or marketing activities are not included.

Any private company without social security penalties can benefit from this incentive.

Companies applying this incentive to 10 or more employees need to undergo a validation process with an ENAC-registered certification entity and then request a motivated report from the Ministry of Economy and Competitiveness guaranteeing compliance with exclusive dedication to research, development and innovation activities. The motivated report must be submitted to the Social Security Treasury no later than six months after the end of the fiscal year in which the relief was applied.

4. IP and jurisdictional requirements

Effective date

The new patent box regime is applicable as of 1 January 2018, but includes grandfathering provisions for intangible assets created before 1 July 2016 allowing the interim application of the precedent regimes until 30 June 2021.

Qualifying IP

Qualifying IP includes patents, utility models, supplementary protection certificates for medicinal and phytopharmaceutical products, legally protected designs arising from R&D or technological innovation activities and copyrighted advanced software arising from R&D activities.

Types of income

Income derived from the assignment of the right of use or exploit (or transfer if carried out after 29 September 2013) of certain intangibles.

Calculation of income

Accounting income

IP regime rate

The tax incentive (up to 60% reduction) is linked to the "qualifying costs" (i.e., excluding the outsourcing costs with related parties and the intangible assets acquisition costs), meaning that the qualifying income should be multiplied by the following ratio:

- ▶ The expenses (excluding any financial expenses and the depreciation of buildings) incurred by the licensing entity directly related to the creation or development of the IP assets, including those derived from the outsourcing to third parties. These expenses will be increased by 30% with the limit of the amount included in the denominator; divided by
- ▶ The expenses (excluding any financial expenses and the depreciation of buildings) incurred by the licensing entity related to the creation of the IP, including those derived from the outsourcing, and if applicable, from the acquisition of such IP.

Can work be performed outside the country?

The assignee must not be resident in a country that does not levy taxes or is considered a tax haven. From 29 September 2013, if the assignee is a resident in a country or territory that does not levy taxes or is considered a tax haven, but is a Member State of the EU, the taxpayer may prove that the transaction is carried out for valid business reasons.

Must the IP be registered/owned locally?

The registration requirement of qualifying assets depends on their nature and is ruled by the specific national and international legislation.

5. Technology or innovation zones

Some regions in Spain have improved their R&D incentives. As an example, the Government encourages innovation and technical research in the Canary Islands by providing incentives to the R&D expenses incurred therein. In this sense, the regime is identical, but both the tax credits and the limits of the deduction are increased by 80% with at least 20 units of increase, with regard to the rest of the Spanish state. All industries are eligible for the incentives as long as the R&D work attempts to advance the underlying science or technology, creates new or improved products or processes, is innovative, is undertaken through systematic investigation and is documented.

Additionally, the Basque Country has its own R&D regime that improves the tax benefits of the standard federal regime. In this context, the general tax credit is 30% and 20% for TI; however, if the expenses incurred exceed the average amount of those costs in the preceding two years, the rate of 30% applies to an amount equal to the average, while a rate of 50% applies to the excess. Furthermore, an additional 20% tax credit may apply to certain R&D expenses, and a 10% tax credit will apply to tangible and intangible investments (except real estate and land) associated with R&D activities. There is no limit on application of the tax credit on the gross tax due albeit the reimbursement (monetization procedure) is not possible in case of lack of the gross tax due. The unused credits may be carried forward for 15 years.

6. Role of governmental bodies in administering incentives**R&D tax credits**

The taxpayer may request a ruling (reasoned report) from the Ministry of Science, Innovation and Universities (or related institutions). This report would confirm or deny the R&D nature of the expenses and investments carried out by the taxpayer. The report is binding on the tax authorities. As a general rule, the request for a report should be sent with a technical analysis issued by an official certifying entity. The authorities have three months to issue the report; however, the expiration of the term has no effects for the authorities or the taxpayer, and the reports are usually issued in a longer period of time. To apply the optional regime regarding R&D tax credit (monetization procedure), the company must obtain such motivated report on whether its activities qualify as R&D activities in any case.

The taxpayer may also request a pre-agreed valuation report of the expenses related to the project from the tax authorities. This report should be requested prior to the project commencement, and the tax authorities have six months to respond. Expiration of the term without tax authority response implies that the tax authorities accept the taxpayer's proposal.

Reduced social security contributions

Companies applying this incentive to 10 or more employees need to undergo a preapproval process with an ENAC-registered certification entity and then request a motivated report from the Ministry of Economy and Competitiveness guaranteeing compliance with exclusive dedication to research, development and innovation activities. The motivated report must be submitted to the Social Security Treasury no later than six months after the end of the fiscal year in which the relief was applied.

Patent box regime

As of 29 September 2013, the taxpayer can request from the tax authorities, before transactions are carried out, a valuation of the revenues and expenses related to the assignment as well as of the income to be generated from a transfer. In addition, the taxpayer can request an agreement on the qualification of the assets under one of the qualifying categories.

7. Administrative requirements

No preapproval or specific annual compliance is required for the R&D credits and patent box regime, with the exception of the duly motivated report in order to apply the optional R&D regime (monetization procedure) and the reduced social security contributions to 10 or more employees, as explained above.

8. Statutory reference

- ▶ Tax credit for R&D expenses:
 - ▶ Articles 35 and 39.2 of CIT Law 27/2014, 27 November
 - ▶ Article 38 of CIT Regulation approved by Royal Decree 634/2015, 10 July
- ▶ Reduced social security contributions:
 - ▶ Royal Decree 475/2014, 13 June
- ▶ Patent box regime:
 - ▶ Article 23 of CIT Law 27/2014, 27 November
 - ▶ Articles 39-44 of CIT Regulation approved by Royal Decree 634/2015, 10 July

S

Sweden



Sweden

This chapter is based on information current as of February 2019.

EY contacts:

Marcel Sikkema
marcel.sikkema@se.ey.com
+46 73 340 77 82

Chris Peck
cpeck@uk.ey.com
+44 7388 969975

Sweden is one of Europe's top spenders in research and development; as of 2016, it ranked as the third-largest spender in R&D among OECD countries (3.255% of gross domestic product). To continue to incentivize this significant business investment in R&D, Sweden introduced an R&D incentive in 2014 for companies carrying out qualifying research and development. The incentive provides a reduction in the employer's social security contributions on staff involved in R&D. In addition to this, Sweden has implemented an expatriate tax regime for key foreign personnel with a scientific/technical background. No changes are expected to be made to Sweden's R&D incentives regime in the near future.

1. Overview

Currently available incentives include:

- ▶ A reduction in social security contributions for R&D employees engaged in commercially performed R&D (under certain conditions)
- ▶ An expatriate tax regime with 25% tax relief for foreign key personnel who are experts and scientists with knowledge and skills that are scarce in Sweden, and whose periods of assignment will not exceed five years (the reduction may be granted for only the first three years of the assignment)

Please note that Swedish tax policy follows the generally accepted accounting principles (GAAP) set by the Swedish Accounting Standards Board (*Bokföringsnämnden*), which means that there are no specific tax rules with regard to R&D income and expense. According to Swedish GAAP, R&D income and expenses should be taxable or deducted as ordinary income or expenses. In certain specific cases, such expenses can be capitalized.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	Reduced social security contributions for tasks concerning commercially performed R&D	Expatriate tax regime for certain foreign experts*
Types of incentives	▶ Reduced social security contributions	▶ Tax exemption

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Reduced social security contributions for tasks concerning commercially performed R&D

(Sänkt arbetsgivaravgift för forskning i kommersiellt syfte)

Description of benefits

The Swedish Government provides a reduction in contribution amounts for social security charges for R&D employees. Social security charges are currently rated at 31.42%. The reduction of the contribution amounts to 10% of the salary of the R&D employee. The maximum reduction in social security charges is SEK230,000 per group of companies, per month (or SEK2.76 million per year). The total percentage of social security contribution shall not fall below the retirement pension fund charge at 10.21%; if so, the deduction is adjusted.

To use the incentive, taxpayers are required to dedicate a minimum of 75% (a minimum of 15 hours per month) of the working hours of R&D employees to R&D activities. Furthermore, eligible employees must be below the age of 65 at the beginning of the year when the reduction is claimed. No preapproval is required.

Guidelines around incentive applications

The incentive is applicable to retrospective, current and future investments. A company can look back up to six years to amend employer returns, which for 2019 is back to the start of the incentive in January 2014 – allowing for a claim for the years 2014, 2015, 2016, 2017, 2018 and current year 2019. The reduction should be claimed on a monthly basis through the company's employer return. The total base for social security contributions, as well as the claimed reduction, must be reported in the company's employer return.

Expatriate tax regime for certain foreign experts

(*Expertskatt*)

Description of benefits

Twenty-five percent of the salary and benefits for individuals who have been granted expatriate taxation classification is exempt from taxation and social security charges. Additionally, moving expenses to and from Sweden, some travel expenses to the home country, and school fees are exempt.

Guidelines around incentive applications

To receive the incentive, preapproval is required from the Taxation of Research Workers Board (*Forskarskattenämnden*) within the National Tax Administration. Two different application forms are available: one is to apply for tax relief based on the level of remuneration, and the other is to apply for tax relief on other grounds.

3. Eligibility requirements

Qualifying R&D activities are systematic, with commercial objectives. To fulfill the research requirement, companies shall develop new knowledge. To fulfill the development requirement, companies shall develop new products, services and production processes through the use of research material, or companies shall substantially enhance the quality of existing products, services and production processes. A substantial enhancement requires an alteration resulting in an essential improvement to quality, use, formation, production or provision. Furthermore, the development activity needs to be directly related to the research result. Projects conducted under public regime are not eligible for the incentives.

Reduced social security contributions for tasks concerning commercially performed R&D

To qualify for a reduction of social security contributions, the employee must be tasked with business-oriented systematic and qualified research or development activities during at least 75% of working hours (ordinary production work does not qualify), with a minimum of 15 hours per month. The employee must be below the age of 65. Further, the salary must be paid from an employer that is tax resident in Sweden (including a permanent establishment of a foreign person in Sweden).

Expatriate tax regime for certain foreign experts

The expatriate tax regime is granted for a maximum of three years and is available for foreign employees intending to work in Sweden for no longer than five years. The expatriate tax regime must be used during the first three years of the assignment. The individual may not be a Swedish citizen or a foreign citizen who has lived or resided in Sweden during the last five years. The employer must be established in Sweden or be a foreign corporation with a permanent establishment in Sweden.

The expatriate tax regime is available only for experts/specialists, key personnel, scientists and employees with a monthly salary in excess of a certain level. It requires preapproval from the Taxation of Research Workers Board (*Forskarskattenämnden*). Application for tax relief must be submitted to the board by the employer or foreign person within three months of the start of employment. Decisions by the Board may be appealed to county or national administrative courts. Employers, in reporting income to tax authorities, must include the key persons' tax-free amounts. All other reporting by employers follows standard procedures.

It should be noted that there is no legal means for extending the application period in individual cases. Applications received by the board just one day after the stipulated deadline will be considered late and will be rejected. It is therefore important to file the application on time.

4. IP and jurisdictional requirements

Sweden does not have any intellectual property (IP) tax incentives.

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Sweden.

6. Role of governmental bodies in administering incentives

- ▶ The Swedish Tax Agency (*Skatteverket*) manages questions concerning the reduction of social security contributions for employees tasked with R&D.
- ▶ The Taxation of Research Workers Board (*Forskarskattenämnden*) grants expatriate taxation classification for foreign individuals.

7. Administrative requirements

The employer must submit a base of calculations for the reductions and the amount of reductions for social security fees in the payroll tax return. The employer must be able to provide the Swedish Tax Agency with information to assure that the requirements are met if subjected to screening. This includes information concerning the number of working hours, the number of working hours dedicated to R&D, and information about the specific R&D work performed by each individual employee.

The employee or employer may submit the application to the Taxation of Research Workers Board to be granted expatriate taxation classification for foreign key personnel or scientists. The application must have been received by the Taxation of Research Workers Board no later than three months from the date when the employee started working in Sweden.

8. Statutory reference

- ▶ The right to reduction of social security contributions is effective as of 1 January 2014 and can be found in the Social Security Contributions Law, chapter 2, paragraphs 29-31.
- ▶ The legislation regarding the expatriate tax regime has been in effect since 2001 and can be found in the Swedish Income Tax Act, chapter 11, paragraph 22-23 a.

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Switzerland



Switzerland

This chapter is based on information current as of February 2019.

EY contacts:

Roger Krapf
roger.krapf@ch.ey.com
+41 58 286 21 25

Martin Kistler
martin.kistler@ch.ey.com
+41 58 286 62 06

As of 1 January 2017, Switzerland obtained full association status in the European Union (EU) Horizon 2020 research and innovation program, which will allow Swiss researchers to claim EU funding under all Horizon 2020 pillars.

1. Overview

The global competition for the most attractive research location has greatly intensified, and through a targeted research and innovation policy, Switzerland is trying to further increase its attractiveness.

Switzerland has several incentives to lower R&D costs and investments for companies. This includes financial contributions (grants), tax holidays and reduced tax rates on patent-related income for companies with domicile in the canton of Nidwalden (flat statutory corporate income tax (CIT) rate of 9.7%).

In general, the Swiss CIT rate is very attractive compared with other countries. Swiss taxes are deductible (i.e., a taxable expense), so the statutory tax rates have to be distinguished from the effective tax rate. The effective tax rates on profits before tax in Switzerland for ordinary taxed companies on the level of federal, cantonal and communal CIT range from 11.19% to 23.21%.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other Reduced tax rates for license income (patent box)	<input checked="" type="checkbox"/>

2. Incentives available

Names of incentives	Financial contributions	Tax holidays	Patent box	Domiciliary and mixed companies	Accelerated depreciation on assets
Types of incentives	<ul style="list-style-type: none"> Contributions to investment costs, repayable on an interest-free basis, subject to conditions 	<ul style="list-style-type: none"> Relief from capital and income taxes at federal, cantonal and communal level at a maximum of 100% for maximum 10 years for one legal entity 	<ul style="list-style-type: none"> A reduced CIT rate for patent-related income in the canton of Nidwalden 	<ul style="list-style-type: none"> The profits derived by these companies from non-Swiss sources are taxed at substantially reduced rates at the cantonal/communal level 	<ul style="list-style-type: none"> Possibility to account a one-off depreciation under certain conditions (depends on different cantonal practices)

Financial contributions/cash grants

Description of benefits

To facilitate and accelerate the realization of projects, several cantons in Switzerland provide financial contributions of creditable investments.

Guidelines around incentive applications

The beneficiary must fulfill various operational conditions (e.g., innovative project, export-oriented, maintenance and creation of jobs) and project-related conditions (e.g., new innovation of the company, national or international target markets, or economic importance for the respective canton). The objective is also to guarantee sustainable development of the company.

Tax holidays

Description of benefits

Various cantons may grant tax holidays for important expansion projects of an existing company or with respect to the new establishment, when such projects are of major economic importance to the respective canton. Such economic importance is basically given if new jobs are derived and capital investments are delivered via such development or establishment projects. In the case of reorganizations, the respective canton may grant a tax holiday if the company can demonstrate that such reorganization is necessary for the maintenance of jobs and that investments in the canton will be realized.

The tax holiday is granted on the CIT and capital tax on a cantonal and communal level. However, if the company is founded in certain areas in the cantons of Berne, Luzern, Uri, Glarus, Solothurn, St. Gallen, Graubünden, Tessin, Wallis, Neuenburg and Jura, a tax holiday on a federal level can also be obtained. In any case, there is a maximum available relief of 100% for a maximum of 10 years. Additionally, the real estate transfer tax triggered by the change of ownership may also be waived on purchases of real estate or industrial land, depending on the cantonal practices, which can vary.

Guidelines around incentive applications

A tax holiday at the federal level is restricted to certain defined areas in the cantons of Berne, Luzern, Uri, Glarus, Solothurn, St. Gallen, Graubünden, Tessin, Wallis, Neuenburg and Jura. Furthermore, it can only be obtained if the respective canton grants a tax holiday in the same amount (percentage and time period). As a consequence, the cantonal authorities should be addressed first.

However, the quantity of tax holidays depends on the investments of the company and creation or maintenance of new employment in the respective canton. The newly created or maintained jobs will also be taken into account as an investment based upon the amount of their average salary. As a general rule, the tax reduction due to the tax holiday must not exceed 50% of the investments (practices of the cantons may vary).

For the cantonal and communal tax holiday, the respective administrative office for economic development is the competent authority, together with the cantonal tax authority. The federal tax holiday is assessed by the State Secretariat for Economic Affairs (SECO).

An application for a tax holiday must be made. The application includes fundamental documentation related to capital budgeting, future employment and a detailed business plan.

The final decision on the granting of a tax holiday is linked to certain terms and conditions during and after the time period of the tax holiday. Typically, the company has to report that it implemented the promised investments according to its business plan during the period of the tax holiday. Furthermore, the company is obliged to continue its business activity for a defined length of time.

Patent box

Description of benefits

The only canton in Switzerland to do so, Nidwalden implemented benefits on net royalty or so-called net license income from the use of intellectual property (IP). In light of the recent developments on the level of the EU and the Organisation for Economic Co-operation and Development (OECD) and in anticipation of the (meanwhile rejected) Swiss Corporate Tax Reform III (CTR III), the cantonal tax authority of Nidwalden had to change its existing license box regime to a patent box regime in 2016. Under the old license box regime, license income was defined as payments of any kind received as a consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work, including cinematographic films; any patent, trademark, design or model, plan, secret formula or process; or information concerning industrial, commercial or scientific experience. In contrast to this rather broad definition, the newly introduced patent box regime only applies to qualifying patent income, provided the R&D expenditure in relation to the registered patent (or similar intellectual property, such as supplementary protection certificates or first applicant protections) occurred at the company applying for the patent box regime. The capital gains on the disposal of such registered patents among affiliated companies also qualify for the patent box. The term further includes income arising from the use of registered patents among affiliated companies. This change to a much narrower patent box regime reduces the range of qualifying IP significantly compared to the previous license box regime, as only registered patents and equivalent rights are included in the definition of patent income. All other IP-related income – also income derived from copyrighted software and not patent-protected inventions – does not qualify for the patent box regime.

The incentive for net license income from the use of registered patents is a fixed statutory CIT rate of 9.7%.

Guidelines around incentive applications

The Nidwalden patent box regime should basically follow the modified nexus approach, as provided under Action 5 of the OECD base erosion and profit shifting (BEPS) project. Only legal entities with a registered office or subsidiary in the canton of Nidwalden may make use of the patent box rules. For tax assessment purposes, a breakdown of income and costs by segment/source must be drawn up. This must be enclosed with the tax return.

Reduced tax rates/preferable tax rates: domiciliary and mixed companies

Description of benefits

For cantonal and communal taxes, the following tax rules apply to domiciliary and mixed companies (effective tax rate on federal level of 7.83% remains):

- ▶ Income derived from a qualifying participation (10% of the share capital, 10% of the profit and reserves or fair market value of CHF1 million), including capital gains resulting from step-ups in the tax basis of such investments, is exempt from tax.
- ▶ Income derived from Swiss sources not described in the item above is taxed at ordinary effective CIT rates (this rule applies only to mixed companies because domiciliary companies do not derive Swiss-source income).
- ▶ Income derived from non-Swiss sources is also taxed at ordinary rates.

- ▶ However, the tax base is substantially reduced by the application of rules that take into account the significance of administrative activities performed by the Swiss company (this depends on the intensity of its physical presence in Switzerland and the level of its economical affinity to Switzerland).

As a result of these rules, approximately 10% to 30% of the non-Swiss income is subject to the ordinary effective CIT on a cantonal and communal level, while the remaining non-Swiss income is exempt.

Guidelines around incentive applications

Domiciliary and mixed companies are those primarily engaged in activities abroad. The profits derived by these companies from non-Swiss sources are taxed at substantially reduced rates at the cantonal/communal level. Domiciliary and mixed companies may be used for sales, financing, holding of IP and other activities which focus primarily on non-Swiss markets. However, at the federal level these companies are usually taxed at an ordinary CIT of 7.83%. A special relief may be achieved in special cases for so-called principal companies.

Accelerated depreciation on assets

Description of benefits

The method of depreciation basically should be in line with usual business practices. However, the tax authorities in Switzerland have published the rate of depreciation that is usually acceptable and therefore treated as business-related expense. Some cantons provide the possibility to account a one-off depreciation under certain conditions (depends on different cantonal practices).

Note on Tax Reform and AHV Financing (TRAF; former Tax Proposal 17)

Description of current discussion

A reform of Switzerland's corporate tax system became necessary due to the changing international tax environment and the former controversy on business taxation with the EU, which was finally resolved by a joint statement between Switzerland and the EU in October 2014. Despite the rejection of CTR III by the Swiss voting population on 12 February 2017, the reform of the current corporate tax system remains an important issue for all stakeholders. As a result, the Swiss government initiated Tax Proposal 17 (TP17), which pursues the following three objectives, similar to those of CTR III: safeguarding the tax appeal of Switzerland as a business location, promoting the international acceptance of Switzerland's corporate tax legislation and ensuring sufficient tax revenues to finance public activities. With respect to R&D incentives, the draft of TP17 proposed, among other measures, the introduction of the following:

- ▶ An OECD-compliant (i.e., follows the nexus approach) patent box at the cantonal level
- ▶ Tax incentives for Swiss local R&D (i.e., an R&D super deduction up to a maximum of 50% of the relevant R&D costs) at the cantonal level

During the discussions in parliament, the draft law was amended with social security measures (AHV) and therefore renamed TRAF. The law passed parliament in September 2018. In January 2019, several groups disposed signatures collected to call a public referendum. In the very likely event that enough signatures have been collected, the public vote will be held on 19 May 2019.

Note on full association status for participation in the EU's Horizon 2020 as of 1 January 2017

Between 15 September 2014 and 31 December 2016, Switzerland had "partially associated" status for the purposes of participating in the EU's Horizon 2020

research and innovation program. National measures were applied to fund Swiss project participations in those areas of Horizon 2020 to which Switzerland was not associated during that time. As of 2017, Switzerland obtained full association status in Horizon 2020, which will allow Swiss researchers to claim EU funding under all Horizon 2020 pillars. For further details on this program, please see the chapter on the EU's Horizon 2020.

3. Eligibility requirements

Financial contributions and tax holidays

Corporate requirements

- ▶ A growth strategy, ideally affiliated with an innovative and/or export-oriented project
- ▶ Guaranteed overall financing and long-term sustainability
- ▶ Retention and creation of jobs
- ▶ Sustainable corporate development

Project-related requirements

- ▶ Innovativeness of the line of business
- ▶ National and international target markets and no distortion of competition
- ▶ Economic importance for Switzerland
- ▶ Planned investments in research, technology, facilities, etc.

Specific requirements for tax holidays

- ▶ Reorganization of existing company
- ▶ Early contact with the responsible project manager of the economic promotion department
- ▶ A business plan
- ▶ A statement of the respective cantonal tax authorities and the local community
- ▶ In certain cantons, a resolution by the cantonal government
- ▶ Capital investments and maintenance or creation of employment

Patent box

A significant operational infrastructure (company-owned/ company-occupied offices, qualified personnel, etc.) must be located at the registered office or subsidiary of the legal entity.

The legal entity must provide evidence of the patent-related income subject to taxation by means of the relevant license agreement.

Payments for so-called milestones are recognized as license income, if they can actually be assigned to a usable IP or right at a later point in time. If at least 90% of the total gross income is derived from patent-related income, and if the other gross income not derived from patent-related income does not exceed CHF50,000, a segment accounting statement can be dispensed with. If license income amounts to less than CHF50,000, a simplified breakdown is sufficient. In that case, the financing costs, administrative expense and taxes can be deducted at a flat rate of 25%.

4. IP and jurisdictional requirements

Only legal entities with a registered office or subsidiary in the canton of Nidwalden may make use of the patent box rules.

5. Technology or innovation zones

As mentioned above in "Tax holidays," a federal income tax holiday can only be obtained in certain zones in the cantons of Berne, Luzern, Uri, Glarus, Solothurn, St. Gallen, Graubünden, Tessin, Wallis, Neuenburg and Jura.

6. Role of governmental bodies in administering incentives

The Swiss tax authorities are cooperative when taxpayers seek to obtain a tax ruling. However, it is very common in Switzerland to provide the tax authorities with the relevant background information and the corresponding tax consequences by a written application. The Swiss tax authorities will then review the proposed tax appraisal and, if they agree, show their (pre-) approval by counter-signature. Such a procedure provides certainty for several years with regard to the envisaged settlement and/or reorganization, etc., for both parties (taxpayer and tax authority).

Please note that because of the current tax transparency measures based on BEPS (Actions 5 and 13), at least some rulings may be subject to information exchange.

7. Administrative requirements

The financial contribution, tax holidays and the patent box require a request to the respective cantonal and, if applicable, federal authorities. After the incentive is granted, the competent authority monitors the course of the project and the development.

8. Statutory reference

- ▶ Financial contributions: cantonal legislation and published (or non-published) practices
- ▶ Tax holiday: cantonal legislation and published (or non-published) practices
- ▶ Patent box: Cantonal Tax Law of the Canton of Nidwalden and the guidelines on Taxation of License Income of the cantonal tax authorities of Nidwalden

T

Thailand



Thailand

This chapter is based on information current as of February 2019.

EY contacts:

Yupa Wichitkraisorn
yupa.wichitkraisorn@th.ey.com
+662 264 9090

Pathira Lam-ubol
pathira.lam-ubol@th.ey.com
+662 264 9090

Similar to other countries, Thailand is increasingly emphasizing the importance of an innovation-driven economy by encouraging both public and private sectors to invest more in R&D activities. The ultimate goal is to increase investment in R&D to 1.5% by 2021.

To do so, the Thai government has released/revamped a number of tax incentive schemes to extend support in the areas of science, technology, R&D and development and innovation. This is part of the nation's policy to guide Thailand from a middle-income country to a high-income country by 2026.

1. Overview

The Thai Government strongly encourages research and technology invention to enhance the country's competitiveness to achieve sustainable development in the long run, and it aims to attract foreign investors by providing R&D incentives to both approved Thai R&D service providers and Thai R&D service users. Currently, a 200% deduction plus a further 100% tax deduction with capped amounts and an accelerated depreciation rate of 40% are available for eligible expenditures incurred on R&D activities carried out in Thailand and R&D-qualified machinery and equipment, respectively. To receive the Thai R&D service provider status, companies or government entities must obtain approval from the Revenue Department (RD).

The Government also provides tax holidays and non-tax incentives to companies providing eligible R&D services or incurring qualifying R&D expenditures.

Apart from the above, the Thai government has recently set up a fund worth THB10,000 million to subsidize investment projects, particularly for startup businesses, engaging in the targeted industries that involve the use of new high technology. The chosen projects will receive a subsidy from the government for qualifying R&D expenditures.

Other financial support is also available from the National Science and Technology Development Agency (NSTDA) in the form of soft loans.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D additional deduction incentive	Accelerated depreciation	The Board of Investment (BOI) tax incentive*	BOI non-tax incentive	Soft loans
Types of incentives	▶ Additional deduction	▶ Accelerated depreciation on qualifying R&D assets	▶ Tax holiday	▶ Non-tax incentives	▶ Loans

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

R&D additional deduction incentive

Description of benefits

Generally, Thai corporate entities are allowed to take a 100% tax deduction for expenses related to R&D activity. Pursuant to Royal Decree No. 598, which took effect on 25 February 2016, Thai corporate entities may take an additional 100% tax deduction (a double deduction) for R&D expenses paid to authorized government agencies or private R&D service providers.

Royal Decree No. 598 also provides for a further 100% tax deduction (a triple deduction) for R&D expenses incurred between 1 January 2015 and 31 December 2019, with threshold amounts depending on the gross revenue of the company.

Corporate entities that claim a deduction under this regulation are not entitled to claim a partial or full deduction under the investment promotion law.

Guidelines around incentive applications

The additional deduction is applicable to current investments and is claimed through an annual corporate income tax (CIT) return. To claim the R&D additional deduction incentive (i.e., double and/or triple deductions), the R&D service provider is required to obtain an authorized R&D service provider status by submitting the

application to the RD, and the service recipient is also required to have its R&D project certified by the NSTDA. Given that this incentive operates on a self-assessment basis, it is recommended that companies maintain all of their supporting documents (e.g., project papers, service receipts) in case they are requested or the incentive is challenged by the RD.

Accelerated depreciation

Description of benefits

Pursuant to Royal Decree No. 319, when acquiring new R&D equipment and machinery, the depreciation value (for the purpose of corporate income tax calculation) will be set at 40% of the asset cost at the acquisition date (depreciation tax for machinery is normally 20% for 5 years, with the balance to be depreciated over the next 4 years). To utilize this incentive, the following conditions must be met:

1. Such machinery or equipment must exclusively be for R&D activities, not for manufacturing or providing services
2. Such machinery or equipment must be used for basic industrial research, applied research or product quality testing
3. Such machinery or equipment must be brand-new with a life-span of two or more years and have a minimum product cost of at least THB100,000

Any losses incurred from the accelerated depreciation may be carried forward for five consecutive years.

Guidelines around incentive applications

The depreciation is applicable to current and future investments. Claiming the R&D double deduction incentive is based on a self-assessment process. Companies claiming the incentive can include qualifying accelerated depreciation expenses in their CIT computations and submit the annual CIT return (IT.50) to the RD without preapproval from the RD. (Note: the timeline for filing IT.50 is within 150 days from the end of an accounting period.)

BOI tax incentive

Description of benefits

Under the revised incentive, companies may receive benefits as follows:

- ▶ Exemption of CIT for up to 15 years
- ▶ Double deduction on expenses related to transport, electricity and water supply depending on investment location
- ▶ Exemption or reduction of import duty on machinery
- ▶ Exemption of import duty on raw or essential materials used in the manufacturing of export products

In addition, the government has set up a fund worth THB10,000 million to subsidize the R&D expenditures for the projects engaging in 10 target industries as follows:

1. Next-generation automotive
2. Smart electronics
3. Affluent, medical and wellness tourism
4. Agriculture and biotechnology
5. Food for the future
6. Agriculture and biotechnology
7. Automation and robotics
8. Biochemicals and eco-friendly petrochemical
9. Digital
10. Medical hub

Please note that apart from engaging in the certain businesses as described above, the applicant's business must also involve the use of high technology that has never been introduced to Thailand before. The BOI has been assigned as the lead authority in charge of considering the application.

Any losses incurred during the BOI tax exemption period can be used to offset against the net taxable profit for up to five consecutive years after the tax exemption period. To receive the BOI tax incentive, an application must be submitted to the BOI for approval. Companies are also required to provide a description of the scope of the R&D process, the number of researchers, their qualifications and R&D experience.

Guidelines around incentive applications

The BOI tax incentive is applicable to current and future investments. For a BOI-promoted company to use the BOI tax incentives in relation to CIT exemption for BOI business, the company must submit the request form for CIT exemption to the BOI for approval within 120 days after the end of an accounting period.

As for the THB10,000 million fund, the qualified company must submit the Competitiveness Enhancement application to the BOI for the board's consideration and approval. However, the approval process may be from 6 to 12 months (i.e., depending on the type of targeted industries and R&D project of the applicant). The amount of funding to be given to each applicant and re-payment term (if any) will be subject to negotiation with the relevant authorities.

BOI non-tax incentive

Description of benefits

With the BOI non-tax incentive, companies may receive benefits as follows:

- ▶ Unlimited number of visas and work permits for qualifying expatriates
- ▶ Eligibility to own land¹
- ▶ No foreign ownership restriction²

¹ Generally, a foreign investor is not eligible to own land under the Thai Land Code. However, the BOI-promoted company is able to own land for BOI business regardless of the percentage of foreign shareholder.

² Generally, a foreign-majority-owned company (i.e., a company that has foreigners holding more than 50% of its shares) are not allowed to engage in certain business activities, e.g., trading and service business, unless specific license is obtained.

Guidelines around incentive applications

The BOI non-tax incentive is applicable to current and future investments. To claim the BOI non-tax incentive, the company must receive approval on its eligibility from the relevant authorities such as the Land Department, Ministry of Commerce and Bank of Thailand.

Soft loans

Description of benefits

Companies engaged in an R&D project can receive a soft loan of up to THB30 million (but not more than 75% of project revenue) from the NSTDA. To receive soft loans, the R&D project should be related to product or production process development, reverse engineering, and the building or refurbishing of laboratories. Companies applying for a soft loan must be Thai-majority-owned companies and qualified as a small and medium-sized enterprise (SME) – i.e., having registered capital of not more than THB200 million (larger companies may be able to qualify for this grant on a case-by-case basis). In addition, the NSTDA must approve the R&D activity. The period of loan repayment is seven years starting from the first loan received.

Guidelines around incentive applications

The soft loan is applicable to current and future investments. The NSTDA and the financial institutions must consider and approve the grant of soft loans.

3. Eligibility requirements

Qualifying R&D activities are defined as follows:

- ▶ Basic research – theoretical or operational activities that are conducted to explore new knowledge from basic natural phenomena and factual observation, without initially considering the application
 - ▶ Applied science – research to explore new knowledge with an objective to put it into practice for specific use
 - ▶ Experimental development – a systematic operation based on the knowledge from research and/or experience with the objective of producing new materials, products or inventions; to install new procedures, systems and services; or to substantially improve the existing products
- Eligibility requirements for specific incentive types are as follows:
- #### R&D additional deduction incentive
- The R&D additional tax deduction is available only for payments to eligible Thai R&D service providers. To qualify as a Thai R&D service provider, a company should be engaged in basic research, applied science and experimental development activities and must receive approval from the RD.
- #### Accelerated depreciation
- Accelerated depreciation is applicable for machinery and related equipment used for an R&D project, provided that such machinery has never been used and the acquisition cost of the machinery exceeds THB100,000 with a minimum useful life of two years.
- #### BOI tax incentives
- ▶ The BOI application must be submitted to the BOI for approval, along with a description of the scope of the R&D process, the number of researchers, their qualifications and R&D experience.
 - ▶ R&D service providers that are BOI-approved must strictly comply with any conditions attached to the BOI certificate.
- #### Soft loans
- ▶ Soft loans for R&D projects will be available to support qualified costs, including salary costs, consultancy costs, training costs incurred for the project, expenditures incurred directly on R&D materials, and general overhead expenditures related to the R&D project.
 - ▶ To apply, the companies must be Thai-majority-owned, have registered capital of less than THB200 million and have a maximum of 200 employees.
 - ▶ Larger companies may be able to qualify for this grant on a case-by-case basis.
 - ▶ The companies must never receive other government financial support for the same R&D project.

4. IP and jurisdictional requirements

There are no jurisdictional requirements related to intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in Thailand.

6. Role of governmental bodies in administering incentives

The relevant Government agencies are as follows:

- ▶ Claims for R&D additional deductions may be reviewed by the Thai tax authority as part of its tax investigations or audits
- ▶ Accelerated depreciation: RD
- ▶ BOI tax incentive: BOI
- ▶ BOI non-tax incentive: BOI
- ▶ THB10,000 million fund for R&D expenditure: BOI
- ▶ Soft loans: NSTDA and Thai financial institutions

7. Administrative requirements

Given that the R&D incentive operates on a self-assessment basis, it is recommended that companies maintain all of their supporting documents (e.g., project papers, service receipts) in case they are requested or the incentive is challenged by the RD.

For BOI tax and non-tax incentives, the BOI application must be submitted to the BOI for approval, along with a description of the scope of the R&D process, the number of researchers, their qualifications and R&D experience. R&D service providers that are BOI-approved must strictly comply with any conditions attached to the BOI certificate.

For a BOI-promoted company to use the BOI tax incentives in relation to CIT exemption for BOI business, the company must submit the request form for CIT exemption to the BOI for approval within 120 days after the end of an accounting period.

No preapproval is required for foreign-majority-owned companies to claim additional deductions on the cost of engaging approved R&D service providers.

8. Statutory reference

- ▶ Royal Decrees No. 598 B.E. 2559 – corporate income tax special treatment (R&D expenses)
- ▶ Royal Decrees No. 319 B.E. 2541 – depreciation of assets used for R&D
- ▶ Royal Decrees No. 145 B.E. 2527 – depreciation of assets
- ▶ Investment Promotion Act B.E. 2520 and revision version B.E. 2560
- ▶ National Competitiveness Enhancement for Targeted Industries Act B.E. 2560

T

Turkey



Turkey

This chapter is based on information current as of February 2019.

EY contacts:

Serdar Altay
serdar.altay@tr.ey.com
+90 212 408 51 87

Ece Ünlü
ece.unlu@tr.ey.com
+90 212 408 59 56

Current supports have been expanded and additional supports have been introduced with the provisions of Law No. 6676 and secondary legislation, also known as the “R&D Reform Package.”

1. Overview

In recent years, many regulations have been introduced to increase competitiveness and economic development in Turkey. These regulations are intended to encourage R&D and human resource investments (i.e., investments in researchers and scientists) with the ultimate aim of reinforcing the technological development level of the country.

The first regulation introduced for the R&D incentive regime was Law No. 4691 (for Technology Development Zones), which became effective in 2001. Furthermore, the R&D reduction regime was added to the Corporate Tax Code in 2004 (Law No. 5746) to support R&D activities. The regime became effective on 1 April 2008 and is designed to provide reductions, exemptions, supports and other incentives to taxpayers carrying out eligible R&D activities. In addition, Law No. 5746 allows for the 100% R&D deduction, income tax withholding incentive, social security premium support, stamp duty exemption and customs duty exemption to taxpayers with eligible R&D activities.

Within the scope of Law No. 6676 (effective as of 1 March 2016) on the “Amendment of the Law on Supporting of Research and Development Activities and Certain Laws and Decree Laws,” also known as the “R&D Reform Package,” changes and additional supports have been introduced regarding the current R&D supports. Under Law No. 6676, design activities have been included in the scope of the incentives and supports for R&D activities in the R&D Law No. 5746 and Technology Development Zones Law No. 4691. Also, Law No. 6518 introduced corporate tax and value-added tax (VAT) exemptions to deliveries and services to be performed as of 1 January 2015 related to the inventions within the scope of R&D activities.

Types of incentives

Tax credits	<input type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input checked="" type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input checked="" type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

2. Incentives available

Names of incentives	R&D expense deduction	Tax exemptions	Cash grants	Income tax withholding incentives	Social security premium support	Stamp and Customs duty exemptions
Types of incentives	▸ Super deduction	▸ CIT and VAT exemption	▸ National and international cash grants	▸ Income tax withholding incentives	▸ Reduced social security contributions	▸ Tax exemptions

R&D expense deduction

Description of benefits

Taxpayers are granted the R&D expense deduction incentive mainly in two ways: through R&D/design centers and through R&D and innovation projects. The R&D expense deductions through both types are applied against the corporate income tax (CIT) base, and taxpayers may deduct 100% of R&D expenditures from the CIT base. In addition, taxpayers can take advantage of depreciation at a rate of 20% for five years for the R&D asset. Any amount that could not be deducted due to insufficient profit in the related period may be carried forward indefinitely. To receive the R&D and design deduction, a company must employ a minimum of 15 full-time-equivalent personnel for the R&D centers (30 for some sectors) and minimum of 10 full-time-equivalent personnel for design centers.

Half of the increase of the R&D and innovation expenses of the current year (compared with the previous year) is also considered within the scope of the R&D reduction if the R&D center achieves at least a 20% increase compared with the previous year in any of the following indicators:

- Ratio of the R&D or design expenditure to the total turnover
- Number of national or international patents registered
- Number of projects supported internationally

- Ratio of the number of researchers with a graduate degree to the total number of R&D personnel
- Ratio of the number of total researchers to the total R&D personnel
- Ratio of the turnover generated from new products derived from R&D activities to the total turnover

New regulation

Starting from 1 May 2018, the taxpayers operating under the Law on Support of Research, Development and Design Activities No. 5746, Technology Development Zones No. 4691 and Supporting Research Infrastructures No. 6550 can issue the depreciation rates and periods to be applied for new machinery and equipment acquired until the end of the calendar year 2019 and calculate by taking into account half the useful life of the asset, in accordance with Article 315 of the Tax Procedure Law.

In the event that the useful life of the asset becomes excessive in this calculation, the depreciation rates and durations to be applied to the related assets shall be determined by completing the higher digit number and the rates and durations determined in such manner shall not be changed in the following years.

The Ministry of Finance has been authorized to determine the procedures and principles regarding the implementation of the regulation.

Guidelines around incentive applications

The R&D deduction is applicable for current investments. The amounts of R&D deduction calculated over the expenses incurred as of the advance tax periods of the taxpayer can be deducted from the income in the tax return of the related advance tax period.¹ The final and certain amounts of R&D deduction are calculated at the end of the year and deducted from the income in the corporate tax return, which can be submitted to the tax office until 25 April (fourth month following the month the fiscal period ends).

Tax exemptions

Description of benefits

Technology Development Zones (TDZ) incentives: in Turkey, there are 69 Technology Development Zones (TDZs), and 56 of them have been opened to active business. TDZ incentives are provided to businesses operating in the TDZs. Gains derived by taxpayers operating in TDZs exclusively from software, R&D and design activities carried out in these zones are exempt from income and corporate tax until 31 December 2023. The incentives provide either R&D expense deduction (R&D incentives) or tax exemption from corporate tax and VAT for income derived from R&D and software activities in TDZs. Other forms of support for R&D activities in TDZs are payroll income tax exemption, stamp tax exemptions and social security premium support for R&D personnel wages.

On the other hand, in October 2017, Decision of the Council of Ministers No. 2017/10821 was issued. Within the scope of the decision, exemption of corporate and income tax from sale, transfer and leasing of intangible rights acquired in Technology Development Zones depends on two important criteria:

- (1) Affiliation of intangible right to patent or equivalent certificate (such as patent certificate, utility model certificate, design registration certificate, copyright registration certificate, integrated circuit topography registration certificate, breeder's right registration certificate of new plant varieties)

¹ Statutory due dates for filing the advance tax returns in Turkey are as follows: Q1 – 14 May 2018, Q2 – 14 August 2018, Q3 – 14 November 2018, Q4 – 14 February 2019.

- (2) Restriction of earning with the share of qualified expenditures in total expenditure

Type of expenditure	Qualified expenditure	Total expenditure
Expenditures made by taxpayer and directly related to intangible rights	Including	Including
Benefits and services provided by unrelated institutions	Including	Including
Interest expenses	Excluding	Excluding
Building costs	Excluding	Excluding
Any cost element not directly related to software, design and R&D activities	Excluding	Excluding
Purchasing price of intangible rights (including license fees and similar prices)	Excluding	Including
Benefit and service price provided by related resident persons domestic	Including	Including
Benefit and service price provided by related resident persons abroad	Excluding	Including

The Council of Ministers has been authorized to apply the exemption at the time the application for patent right is made provided that the application is made until the end of the corporate tax return filing date of the year in which the income is generated.

Exemption on intellectual property (IP) rights: corporate tax and VAT exemptions apply to the transfer, sale and leasing of patented inventions or inventions with utility model certificates. The corporate tax exemption applies to 50% of the income derived from the transfer, sale or leasing of these intangible rights from 1 January 2015.

Furthermore, the corporate tax exemption applies to 50% of the income attributed to the intangible rights derived from the sale of invented manufactured products.

Finally, if the intangible patented right is used in the manufacturing of any other product, 50% of the income attributable to the intangible right gained as a result of the sales of the manufactured product is exempted from corporate tax.

Guidelines around incentive applications

TDZ incentives: gains derived by taxpayers operating in TDZs exclusively from software, R&D and design activities carried out in these zones are exempt from income and corporate tax until 31 December 2023. If the R&D deduction is applied, then VAT or income tax exemption cannot be used. To benefit from R&D deduction in a TDZ, there must be an R&D project approved by the Scientific and Technological Research Council of Turkey (TÜBİTAK). A preapproval is required to receive the incentives in a TDZ.

Exemption on IP rights: receiving a patent upon the examination of the Turkish Patent Institute or utility model certificate as a result of a positive research report is a condition for benefiting from exemption. Not exceeding the period of protection offered for the patent and utility model certificate is another condition.

Cash grants

Description of benefits

TÜBİTAK provides up to 60% in a cash grant to certain portions of the eligible R&D expenses. Preapproval from TÜBİTAK is required to obtain the cash grants. Cash grants are not subject to corporate tax provided that the cash grant amount is recorded to a "fund" account in the balance sheet. R&D expenditures corresponding to this fund amount cannot be used as a deduction from the corporate tax base.

Guidelines around incentive applications

The cash grant is applicable for current investments. Companies that will benefit from cash grants for their R&D projects must submit a financial report to TÜBİTAK, and tax returns are not used to benefit from cash grants. The financial report, consisting of the expense forms, documents and necessary attachments related to the supported projects, other supporting forms and complementary financial documents, should be submitted to TÜBİTAK by 30 September (following the first financial

period) and by 31 March (following the second financial period), respectively.²

For cash grants in the employment of basic science graduates, personnel in question must have been recruited and employed for the first time after (and including) the date of 1 March 2016. Furthermore, the amount of supports that can be provided for each R&D or design center is limited to 10% of the total number of personnel employed at the R&D/design center in the month in question.

Income tax withholding incentives

Description of benefits

Income tax calculated on wages earned by the R&D and assisting personnel shall be canceled at 95% for personnel with a doctorate degree or at least one graduate degree in one of the basic sciences, 90% for those with a graduate degree or an undergraduate degree in one of the basic sciences, and 80% for other personnel by deducting from the tax accrued over the withholding tax return to be submitted.

To be accepted as an R&D center, a company must continuously employ a minimum of 15 (30 for some sectors and 10 FTE for design centers) full-time-equivalent personnel in quarters (the advance taxation period). The income tax withholding incentive will not be applicable in the following situations:

- ▶ In cases where the project is terminated or where project support has ended, as of the termination date, the R&D and innovation activities will also be deemed to have been ended.
- ▶ In cases where the R&D center does not continuously employ 15 and design center 10 full-time-equivalent personnel (30 in some sectors) in the advance taxation period, the incentive will not be applicable.

² Financial and technical reports are prepared for two periods: 1 January-30 June (first period) and 1 July-31 December (second period).

The number of full-time-equivalent support staff that benefit from the incentives for income tax withholding may not exceed 10% of the total number of full-time-equivalent R&D/design personnel. Fractions in calculations are rounded up to the whole number. If the full-time-equivalent number of support staff exceeds 10% of the total number of full-time R&D or design personnel, the staff to benefit shall be determined by starting from the wage of the support staff member with the lowest gross wage. If the wages of those within the scope of benefit are equal, the determination shall be performed by the employer. A preapproval process is required to obtain the incentive.

Guidelines around incentive applications

The incentive is applicable for current investments: 95%, 90% and 80% of the income tax calculated over the wages of R&D and support staff shall be canceled by deducting from the tax accrued over the withholding tax return to be submitted. A withholding tax return is submitted until the 23rd of the month following the month the wages are paid (e.g., a withholding tax return related to July is submitted 23 August).

Social security premium support

Description of benefits

For R&D, design and support personnel who work in an R&D or design center on R&D and innovation projects, half of the social security employer's share calculated on the remunerations received by R&D, design and support personnel in return for R&D and design work can be paid from a fund to be placed in the Ministry of Finance budget.

The full-time-equivalent support personnel who benefit from the employer share insurance premium cannot exceed 10% of the number of total full-time-equivalent R&D personnel. If the number of the support personnel exceeds 10% of the total full-time-equivalent R&D personnel, the insurance premium employer's share incentive is applied starting from the wage of the support personnel member with the lowest gross salary. If the gross salaries are the same, the support personnel to benefit from the insurance premium employer's share incentive shall be determined by the employer. Preapproval is required to receive the support.

Guidelines around incentive applications

The incentive is applicable for current investments. Tax returns are not used to benefit from social security premium support. Social security premium support may be applied to premiums accrued due to the monthly premium and service documents issued in the scope of Law No. 5510. Monthly premium and service documents are submitted until the 23rd of the month that follows the month the wages are paid.

Additional support for basic science graduates

Description of benefits

In case of employment of new R&D/design or software personnel with at least an undergraduate degree in basic sciences (physics, chemistry, biology or mathematics) to R&D/design center or TDZ entrepreneur company, the part equal to the monthly gross amount of the minimum wage will be paid from the fund to be placed in the budget of the Ministry for two years.

Guidelines around incentive applications

To benefit from this support, the following requirements must be considered:

- ▶ Personnel to be hired must first be recruited to the company following the date of 1 March 2016 (inclusive).
- ▶ The support provided to each R&D/design center of TDZ entrepreneur company is limited to 10% of total number of recruited personnel during the related month.
- ▶ Salary payment documents must be submitted to related institution (Science, Industry and Technology Ministry for R&D/design centers or Management Company for TDZ company).
- ▶ The supported and paid amount must be followed on "Special Funds" account.

Stamp duty exemption

Description of benefits

A range of documents (e.g., contracts and payroll slips) issued in relation to R&D, design and innovation activities (including the documents issued for the wage payments made to R&D or design personnel) are exempt from stamp tax. For applying the stamp tax exemption, preapproval from the authorized Government entities (i.e., TÜBİTAK) is sufficient.

Goods imported from foreign countries in the scope of R&D projects are exempt from customs duties, and all kinds of funds, while papers issued and transactions conducted within this scope are exempt from stamp duty and fee.

Guidelines around incentive applications

The incentive is applicable for current investments. The wages of R&D and support personnel are exempted from stamp tax, and the amounts of exemption are not shown in the withholding tax return in any separate section. For the other documents regarding R&D activities, it is sufficient to deliver the list determining and supporting performed transactions in scope of the R&D activity confirmed by the applied public institution and foundation to the institutions and foundations carrying out transactions during the transaction to implement the stamp duty exemption.

Customs duty exemption

Description of benefits

Goods imported from foreign countries within the scope of R&D or design projects are exempt from customs duties, and all kinds of funds, while papers issued and transactions conducted within this scope are exempt from stamp duty and fee.

Guidelines around incentive applications

The incentive is applicable for current investments. Enterprises that have R&D or design center certification must apply to the Customs and Trade Ministry using an e-application. Enterprises benefiting from project-based support and incentives must apply to the institution or organization that provides cash support.

Value-added tax exemption

Description of benefits

New machinery and equipment deliveries made for the exclusive use of R&D, innovation and design activities are exempted from VAT from 1 May 2018 to 31 December 2019:

- ▶ R&D and design centers within the scope of the Law on the Support of Research, Development and Design Activities Law No. 5746
- ▶ Technology development zone and specialized technology development zone, covered by the Technology Development Zones Law No. 4691
- ▶ Research laboratories covered by Law No. 6550 on Supporting Research Infrastructures

Guidelines around incentive applications

Within three years from the beginning of the calendar year following the date of delivery of the machinery and equipment taken within the scope of exception; in the case of use or exclusion from the activities of R&D, innovation and design activities, the tax that is not taken in time shall be collected from the buyer by applying the tax penalty and interest. The taxation with the tax not taken in time will start from the beginning of the calendar year following the date in which the statute of limitations, the condition of the taxpayer or the order in which the punishment is to be cut down has come to fruition.

3. Eligibility requirements

Qualifying activities include the following:

- ▶ Obtaining new technical information for the development of science and technology with the aim of clarifying the ambiguities in scientific and technological fields
- ▶ Developing new products, materials, supplies, devices, equipment, procedures and systems through new methods and producing new techniques and prototypes through design and drawing studies
- ▶ Performing software activities based on new and original designs
- ▶ Researching and developing new productions, methods, processes and procedures
- ▶ Researching new techniques and technologies that decrease the cost of a product while increasing its quality, standard or performance
- ▶ Measuring the usability of the products obtained during the phase of final product formation and testing them within and outside of the enterprise, then making necessary adjustments
- ▶ Performing design activities for increasing, developing and differentiating the products with the potential to create added value and competitive advantage

The following expenses are considered within the scope of R&D, design and innovation activities:

- ▶ Personnel expenses (i.e., salaries and wages)
- ▶ Raw material and supplies expenses
- ▶ General expenses
- ▶ Benefits and services obtained from the outside (cannot exceed 50% of total R&D and innovation expenses)
- ▶ Depreciation
- ▶ Taxes, duties and charges that are directly related to R&D activities

The incentives are not limited to a specific industry or entity.

4. IP and jurisdictional requirements

The IP that emerges at the end of the R&D project can also be registered or owned abroad. However, to benefit from the R&D incentives, R&D activities should be performed in Turkey.

5. Technology or innovation zones

See "Tax exemptions" under Section 2 for a description of TDZ incentives.

6. Role of governmental bodies in administering incentives

Entities wishing to receive R&D or design center certificates should prepare an application including the information and documents required by the Republic of Turkey Ministry of Science, Industry and Technology. Entities that do not have R&D or design center certificates should obtain approval from TÜBİTAK or other authorized Government institutions for R&D projects to benefit from R&D deductions. TÜBİTAK also provides cash grants for R&D projects. To benefit from TDZ incentives, taxpayers performing software development, design or R&D activities must apply to Management Company of related Technology Development Zone.

7. Administrative requirements

To benefit from R&D or design incentives through R&D or design projects, taxpayers should have an R&D or design center certificate or obtain approval from TÜBİTAK or other authorized Government institutions.

To receive support and incentives under the R&D and Design Law and obtain an R&D/Design Center License, taxpayers must meet the following minimum requirements:

- ▶ Employ at least 15 full-time equivalent R&D personnel (30 for some sectors) for R&D centers, 10 full-time equivalent design personnel for design centers
- ▶ Perform R&D or design activities in Turkey
- ▶ Have adequate R&D/design management and technological assets, human resources, intellectual property, project and information resources management capability and capacity
- ▶ Have eligible projects with the subject, duration, budget and personnel needs defined
- ▶ Be organized in a separate unit and located within a single campus or physical space

R&D expense deduction

Entities that would like to have an R&D/design center certificate should prepare an application including the information and documents required by the Republic of Turkey Ministry of Science, Industry and Technology. Entities are required to receive an approval from TÜBİTAK or other authorized Government institutions for new R&D activities to receive the R&D expense deduction on a project basis.

Documents related to the process of the R&D and innovation projects conducted within R&D centers and R&D projects should be submitted to the affiliated tax offices with annual income and corporate tax returns to benefit from the R&D deduction. Expenses made within R&D/design centers or R&D projects and included in the R&D deduction should be certified by a sworn-in certified public accountant.

Tax exemptions

TDZ incentives: to receive this incentive, taxpayers must apply to the Ministry of Finance. For information purposes, they must attach documentation proving the employment of the taxpayers in the region and their fields of occupation to the application. The associated entrepreneurs must provide the Ministry of Finance a list approved by the managing company of all the researchers, software engineers and R&D personnel it employs, with descriptions of their functions, attributes and duration of their employment on the R&D projects, on a monthly basis.

Exemption for IP rights: to receive the exemption, taxpayers need to issue a valuation report (in the first year of entitlement to tax exemption, the valuation report for the assessment of the value of the invention in case of transfer or sale by taking into account the value added created by the invention). The valuation report to be prepared by the taxpayer shall contain the values that will be determined separately according to the determined methods (cost-based methods, market method, income-based methods and other valuation methods) and calculations about the determination of these values with respect to patented inventions or inventions with utility model certificates.

Cash grants

There are two main phases of the operation of cash grants provided by TÜBİTAK:

- ▶ The application and evaluation phase: the company applies for the project, which is then accepted for preliminary examination by a TÜBİTAK expert and sent to independent examiners who will prepare evaluation reports. Upon completion of evaluation reports, the relevant technology group committee discusses the project proposal in order to grant a final decision of acceptance or rejection.

- ▶ The monitoring and granting phase: for accepted projects, the project agreement is signed by the company and TÜBİTAK. Afterward, the company is required to send financial and technical reports to TÜBİTAK semi-annually during the project. Expenses done by the firm within the scope of project must be examined and approved by a sworn-in certified public accountant. The financial and technical situation of the project is evaluated by independent examiners who are experts/academicians in the field of the project topic. The accepted amount of expenses is multiplied by the program's grant ratio, and the respective amount of grant is deposited to the company's account.

Cash grants are not subject to corporate tax provided that the cash grant amount is recorded to a "fund" account in the balance sheet. R&D expenditures corresponding to this fund amount cannot be used as deduction from the corporate tax base.

Income tax withholding incentives

In R&D or design centers, the income tax withholding incentive will be benefited from the date when the R&D or design center certificate is issued. For R&D/design and innovation projects supported by public bodies and foundations established by law or international funds, or managed by TÜBİTAK, it is as of the date when the support decision letter is issued or when the project contract is enforced. In TDZs, 100% of R&D personnel wages is exempted from income tax withholding; the figure is 80% to 95% in R&D or design centers.

Social security premium support

As long as the income tax exemption is applied for personnel, half of the employer's insurance premium calculated over the exempted wage amounts will be funded by the Ministry of Finance.

Stamp duty exemption

To apply the stamp tax exemption, it is sufficient to submit the project proposal detail list or support decision letter or project agreement to institutions and organizations that conduct the transactions, such as notary, state offices, other public institutions and organizations during the transaction.

To apply the customs duty exemption, enterprises that have an R&D or design center certificate must apply to the Customs and Trade Ministry using an e-application, and enterprises benefiting from project-based support and incentives must apply to the institution or organization that provides cash support.

8. Statutory reference

- ▶ R&D expense deduction, income tax withholding incentives, social security premium support and stamp duty exemption: Law No. 5746, which became effective on 1 April 2008 (revised on 10 August 2016) and will be in force until 31 December 2023.
- ▶ For TDZ incentives: Law No. 4691 on Technology Development Zones. This law became effective on 6 July 2001 (revised on 10 August 2016) and the tax incentives granted to the taxpayers with this law are valid until 31 December 2023.
- ▶ Cash grants (provided by TÜBİTAK): TÜBİTAK Regulation on Technology and Innovation Support Programs, 1995
- ▶ Exemption for IP rights: Law No. 5520, Article 5/B

U

United Kingdom



United Kingdom

This chapter is based on information current as of February 2019.

EY contact:

Frank Buffone
fbuffone@uk.ey.com
+44 20 7951 1991

The Research and Development Expenditure Credit (RDEC) is a taxable credit paid at a headline rate of 12% from 1 January 2018 (previously 11% from 1 April 2015). For a 19% taxpayer, this typically results in a 9.72% net benefit after tax. The main reason for introducing the RDEC scheme is to increase the visibility and certainty of UK R&D relief. Another aim is to provide greater financial support to loss-making companies by having the RDEC payable even where there is no corporation tax liability, subject to certain caps. Another major R&D development was the incorporation of the “modified nexus” approach to the patent box regime, as required by the outcome of Action 5 of the BEPS project.

1. Overview

Available incentives include R&D tax relief, an R&D tax credit and an R&D allowance (for capital expenditures). An incentive is also available that provides a reduced effective rate of corporation tax of 10% on certain profits derived from qualifying patents and other similar IP rights (the patent box).

R&D tax relief is currently available for large companies as a Research and Development Expenditure Credit (RDEC) claim. An 11% tax credit is available for qualifying expenditures from 1 April 2015, and from 1 January 2018 the tax credit rate was increased from 11% to 12%.

Small and medium-sized enterprises (SMEs) are eligible to claim a more generous enhanced deduction. The criteria for qualification as an SME, however, are complicated. To qualify as an SME, a company must have fewer than 500 employees, an annual turnover not exceeding EUR100 million or an annual balance sheet total not exceeding EUR86 million, and no more than 25% of the company share capital owned by large enterprises. Other specific circumstances can prevail, but this is a particularly complex area of legislation.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input checked="" type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input checked="" type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input checked="" type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

An R&D capital allowance is available for capital expenditures incurred on R&D assets. A first-year allowance of 100% is available in relation to qualifying expenditures. This allowance is set out within Section 437 of the Capital Allowances Act 2001.

The UK tax authorities typically play a helpful role in the claim and audit process, and as such, these incentives are considered something taxpayers should be taking advantage of. The incentives are treated the same as any other tax rules; they are strictly enforced and audited like other expenses. The tax authorities may audit the expenditure incurred and the eligibility of the activities undertaken.

The UK R&D regime is a mature scheme. Companies have been eligible to claim under the large company scheme since 1 April 2002, and the SME regime commenced in 2000.

The corporation tax rate within the UK is 19% for expenditures incurred beginning 1 April 2017.

The UK patent box regime has been phased in since 1 April 2013. Most recently, the regime has been adapted to incorporate the “modified nexus” approach required by the Organisation for Economic Co-operation and Development in accordance with the outcome of Action 5 of the Base Erosion and Profit Shifting (BEPS) project. While the regime is relatively new, as with R&D, the UK tax authorities typically play a helpful role in the election and computation process, and as such, this incentive is considered something taxpayers should be taking advantage of. However, the patent box is part of the usual corporation tax framework; therefore, tax authorities may audit the calculation and the qualifying criteria on which it is based.

In addition to tax incentives, the UK Government and associated agencies offer a number of grant and loan schemes aimed at stimulating overall economic growth and/or R&D in priority technology domains. These are typically implemented through scheduled open “competitions” for applications, judged on a competitive basis for millions of British pounds in funding. Specific programs include:

- ▶ The Local Growth Fund: Drawn from the budgets of existing Governmental Departments, the Local Growth Fund promises to distribute at least £2 billion a year from 2015-16 among the 39 Local Enterprise Partnerships (LEPs) located across England. Of that sum, loans and cash grant funding are made available at a local level to support capital and revenue investments, including R&D projects focused around economically challenged regions, and the creation of sustainable new jobs.
- ▶ Innovate UK: An agency of the Department for Business, Energy & Industrial Strategy, Innovate UK connects technology communities (academia, research establishments, industry) and allocates around £200 million of its £600 million budget in direct grant funding every year on R&D projects run by companies of all sizes in a wide range of technology sectors. Current priorities for funding include emerging and enabling technologies, health and life sciences, manufacturing and materials, and infrastructure systems projects. There is also an open innovation competition.

There are also a number of other complementary grant schemes available across the UK and the regions that focus primarily on R&D and job creation.

2. Incentives available

Names of incentives	Super deduction	Tax credits*	Research and development allowance (RDA)
Types of incentives	▶ An enhanced deduction over and above the usual corporation tax deduction	▶ A credit to operating income as a percentage of qualifying spend	▶ First-year allowance on qualifying capital expenditure

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors.

Super deduction

Description of benefits

A governmental allowance is available for companies that incur qualifying expenditures during the resolution of technological and scientific uncertainties. In general, the R&D scheme is available for eligible revenue spending (separate large company and SME schemes are available), and the research and development allowance (RDA) scheme is available for eligible capital spend (available to all companies). The R&D incentive is currently available for SME companies as an enhanced deduction of 230% from 1 April 2015 of qualifying spend. This deduction is available before tax as a deduction against taxpayers' profits chargeable to corporation tax. The enhanced deduction scheme for large companies is no longer available after the accounting period ending 31 March 2016.

A cash refund may be obtained for SMEs making a claim if the enhanced deduction exceeds the company's tax base for that given year. The cash refund is calculated from £32.63 to £33.35¹ cash back for every £100 of qualifying eligible expenditures.

Guidelines around incentive applications

The super deduction is applicable to qualifying expenditures, expensed to a company's profit and loss account. The claim must be filed within two years of the end of the accounting period to which it relates; therefore, companies may file amended claims up to the first anniversary of the filing deadline for the tax return.

Tax credits

Description of benefits

Large companies incurring qualifying R&D expenditures after 1 April 2013 are entitled to elect to make an R&D Expenditure Credit (RDEC) claim. A 12% (currently

¹ From 1 April 2014, the rate of R&D payable tax credit for loss-making SMEs increases from 11% to 14.5%. Consequently, this increases the cash credit payable to loss-making SMEs undertaking qualifying R&D from £32.63 to £33.35 cash back for every £100 of qualifying eligible expenditures.

9.72% post-tax) taxable credit is available for qualifying expenditures from 1 January 2018. This is an increase from the previous rate of 11% (8.8% post-tax) which was for expenditures incurred from 1 April 2015. Under the tax credit scheme, a repayable credit may be available in certain circumstances. The repayable credit is available to companies with no current-year corporation tax liability.

The initial tax credit (known as the set-off amount available to the company, which is calculated as 11%/12% of the qualifying R&D expenditure) is subject to corporation tax and pay-as-you-earn (PAYE) and national insurance contributions (NIC) caps, and is also reduced by any current-year corporation tax payable or other tax liabilities of the entity. There are some other restrictions but, subject to there being a positive set-off amount once all restrictions have been made, a repayable credit will be available. If the PAYE and NIC caps limit the credit available, the amount it is limited by is carried forward to the next accounting period.

Guidelines around incentive applications

The tax credits are applicable for current investments. Claims must be filed within two years of the end of the accounting period to which they relate; therefore, companies may file amended claims up to the first anniversary of the filing deadline for the tax return.

RDA

Description of benefits

Capital expenditures on R&D attract a first-year allowance of 100% on the qualifying expenditures. This includes expenditures on plants, machinery and buildings (but not land) used for the purposes of carrying out R&D activities. The RDAs give businesses an enhanced rate of capital allowances in the accounting period in which the expense is incurred.

Guidelines around incentive applications

The RDA applies to current investments and is claimed through the corporation tax return. The claim must be filed within two years of the end of the accounting period to

which it relates; therefore, companies may file amended claims up to the first anniversary of the filing deadline of the tax return.

3. Eligibility requirements

For there to be R&D for the purpose of the tax relief, a company must be carrying on a project that seeks an advance in science or technology. The advance being sought must constitute an advance in the overall knowledge or capability in a field of science or technology, not a company's own state of knowledge or capability alone. Qualifying expenses include staff costs, externally provided workers (subcontract expenditure for SMEs only), materials used up in the R&D process (consumables),² software and software licenses, utilities (water, fuel and power), and payments to universities or other research organizations to do R&D. There is no restriction in relation to the type of industry the entity must belong to in order to make a claim.

4. IP and jurisdictional requirements

There is no requirement that the company receiving the R&D incentive (whether it be an R&D tax relief, an R&D tax credit or an R&D allowance) must own the intellectual property arising from the R&D expenditure. There is also no requirement that the R&D be performed within the UK for the expenditure to be eligible for the incentives available.

Patent box regime

Overview

The patent box regime provides for an effective rate of corporation tax of 10% on profits derived from qualifying patents and certain similar IP rights. It applies to such profits arising after 1 April 2013 (phased in over four years). There are no restrictions on when a patent was granted, and profits earned while a patent is pending (up to six years) can be included in the accounting period of the grant.

² From 1 January 2015, raw materials used in sold products are no longer eligible R&D costs.

Broadly, if the qualifying criteria are met (see below), the calculation of the benefit starts with the identification of relevant income. The types of income are very broad. For example, a product only needs to contain one patented component for all the income from sale of that product to fall within the regime. Income may also derive from the license of patents (and potentially other rights licensed alongside the patent and for the same purpose) and the use of patented technology within a business (i.e., exploitation within the business rather than monetization through sales of products or licenses), in which case a notional royalty calculation for the value of the patented technology is undertaken to determine the relevant income.

An important point to note is that the R&D tax regime and the patent box work side by side. In other words, where a company has taken advantage of one of the R&D incentives, this does not dilute its patent box benefit.

Qualifying IP

The patent box regime is available to UK companies that hold or exclusively license granted UK or European patents (in addition to patents granted by a number of other selected European Economic Area member states that have similar examination and patentability criteria to the UK). The regime cannot be accessed by holding rights such as copyrights, trademarks or designs.

Qualifying development

The patent box company, or a group member, must have created or significantly contributed to the creation of the patented invention or have performed a significant amount of activity to develop the patented invention, any product incorporating the patented invention or any process incorporating the patented invention. If a group member has performed the development activity, the patent box company must be actively managing the resultant patent rights.

Regime changes: the "modified nexus" approach

From 1 July 2016, the UK patent box regime has been changed to align with the outcome of Action 5 (Harmful Tax Practices) of the BEPS project. Subject to "grandfathering" (see below), from 1 July 2016, the company must break down its overall patent box profit into separate profit streams attributable to individual patents, products or product families and then apply a "nexus fraction" to each resultant profit stream.

The nexus fraction applied to each profit stream looks at the level of R&D undertaken by the company itself (which includes R&D performed under externally provided worker arrangements), plus R&D contracted out to third parties by the company, relative to the total R&D (i.e., the R&D undertaken by the company, the R&D contracted out to third parties and the R&D subcontracted out to group members) plus any acquisition costs related to each patent/product or product family in question.

Under the modified nexus regime, the location and structuring of the R&D activity within a wider group is therefore very important in determining the level of ultimate benefit.

Grandfathering into the old regime

Where the grandfathering conditions are met, it will be possible for a company to continue to use the pre-modified nexus rules with respect to the relevant qualifying IP rights until 2021. The grandfathering conditions can be met with respect to qualifying IP rights that either existed at 30 June 2016 or result from patent applications filed by 30 June 2016. To attain grandfathered status with respect to these rights, a patent box election must also be made within two years of the end of the accounting period in which 30 June 2016 was included. Where a company has qualifying IP rights that do not meet the above criteria (or it otherwise elects), the company will fall under the modified nexus rules from 1 July 2016. It is possible (and expected) that many companies will have both grandfathered patents and non-grandfathered patents, with some profits therefore being outside modified nexus until 1 July 2021 and some profits being subject to these rules from the outset.

Can R&D activity still be performed outside the country for patent box purposes?

The answer is yes, but the immediate impact on the patent box calculation will depend upon whether the qualifying IP rights to which the R&D relates are grandfathered. If they are, then the fact that the R&D is undertaken outside the UK will only have an impact if it is undertaken by connected parties and then not until 1 July 2021 (although because the nexus fraction is cumulative, if R&D has been undertaken outside the UK by the connected party from 1 July 2016, this will have an impact on the patent box

calculation from 1 July 2021). If the nexus rules apply from 1 July 2016, however, then the amount of R&D performed outside the UK by connected parties is likely to have an immediate effect on the amount of benefit that can be obtained through the patent box regime.

5. Technology or innovation zones

There are no technology or innovation zones in the United Kingdom.

6. Role of governmental bodies in administering incentives

Companies may file both an R&D claim and an RDA claim annually within their corporation tax returns. HM Revenue & Customs, the UK governmental body, then reviews it. Eligibility is determined by an engineer within the company, the so-called competent professional. HM Revenue & Customs is also responsible for reviewing patent box claims.

7. Administrative requirements

The claim must be filed within two years of the end of the accounting period to which it relates. Therefore, companies may file amended claims up to the first anniversary of the filing deadline for the tax return.

8. Statutory reference

Schedule 15, Chapter 29 of Corporation Tax Act 2009 and Chapter 6a, Part 3, Corporation Tax Act 2009. Part 6 s 437 of Capital Allowances Act 2001.

U

United States



United States

This chapter is based on information current as of February 2019.

The US research credit permanent status was unchanged under P.L. 115-97, commonly known as the Tax Cuts and Jobs Act (TCJA), and its importance continues to be recognized in the eyes of many clients. They place a high value on the credit, and they are willing to invest more into the process that they are employing to calculate and document it.

1. Overview

In the US, a nonrefundable tax credit is available for certain qualified research expenses (QREs) incurred in the US that exceed one of two computed base amounts. This tax credit may be used by a business to reduce its federal tax liability. A deduction is also allowed under Internal Revenue Code (IRC) Section 174 for 100% of the expenses of research and development (R&D) (other than expenses associated with the acquisition of depreciable property – e.g., building, equipment). However, if a taxpayer claims both the research credit and the deduction under IRC Section 174, certain limitations on these benefits will apply under IRC Section 280C.²

The QREs eligible for the research credit are a subset of the expenses eligible for the deduction, as QREs are generally measured as direct expenses of R&D without including overhead expenses or indirect expenses. QREs generally include wage, supply and a portion of contract or third-party expenses incurred within the United States.

¹ This chart is for federal purposes only. Various states may offer additional research incentives (e.g., cash grants, loans). Please check with your local EY Quantitative Services (QS) professional for a complete state-by-state list.

² IRC Section 280C(c)(1) requires taxpayers who claim the research credit to reduce their Section 174 deduction by an amount equal to the research credit or alternatively, allows taxpayers to elect to claim a reduced research credit instead of a reduced Section 174 deduction.

EY contacts:

Craig M. Frabotta
craig.frabotta@ey.com
+1 216 583 4948

David S. Hudson
david.hudson@ey.com
+1 202 327 8710

Alexa Claybon
alexa.claybon@ey.com
+1 720 931 4604

Josh Perles
joshua.perles@ey.com
+1 202 327 6535

Types of incentives¹

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input type="checkbox"/>
Reduced tax rates/preferable tax rates	<input type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input type="checkbox"/>
Tax deduction (including super deduction)	<input checked="" type="checkbox"/>
Tax exemptions	<input type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input type="checkbox"/>
Tax holiday	<input type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other	<input type="checkbox"/>

Most of the 50 US states permit a deduction for R&D expenses that is identical to the federal deduction. Approximately two-thirds of the states also offer a research credit for state tax purposes. Many states model their research credit on the federal credit; however, the credit is generally permitted only for QREs incurred within the state, and the state credits can vary dramatically between jurisdictions. For example, some states do not require a business to increase its QREs (as the federal credit does) in order to receive a credit. Often the types of expenses that qualify for the credit are different, and the percentages of QREs used to compute the credit also differ. For most businesses, their federal research credits are larger than their state research credits, but that is not always the case.

Although the federal research credit had always been a temporary provision in the law requiring an act of Congress to renew it year after year, the termination provision was removed in 2015, seamlessly extending the research credit permanently for amounts paid or incurred after 31 December 2014. In addition to making the credit permanent, other changes made in 2015 to the research credit benefit “eligible small businesses” that can now claim the credit against alternative minimum tax (AMT) and other “qualified small businesses” that may apply the research credit against the employer’s payroll tax liability.³ Generally, most state research credits continue to be permanent.

2. Incentives available

Names of incentives	Research credit	Tax deduction*
Types of incentives	▸ Tax credit	▸ Tax deduction

* Although not based upon scientific analysis, EY clients report that this incentive delivers more beneficial results to investors in general; however, the results depend on the taxpayers’ facts and circumstances.

Research credit

Description of benefits

Federal and state research credits for certain QREs incurred in the US may be used by a business to reduce its federal and state tax liabilities. These are statutory tax incentives with specific amounts and applicability defined in the statute at either the federal or state level. In general, the federal credits are non-refundable, while some state credits are refundable. In addition, some state credits may have the potential to be purchased or sold to the benefit of the taxpayer.

The federal research credit is designed to reward a business for performing research in the United States and for increasing its spending on research; thus, a taxpayer must determine the increment of its current-year QREs over a

computed base amount to claim the research credit.

Section 41 of the Internal Revenue Code provides two methodologies for computing the research credit:

- **Regular credit:** The regular credit is computed by measuring spending as a percentage of a business’s gross receipts. Thus, if a business is increasing its QREs as a percentage of gross receipts measured against a historic period (generally 1984-88), it will likely be eligible for the regular credit. The maximum cash benefit in tax savings for the regular credit is about 7.9% of a business’s QREs, but the benefit may be smaller.
- **Alternative Simplified Credit (ASC):** The ASC is a much simpler way to compute the research credit. Generally, the credit is equal to 14% of a business’s increase in QREs in the current year, over 50% of the average QREs for the prior three years.

³ Under the TCJA, corporate AMT was repealed for tax years beginning after 31 December 2017. Therefore, the AMT offset provision only applies to partnerships and sole proprietorships for tax years beginning 2018 and after.

The net benefit of the reduced research credit that taxpayers can elect under Section 280C (mentioned above) was indirectly increased by the lower corporate tax rate passed under the TCJA. The Section 280C reduced credit is net of the highest tax rate. Prior to the TCJA, the highest tax rate was 35%, and post-TCJA the new rate is 21%, meaning that pre-TCJA, taxpayers claiming the reduced ASC credit only recognized a tax credit benefit that equated to 65% of the research credit and now, taxpayers will recognize a benefit that equates to 79% of the research credit, a 21.5% increase. For taxpayers claiming a reduced regular credit, they will recognize a benefit that equates to 15.8% of the research credit instead of 13%.

In general, the research credit is limited to a maximum of 25% of the regular tax liability. Unused research credits may be carried back for 1 year and carried forward for 20 years. Additionally, certain qualified small businesses may claim the credit against their federal payroll tax liability up to \$250,000.

Guidelines around incentive applications

The research credit is applicable to retroactive investments and current investments. The research credit is claimed on the original corporate income tax return by completing Form 6765 and electing either the regular credit or the ASC. It must be filed by the due date of the return with extensions. A retroactive research credit may be filed by amending the income tax return for the open year for which the credit is being claimed. In general, taxpayers may claim the incentive retroactively for three years. The IRS has also released Form 8974 and revised Form 6765 to allow qualified small businesses to claim the credit against their federal Form 941 payroll tax liability for tax years beginning on or after 1 January 2016. For questions regarding incentive applications, please contact one of the named individuals in this document.

Tax deduction

Description of benefits

The tax deduction is permitted for 100% of R&D expenses (other than expenses associated with the acquisition of depreciable property) for federal and state tax purposes.

Guidelines around incentive applications

The deduction is applicable to retroactive investments and current investments. The deduction for research expenditures must be made on the originally filed income tax return. Taxpayers may claim additional deductions for research expenditures on amended returns if the taxpayer has established a method of accounting to deduct its research expenses and merely erred in not deducting them on the original return. In general, taxpayers may claim the incentive retroactively for three years. Note that beginning in tax years ending after 31 December 2021, amounts defined as specified research or experimental expenditures will be required to be capitalized and amortized ratably over a five-year period. Further, expenditures attributed to research that is conducted outside the United States will be required to be capitalized and amortized ratably over a 15-year period.

3. Eligibility requirements

“Qualified research” includes research for the purpose of developing new or improved “business components.” Business components are defined as products, processes, computer software, techniques, formulas and inventions, whether held for sale or lease by the taxpayer or used in the taxpayer’s trade or business. The credit is available for in-house and contract expenses incurred for qualified research. Qualified research consists of R&D activities involving a process of experimentation designed to eliminate uncertainty in the development process. The R&D must relate to the function, performance, reliability or quality of the business component and must be based on engineering or on biological, chemical, physical or computer sciences.

Qualifying expenses for the federal research credit (and most state credits) are defined as taxable wages paid to employees directly involved in R&D, consumable supplies (not depreciable property) used directly in R&D and 65% of amounts paid to third parties for research services. Qualifying expenses for the federal and state deductions are defined as direct and an allocable portion of indirect expenses for R&D.

4. IP and jurisdictional requirements

There is no specific jurisdictional requirement on the location of intellectual property (IP).

5. Technology or innovation zones

There are no technology or innovation zones providing R&D incentives in the US.

6. Role of governmental bodies in administering incentives

Generally speaking, the taxing authorities may audit research credits and deductions claimed by any taxpayer after the filing for the credit or deduction. Although there is no special audit or preapproval process required, there are special procedures, such as pre-filing agreements (PFAs), available to taxpayers who wish to have their federal research credit and/or deduction audited in advance of filing their tax returns. Additionally, in 2017, the Internal Revenue Service issued a directive to its audit teams that provided favorable guidance for calculating QREs and that covers taxpayers that also expense research and development under FASB Accounting Standards Codification Topic 730.

7. Administrative requirements

As with any credit or deduction, a taxpayer must maintain business records to support credits and deductions claimed. There are no special procedures for research credits or deductions. No preapproval process is required for the R&D incentives.

8. Statutory reference

- ▶ Federal research credit: Section 41 of the Internal Revenue Code
- ▶ Federal R&D deduction: Section 174 of the Internal Revenue Code
- ▶ State credits and deductions: various provisions based on each state's statutory framework

V

Vietnam



Vietnam

This chapter is based on information current as of February 2019.

EY contact:

Huong Vu
huong.vu@vn.ey.com
+84 24 3831 5100

Incentives for R&D have been consistently among the most favorable in Vietnam, given that R&D activities are important to the country's development. Eligibility requirements for obtaining incentives, however, are strictly set out.

1. Overview

Vietnamese regulations do not provide specific incentive schemes for R&D activities. However, R&D activities are important criteria in the evaluation and qualification of projects in the high-tech sector, which is highly encouraged and incentivized by the Government. In addition, the Government encourages activities of scientific research and technological development and the application of results from scientific research and technological development of which R&D activities may be included as an important activity. Currently, the Vietnamese Government provides incentives for the high-tech sector and for science research and the technology deployment sector through tax exemptions, financial support, reduced tax rates and a tax holiday.

Types of incentives

Tax credits	<input checked="" type="checkbox"/>
Cash grants	<input type="checkbox"/>
Loans	<input checked="" type="checkbox"/>
Reduced tax rates/preferable tax rates	<input checked="" type="checkbox"/>
Reduced social security contributions	<input type="checkbox"/>
Accelerated depreciation on R&D assets	<input type="checkbox"/>
Tax allowance	<input type="checkbox"/>
Infrastructure/land preferential price	<input checked="" type="checkbox"/>
Tax deduction (including super deduction)	<input type="checkbox"/>
Tax exemptions	<input checked="" type="checkbox"/>
Income tax withholding incentives	<input type="checkbox"/>
Patent-related incentives	<input type="checkbox"/>
Financial support	<input checked="" type="checkbox"/>
Tax holiday	<input checked="" type="checkbox"/>
Expedited government approval process	<input type="checkbox"/>
VAT reimbursement	<input type="checkbox"/>
Qualifies for Horizon 2020 funding	<input type="checkbox"/>
Other (free training)	<input checked="" type="checkbox"/>

2. Incentives available

Names of incentives	Incentives for the high-tech sector	Incentives for science research and technology development*
Types of incentives	<ul style="list-style-type: none"> ▶ Reduced tax rates ▶ Tax exemptions ▶ Tax holiday ▶ Financial support ▶ Preferential land lease fees 	<ul style="list-style-type: none"> ▶ Reduced tax rates ▶ Tax exemptions ▶ Tax holiday ▶ Financial support ▶ Preferential land lease fees

* Although not based upon scientific analysis, EY clients report that this incentive delivers the most beneficial results to investors.

Incentives for the high-tech sector

Description of benefits

The incentives for the high-tech sector should be classified under the following categories:

- ▶ Category 1: scientific research and technological development; application of high-tech; high-tech incubation; high-tech enterprise incubation
- ▶ Category 2: high-tech enterprise; agricultural enterprise applying high technology
- ▶ Category 3: production of high-tech products
- ▶ **Corporate income tax (CIT):**
 - ▶ Category 1: a reduced tax rate of 10% applies for 15 years* (can be extended to 30 years at the prime minister's approval applicable to large-scale and high or new technology); four years of CIT exemption and nine years of 50% CIT deduction.**
 - ▶ Category 2: a reduced tax rate of 10% applies for 15 years*; four years of CIT exemption and nine years of 50% CIT deduction.**
 - ▶ Category 3: there is no CIT incentive scheme applicable.

* Applicable from the first year of making revenue and only after the respective certificate is granted by the competent authorities.

** Applicable from the first year of making profit and only after the respective certificate is granted by the competent authorities. If company does not make profit within the first three years, tax holiday will start from the fourth year counting from the first year of making revenue.

After tax is finalized at year-end, net operating losses (if any) must be carried forward totally and continuously for a maximum period of five years counting from the year following the year the losses arise. Carryback of losses is not permitted.

Value-added tax (VAT): VAT exemption applies to transfers of technology.

- ▶ **Import duty:** exemption from import duty on imported goods to create fixed assets used in an R&D project; tax exemption of five years is available on import duty for raw materials, materials and component parts that are not yet able to be domestically produced for qualified projects. An import duty refund is also available for some specific cases where goods are not subject to import tax but the tax has been paid for the importation of such goods.
- ▶ **Land leasing incentives:** the exemption and reduction rate of the land lease fee depends on the location of investment project.
- ▶ **Land use tax:** exemption from non-agricultural land use tax.
- ▶ **Funding schemes from the national high-tech development program:** funds are available for training, R&D or trial production. Note that this kind of incentive is not applicable for Category 3.

To receive the above incentives, taxpayers must obtain certification from the Ministry of Science and Technology.

Guidelines around incentive applications

The high-tech sector incentives are applicable to current and future investments on a self-assessment basis. As long as the project qualifies as a high-tech project, the incentives may be applied. The company must apply for certification from the competent authority to certify that the project is applying high tech, carrying out high-tech R&D activities or being a high-tech enterprise, or high-tech incubation enterprise.

The incentive rate is applied and reflected in the company's tax returns. Form No. 03-TNDN (for final return on an annual basis) is used to claim the incentives. Enterprises are permitted to adjust their tax declaration prior to the tax authority deciding to conduct a tax audit on the enterprises.

Incentives for science research and technology development

Description of benefits

A qualifying enterprise in the scientific research and technology development sector will be entitled to the following incentives and support:

CIT

- ▶ A reduced tax rate of 10% applies for 15 years (up to 30 years if approved by the Prime Minister) from the first year of making revenue. Companies are also entitled to four years of CIT exemption and nine years of 50% CIT deduction counting from the first year of making profit. If a company does not make profit within the first three years, the tax holiday will start from the fourth year counting from the first year of making revenue
- ▶ The income under the following scenarios is exempted from CIT:
 - (i) Income earned from performance of contracts for scientific research and technological development shall be eligible for tax exemption during the implementation period of that contract but not for more than three years from the date on which the revenue is earned.

- (ii) Income derived from the sale of products that are results of new technologies applied in Vietnam for the first time shall be eligible for tax exemption but not for more than five years from the day on which the revenue derived from the sale of such products.

- (iii) Income derived from the sale of experimental products during the experimental production period.

Such incentive is only permitted when some requirements by laws are satisfied.

- ▶ Companies are permitted to use profits before tax to establish a fund for scientific and technology development. The amount paid into the fund may not exceed 10% of the total taxable income for the assessable tax year.

VAT

- ▶ A 5% VAT rate may be applied to scientific and technological services such as: services to support scientific research and technology development; services related to application of scientific research and technology development results under the science and technology service contract.
- ▶ Machinery, equipment and material imported for scientific research and technology development are not subject to VAT at the import stage.

Import duty

- ▶ An exemption is applicable on import duty on imported goods and those directly used for scientific research and technology development.
- ▶ An exemption is applicable on import duty on imported goods to create a fixed asset of the respective project. There is a five-year exemption of import duty on raw materials, materials and component parts that are not yet able to be domestically produced.

Land incentives

- ▶ The exemption and reduction rate of land lease fee depends on the location of the investment project.

Land use tax

- ▶ A 50% reduction of non-agricultural land use tax is available. However, if the R&D project is located in areas having socio-economic difficulties (such as Nong Cong District - Thanh Hoa Province, etc.), there is a chance to apply for an entire exemption from non-agricultural land use tax.

Stamp duty

- ▶ A stamp duty exemption applies when registering for a land use right for an R&D project.

Other support

- ▶ Being considered to receive the ownership or right of use of state-owned scientific results.
- ▶ Being entitled to enjoy a credit incentive for investment in accordance with regulations.
- ▶ Getting priority to use equipment in national laboratories or research institutions.
- ▶ Projects are entitled to free training and consulting services from a state-owned technologies institution.
- ▶ Scientific and technological organizations are prioritized by industrial park, export-processing zone, economic zone or high-tech park management boards and local People's Committees in renting land or infrastructure at the lowest rates under regulations.

Guidelines around incentive applications

Incentives for science research and technology development are applicable provided that the company is issued a certificate of scientific and technological operation and registration by the competent Science and Technology Authority, in accordance with the current regulation.

The incentive rate is applied and reflected in the company's tax returns. Form No. 03-TNDN (for final return on an annual basis) is used to claim the incentives. Enterprises are permitted to adjust their tax declaration prior to the tax authority deciding to conduct a tax audit on the enterprises.

3. Eligibility requirements

(a) High-tech enterprise: to be certified as a high-tech enterprise, the following conditions must be met:

- ▶ Manufacturing products listed as high-tech products are given priority in accordance with current regulations.
- ▶ Eco-friendly, energy-saving solutions should be applied to manufacturing and quality control in accordance with Vietnam's technical regulations and standards (or international standards if no Vietnam technical regulations and standards are available).
- ▶ The enterprise's revenue from high-tech products must account for at least 70% of its total annual net revenue.
- ▶ The enterprise's total expenses for research and development activities conducted in Vietnam must account for at least 1% of its total annual net revenue, for small and medium-sized enterprises (SMEs); or 0.5%, for enterprises with a total capital of over VND100 billion and more than 300 employees.
- ▶ The number of research and development staff members holding a university or higher degree must account for at least 5% of the enterprise's total number of employees for SMEs. For enterprises with a total capital of over VND100 billion and more than 300 employees, the number of research and development staff members holding a university or higher degree must account for at least 2.5% of the total number of employees and be not less than 15.

(b) High-tech incubation enterprise: to be certified as a high-tech incubation enterprise, the following conditions must be met:

- ▶ Technology being incubated is required to be under the list of high technology given priority in accordance with current regulations

- ▶ Must have technical infrastructure and professional managerial staff that meet the high-tech incubation or high-tech enterprise incubation requirements
- ▶ Must have technological, intellectual property, legal, financial and business administration consultants
- ▶ Must be capable of cooperating with production, research and training institutions in high-tech incubation or high-tech enterprise incubation activities

(c) High-tech application project

- ▶ Applying qualified high technologies – i.e., encouraged high technologies (list in Decision 66/2014/QĐ-TTg)
- ▶ Qualified purpose of applying high technologies
 - ▶ Use of high-tech research results for technology renewal, product renewal or increase of the added value of products
 - ▶ Trial production of high-tech production
- ▶ Mastering and adaptation of imported high technologies to Vietnam's practical conditions
- ▶ Meeting quantitative criteria
 - ▶ Employees with a university or higher degree involved in R&D activities: at least 5% of its total workforce
 - ▶ Average total expenditure for R&D activities: at least 1% total annual turnover. The details of expenditure for R&D activities are clearly specified in the guiding legal documents.
- ▶ Quality control system meets national standards TCVN ISO 9001:2008, CMM or GMP standards (depending on national or international standards applied by the project)
- ▶ Comply with standards and technical regulations on environment applicable to its operation domain under Vietnamese law. Projects are encouraged to meet international environmental standards such as ISO 14000 or equivalent.

(d) Production of high-tech products

- ▶ Manufacture of products that are listed as high-tech products (in accordance with Decision 66/2014/QĐ – TTg).

- ▶ Products have superior quality and properties and high added value, are environment-friendly and can substitute imports.
- ▶ Technological line is advanced and operates under programmed control. The technological line's main parts are of technologies applied to the project's operation domain updated within five years from the time of investment.
- ▶ Quality control system meets national standards TCVN ISO 9001:2008, CMM or GMP standards (depending on national or international standards applied by the project).
- ▶ Comply with standards and technical regulations on environment applicable to its operation domain under Vietnamese law. Projects are encouraged to meet international environmental standards such as ISO 14000 or equivalent.

(e) Science research and technology development

To qualify, there are certain requirements for organizational and operational charter by laws.

- ▶ Human resources for science and technology:
 - (i) Each scientific and technological organization must have at least five persons with university degree or higher working full-time and part-time in which there is at least 30% having professional skills in accordance with the key areas applied for operation registration and at least 40% working full-time
 - (ii) The head of scientific and technological organization must have a university degree or higher with management experience and appropriate professional capacity
- ▶ Must have qualified material and technical facilities as specified by laws
- ▶ Scientific and technological organizations with foreign capital must meet the requirement specified in the Law on Science and Technology, such as the establishment must be approved by the Minister of Science and Technology

4. IP and jurisdictional requirements

An enterprise applying for certification as a scientific research and technology development enterprise is protected with intellectual property rights and transfer results of science and technology activities in accordance with laws on intellectual property and technology transfer.

The Ministry of Finance's Circular No. 219/2013/TT-BTC, dated 31 December 2013, guides the implementation of the Law on Value Added Tax and is effective from 1 January 2014. Transfers of technology are subject to VAT exemption. In cases of a technology transfer contract including transfer of machinery and equipment, the transfer of the asset within such technology transfer contract is not subject to VAT.

5. Technology or innovation zones

Vietnam currently has three high-tech industrial parks: Hoa Lac High-Tech Park (in Hanoi), Saigon High-Tech Park (in Ho Chi Minh) and Da Nang High-Tech Park (in Da Nang).

5.1. Investment incentives in high-tech parks

The general investment incentives for projects located in high-tech parks are covered in tax law and its guiding documents, and Circular 83/2016/TT-BTC. Moreover, there is particular investment incentive scheme applicable for each high-tech park. In particular, Decree 74/2017/ND-CP and Circular 32/2018/TT-BTC provides a specific investment scheme for Hoa Lac High-Tech Park, and Decree 04/2018/ND-CP provides a specific scheme for Da Nang High-Tech Park. For Saigon High-Tech Park, currently there are no specific regulations like other high-tech parks.

The below are tax incentives and other support for enterprises in the high-tech sector:

CIT: a reduced tax rate of 10% applies for 15 years from the first year of making revenue; four years of CIT exemption and nine years of 50% CIT deduction from the first year of making profit or the fourth year from year of making revenue, whichever is earlier. Moreover, the tax rate reduction of 10% may be extended up to 30 years for the following investment project having a huge investment scale:

- (i) Huge investment scale project of at least VND4,000 billion located in Hoa Lac High-Tech Park.
- (ii) Huge investment scale project of at least VND3,000 billion located in Da Nang High-Tech Park.

Import duty: exemption from import duty on imported goods to create fixed assets of investment project; tax exemption of five years is available on import duty for raw materials, materials and component parts that are not yet able to be domestically produced.

Land leasing incentives: the exemption and reduction rate of the land lease fee depends on the specific scheme of a particular high-tech park authority.

Land use tax: exemption from non-agricultural land use tax.

5.2. Requirements for investment projects in high-tech parks

An investment project that meets the following conditions will be considered to invest in the high-tech parks:

- ▶ Its operation are high-tech sectors being encouraged to invest in accordance with current regulations as follows:
 - ▶ Information technology
 - ▶ Biotechnology
 - ▶ New material technology
 - ▶ Automation technology

The list of high technologies prioritized for development investment and the list of high-tech products eligible for development promotion are detailed under the Decree 66/2014/QD-TTg and Decree 13/2017/QD-TTg.

- ▶ Expenses for R&D work under the project include total expenses for R&D work performed in Vietnam accounting for at least 5% of annual total turnover, or expenses for R&D activities carried out in Vietnam accounting for at least 1% of annual total turnover.
- ▶ The number of personnel with a university or higher degree who are directly engaged in the project's R&D work accounts for at least 5% of the project's total number of personnel.
- ▶ The project's technological chain is at an advanced level and satisfies the following requirements: production activities are specialized and organized with automation methods, of which at least a third of automatic devices are controlled under set programs, and they are arranged in a working space that satisfies industrial sanitation standards required by Vietnamese law.
- ▶ The project's quality management system reaches specialized international standards (e.g., ISO 9000/2001, CMM or GMP); it applies to a computerized corporate administration system.
- ▶ The project abides by environmental standards and technical regulations in its operation domain as required by Vietnamese law. It is encouraged to apply for international environmental standards such as ISO 14000 or equivalent standards.

6. Role of governmental bodies in administering incentives

The role of the tax authorities (i.e., the Provincial Tax Department where the company is located) in administering tax-based R&D incentives includes the following:

- ▶ On the receipt of an application for an Investment Certificate, licensing authorities will perform an assessment and will indicate whether the tax incentive is applicable to the investment project.
- ▶ After obtaining the Investment Certificate, the enterprise will further apply to the relevant Science and Technology authority (i.e., Provincial Science and Technology Department where the company is located)

for this authority to evaluate and certify that it is a high-tech project or scientific research and technology development project. This certification will be the basis for the enterprise to enjoy relevant incentives.

- ▶ For enterprises, this is a self-assessment regime (i.e., enterprises self-declare and pay tax in accordance with local regulations).
- ▶ The relevant tax authorities monitor and conduct tax audits on the tax compliance of the enterprise.
- ▶ Customs authorities (i.e., the Provincial Customs Department and the General Department of Customs) monitor and conduct customs audits on the enterprise's import duties.

7. Administrative requirements

7.1 High-tech sector

To be certified as a high-tech project and enjoy the incentives, the company has to apply for certification from the Ministry of Science and Technology (i.e., applying high tech, carrying out high-tech R&D or being a high-tech enterprise).

Application for a certification of an enterprise applying high tech or carrying out high-tech R&D activities (operation certificate)

The application dossiers are required to be submitted to the Ministry of Science and Technology. A dossier is made in two sets, including one original set and one copy.

An organization's dossier of application for an operation certificate consists of the following:

- ▶ An application for the certificate (Standard Form of Ministry of Science and Technology)
- ▶ A notarized copy of the business registration certificate, investment certificate, science and technology enterprise certificate, or certificate of registration of scientific and technological operations

- ▶ A written explanation regarding the high-tech application project or high-tech R&D scheme (for high technologies on the list of those prioritized for development investment)
- ▶ The managing agency's written certification of the contents presented in the written explanation (for organizations managed by ministries, ministerial-level agencies or Government-attached agencies) or a written certification of the provincial-level Science and Technology Department of the locality in which the organization carries out high-tech application or R&D operations (for organizations not managed by ministries, ministerial-level agencies or government-attached agencies)

An individual's dossier of application for an operation certificate consists of the following:

- ▶ An application for the certificate, made according to a form set by the Ministry of Science and Technology, enclosed with two 4x6 cm photos
- ▶ A copy of the individual's valid identity card or passport
- ▶ A written explanation about the high-tech application project or high-tech research and development scheme (for high technologies on the list of those prioritized for development investment)
- ▶ A written certification of the contents presented in the written explanation, given by the provincial-level Science and Technology Department of the locality in which the individual carries out high-tech application or R&D operations

An operation certificate is valid from the date of its issuance until the completion of a project or scheme.

Application for a high-tech enterprise certification

Dossiers of application for high-tech enterprise certificates are required to be submitted directly to the Ministry of Science and Technology. A dossier is made in two sets, including one original set and one photocopied set, and it consists of the following:

- ▶ An application for high-tech enterprise recognition, made according to a form set by the Ministry of Science and Technology

- ▶ A notarized copy of the business registration certificate, investment certificate, or science and technology enterprise certificate
- ▶ A written explanation about the enterprise's satisfaction of all the conditions in accordance with the law

A high-tech enterprise certificate is valid for five years from the date of its issuance. Regulations do not provide guidance for certificate renewal.

Application for high-tech incubation enterprise

Dossiers of application for high-tech incubation enterprise are submitted to the Ministry of Science and Technology. The application dossier includes but is not limited to the following:

- ▶ Application Request Form (standard form)
- ▶ Explanation of capacity of high-tech incubation enterprise
- ▶ Commitment letter and explanation letter for the capacity of financial mobilization
- ▶ Other documents required by law and the competent authority

Application for certification of project manufacturing high-tech products

Dossiers of application for certification of project manufacturing high-tech products are submitted to the Ministry of Science and Technology. The application dossier includes but is not limited to the following:

- ▶ An application for the certificate (Standard Form of Ministry of Science and Technology)
- ▶ A written explanation to satisfy the requirement of a project manufacturing high-tech products (standard form of Ministry of Science and Technology)
- ▶ A notarized copy of the business registration certificate, investment certificate, etc.
- ▶ Other documents required by laws and the competent authority

7.2 Science research and technology development

To be certified as a scientific research and technology development project, the company is required to apply for certification by the Ministry of Science and Technology. An application dossier for the certification is required to provide documents, including the application letter, business registration certificate or investment certificate, and a detailed explanation of the project.

7.3. Investment projects located in high-tech parks

The investment projects in high-tech parks are required to be issued the Investment Registration Certificate (IRC) by the competent authority. Such certificate should specify the investment incentives that are applied for the investment project. The application for issuance of the IRC is regulated under the law on investment and its guiding documents.

8. Statutory reference

- ▶ Law No. 21/2008/QH12, dated 13 November 2008, of the National Assembly on high technologies
- ▶ Decision No. 55/2010/QD-TTg, dated 10 September 2010, of the prime minister on the competence, order and procedures for certifying organizations and individuals carrying out high-tech application or R&D operations and recognizing high-tech enterprises
- ▶ Decision No. 66/2014/QD-TTg, dated 25 November 2014, by the prime minister on approving the list of high technologies prioritized for development investment and the list of high-tech products eligible for development promotion
- ▶ Decision No. 27/2006/QD-BKHCHN, dated 18 December 2006, of the Ministry of Science and Technology on Regulation on the criteria of high-tech projects
- ▶ Decree No. 96/2010/ND-CP, dated 20 September 2010, of the Government on amending and supplementing a number of articles of the Government's Decree No. 115/2005/ND-CP of 05 September 2005, on the mechanism of autonomy and accountability of public science and technology organizations, and the Government's Decree No. 80/2007/ND-CP of 19 May 2007, on science and technology
- ▶ Decree No. 80/2007/ND-CP, dated 19 May 2007, of the Government on science and technology enterprises
- ▶ Decree No. 54/2016/ND-CP, dated 14 June 2016, providing for the autonomy mechanism applicable to public scientific and technological organizations
- ▶ Joint Circular No. 12/2016/TTLT-BKHCHN-BTC, dated 28 June 2016, on guidelines for the allocation and management of the science and technology development fund in enterprises
- ▶ Circular 83/2016/TT-BTC, dated 17 June 2016, on guiding the implementation of investment incentive programs under the provisions of the investment law and the government's Decree No. 118/2015/ND-CP, dated 12/11/2015, specifying and guiding the implementation of several articles of the investment law
- ▶ Decree 08/2014/ND-CP detailing and guiding the implementation of a number of articles of the law on science and technology dated 27/01/2014
- ▶ Decree 74/2017/ND-CP of the Government, dated 20/06/2017, providing the specific scheme and policy of Hoa Lac High-Tech park
- ▶ Decree 04/2018/ND_CP of the Government, dated 04/01/2018, providing the specific scheme and policy of Da Nang High-Tech park
- ▶ Decree 32/2011/TT-BKHCHN providing criteria for determining high-tech application projects and investment projects on high-tech product manufacture, and evaluation of dossiers of application for certificates of high-tech application activities, new enterprises established under investment projects on high-tech product manufacture and high-tech enterprises

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EU's Horizon 2020 program



EU's Horizon 2020 program

This chapter is based on information current as of February 2019.

EY contact:

Frank Burkert
frank.burkert@de.ey.com
+49 40 36132 21155

Compared to previous years, submitting proposals for the R&D cash grant program Horizon 2020 will require a more elaborated market uptake and commercialization strategy. Projects should be in the range of Technology Readiness Levels 3 through 8. Also, a new chapter dedicated to defense research was introduced in 2017. In addition to Horizon 2020, numerous cash grant programs are available to support companies and public entities to conduct R&D, innovation and investment programs in the European Union (EU).

1. Overview

Launched on 1 January 2014, Horizon 2020 is the EU's financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's competitiveness. Horizon 2020 replaces the previous 7th Framework Programme for Research and Technological Development (FP7).

Available from 2014 to 2020 with a EUR70.2 billion budget, the EU's program for research and innovation forms part of the drive to create growth and new job opportunities in Europe. It is designed to bring business into the research and innovation chain throughout its various components and is the financial instrument that effectively implements the Innovation Union. In the final two years of the program, more than EUR20 billion is still available in the years 2019-20.

The main features of Horizon 2020 are:

- ▶ Bringing together the FP7, the innovation part of the Competitiveness and Innovation Framework Programme (CIP) and the European Institute for Innovation and Technology
- ▶ Simplification and standardization of funding schemes and administrative rules
- ▶ Increased funding

Identifying and pursuing Horizon 2020 opportunities

Companies, including non-EU companies – as well as public sector entities and universities – that conduct research within the EU may be eligible for Horizon 2020 funding. Examples of funding areas include (but are not limited to):

Sustainability

- ▶ Smart, green and integrated transport
- ▶ Climate action, resource efficiency and raw materials
- ▶ Eco-innovative solutions for water management

Health

- ▶ Digital transformation in health and care
- ▶ Personalized medicine
- ▶ Innovative health and care industry
- ▶ Infectious diseases and improving global health
- ▶ Integration of care

Information and communication technologies

- ▶ Future internet, cloud computing, big data, cybersecurity and Internet of Things

Clean energy

- ▶ Advanced biofuel technologies
- ▶ Integration of ICT in all energy fields
- ▶ Smart cities
- ▶ Fuel cells and hydrogen
- ▶ Electricity grids
- ▶ Low-carbon technologies
- ▶ Electro-mobility and storage solutions
- ▶ Highly energy-efficient buildings, renewable heating and cooling
- ▶ Smart electricity networks

Transport

- ▶ Cooperative and connected automated transport
- ▶ Transport electrification
- ▶ Vehicle design and manufacturing
- ▶ Low-emission alternative energy for transport

- ▶ Network and traffic management systems
- ▶ Smart mobility and services
- ▶ Infrastructure

Food

- ▶ Competitive and resource-efficient food production systems
- ▶ Promoting informed consumer choices
- ▶ Delivering strategic solutions for healthy and safe foods and diets for all
- ▶ Creating opportunities for a sustainable and competitive agri-food industry, through innovation in food processing

Additionally, Horizon 2020 will offer opportunities in the fields of nanotechnologies, advanced materials, biotechnology, advanced manufacturing and processing, security, health and space technologies.

The average grant a participating organization can potentially secure will range between EUR200,000 and EUR1.5 million per project (higher amounts are also possible depending on the individual project), with funding up to 100% of eligible project costs. There is no limitation on the number of projects for which a company can apply and, additionally, Horizon 2020 funding can typically be complemented with local tax and nontax incentives. The program is available in the EU Member States and associated countries.

The Horizon 2020 process

- ▶ The Horizon 2020 program is competitive and requires a seamless effort of identifying R&D projects that align with the program's scope and completing the intensive application process.
- ▶ A diligent, coordinated effort is necessary to identify projects and qualify value, working with stakeholders from the company and governing bodies.

The EY approach to Horizon 2020

- ▶ The EY Global R&D and Innovation Services network consists of more than 800 professionals focused on assisting companies with tax incentives, cash grants and other related business incentives. The EY service delivery approach centers on dedicated account management to multinational companies.
- ▶ We will work to complete the efforts to secure Horizon 2020 benefits in conjunction with key company personnel with minimal disruption to companies' business operation teams.

Timing and next steps

Horizon 2020 will cover funding opportunities from 2014 to 2020.

Calls for proposals have launched and are currently open in all fields. The European Commission is currently debating the successor of H2020, named Horizon Europe, which will start as of 1 January 2021. The proposed financial envelope for this program is EUR100 billion at the moment, subject to budget approval by the European Council.

More information on Horizon 2020

The European Union website provides in-depth details regarding Horizon 2020 and can be accessed at ec.europa.eu/research/horizon2020.

To have a discussion with an EY subject-matter professional about Horizon 2020 opportunities for your company, please contact one of the named individuals in this document.

The EY organization: the gateway to European funding and equity

At the European level, about 350 funding programs have been created to support job creation, investments, R&D and innovation not only across the EU but also in many other countries. We have a proven track record and can provide assistance in identifying and accessing the appropriate program to support the agenda of our clients. Prominent funding programs include:

- ▶ Connecting Europe Facility (CEF)
- ▶ SME Instrument
- ▶ LIFE
- ▶ European Structural & Investment Funds (ESIF)
- ▶ European Regional Development Fund (ERDF)
- ▶ Erasmus+

In addition, our teams provide services to access the various co-financing instruments offered by the European Investment Bank, such as low-interest loans, guarantees and equity.

R&D incentives summary matrix – Americas (2019)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Argentina	Software promotional regime	<ul style="list-style-type: none"> ▸ Reduced tax rates ▸ Tax stability 	<ul style="list-style-type: none"> ▸ Tax stability for taxpayers registering with scheme. ▸ 70% of social security payments as tax credit. ▸ 60% income tax reduction. ▸ Exclusion from VAT withholding or reverse withholding, which could be an important advantage from financial standpoint.
	R&D promotional regime	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ 10% tax credit on qualifying R&D.
	Biotechnology promotional regime	<ul style="list-style-type: none"> ▸ VAT reimbursement ▸ Accelerated depreciation and certain exemptions 	<ul style="list-style-type: none"> ▸ 50% tax credit on social security contributions payable to payroll assigned to eligible R&D project. ▸ 50% tax credit on expenses related to R&D services provided by national scientific institutions. ▸ Early VAT reimbursement. ▸ Accelerated depreciation.
	Training courses regime	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ Tax credits of 0.8% of qualifying expenses (salaries) related to training courses.
Brazil	R&D deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ A super deduction of 160% to 200% is available to taxpayers with eligible expenses. ▸ The “standard” super deduction is 160% of eligible R&D expenses. If a company increases its number of contracted researchers during a calendar year when compared with the average number of contracted researchers in prior calendar year, the amount of the super deduction increases. If the number of contracted researchers increased up to 5%, an extra deduction of 10% is available (resulting in a total super deduction of 170%); if the number of contracted researchers increased by more than 5%, an extra deduction of 20% is available (resulting in a total super deduction of 180%). In addition, if a company registers IP in Brazil, an extra 20% deduction is available. ▸ A super deduction of up to 250% of eligible expenses for innovation projects executed by Scientific and Technological Institutions is available.
	Accelerated depreciation	<ul style="list-style-type: none"> ▸ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▸ 100% depreciation on eligible R&D assets during same year of acquisition.
	Funding authority for studies and projects	<ul style="list-style-type: none"> ▸ Financial support ▸ Loans 	<ul style="list-style-type: none"> ▸ Financial support with reduced interest rates for new R&D investments of Brazilian companies. ▸ Government may fund up to 90% of total project costs.
Canada	Scientific Research & Experimental Development (SR&ED) tax credit	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ 15% federal tax credit on eligible activities and expenditures. ▸ Tax credit is increased to 35% for small Canadian-controlled private corporations on first C\$3 million of expenditures per year.

R&D incentives summary matrix – Americas (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments 	<ul style="list-style-type: none"> ▸ Unused R&D deductions cannot be carried forward or carried back. 	No	Yes	Yes
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	Yes	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	Yes	
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Current investments 	<ul style="list-style-type: none"> ▸ Unused R&D tax credits may be carried forward for 20 years and carried back for three years. 	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – Americas (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Accelerated capital cost allowance (CCA) rate and Manufacturing and Processing (M&P) tax credit	<ul style="list-style-type: none"> Accelerated depreciation and tax credit on the R&D asset 	<ul style="list-style-type: none"> Certain R&D assets used in connection with taxpayer's eligible manufacturing and processing activities may qualify for Class 53 property classification and can be depreciated over approximately four years. Eligible assets may qualify for federal and/or provincial manufacturing or processing investment tax credits ranging from 4% to 10% (or more) of qualifying expenditures.
	Strategic Innovation Fund	<ul style="list-style-type: none"> Combination of cash grants and loans 	<ul style="list-style-type: none"> Cash grants and/or favorable loans up to 50% of eligible project costs.
Chile	Tax incentive to private investment in R&D	<ul style="list-style-type: none"> Tax credits Tax deductions 	<p>R&D certified contract with a registered research center:</p> <ul style="list-style-type: none"> A tax credit against the taxpayer's corporate tax equivalent to 35% of payments associated with R&D certified contracts entered into with registered research center, with a cap of UTM15,000 (approximately US\$1.2 million). Taxpayer allowed to deduct as an expense any amounts paid, not deducted as a credit, associated with R&D certified contracts entered into with registered research center. <p>R&D project (based on in-house R&D activities):</p> <ul style="list-style-type: none"> A tax credit against the taxpayer's corporate tax equivalent to 35% of base composed of total payments made concerning current expenses in tandem with annual quota of depreciation of fixed tangible property acquired within scope of R&D project, with an annual cap of UTM15,000 (approximately US\$1.2 million). Taxpayer allowed to deduct as an expense any amounts paid, not deducted as a credit, in connection with R&D certified project.

R&D incentives summary matrix – Americas (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Future investments 				
<ul style="list-style-type: none"> ▸ Current investments 	<ul style="list-style-type: none"> ▸ May be carried forward indefinitely. 	Yes	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – Americas (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	CORFO grants and lines of credit	<ul style="list-style-type: none"> ▸ Cash grants 	<p>Technological Contracts for Innovation:</p> <ul style="list-style-type: none"> ▸ Beneficiaries receive from 50% to 70% of total project cost. <p>Technological Prospecting Program:</p> <ul style="list-style-type: none"> ▸ Beneficiaries receive up to 60% of total project cost. <p>Applied R&D Profile Competition:</p> <ul style="list-style-type: none"> ▸ Beneficiaries receive contribution of up to 80% of total cost of project, with ceiling of CLP15 million (approximately US\$24,850). <p>Applied R&D Project Competition:</p> <ul style="list-style-type: none"> ▸ Beneficiaries receive grant of up to 70% of total cost of project, with ceiling of CLP135 million (approximately US\$223,600). <p>Integrated Development Initiatives:</p> <ul style="list-style-type: none"> ▸ Provides up to 30% of the resources committed by the beneficiary company during the first two years of the project's execution, with a cap of US\$5 million. <p>High Technology Business Innovation Program:</p> <ul style="list-style-type: none"> ▸ Finances up to 50% of total amount required, with maximum grant ceiling of CLP400 million (approximately US\$663,000). <p>Technology Consortiums for Innovation:</p> <ul style="list-style-type: none"> ▸ Co-finances up to 50% of total amount required, with maximum ceiling of CLP5 billion (approximately US\$8.3 million), with maximum project duration of 10 years.
Colombia	Income tax discount for investment in research, technology development and innovation	<ul style="list-style-type: none"> ▸ Tax discount 	<ul style="list-style-type: none"> ▸ Tax discount rate of 25% for investments in science, technology and innovation projects aimed at solving business problems, generating new knowledge, taking advantage of market opportunities or solving internal process problems.
	VAT exemption for imports in research, development and innovation	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ VAT exemption on equipment imported by research or technological development centers and basic education institutions dedicated to the development of projects rated scientific, technological or innovative.
	Exempt income for resources for science, technology and innovation, and payment of work performances related to these concepts	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Income derived from development of scientific, technological and innovation projects may be exempt from VAT tax. Same treatment is applied to compensation of individuals for the direct execution of work of scientific, technological and innovation, provided that such compensation is derived from the respective resources for the project.
	Financial support of strategic programs and/or projects of applied research, technological development and innovation	<ul style="list-style-type: none"> ▸ Financial support 	<ul style="list-style-type: none"> ▸ COLCIENCIAS provides co-financing and financing to a range of strategic programs and projects of applied research, technological development and innovation.

R&D incentives summary matrix – Americas (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No
▸ Current investments ▸ Future investments	NA	Yes	No	No
Current investments	NA	Yes	No	No
▸ Current investments	NA	Yes	No	No
▸ Current investments ▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – Americas (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Mexico	Innovation Incentive Program (PEI)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Subsidies are granted as cash grants as a percentage of eligible expenses incurred during the year following the publication of CONACYT's call for PEI submissions. PEI offers three support modalities: ▸ High Added Value Technological Innovation for Technological Research, Development, and Innovation (INNOVAPYME) – for MIPYMES, with grants of up to MXN15 million per company. ▸ Technological Innovation to Enhance Competitiveness for Technological Research, Development, and Innovation (INNOVATEC) – for large companies, with grants of up to MXN25 million per company. ▸ Development and Innovation of Precursor Technologies for Technological Research, Development, and Innovation (PROINNOVA) – for projects that involve the collaboration of at least two research centers or universities, with grants of up to MXN19 million per company.
	Industrial Productivity and Competitiveness Program (PPCI)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Subsidies are granted as cash grants of 50% of eligible expenses incurred in calendar year following the publication of the SE's call for PPCI submissions.
	Software Industry and Information Technology Services Development Program (PROSOFT)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Subsidies are granted as cash grants of 20% or 50% of eligible expenses incurred during calendar year in which the SE's call for PROSOFT submissions is announced.
	R&D Tax Credit	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ The 2018 Mexican Income Law provides a stimulus in the form of 30% tax credit for expenses and investments made for research and technological development, creditable against CIT. The credit will be calculated as the difference between R&D investments of current year with average of R&D investments of past three years. Maximum amount granted per taxpayer is MXN50 million.
	R&D, innovation and technology collaboration grants (Advanced Manufacturing Division)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Encouraging Support in Traditional Industries: For companies in traditional industries (such as plastic, rubber, metal, glass, ceramics, hardware, textile, wood, leather, paper, metalwork and food) that have relatively low investment in R&D and want to conduct innovative R&D. Eligible companies receive grant of up to 50% of approved budget.
United States	Research credit	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ Regular credit: Maximum cash benefit in tax savings for regular credit is about 6.5% of a business's QREs. ▸ Alternative Simplified Credit (ASC): Generally, the credit is equal to 14% of a business's increase in QREs in current year, over 50% of average QREs for the prior three years.
	Section 174 deduction	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Tax deduction permitted for 100% of eligible R&D expenses for federal and state tax purposes.

R&D incentives summary matrix – Americas (2019)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	Yes
▸ Future investments	NA	Yes	No	No
▸ Current investments	NA	Yes	No	No
▸ Current investments	NA	Yes	Yes	Yes
▸ Future investments	NA	Yes	No	No
▸ Retroactive investments ▸ Current investments	▸ Unused research credits may be carried back for one year and carried forward for 20 years.	No	No	No
▸ Retroactive investments ▸ Current investments	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – Asia-Pacific (APAC) (2019)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Australia	R&D Tax Incentive	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ A 43.5% refundable tax offset is available for eligible R&D entities with aggregated turnover of less than AUD20 million per year. ▸ A 38.5% non-refundable tax offset is available for all other eligible R&D entities. ▸ Foreign-owned R&D can qualify for the 38.5% to 43% tax offset depending on its aggregated turnover. ▸ Annual cap of R&D expenditure claimed is AUD100 million per R&D entity.
China (mainland)	Incentives for Technologically Advanced Service Company (TASC) status	<ul style="list-style-type: none"> ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ Reduced CIT rate of 15%. ▸ Deduction limit of employee education expenses increases to 8% of total salaries and wages (compared with normal rate of 2.5%) for CIT purposes. ▸ VAT exemption applies on qualified offshore outsourcing service income.
	Incentives for High- and New Technology Enterprises (HNTE) status	<ul style="list-style-type: none"> ▸ Reduced tax rates ▸ Tax holiday 	<ul style="list-style-type: none"> ▸ Reduced CIT rate of 15%. ▸ For qualified HNTE newly established in one of the five Special Economic Zones or Shanghai Pudong New Area on or after 1 January 2008, enterprise could be entitled to tax holiday of “two years’ exemption and three years’ half deduction” from first year in which it derives production or operating income.
	R&D expenses super deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Resident enterprises allowed to deduct 150% of qualified R&D expenses for CIT purposes. ▸ Technology-based SMEs allowed to deduct 175% of qualified R&D expenses for CIT purposes. ▸ In 2018, a new benefit is announced that, from 1 January 2018 to 31 December 2020, enterprises are allowed to claim a 175% super deduction on eligible R&D expenses actually incurred in the course of R&D activities. Alternatively, if the R&D expenses incurred are capitalized as intangible assets, the enterprises are allowed to amortize the intangible assets based on 175% of the actual costs incurred.
	Incentives for qualified technology transfer income	<ul style="list-style-type: none"> ▸ Tax exemption and reduction 	<ul style="list-style-type: none"> ▸ CIT can be exempted and reduced for qualified technology transfer income. ▸ If resident enterprise's income from its technology transfer does not exceed RMB5 million (about US\$806,452), CIT may be exempted. ▸ For the part of the enterprise's income exceeding RMB5 million, the enterprise income tax shall be half-exempted.
Hong Kong	Enhanced R&D deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ 300% deduction for the first HK\$2 million, and the remainder deductible at 200% without limitation for qualifying R&D expenditure on a qualifying R&D activity.

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	<ul style="list-style-type: none"> ▸ Unused tax credits may be carried forward indefinitely. ▸ R&D entities eligible for the 43.5% refundable tax offset that are in sufficient tax losses can cash out their refundable tax offset. 	<ul style="list-style-type: none"> ▸ Eligibility of work performed outside country requires preapproval through Overseas Finding Application; however, this is only available to Australian-owned R&D activities, not ▸ foreign-owned R&D activities. ▸ Pre-approval of R&D Activities for the current financial year and future two financial years can be applied for. 	Yes	No
▸ Current investments	NA	Yes	Yes	Yes
▸ Current investments	NA	Yes	Yes	Yes
▸ Current investments	NA	No	Yes	No
▸ Current investments	NA	Yes	Yes	Yes
▸ Current investments for qualifying R&D expenditure incurred on or after 1 April 2018	<ul style="list-style-type: none"> ▸ Unused losses may be carried forward indefinitely, subject to certain anti-avoidance provisions 	No	Yes	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Indonesia	Tax allowance	<ul style="list-style-type: none"> Accelerated depreciation and amortization Reduced tax rates Investment allowance 	<ul style="list-style-type: none"> Accelerated depreciation and amortization. Reduced tax rate of 10% for dividend paid to nonresidents (or applicable tax treaty rate). Investment allowance in the form of a reduction of net income. Extended time period in relation to carrying forward of tax losses.
Japan	R&D tax credit	<ul style="list-style-type: none"> Tax credit 	<p>Base credit:</p> <ul style="list-style-type: none"> Consists of credit for general R&D expenses and credit for special open innovation R&D expenses. The tax credit is calculated as qualifying R&D expenses multiplied by a specific ratio The tax credit for general R&D expenses can be used up to 25% of the annual corporate tax liability (or up to 35% under a temporary measure). The tax credit for special open innovation expenses is up to 10% of the annual corporate tax liability (a total of 35% of the annual corporate tax liability or a total of 45% of the annual corporate tax liability under a temporary measure) There is a special category called R&D venture-company. In case of an R&D venture company, the tax credit for general R&D expenses can be used up to 40% of the annual corporate tax liability (or up to 50% under a temporary measure). The tax credit for special open innovation expenses is up to 10% of the annual corporate tax liability (a total of 50% of the annual corporate tax liability or a total of 60% of the annual corporate tax liability under a temporary measure)
Malaysia	Pioneer status	<ul style="list-style-type: none"> Tax holiday 	<ul style="list-style-type: none"> 70% to 100% income tax exemption for 5 to 10 years on eligible R&D income.
	Investment tax allowance (ITA)	<ul style="list-style-type: none"> Tax allowance 	<ul style="list-style-type: none"> 60% to 100% tax allowance on qualifying capital expenditure incurred within 10 years.
	Special incentive scheme	<ul style="list-style-type: none"> Tax exemption Tax allowance Cash grants 	<p>Pre-packaged incentive scheme that offers two types of incentives:</p> <ul style="list-style-type: none"> Income tax exemption: up to 100% of income tax exemption for specific period. Investment tax allowance: up to 100% tax allowance on qualifying capital expenditures incurred for specific period.
	Incentives for researchers to commercialize research findings	<ul style="list-style-type: none"> Tax exemption 	<ul style="list-style-type: none"> 100% income tax exemption on income received from commercialization of R&D findings for period of 10 years.

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	▸ Normally, tax loss may be carried forward for five years. Taxpayers granted tax allowance incentive may be entitled to carry forward and claim tax losses for two additional years if they conduct qualifying R&D activities on product development or manufacturing efficiency.	Yes	Yes	Yes
▸ Current investments	▸ Carryforward/carryback of excess credit is not permitted.	No	The Japanese taxpayer has to show the R&D tax credit calculation in its annual tax return.	No
▸ Future investments	NA	Yes	No	Yes
▸ Future investments	▸ Unused ITA can be carried forward indefinitely.	Yes	No	No
▸ Future investments	▸ Unused ITA can be carried forward indefinitely.	Yes	No statutory annual compliance required. However, in recent incentive approval letters, a clause is added that requires a report of incentive conditions compliance.	Yes for Pioneers status incentive No for ITA incentive
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Double deductions	▸ Super deduction	▸ 200% deduction for qualifying R&D revenue expenditures for eligible R&D activities excluding capital expenditure.
	Financial assistance	▸ Financial support	▸ Financial assistance is available from ScienceFund, Pre-Commercialization Funds, Commercialization of Research and Development Fund and Cradle Investment Programme. The amount of funding approved will be determined based on merits of each application, and value potential varies depending on the fund approved.
	R&D grants	▸ Cash grants	▸ Reimbursable dollar-for-dollar grant on qualifying R&D expenditure.
New Zealand	▸ R&D tax incentive	▸ Tax credit	▸ Eligible businesses with R&D expenditure can claim a tax credit of 15%. ▸ R&D funding is capped at NZD120 million of R&D expenditure per year. A mechanism to go beyond the cap is available.
	R&D loss tax offset	▸ Refundable tax credit	▸ Eligible loss-making companies with high R&D intensity can refund up to 28% of R&D-related tax losses.
	Callaghan Innovation grants	▸ Cash grant	▸ Student Grant: funds university students to gain experience in a business R&D setting ▸ Project Grant: 40% of eligible R&D project
Philippines	R&D expense deductibility	▸ Tax deduction	▸ In general, R&D expenditures paid or incurred during taxable year in connection with taxpayer's trade, business or profession may be treated as ordinary and necessary expenses, which are not chargeable to a capital account, or as deferred expenses ratably distributed over period of no less than 60 months (beginning with month in which taxpayer first realizes benefits from such expenditures), at the election of the taxpayer. ▸ R&D expenditures may be treated as deferred expenses if three conditions are met (they are paid or incurred in connection with the taxpayer's trade, business or profession; they are not treated as ordinary and necessary expense; they are chargeable to the capital account but not chargeable to the property of a character that is subject to depreciation or depletion).

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments		Yes Exemption on preapproval for companies with paid-up capital not exceeding RM2.5 million. Under this exemption, the company may claim double deduction on R&D expenditure up to RM50,000 for each YA without approval from IRB. This exemption is valid from YA2016 to YA2018.	Yes	No
▸ Future investments	NA	Yes	No	No
▸ Future investments	NA	Yes	No	No
▸ Current investments	▸ Unused credits may be carried forward indefinitely, subject to satisfaction of the shareholding test.	No	Yes	No
▸ Current investments	NA	No	Yes	No
▸ Future investments	NA	Yes	Yes	Yes
▸ Current investments	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Income tax holiday (ITH)	<ul style="list-style-type: none"> ▸ Tax holiday for R&D enterprises 	<ul style="list-style-type: none"> ▸ Enterprises engaged in IT R&D activities and registered with PEZA as IT Ecozone Enterprise may be entitled to four-year ▸ ITH for non-pioneer projects, as well as other fiscal and non-fiscal incentives. ▸ The PEZA IT Ecozone Enterprise should invest in brand new IT equipment. ▸ ITH may be claimed only on income derived from registered activity of the PEZA IT Ecozone Enterprise. Income derived from non-registered activities shall be subject to the 30% regular CIT.
	Exemption from donor's tax	<ul style="list-style-type: none"> ▸ Tax exemptions for donations to accredited research institutions 	<ul style="list-style-type: none"> ▸ Gifts in favor of accredited research institution or organization shall be exempt from donor's tax provided that no more than 30% of the gift shall be used for administration purposes. ▸ Donations to accredited NGO organized and operated exclusively for scientific, research and educational purposes shall be 100% deductible from taxable business income of the donor subject to the donee's compliance with the level of administrative expense and use requirements.
Singapore	Enhanced R&D deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Provides for 150% enhanced deduction on qualifying R&D expenditure in Singapore for YAs 2009 to 2018. ▸ R&D tax deduction is further enhanced from 150% to 400% for first S\$400,000 of eligible R&D expenditure for YAs 2011 to 2018. ▸ Additionally, for YAs 2015 to 2018, SMEs will enjoy 400% enhanced tax deduction on an additional S\$200,000 of qualifying expenditure. ▸ Eligible businesses also have the option to convert up to S\$100,000 of qualifying expenditures into cash at a conversion rate of 40% (60% for qualifying expenditure incurred before 1 August 2016) up until YA 2018. ▸ For YAs 2019 to 2025, the enhanced deduction will be a flat 250% on qualifying R&D expenditures incurred on qualifying R&D projects in Singapore.
	Research Incentive Scheme for Companies (RISC)/Innovation Development Scheme (IDS)/Financial Services Technology Innovation (FSTI)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Support is typically 30% or 50% of total qualifying cost, such as manpower-related costs, equipment and materials, professional services and IP rights. ▸ Grants have been provided selectively to large projects in certain strategic technology areas identified by the Singapore Government. However, projects awarded the cash grant are not announced nor made public.
	"Double tax deduction for R&D expenses"	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ 200% tax deduction on R&D expenditure incurred on approved projects. ▸ Under the current law, no R&D projects may be approved for this incentive after 31 March 2020.

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	NA	Yes	No	Yes
▸ Current investments	NA	No	No	Yes
▸ Current investments	▸ Unused losses may be carried forward indefinitely, subject to satisfaction of the shareholding test.	No	Yes	No
▸ Future investments	NA	Yes	Yes	Yes
▸ Future investments	▸ Unused losses may be carried forward indefinitely, subject to satisfaction of the shareholding test.	Yes	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
South Korea	Tax credit for R&D expenditures	<ul style="list-style-type: none"> ▸ Tax credits 	<p>Tax credit for R&D expenditures in new growth engine sectors or to secure source (original) technologies (which applies to R&D expenditures incurred until 31 December 2021):</p> <ul style="list-style-type: none"> ▸ 20% (25% for certain qualified medium-sized mature enterprises (MMEs) listed on the KOSDAQ Stock Market) of R&D expenditures; 30% of R&D expenditures for small and medium-sized enterprises (SMEs) ▸ 3 times the share of R&D expenditure to total sales amount, which is capped at 10% (15% for certain qualified MMEs listed on the KOSDAQ Stock Market) of R&D expenditures <p>Ordinary credit for R&D expenditures:</p> <ul style="list-style-type: none"> ▸ Large corporations: tax credit equals the greater of (i) 25% of current-year R&D expenditures exceeding the prior year R&D expenditures, or (ii) 50% of the share of R&D expenditures out of total revenue, which is capped at 2% of R&D expenditures. ▸ Medium-sized mature enterprises (MMEs): tax credit equals the greater of (i) 40% of current-year R&D expenses exceeding the prior year R&D expenditures, or (ii) 8% of current-year R&D expenditures. ▸ SMEs: tax credit equals the greater of (i) 50% of current-year R&D expenses exceeding the prior year R&D expenditures, or (ii) 25% of current-year R&D expenditures. In cases where SMEs do not qualify as an SME in the concerned fiscal year for the first time, a tax credit of 15% applies for the tax years ending within three years from the date of the tax year in which the SME does not qualify for the first time; a tax credit of 10% then applies for the tax years ending within two years from the end of the aforementioned period.
	Tax credit for investment in R&D facilities	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ Additional tax credit (7% for SMEs, 3% for MMEs and 1% for large corporations) of qualifying investment amounts in new R&D facilities may be available in the year that construction or deployment of R&D facilities is completed.
Thailand	R&D additional deduction incentive	<ul style="list-style-type: none"> ▸ Additional deduction 	<ul style="list-style-type: none"> ▸ Thai corporate entities may take additional 100% tax deduction (a double deduction) for R&D expenses paid to authorized government agencies or private R&D service providers. ▸ A further 100% tax deduction (a triple deduction) for R&D expenses incurred between 1 January 2015 and 31 December 2019 is available, with threshold amounts depending on gross revenue of the company.
	Accelerated depreciation	<ul style="list-style-type: none"> ▸ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▸ Accelerated depreciation rate of 40% on total acquisition cost of qualifying machinery and related equipment used in R&D project-is allowed on the acquisition date.

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	<ul style="list-style-type: none"> ▸ Unused tax credits for R&D expenditures can be carried forward for up to five years. ▸ In cases where startup SME cannot use R&D tax credit carryforward within five years from its setup, the unused tax credits can be carried forward for up to 10 years. 	No	Yes	No
▸ Current investments	▸ Unused tax credit for investment in R&D facilities can be carried forward for up to five years.	No	Yes	No
▸ Current investments	▸ Losses can be carried forward for five years.	Yes	No	Yes
▸ Future investments	▸ Losses can be carried forward for five years.	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Board of Investment (BOI) tax incentive	<ul style="list-style-type: none"> ▸ Tax holiday 	<ul style="list-style-type: none"> ▸ Exemption of CIT (unlimited amount) for up to 15 years. ▸ Double deduction on expenses related to transport, electricity and water supply depending on location. ▸ Exemption or reduction of import machinery. ▸ Exemption of import duty on raw or essential materials used in the manufacturing of export products.
	BOI non-tax incentive	<ul style="list-style-type: none"> ▸ Non-tax incentives 	<ul style="list-style-type: none"> ▸ Unlimited number of visas and work permits for qualifying expatriates. ▸ Eligibility to own land. ▸ No foreign ownership restriction.
	Soft loans	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ Thai-majority-owned companies engaged in R&D project can receive soft loan of up to THB30 million (but not more than 75% of project revenue) from the National Science and Technology Development Agency (NSTDA). ▸ R&D project should be related to product or production process development, reverse engineering, and building or refurbishing of laboratories.
Vietnam	Incentives for the high-tech sector	<ul style="list-style-type: none"> ▸ Reduced tax rates ▸ Tax exemptions ▸ Tax holiday ▸ Financial support ▸ Preferential land lease fees 	<ul style="list-style-type: none"> ▸ CIT: Reduced tax rate of 10% applies for 15 years (up to 30 years if approved by Prime Minister). Companies are also entitled to four years of CIT exemption and nine years of 50% CIT deduction. ▸ VAT: VAT exemption applies to transfers of technology. VAT refund is available in some cases where input VAT has not been credited against output VAT. ▸ Exemption from import duty on imported goods to create fixed assets used in R&D project: Tax exemption of five years is available on import duty for raw materials, materials and component parts that are not yet able to be domestically produced, for qualifying projects. ▸ Land leasing incentives: The exemption and reduction rate of the land lease fee depends on the location of the investment project. ▸ Land use tax: Exemption from non-agricultural land use tax. ▸ Funding schemes from national high-tech development program are available for training, R&D or trial production.

R&D incentives summary matrix – APAC (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Future investments 	<ul style="list-style-type: none"> ▸ Losses incurred during BOI tax exemption period can be used to offset against net taxable profit for up to five consecutive years after tax exemption period. 	Yes	No	Yes
<ul style="list-style-type: none"> ▸ Future investments 	NA	Yes	No	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ After tax is finalized at year-end, NOLs (if any) must be carried forward totally and continuously for maximum period of five years. ▸ Carryback of losses is not permitted. 	Yes	No	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – APAC (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Incentives for science research and technology development	<ul style="list-style-type: none"> ▸ Reduced tax rates ▸ Tax exemptions ▸ Tax holiday ▸ Financial support ▸ Preferential land lease fees 	<ul style="list-style-type: none"> ▸ CIT: Reduced tax rate of 10% applies for 15 years (up to 30 years if approved by Prime Minister). Companies also entitled to four years of CIT exemption and nine years of 50% CIT deduction. Income from contracts for scientific research and technological development shall be eligible for tax exemption during the implementation period of that contract but not exceed three years from the date on which the revenue is earned. Income products that are results of new technologies applied in Vietnam for the first time shall be eligible for tax exemption but not exceed 5 years from the day on which the revenue derived from sale of such products. Income from experimental products during the experimental production period are eligible for tax exemption. Companies permitted to use profits before tax to establish fund for scientific and technology development within enterprise. ▸ VAT: Reduced 5% VAT rate applicable for qualifying activities and services. VAT refund is available in some cases where input VAT has not been credited against output VAT. Some material and machinery not subject to VAT at import stage. ▸ Import duty: Exemption on imported goods used for scientific research and technology development and used to create fixed asset. Import duty refund when goods are not subject to import tax but tax has been paid for importation of goods. ▸ Land incentives: Land lease fee is regulated by local authority where project is located. ▸ Stamp duty: Stamp duty exemption when registering for land use right.

R&D incentives summary matrix – APAC (2019)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ After tax is finalized at year-end, NOLs (if any) must be carried forward totally and continuously for maximum period of five years. ▸ Carryback of losses is not permitted. 	Yes	No	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – Europe, Middle East, India and Africa (EMEIA) (2019)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Austria	R&D premium	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ Subsidy of 14% is granted for qualifying R&D expenses incurred by SMEs and large businesses. Companies are eligible for two types of subsidies: in-house research subsidies and subsidies for outsourced (external or subcontracted) research.
	Grants by the Austrian Research Promotion Agency	<ul style="list-style-type: none"> ▸ Cash grants ▸ Loans ▸ Guarantees 	<ul style="list-style-type: none"> ▸ Provides cash grants, guarantees, loans and advisory services. The amount granted varies, depending on the development phase and type of project, business and subject area.
	Grants by Austria's nine federal states	<ul style="list-style-type: none"> ▸ Cash grants ▸ Loans ▸ Guarantees 	<ul style="list-style-type: none"> ▸ Provide cash grants. The amount granted varies, depending on the development phase and type of project, business and subject area.
Belgium	Cash grants	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Grants are provided and managed by the different regions. In general, the grants support between 25% and 80% of eligible R&D costs. ▸ Grants may be provided in addition to tax incentives, and taxpayers may claim tax incentives and cash grants simultaneously.
	Loans	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ In the Flemish region, independent investment companies PMV and LRM offer variety of loans to startups, SMEs and large companies. Loans range from minimum of EUR350,000 to maximum of EUR5 million for larger corporations and from EUR50,000 up to EUR350,000 for SMEs and startups. Life of loan can range from three to 10 years, and can be subordinated or non-subordinated with an interest rate between 2.25% up to 6%. In the Walloon and Brussels-Capital regions, Sowalfin and finance.brussels provide access to financing for all companies active in these regions. In general, loans cover 50% of requested capital with maximum of EUR500,000, with a public guarantee generally up to 75%.
	Investment deduction for R&D and patents	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ One-shot deduction: amounts to 13.5% (for tax year 2019) of acquisition value of the asset (3.99% tax benefit based on CIT rate of 29.58% for financial years 2018/2019). ▸ Spread deduction: amounts to 20.5% (for tax year 2019) of depreciation amount (5.13% tax benefit based on CIT rate of 25% as of financial year 2020).
	Tax credit for R&D and patents	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ A tax credit equal to the investment deduction multiplied by standard CIT rate of 29.58% (financial years 2018/2019)/25% (as of financial year 2020) is available for qualifying expenses and activities.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Current Investments ▸ Future investments 	NA	<ul style="list-style-type: none"> ▸ Yes (for in-house research; preapproval not required for outsourced research) 	No	No
<ul style="list-style-type: none"> ▸ Future investments 	NA	Yes	No/Yes, depending on kind of subsidy	No/Yes, depending on kind of subsidy
<ul style="list-style-type: none"> ▸ Future investments 	NA	Yes	No/Yes, depending on kind of subsidy	No/Yes, depending on kind of subsidy
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ If increased investment deduction exceeds taxable basis, excess balance may be carried forward indefinitely. 	No	No	<ul style="list-style-type: none"> ▸ Yes (must obtain certificate from regional authorities regarding environmental impact)
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ Excess tax credit is carried forward, and remaining balance after five years is refunded, which may result in a cash benefit. 	No	No	<ul style="list-style-type: none"> ▸ Yes (must obtain certificate from regional authorities regarding environmental impact)

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Patent income deduction (PID) (old regime)	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Allows 80% tax deduction of gross patent income from taxable basis, reducing effective tax rate on such income to maximum of 5.9% (i.e., 20% of Belgian statutory CIT rate of 29.58% for financial years 2018/2019). ▸ As a result of BEPS Action 5 (Harmful Tax Practices), PID regime was abolished with effect from 1 July 2016. However, it will remain in place for income earned up to 30 June 2021 for patents requested and patents or licenses acquired prior to 1 July 2016. To avoid “patent shifting,” non-qualifying patents acquired directly or indirectly after 1 January 2016 from related party will not be grandfathered under transition regime.
	Innovation deduction (ID) (new regime)	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Replaces PID regime. ▸ Provides for deduction of 85% of qualifying net IP income, effectively reducing the related maximum effective tax rate to 4.4% (i.e., 15% of the Belgian statutory CIT rate of 29.58% for financial years 2018/2019)/3.8% (i.e., 15% of the Belgian statutory CIT rate of 25% for financial years as of 2020). The extent to which the ID can be applied depends on the nexus ratio (i.e., a BEPS Action 5-compliant formula with a 30% uplift to the qualifying expenditures).
	Notional interest deduction (NID)	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Allows companies, irrespective of size, industry or activities, to deduct a percentage of their equity from taxable income. ▸ NID rate for tax year 2019 is 0.746%.
	Foreign tax credit (FTC) for withholding tax on royalties received	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ Available for foreign withholding tax on royalties of 15/85 of net income at the border. It is creditable against CIT due. ▸ In cases where PID or ID regime is applicable, FTC is limited to the actual withholding taxes paid on royalties received.
	Partial exemption of professional withholding tax	<ul style="list-style-type: none"> ▸ Income tax withholding incentive 	<ul style="list-style-type: none"> ▸ 80% exemption of professional withholding taxes on wages paid to specific personnel with PhD or master’s degree in scientific or engineering domain performing R&D activities. ▸ 40% exemption of professional withholding taxes on wages (will increase to 80% as of income year 2020) paid to specific personnel with bachelor’s degree in scientific or engineering domain performing R&D activities, capped at 25% of the total withholding exemption applied for master’s and doctoral degrees for large companies or 50% for small and medium-sized companies.
	Expat tax regime - tax-free allowances for foreign executives and researchers and exclusion of foreign working days	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ Persons classified as foreign executive or researcher are taxed only on income relating to professional activities carried out in Belgium. ▸ Expatriate allowance for researchers can increase to a maximum EUR29,750 per year (compared to standard maximum of EUR11,250 per year). ▸ Expat is not taxable on remuneration that relates to professional activity outside Belgium.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments, subject to transition rules 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ Unused ID can be carried forward indefinitely. 	No	Yes, depending on the qualifying IP	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Current investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	No	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	IP income - beneficial tax regime	<ul style="list-style-type: none"> ▶ Reduced tax rates/preferable tax rates 	<ul style="list-style-type: none"> ▶ Income related to cession and concession of IP income and related rights can be considered as movable income (up to EUR59,970 for income year 2018) and will be subject to tax differently than regular professional income. ▶ Income from IP will be taxable at a rate of 15% with a 50% lump sum cost deduction up to EUR15,990, and lump sum cost deduction of 25% for IP income between EUR15,990 and EUR31,990.
Czech Republic	R&D deduction	<ul style="list-style-type: none"> ▶ Super deduction 	<ul style="list-style-type: none"> ▶ Eligible R&D costs may be deducted twice: once as operating costs and again as special deduction. ▶ R&D deduction could be increased to 110% of incremental eligible costs incurred in tax period.
	Investment incentives for R&D centers	<ul style="list-style-type: none"> ▶ Tax holiday ▶ Cash grant ▶ Real estate tax exemption 	<ul style="list-style-type: none"> ▶ CIT holiday for 10 years. ▶ Job creation grants of CZK100,000 (approximately US\$4,500) - CZK300,000 (approximately US\$13,300) per employee in regions with high unemployment and in special industrial zones. ▶ Training and retraining grants of up to 70% of eligible training costs in regions with high unemployment. ▶ Cash grants of up to 10% of capital expenditures for R&D centers in cases of strategic investment. ▶ Real estate tax exemption for five years in special industrial zones.
France	R&D tax credit	<ul style="list-style-type: none"> ▶ Tax credits 	<ul style="list-style-type: none"> ▶ Tax credit of 30% is available for first EUR100 million of qualified R&D expenses incurred during tax year, plus 5% of any amount in excess of EUR100 million.
	Cash grants for collaborative R&D projects	<ul style="list-style-type: none"> ▶ Cash grants 	<ul style="list-style-type: none"> ▶ Cash grants cover all or part of industrial R&D, R&D personnel costs and depreciation of R&D equipment. ▶ Grants are attributed to a consortium of at least two companies, active in the industry sector, and one R&D laboratory or training center. ▶ Several incentives are related to sustain collaborative. ▶ R&D activity and can reach up to EUR20 million depending on size of project (up to EUR50 million with certain projects).
	Reduced CIT treatment of revenues derived from patents	<ul style="list-style-type: none"> ▶ Reduced tax rates 	<ul style="list-style-type: none"> ▶ Full deductibility of amortization allowances and financing costs on standard 31% CIT rate. ▶ 10% CIT rate applies to income derived by French corporation from licensing or sale of patents, patentable rights or software, subject to certain conditions.
	Innovative New Company status	<ul style="list-style-type: none"> ▶ Reduced tax rates 	<ul style="list-style-type: none"> ▶ Full exemption from CIT for first profitable year and partial exemption (50%) for second profitable year. ▶ With approval of relevant local authorities, exemption from property tax and/or territorial economic contribution (TEC) for seven years. ▶ Exemptions for eight years from employer social security contributions for certain categories of employees involved in R&D operations.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	No	<ul style="list-style-type: none"> ▶ No (but obtaining tax ruling is strongly recommended) 	No	No
<ul style="list-style-type: none"> ▶ Future investments 	<ul style="list-style-type: none"> ▶ Unused credits may be carried forward for three years. 	No	Yes (after Income Tax Act amendment in 2019)	No
<ul style="list-style-type: none"> ▶ Future investments 	NA	Yes	Yes	No
<ul style="list-style-type: none"> ▶ Retroactive investments ▶ Current investments ▶ Future investments 	<ul style="list-style-type: none"> ▶ Unused credits may be refunded after carried forward for three years. 	No	Yes	No
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	NA	Yes	Yes	Yes
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	The territorial economic contribution (TEC) & property tax relief	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Companies eligible for Innovative New Company (INC) status can benefit from a temporary exemption from property tax and/or territorial economic contribution (TEC) ▸ Companies that performed certain types of activities within specific areas can benefit from temporary TEC relief. The tax relief is applicable to operations performed until 31 December 2020 for areas qualified as regional aid areas and for SMEs in SME investment aid areas. ▸ As of 1 January 2016, companies that have new buildings directly assigned to R&D activities – and subject to taxes for the first time in 2016 – can benefit from a 50% reduction in basis of Business Contribution on Property (cotisation foncière des entreprises), known as BCP, which is the main component of the territorial economic contribution and property tax.
	Accelerated depreciation of equipment and tools used for research operations	<ul style="list-style-type: none"> ▸ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▸ Applicable coefficients are 1.5, 2 and 2.5, depending on standard duration of amortization of equipment or tools for tax purposes. The plant and equipment must be primarily (but not exclusively) used for R&D operations eligible for R&D tax credit.
Germany	Various types of grants	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ R&D activities performed in Germany may be funded at regional, national and EU level. Funding quota ranges from 25% to 75% of eligible costs, depending on size of company, research category of the project, and whether project is conducted in cooperation with other companies or research institutes. ▸ Large companies may typically receive funding of up to 50% for eligible costs, while aid for SMEs may be higher.
Hungary	VIP cash grant	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Nonrefundable cash grant is available for investments. Grant amount depends on location and nature of investments. Grant is paid out as costs are incurred, and maximum cash grant amount is typically capped at certain percentage of total investment amount. ▸ Minimum investment value is EUR10 million and 50 new jobs (depending on location). ▸ Government has introduced a special R&D project cost-based cash grant in 2017. Minimum investment value is EUR3 million and 25 new R&D positions.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Ex ante: R&D projects starting in the future (upon receipt of a grant assessment) 	NA	Yes	Yes (during call for funds and annual post calculation of project costs)	In general, no; however, audits are possible
<ul style="list-style-type: none"> ▸ Future investments 	NA	Yes	Yes	In some cases

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Corporate tax credit	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ Tax credit is available to decrease CIT liability for period of 13 tax years. Maximum tax credit amount depends on location and value of investment and can decrease annual CIT liability by 80%. Tax credit may be applied together with cash grants. ▸ Government takes into consideration losses from initial operations and determines 16-year period in which tax credit can be used. ▸ Minimum investment value is HUF1 billion (EUR3.3 million) and 25 new jobs. ▸ There is special opportunity for R&D investments with significantly lower threshold of HUF100 million (EUR 0.3 million) investment without new job requirement.
	Double deduction of R&D costs	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Direct R&D costs or depreciation of capitalized R&D costs incurred in a given tax year are deductible twice for CIT purposes: as an expense and as CIT base deduction item. In some cases the recharged R&D costs from abroad are also eligible.
	Reduced social security contribution and training fund contribution for researchers	<ul style="list-style-type: none"> ▸ Tax credit ▸ Tax allowance 	<ul style="list-style-type: none"> ▸ The social contribution tax and training fund contribution on the wages of researchers with scientific degrees or academic titles (including students applying for these titles) will be 0% (instead of 19.5% and 1.5%, respectively), capped at gross monthly wage of HUF500,000 (EUR1,600) in case of researchers and HUF200,000 (EUR640) in case of students. ▸ In addition, R&D staff can get a maximum of 9.75% tax exemption on social contribution without any additional conditions to be fulfilled.
	Corporate tax exemption of 50% on royalty income	<ul style="list-style-type: none"> ▸ Reduced tax rate 	<ul style="list-style-type: none"> ▸ 50% CIT exemption of royalty profit (but capped at 50% of pre-tax profit). ▸ The BEPS approach (i.e., the nexus ratio) should be applied.
	Reduced local business tax base and innovation contribution base	<ul style="list-style-type: none"> ▸ Tax allowance 	<ul style="list-style-type: none"> ▸ All direct R&D costs in given tax year are deductible from local business tax base and from innovation contribution base. ▸ Royalty income is fully exempt and nexus ratio should not be applied. ▸ 10% of direct R&D costs are deductible from local business tax obligation in certain geographical locations.
India	Deductions for expenditure on scientific research	<ul style="list-style-type: none"> ▸ Accelerated depreciation on capital assets 	<ul style="list-style-type: none"> ▸ 100% deduction of revenue and capital expenditures (other than expenditures incurred during acquisition of land) paid out or expended in scientific research related to taxpayer's business. ▸ For expenditure incurred before business commences to pay salaries to employees engaged in scientific research or to purchase materials used in scientific research deduction of expenditures to be certified by appropriate authorities.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Future investments 	<ul style="list-style-type: none"> ▸ Unused tax credits cannot be carried forward once 16-year statutory deadline has lapsed. 	Notification to the Ministry for Finance is required only	No	In some cases
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Current investments 	NA	No	No	Recommended but not mandatory
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Retroactive investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ NOLs may be carried forward for eight years. 	No	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Deductions for expenditure on scientific research by manufacturing entities	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Super deduction of 150% for scientific research on approved in-house R&D expenditure, including capital expenditures (other than land and buildings), by companies engaged in manufacturing and production of articles and things (except those specified in Eleventh Schedule) or companies engaged in biotechnology business (from April 2020, deduction is restricted to 100% of sums paid).
	Deductions for contributions for R&D	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Weighted deduction of 150% is granted to assessee for sums paid to national laboratory, university or institute of technology or specified persons with specific direction that sums to be used for scientific research (from April 2020, deduction is restricted to 100% of sums paid). ▸ Weighted deduction of 150% is available for contributions to approved institutions to be used for scientific research (from April 2020, deduction is restricted to 100% of sums paid). ▸ Weighted deduction of up to 100% is available for contributions to qualifying company engaged in scientific research. ▸ Weighted deduction of up to 100% is available for contributions to approved institutions to be used for research in social sciences or statistical research.
	Patent-related incentive	<ul style="list-style-type: none"> ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ To provide additional incentive for companies to retain and commercialize existing patents and develop new innovative patented products, a concessional tax rate of 10% (plus applicable surcharge and tax) on gross royalty income (i.e., without deduction of any expenditure incurred of an eligible assessee from patents developed and registered in India) is available.
	Tax holiday on export profits earned by units set up in Special Economic Zones (SEZs)	<ul style="list-style-type: none"> ▸ Tax holiday 	<ul style="list-style-type: none"> ▸ SEZ units engaged in export of goods and services from 1 April 2006 to 31 March 2021 are eligible to claim 15-year, phased tax holiday on all export-linked profits earned.
	Funding for R&D activities in technology	<ul style="list-style-type: none"> ▸ Cash grants ▸ Loans ▸ Financial support 	<ul style="list-style-type: none"> ▸ Department of Scientific and Industrial Research (DSIR) provides support to industrial R&D projects through its Technology Development Program (TDP). The TDP Board invests in equity capital or gives loans to industrial concerns and research associations that are attempting development and commercial application of indigenous technology or adapting imported technology to wider domestic applications.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ NOLs may be carried forward for eight years. 	Yes	Yes	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	<ul style="list-style-type: none"> ▸ NOLs may be carried forward for eight years. 	Yes	Yes	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	Yes	Yes
<ul style="list-style-type: none"> ▸ Future investments 	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Customs duty exemption and concession	<ul style="list-style-type: none"> ▸ Tax exemptions ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ Customs duty exemption on import of specified goods for use by agrochemical sector having export turnover of INR0.2 billion and above during preceding financial year by manufacturers with in-house R&D unit. ▸ Concessional customs duty rate available on import of specified instruments, equipment or components by research institutions in pharmaceutical and biotechnology sector. ▸ Customs duty exemption on import of equipment, instruments, raw materials, components, pilot plant and computer software when imported into India on a project by a company with an in-house R&D unit.
	GST concession (research institution)	<ul style="list-style-type: none"> ▸ Reduced tax rate 	<ul style="list-style-type: none"> ▸ Concessional rate of GST to research institution for specified goods.
Ireland	R&D tax credits incentive	<ul style="list-style-type: none"> ▸ Tax credits ▸ Cash refunds 	<ul style="list-style-type: none"> ▸ Tax deduction for R&D expenditures incurred and additional R&D tax credit of 25% of qualifying spend can be relieved against CIT charge for the period. Excess R&D tax credits can be refunded in cash.
	RDI cash grants/financial support incentives	<ul style="list-style-type: none"> ▸ Cash grants ▸ Financial support 	<ul style="list-style-type: none"> ▸ Enterprise Ireland (EI) offers grants for R&D expenditures incurred by Irish-based manufacturing or internationally traded services companies. ▸ Grants for expenditures incurred on research, development and innovation are available from Irish Industrial Development Authority (IDA) and are offered for both first-time foreign direct investment and companies currently located in Ireland. ▸ Level of grant assistance from IDA and EI can vary, depending on a number of factors, including type of research activity. Grants are typically negotiated on a case-by-case basis, with a primary focus of job creation.
	Key employee tax credit incentive	<ul style="list-style-type: none"> ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ Allows company to reward key R&D employees who perform at least 50% of their duties in the “conception or creation of new knowledge, products, methods and systems” in the relevant accounting period. ▸ Company can allocate part of R&D tax credit it could have used to reduce CIT liability to a key R&D employee. This effectively allows employee engaged in R&D to claim a credit equal to the amount surrendered by the employer against his or her income tax.
	R&D tax credit on R&D buildings	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ 25% tax credit for expenditures for construction or refurbishment of building or structure used for R&D activities.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	NA	No	No	Yes
▸ Current investments	NA	No	No	Yes
▸ Current investments	▸ Excess R&D tax credits may be carried back for one year, while excess R&D tax credits may be carried forward indefinitely.	No	Yes; the R&D tax credit claim must be filed within 12 months of the accounting period in which the qualifying expenditure on R&D was incurred.	No
▸ Current investments ▸ Future investments	NA	Yes	Yes	No
▸ Current investments	▸ Employee may carry forward unused credits indefinitely (but loses credits upon leaving company).	No	Yes	No
▸ Current investments	▸ Excess credits may be carried forward indefinitely.	No	Yes; the R&D tax credit claim must be filed within 12 months of the accounting period in which the qualifying expenditure is treated as incurred.	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Allowances for capital expenditure for scientific research	<ul style="list-style-type: none"> ▸ Tax exemptions ▸ Accelerated depreciation 	<ul style="list-style-type: none"> ▸ Tax depreciation allowances for capital expenditure incurred during course of scientific research are available. Allowance is equal to amount of capital expenditure incurred (i.e., 100%) and is granted in computing trade profits.
	Knowledge Development Box	<ul style="list-style-type: none"> ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ Offers 6.25% effective tax rate for profits arising from qualifying assets. Main categories of qualifying assets are patents (including patents pending) and copyrighted software. Relief operates by providing a 50% deduction from qualifying profits, resulting in effective 6.25% tax rate.
Israel	Preferred Enterprise/Special Preferred Enterprise status	<ul style="list-style-type: none"> ▸ Reduced tax rates/ preferable tax rates 	<p>Preferred Enterprise: Reduced CIT rate on preferred income according to set schedule (for 2017 onward, the rate is 7.5% for companies located in Development Area A and 12% for rest of the country).</p> <ul style="list-style-type: none"> ▸ Special Preferred Enterprise: Reduced CIT rate of 6% for the portion of intellectual property developed in Israel, according to the Nexus Approach.
	Innovation box regime (Preferred Technology Enterprise/Special Preferred Technology Enterprise status)	<ul style="list-style-type: none"> ▸ Reduced tax rates/preferable tax rates 	<p>Preferred Technology Enterprise:</p> <ul style="list-style-type: none"> ▸ Reduced CIT rate of 12% on portion of IP developed in Israel (tax rate is reduced to 7.5% if company is located in Development Area A). ▸ Reduced capital gains rate of 12% for new IP acquired from a foreign company after 1 January 2017 at a minimum cost of ILS200 million (please note that a ruling is required). ▸ Reduced withholding tax rate of 4% on dividends distributed to a “qualifying company” (i.e., a foreign company that holds at least 90% of the Preferred Technology Enterprise’s shares). <p>Special Preferred Technology Enterprise:</p> <ul style="list-style-type: none"> ▸ Reduced CIT rate of 6% on portion of IP developed in Israel. ▸ Reduced capital gains rate of 6% for new IP developed or acquired from a foreign company after 1 January 2017 (please note that a ruling is required). ▸ Reduced withholding tax rate of 4% on dividends distributed to “qualifying company” (i.e., foreign company that holds at least 90% of Special Preferred Technology Enterprise’s shares).

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▶ Current investments 	<ul style="list-style-type: none"> ▶ Unused allowances may be carried forward indefinitely. 	No	A claim must be made within two years of the end of the chargeable period in which the expenditure was incurred, or where the expenditure was incurred before the trade was set up, within two years of the end of the chargeable period in which the trade was set up.	No
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments (Note: Benefits are available for accounting periods commencing on or after 1 January 2016 and before 1 January 2021.) 	NA	No	A claim in respect of each qualifying asset or family of qualifying assets must be made within 24 months of the end of the accounting period to which the claim relates. The claim is a lifetime claim, in that it continues until such time as the invention underlying the qualifying asset is disposed of or ceases to be used.	Certification is only required for certain SME companies who wish to avail of the KDB in respect of inventions that are not patented subject to meeting certain criteria. The application for certification where relevant must be accompanied by an opinion and supporting evidence from a patent agent confirming that the invention is novel, non-obvious and useful.
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Additional benefits (including the Angels Law)	<ul style="list-style-type: none"> ▸ Deduction of investment cost 	<ul style="list-style-type: none"> ▸ R&D expense deduction: Section 20A of Income Tax Ordinance enables companies to deduct R&D expenses (i.e., expenses incurred in scientific research in industry, agriculture, transportation or energy) on a current basis in tax year in which they were paid. ▸ Business asset rollover relief: Section 104 of Income Tax Ordinance provides capital gains tax relief to R&D-intensive companies that transfer certain assets to another company in order to raise capital for R&D activity. ▸ Angels Law: Permits individual investors, or individual investors in a partnership, to deduct investments (up to ILS5 million per target) made by 31 December 2019 to a qualifying R&D startup company or target company. Deduction is spread over three-year period starting with tax year in which investment is made. ▸ Deduction for purchase of shares in other R&D companies: A company that purchases shares of a qualifying R&D company may deduct the purchase amount for a period of five years starting from year following the year of purchase.
	Employment grants	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Employment Grant Program for High Salaries (R&D Centers): For enterprises located in national preference areas and/ or planning to recruit new employees from populations with low employment rates. The average grant is 20% of the salary cost to the employer (up to a maximum monthly salary of ILS16,000 per employee) for a period of 2.5 years. ▸ Employment Grant Program for High Salaries (R&D Centers): For enterprises with consolidated income turnover (including a foreign parent company) in excess of ILS25 million that are located in national preference areas and are planning to recruit 15-100 new employees with salary cost between the average cost of salary and 2.5 times the average salary in the market. Average grant is 25% of salary cost to the employer (up to maximum monthly salary of ILS30,000 per employee) for period of four years. ▸ “Ogen” employment grants: For enterprises with consolidated income turnover (including a foreign parent company) in excess of ILS100 million that are located in national preference areas and are planning to recruit 80-150 new employees with salary of at least 1.5 times the average salary in the market. Average grant is 25% of salary cost to the employer (up to a maximum monthly salary of ILS20,000 per employee) for period of four years. ▸ Employment grants for employers in the National Cyber Arena in Be'er-Sheva: For corporations, including partnerships, that employ (or are considering employing) staff in field of cybersecurity at National Cyber Arena in Be'er Sheva. Qualifying companies receive grant of 20% of employees' salaries for first three years (under certain conditions), with the percentage decreasing over following four years.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D, innovation and technology collaboration grants (Startup Division)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Tnufa Program: Supports private entrepreneurs and nascent startups that wish to bring novel technological idea to business fruition. A grant of up to 85% of approved budget, with maximum grant of ILS200,000 for a period of up to two years, is provided. ▸ Early Stage Incentive Program: For pre-seed companies that are looking to develop and promote innovative technological project and penetrate market by raising capital from private sector. A grant of 30% or 50% of approved budget, with maximum grant of ILS1.10 million for a year is provided. ▸ Incubators Incentive Program: Helps entrepreneurs transform innovative technology idea into a startup company. A technological incubator provides entrepreneurs with administrative, technological and business support. A grant of up to 85% of approved budget is provided, with budget limit of ILS3.5 million for period of up to two years. No financial investment is required by the entrepreneur, as the supplementary 15% financing is invested by the incubator ▸ Open Innovation Labs: The IIA will fund 33% (50% in Development Area A) of costs of establishing lab infrastructure and making the technology accessible (up to ILS2 million, or ILS4 million in Development Area A), and will fund 50% of costs of running the lab (up to ILS500,000) per year. The startup companies will be provided grants of up to 85% of approved budget (up to ILS1 million) for one year. ▸ Renewable Energy (Cleantech) Technology Center: The center supports technological ventures and R&D projects starting from the stages of applied academic research and early stage entrepreneurship. For enabling testing and trials for products undergoing development and demonstration. The center is operated by entities from the private sector, composed of strategic investors and an academic institute. The goal of this program is to support companies and entrepreneurs that interested in development of innovative technology in the fields of renewable energy and energy efficacy

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D, innovation and technology collaboration grants (Growth Division)		<ul style="list-style-type: none"> ▸ R&D Fund for Support of Competitive Research and Development: Grants are not limited in amount but companies whose annual development project budget exceeds ILS15 million are required to submit application for financial aid at beginning of the calendar year. Duration of approved development project is generally up to one year and scope of support ranges between 20% and 50% of approved development budget. ▸ Generic R&D Arrangement for Large Companies: Qualifying companies receive grant of 20% to 50% of approved R&D expenditures for long-term R&D plans. ▸ Encouragement of R&D for Space Technology: Encourages R&D in finding space-related technological solutions, such as development or upgrading of space-related products. Applicants are eligible for grants of up to 85% of approved R&D expenditures for period of 36 months. ▸ R&D and Pilot programs: The incentive programs enable Israeli technology companies (early stage, medium or big companies) to receive support in their R&D programs or pilot programs (a trial for assessing feasibility/proving the value of an existing technology in a work surrounding that simulates the target market) in selected fields, according to calls for proposals and submission deadlines that are published by the IIA. The relevant fields for such programs are: Transportation, Environmental Protection, Digital Health, Space Technologies, Cyber Security, Agrotech, Energy Efficiency and Reduction of Greenhouse Gas Emissions.. The participating companies will receive financial support of between 20%-75% of the approved Pilot's expenditures, depending on the field of the subjected project and its potential impact. ▸ Establishment of Multinational Companies' R&D Centres in the Fields of Biotechnology and Health (pilot): This incentive program enables large foreign industrial corporations operating in the fields of biotechnology or health to establish or expand their Israeli R&D and technological innovation operations as well as their management and global value chain operations in these fields. The submitting company receives a concession to submit for a period of five years with a financial support of up to 20% - 40% of approved R&D expenditures. The R&D plans will be approved in advance for a period of up to 3 years. Supported R&D centers will not be required to pay royalties to the Innovation Authority.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D, innovation and technology collaboration grants (Technological Infrastructure Division)		<ul style="list-style-type: none"> ▸ MAGNET Consortia: Supports formation of consortia consisting of industrial companies and academic institutions in order to jointly develop generic, precompetitive technologies. Industrial companies are granted up to 66% of approved budget, and academic institutions are granted up to 100%. ▸ MAGNETON: Promotes technology transfer from academic research institutions to industrial companies for development of breakthrough products. Grants are given of up to 66% of approved budget (up to a total of ILS3.4 million for period of 24 months). ▸ NOFAR: Provides support to academic research groups with technologically feasible ideas that are not mature enough for support from MAGNETON program but need financing in initial applied research stage. Grants under this program constitute up to 90% of approved budget, up to ILS550,000 for period of 12 months. Program is limited to fields of biotechnology and nanotechnology. ▸ Leveraging Military, Defense and Commercial R&D for Dual-Use Technologies (MEIMAD): Maximum grant per project is ILS5 million, and grant rate is 50% to 66% for industrial companies and 50% to 90% for research institutions. ▸ KAMIN: The KAMIN incentive program connects basic and applied research, focusing on the stage of transformation and realization of basic research achievements into technologies with commercial application. The goal is to encourage investment interests of business entities in applied research from the academic research institutions. Research groups get a grant of 85%-90% of the approved budget, up to a maximum amount of NIS 440,000 per year, for up to 2 years ▸ Users' Association: Designed for Companies engaged in R&D and interested in collaboration in the distribution and implementation of new technologies, this program allows joint activity of a group of industrial corporations as part of the Advanced Technologies Users' Association. The goal of this program is increase the knowledge and skills of companies through the cooperation with other companies. The Association, as a legal entity, receives a grant of up to 66% of the approved expenses. The members of the Association complete this sum to 100% of the Association's expenses and planned budget. There are no royalty payments under this program

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D, innovation and technology collaboration grants (Advanced Manufacturing Division)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Encouraging Support in Traditional Industries: For companies in traditional industries (such as plastic, rubber, metal, glass, ceramics, hardware, textile, wood, leather, paper, metalwork and food) that have relatively low investment in R&D and want to conduct innovative R&D. Eligible companies receive grant of up to 50% of approved budget. ▸ R&D Preparatory Incentive Program for Companies in the Manufacturing Industry: In order to assist companies from the manufacturing industry sectors with their R&D activities, the IIA established this incentive program. The preparatory incentive program has 4 secondary tracks: Basic Support Track (assist in formulating new products or processes), Technological Feasibility Examination Track, and Developing Solutions for Flaws in the Production Process and Improved Production Process. The support includes the consultant's fee, market surveys, technology and patents, laboratory tests, purchase of materials and specific equipment, additional technology consultants, fees and other miscellaneous expenditures related to the approved project.
	R&D, innovation and technology collaboration grants (Societal Challenges Division)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Support in R&D of Assistive Technology for the Disabled: Nonprofits receive support of 85% of approved expenses for R&D, with no repayment of royalties. Commercial companies receive support of 65% of approved budget as a conditional grant. The conditional grant is up to ILS900,000 per year. ▸ Grand Challenges Israel (GCI) Incentive Program: Provides financing of up to 90% of approved budget, up to ILS500,000. ▸ Digital Innovation in Industry Focused on Public Sector Challenges: There are two benefit tracks: (i) preliminary R&D track, which provides support of up to 90% of approved budget or conditional grant of ILS300,000 for period of 12 months; and (ii) R&D track, which provides support of up to 50% of approved budget or conditional grant of ILS4 million for period of 12 months. ▸ Incentive Programs for Ultra-Orthodox and Minorities: The program is suitable for companies that at least 33% of their shares are owned by an entrepreneur from the Haredi or minorities sector. The grant is up to 75% of the project's approved budget (up to NIS 2.5 million) in the first year and 70% (up to NIS 4.5 million) in the second year. A company interested in a higher budget may submit under to Early Stage Companies standard program, a budget of up to NIS 10 million at a grant rate of 50% or 30% of the approved budget.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D, innovation and technology collaboration grants (International Collaboration Division)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Bilateral parallel support programs: Israeli Government has concluded more than 40 binational R&D agreements with countries, states, provinces and regions that enable Israeli companies to enter into joint R&D projects with foreign companies. Support includes grants of up to 50% of approved R&D budget, or in accordance with incentive program applicable to joint project. ▸ Binational funds: Israel Innovation Authority operates binational funds, whereby Israel and foreign country allocate dedicated funds to finance joint R&D projects between companies in Israel and in partner country. The funds operate under provisions set out in bilateral agreements. There are currently five binational funds (with the US, Canada, South Korea, India and Singapore). ▸ Horizon 2020: Israel is “associated country” to EU’s Horizon 2020 program, which enables Israel to participate in Horizon 2020 program under same conditions as EU Member States. ▸ EUREKA: Israel is member of EUREKA, an intergovernmental network that supports pan-European market-oriented industrial R&D and innovation projects. The network facilitates the international coordination of national R&D and innovation programs, and provides support to companies, research centers and universities. Israeli companies that take part in program are entitled to receive royalty-bearing R&D grants from Israel Innovation Authority of up to 50% of approved budget. EUREKA network has over 40 member countries and provides support through four instruments (network projects, Eurostars, ECSEL, FTI and Clusters).
Italy	R&D tax credit	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ Tax credit equals up to 25%/50% of annual increase of average R&D expenses for the FYs 2012-2014
	Patent box	<ul style="list-style-type: none"> ▸ Tax deduction related to the use of qualifying IP/execution of qualifying R&D expenses 	<ul style="list-style-type: none"> ▸ 50% exemption (reduced to 30% for 2015 and 40% for 2016) from CIT and local tax (IRES and IRAP) on income derived from licensing or direct exploitation of qualifying IP (no trademarks). ▸ Regime is available for taxpayers who perform R&D activities and is characterized by five-year lock-in period (election is renewable).
	Regional tax (IRAP) deduction for R&D employees	<ul style="list-style-type: none"> ▸ IRAP deduction for costs related to personnel employed in R&D activities 	<ul style="list-style-type: none"> ▸ Costs related to personnel employed in R&D activities may be deducted from IRAP taxable basis. The deduction is an alternative to other IRAP tax deductions related to labor costs and may not be used if taxpayer elects other deductions. ▸ Deduction amount is limited to employees’ direct costs related to R&D activities.
Lithuania	The scientific research and experimental development incentive	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ When calculating CIT, R&D costs (except for depreciation or amortization costs of fixed assets) may be deducted three times from income for tax period during which the costs were incurred.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	No	No
▸ Current investments ▸ Future investments	No	No	Yes	Yes
▸ Current investments ▸ Future investments	NA	▸ No (but a ruling is required in some cases)	No	No
▸ Current investments ▸ Future investments	NA	No	No	No
▸ Current investments	▸ Losses may be carried forward indefinitely, but loss carryback not permitted.	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	The scientific research and experimental development incentive	<ul style="list-style-type: none"> Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> Certain fixed assets used in R&D activity may be depreciated with accelerated terms. Depending on type of fixed asset, the depreciation period might be shortened from eight, five, four or three years to two years.
	Patent-related incentive	<ul style="list-style-type: none"> Reduced CIT rate for taxable profit derived from intangible assets 	<ul style="list-style-type: none"> Taxable profit from the use, sale or other transfer of an intangible asset may be taxed at a reduced 5% rate.
Luxembourg	R&D projects or programs	<ul style="list-style-type: none"> Cash grants, recoverable advances 	<ul style="list-style-type: none"> R&D and innovation aid for eligible businesses and projects (all enterprises) may not exceed the following amounts (additional increases of 10%-20% may be granted depending on types of enterprises or activities): <ul style="list-style-type: none"> Fundamental research: maximum 100% of eligible expenses. Applied industrial research: maximum 50% of eligible expenses. Experimental development activities: maximum 25% of eligible expenses. An enterprise or private research organization that conducts a feasibility study prior to an R&D project or program may benefit from aid capped at 50% of the amount of eligible costs. Amount can be increased by 10% for medium-sized enterprises and medium-sized private research organizations and by 20% for small enterprises and small private research organizations. Aid of up to 50% of eligible costs can be granted for construction or modernization of research infrastructures that perform economic activities. SMEs may be granted innovation aid of up to 50% of eligible costs, which can increase to 100% with a maximum of EUR200,000 for innovation advisory and support services. Enterprises or private research organizations realizing process or organizational innovation may be granted up to 15% for large companies or private research organizations and 50% for small and medium-sized enterprises and private research organizations.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	▸ Losses may be carried forward indefinitely, but loss carryback not permitted.	No	No	No
	▸ Losses may be carried forward indefinitely, but such losses may cover only the taxable profit from the use, sale or any other transfer of the intangible asset.	No	No	Yes (some exceptions may apply)
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Investment tax credit	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ Tax credit of 13% is granted for additional investments in qualifying assets made during tax year. Qualifying assets consist of additional tangible fixed assets depreciable over three or more years that are physically used in EU Member States or in Iceland, Liechtenstein and Norway (the EEA). Buildings do not qualify, nor do secondhand assets, barring a few exceptions. ▸ An 8% credit is granted for qualifying new investments up to EUR150,000, and a 2% credit is granted for investments over that amount. If investments are made to create jobs for disabled persons, these rates increase to 9% and 4%, respectively. ▸ In addition, an 8% tax credit is granted, upon conditions, for investments in acquired software.
	Tax credit for hiring of unemployed persons	<ul style="list-style-type: none"> ▸ Tax credit 	<ul style="list-style-type: none"> ▸ A monthly tax credit of 10% calculated on the monthly gross remuneration paid to persons who were unemployed can be offset against CIT. ▸ The tax credit is granted for a period of 12 months starting with the month of employment.
	Special tax regime for expatriate highly skilled employees	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ A beneficial income tax regime is available for expatriate highly skilled employees, i.e., employees who are sent to work temporarily in Luxembourg on an assignment between intragroup entities. It also applies to employees who are directly recruited abroad by a Luxembourg company to work in Luxembourg. Under certain conditions, various costs directly related to the expatriation are not considered taxable employment income (e.g., moving costs, school fees, housing costs)
	Medium-term and long-term loans granted by the <i>Société Nationale de Crédit et d'Investissement</i> (SNCI)	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ SNCI grants medium-term and long-term loans to industrial enterprises and service providers whose activity represents a significant impact on economic development and whose equity amounts to at least EUR25,000. ▸ Loans are intended to finance tangible and intangible assets that are subject to depreciation, and land used for professional purposes only.
	Direct loan for research, development and innovation granted by the SNCI	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ SNCI grants direct loans for research, development and innovation to innovative SMEs that possess a business license for at least four years and have substantial impact on national economic development.
	Loan for innovative enterprises granted by the SNCI	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ SNCI grants loans for “innovative enterprises” to young innovative SMEs that have a business license, have been in existence for less than eight years and have substantial impact on national economic development. ▸ Loan amount takes into account extent of project and size of the company, without exceeding EUR1.5 million and 35% of eligible costs. ▸ Incentive cannot be combined with other SNCI instruments.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
New investments	Credits may be carried forward for 10 years.	No	Form 800 to be filed together with Corporate Income Tax (CIT) return	No
Hiring of unemployed persons	Credits may be carried forward for 10 years	No	Form 805E to be filed with Corporate Income Tax (CIT) return	Yes - certificate from the employment administration certifying the placement and continuation of employment must be attached for each hired unemployed person
▸ Hiring of highly skilled personnel	NA	No	At the beginning of each calendar year (at the latest on 31 January), the employer must send a list of employees who benefited from the regime to the Luxembourg tax authorities	No
▸ Future investments	NA	Yes	No	No
▸ Future investments	NA	Yes	No	No
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Value-added tax (VAT) considerations	<ul style="list-style-type: none"> Exemptions 	<ul style="list-style-type: none"> Franchise regime is applicable for small enterprises to minimize compliance burden VAT exemption for education including supply of services and goods applies under certain conditions Subsidies, when not directly linked to a supply, are outside the VAT scope
	Accelerated depreciation and deferred depreciation	<ul style="list-style-type: none"> Accelerated and deferred depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> Standard depreciation for wear and tear may be taken using annual declining balance depreciation method, which may be calculated by applying a fixed rate to the book value (remaining value). The rate of accelerated depreciation applicable to materials and equipment used exclusively in scientific or technical research activities may not exceed four times the rate that would be applied for straight-line depreciation, and it may not be greater than 40%. If a taxpayer does not choose the method of the accelerated depreciation, but instead opts for the method of the linear depreciation (straight-line depreciation over the useful life of the asset), the depreciation of an asset for a given year can, upon request, be deferred until at the latest the end of the useful life of such asset.
	Special depreciation	<ul style="list-style-type: none"> Special depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> Special depreciation may apply to fixed assets purchased or constructed for purposes of protecting the environment, reducing waste or saving energy. Acquisition or production cost of investment must be at least EUR2,400 (excluding VAT). Special depreciation may not exceed 80% of acquisition or production costs of qualifying assets, and may be taken during financial year in which the purchase of formation of the fixed assets occurs, during one of four subsequent years or on a straight-line basis in installments over five years. Special depreciation does not exclude application of standard depreciation for wear and tear. Standard depreciation should be calculated on net book value remaining after deduction of special depreciation and should be based on ordinary useful life.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ VAT exemptions and regimes for qualifying activities	NA	NA	NA	No
▸ Current investments	NA	No	No	No
▸ Newly acquired or constructed fixed assets	NA	Yes	Form 113a to be filed with Corporate Income Tax (CIT) return	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Partial tax exemption of income derived from qualifying IP	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ Under IP regime introduced by law of 21 December 2007, 80% of net income generated by exploitation of IP right is exempt from tax, under certain conditions. The regime covers patents, trademarks, designs, domain names and software copyrights. ▸ To comply with BEPS Action 5, the regime was abolished as of 1 July 2016 for corporate tax and as of 1 January 2017 for net wealth tax. However, a five-year transition period is in place: the current regime will continue to apply until 30 June 2021 to qualifying IP created or acquired before 1 July 2016, including improvements made to such IP, provided they were completed before 1 July 2016. For net wealth tax purposes, the current regime will continue to apply to the abovementioned IP until 1 January 2021 (inclusive) as a key date for calculation of the unitary value.
Netherlands	R&D tax credit (WBSO)	<ul style="list-style-type: none"> ▸ Tax credit ▸ Income tax withholding incentives ▸ Reduced social security contributions (available for employers) ▸ Based on wage costs and other costs and expenses 	<ul style="list-style-type: none"> ▸ R&D tax credit reduces wage withholding tax payable by employer based on qualifying wage costs and other costs and expenses. Credit is accumulated in 2019 as follows: <ul style="list-style-type: none"> ▸ For R&D entities: credit is 32% for first EUR350,000 of qualifying R&D wage costs and other costs and expenses for R&D. For (wage) costs and expenses that exceed EUR350,000, deduction rate is 16%. ▸ Startups are eligible for increased deduction of 40% of R&D wage costs and other costs and expenses for R&D. ▸ For other costs and expenses (such as for (raw) materials, prototype construction, investments in equipment) in an R&D project, taxpayers can calculate amount of tax credit by choosing one of two approaches: a fixed sum or actual costs and expenses.
	Innovation credit	<ul style="list-style-type: none"> ▸ Direct loans for technologically innovative projects 	<ul style="list-style-type: none"> ▸ SMEs are eligible for direct loan for “risky” innovation projects that are technologically innovative and unique to the Netherlands. The loan is risk-bearing and has to be repaid only if project succeeds. ▸ Small companies can qualify for 45% credit of development costs. ▸ Medium companies can qualify for 35% credit of development costs. ▸ Large companies can qualify for 25% credit of development costs.
	Innovation box	<ul style="list-style-type: none"> ▸ Reduced corporate income tax rate 	<ul style="list-style-type: none"> ▸ Eligible R&D income effectively taxed at 7% instead of statutory CIT rate of 25%. Losses are deductible at 25% statutory rate, but future profit will be taxed at 25% for amount of loss related to R&D allocated to innovation box. ▸ Legislation has been changed to bring innovation box regime in line with BEPS Action 5. This legislation is applicable as of 1 January 2017. Grandfathering rules allow taxpayers to make use of the 2016 innovation box regime until the end of the last financial book year of the taxpayer prior to 1 July 2021 (subject to meeting certain conditions).

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments, subject to transition rules	NA	No	No	No
▸ Future investments	NA	Yes	Yes	No
▸ Current investments ▸ Future investments	NA	Yes	Yes	No
▸ Retroactive investments ▸ Current investments ▸ Future investments (Note: Transitional rules apply)	▸ NOLs can be carried back for one year and carried forward six years.	No (but recommended)	Yes	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	SME Innovation Incentive Scheme for Top Sectors (MIT)	<ul style="list-style-type: none"> ▸ Cash grants for SMEs for feasibility studies and R&D collaboration projects ▸ Knowledge vouchers 	<ul style="list-style-type: none"> ▸ Aimed In particular at SMEs that will engage in innovation and/or R&D collaboration projects. ▸ Cash grants for technical and commercial feasibility studies, knowledge vouchers and R&D collaboration projects.
	Private-public partnerships project allowance for research and innovation (PPS)	<ul style="list-style-type: none"> ▸ Cash grants for partnerships between private and public parties 	<ul style="list-style-type: none"> ▸ Cash grants of 40% are available on private investment costs for first EUR20,000, and 25% for excess. ▸ To receive funding, the cash grant has to be invested in R&D project of the partnership.
	One-time full amortization for R&D intangible assets	<ul style="list-style-type: none"> ▸ Full amortization for R&D intangible assets (available for personal and corporate income tax) 	<ul style="list-style-type: none"> ▸ Self-developed intangibles are fully amortized at moment they are realized, instead of amortization over intangible's entire life cycle.
	R&D deduction	<ul style="list-style-type: none"> ▸ Fixed super deduction for personal income tax 	<ul style="list-style-type: none"> ▸ Lump-sum deduction for an individual (entrepreneur) who performs R&D activities is EUR12,775 or EUR19,166 (2019 amounts) for first five years of enterprise's life.
Norway	Tax credit scheme (SkatteFUNN)	<ul style="list-style-type: none"> ▸ Tax credit ▸ Reduced social security contributions 	<ul style="list-style-type: none"> ▸ Taxpayers may take direct deductions as percentage of their tax liabilities and of up to 20% of the qualifying expenditure. The deduction is either used to obtain reduced tax liabilities and social security contributions, or contributed as a cash payment if the taxpayer is not in a taxpaying position.
	Cash grants/financial support	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Governmental agencies (such as Innovation Norway) and partially state-owned organizations provide cash grants or financial support. The amount granted varies with development phase and type of project, business and subject area.
	Loans and warranties	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ Innovation Norway also offers loans and warranties in same manner as cash grants/ financial support.
Poland	Incentives for special economic zones (SEZs)	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ CIT exemption is granted to taxpayers with a permit for running a business in a SEZ. CIT exemption amount may be used by investor until end of SEZ's existence (i.e., up to 2026) in relation to income generated by business activities specified in permit (R&D activities are eligible). ▸ State aid for an investment project can be up to 50% (depending on the location, an additional 20 or 10 percentage points are granted small and medium-sized enterprises, respectively) of the eligible investment costs or two-year employment costs.
	Incentive for Polish Investment Zone (PIZ)	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ Allows for CIT exemption of up to 15 years for income generated by activities covered by a decision on support and conducted within the territory of the investment.
	Multi-Annual Support Program (MASP)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Cash grants are provided to large investments that are considered crucial to Polish economy and dependent on grants for implementation. Level of support is based on i) costs of new investment expenditures, or ii) two-year employment costs of newly created jobs.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Future investments	NA	Yes	Yes	No
▸ Future investments		Yes	Yes	No
▸ Retroactive investments	▸ NOLs may be carried back one year (for CIT) or three years (for individual income tax) and be carried forward for six years.	No	No	No
▸ Future investments	▸ NOLs can be carried back for three years and carried forward for six years.	Yes	Yes	No
▸ Retroactive investments ▸ Current investments ▸ Future investments	NA	Yes	Yes	No
▸ Current investments ▸ Future investments	NA	Yes	Yes	No
▸ Current investments ▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	"R&D tax relief - additional decrease in tax base by R&D costs"	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Up to 100% of R&D expenses may be additionally deducted directly from tax base (150% for entities holding R&D center status). ▸ Starting from 2018, this form of support is available, under certain conditions, also to companies running business actions in the SEZ.
	Research and Development Center (RDC) status	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Ministry of Entrepreneurship and Technology may grant tax deduction for entrepreneurs who carry out R&D activities. ▸ Through the incentive, additional incentives for R&D tax relief will apply (higher tax deduction and additional categories of eligible costs).
	Grants from EU funds	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ As part of EU's Horizon 2020 program, Poland is implementing new operational programs (with a total budget of about EUR82.5 billion) to provide support for various types of projects. Programs include EU cash grants for R&D works and EU funds for R&D infrastructure.
Portugal	R&D cash grant (SI I&DT)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Cash grants up to EUR1 million; for incentive amounts that exceed EUR1 million, 25% is interest-free loan and 75% is cash grant.
	R&D tax credit (SIFIDE)	<ul style="list-style-type: none"> ▸ R&D tax credit 	<ul style="list-style-type: none"> ▸ SIFIDE tax credit consists of two components: ▸ A base rate of 32.5% applicable to R&D expenses of current tax year. ▸ An incremental rate of 50% on expenses incurred during the period, in comparison with the simple average of the two previous tax years, with a limit of EUR1.5 million.
	Portuguese nonhabitual resident individuals regime	<ul style="list-style-type: none"> ▸ Portuguese non-habitual resident individuals regime 	<ul style="list-style-type: none"> ▸ Employment and business or professional income arising from a Portuguese source and derived from "high-added-value" activities of scientific, artistic or technical nature is taxed at flat rate of 20% on net income plus extraordinary surcharge between 0% and 3.5%, depending on the amount of net income. ▸ Regime may be applied for period of 10 years.
	Patent box - deduction from income derived from patents and industrial IP developed in Portugal	<ul style="list-style-type: none"> ▸ Patent-related incentives 	<ul style="list-style-type: none"> ▸ Patent box was amended to align with BEPS Action 5. New regime provides (in proportion to incurred eligible expenses) for exclusion of up to 50% from taxable basis in relation to income derived from contracts of transfer or of temporary use of patents and industrial designs or models. ▸ This regime applies only to patents and industrial designs or models registered on or after 1 July 2016. For eligible IP registered previously (from January 2014 to July 2016), the previous patent box regime rules will apply until 2021.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	▸ Excess can be carried forward for six consecutive years after a year in which costs were incurred.	No	No	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Retroactive investments ▸ Current investments	▸ Tax credits not deductible because of insufficient tax payable in the period in which they were granted may be deferred up to the eighth immediate tax year.	Yes	No	No
▸ Current investments	NA	Yes	No	No
▸ Current investments ▸ Future investments (Note: Previous patent box regime applies until 2021 under transition rules.)	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	R&D deduction regarding the Special Contribution on the Pharmaceutical Industry (SCPI)	<ul style="list-style-type: none"> ▸ Tax deduction 	<ul style="list-style-type: none"> ▸ Per agreement between Ministries of Health and Finance and the pharmaceutical industry, R&D expenses related to the SCPI may be deducted in order to stimulate investment in R&D activities in Portugal. Agreement will be valid for the years 2016, 2017 and 2018, and amount of deduction must be certified by the last day of January of following year by a Big Four accounting firm.
Romania	Corporate income tax exemption for companies that exclusively perform R&D and innovation activities	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ In January 2017, CIT exemption was introduced for taxpayers that exclusively perform R&D and innovation activities, as well as related activities. ▸ Exemption is available for newly set-up taxpayers for first 10 years of their activity; or, for taxpayers that were already set up when provisions entered into force, for 10 years from entry into force of provisions.
	Accelerated depreciation method	<ul style="list-style-type: none"> ▸ Accelerated depreciation on R&D assets 	<ul style="list-style-type: none"> ▸ Maximum of 50% of fiscal value of asset may be deducted during first year of use, while rest of asset's value may be depreciated over the remaining useful life.
	Additional deductions for eligible R&D expenses	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ By law, a 150% super deduction can be applied only to expenses incurred in relation to applied research and technological development. Under this incentive, taxpayer can benefit from additional deduction for CIT purposes representing 50% of R&D expenses.
	Income tax exemption on salary income attributable to activities performed in applied R&D or technological development fields	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ Income earned from performing activities in applied R&D or technological development fields will be exempt from Romanian salary income tax (10%). Applies to salary income derived from August 2016.
Russia	Super deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ 150% super deduction of R&D expenses incurred for activities in accordance with Government-approved list.
	Investment tax credit	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ Taxpayer is allowed to reduce tax payments for certain period, with subsequent payment of amount of tax credit and accrued interest. Tax credit may be provided for one to five years and shall not exceed 50% of a taxpayer's total payment for the period.
	Reduced profits tax and assets tax rates	<ul style="list-style-type: none"> ▸ Reduced tax rates 	<ul style="list-style-type: none"> ▸ Regional governments may provide reduced profits tax rate (from 20% to 15.5%) for taxpayers engaged in certain types of R&D activities. May also provide reduced assets tax rate below the ordinary 2.2% rate (some regions provide assets tax exemption) on assets used in such R&D activities.
	Reduced rate of social insurance contributions	<ul style="list-style-type: none"> ▸ Reduced social security contributions 	<ul style="list-style-type: none"> ▸ Reduced rates of social security contributions are available to IT companies at following rates: 14% on annual compensation up to RUB865,000; 12% on annual compensation up to RUB1.150 million; and 4% on annual compensation exceeding RUB1.150 million.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	Yes
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	<ul style="list-style-type: none"> ▸ Unused expenses may be carried forward no more than 50% of the tax profits for a current tax period 	No	Yes	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	Yes	Yes	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	Yes	Yes/No, depending on the legislation of the region	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	No	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Accelerated depreciation on R&D assets	<ul style="list-style-type: none"> Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> Taxpayers may apply special coefficient, but no higher than three, to basic depreciation norm in relation to amortizable fixed assets that are used exclusively to carry out scientific and technical activities.
	VAT exemptions	<ul style="list-style-type: none"> VAT exemptions 	<ul style="list-style-type: none"> VAT exemption for certain R&D production activity.
	Tax holiday	<ul style="list-style-type: none"> Tax holiday 	<ul style="list-style-type: none"> Individual entrepreneurs performing R&D activities and applying simplified or patent taxation systems may apply 0% tax rate for two years.
Slovak Republic	R&D subsidy	<ul style="list-style-type: none"> Cash grants 	<ul style="list-style-type: none"> Maximum amount of grants ranges from 25% to 100% of eligible costs, depending on type of R&D project and size of enterprise.
	R&D income tax relief	<ul style="list-style-type: none"> Tax credit 	<ul style="list-style-type: none"> Tax credit is provided to companies that pursue projects involving basic and applied research, experimental development and feasibility studies. In determining the tax credit amount, the Government takes into account direct and indirect R&D expenses incurred by the taxpayer, size of the company and type of project. Once credit amount is determined, it is applied proportionally to the tax base.
	Investment aid for technological centers	<ul style="list-style-type: none"> Cash grants Tax credits Transfer or rent of immovable property or exchange of immovable property at a price lower than market price 	<ul style="list-style-type: none"> Can be provided in the form of income tax relief, subsidy for acquisition of tangible and intangible fixed assets, contribution for creation of new jobs, or transfer or rent of immovable assets from the state and/or municipality at a price lower than the general value of the asset or rent lower than according to official appraisal. Amount of aid can be up to 35% of eligible costs and depends on region where project is realized and on size of enterprise.
	Subsidy on scientific and technical services	<ul style="list-style-type: none"> Cash grants 	<ul style="list-style-type: none"> Specific funding programs have predefined amounts of funds and funding amounts vary by the type of program.
	Super tax deduction for R&D costs	<ul style="list-style-type: none"> Tax deduction 	<ul style="list-style-type: none"> Legislation introduced as of 1 January 2015 provides for additional deduction of qualified R&D costs that can be added to taxpayer's tax base. Qualified costs can be increased by: <ul style="list-style-type: none"> 100% of expenses incurred in connection with R&D. 100% from year-on-year increase in the R&D costs.
	Patent box	<ul style="list-style-type: none"> Tax exemption 	<ul style="list-style-type: none"> Partial tax exemption of revenues generated from some intangible assets created by a taxpayer's own development activities in the territory of Slovakia. Exemption of 50% applies to revenues generated from provision of right to use (licensing) a patent, design, utility model or computer program (software) created by a taxpayer in Slovakia. The same 50% exemption applies to revenues generated from sale of products in which a patent, utility model or design created in Slovakia has been used.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	▸ Expenses may be carried forward for 10 years.	No	No	No
▸ Current investments	NA	No	No	No
▸ Current investments	NA	No	No	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Future investments	NA	Yes	Yes	No
▸ Current investments ▸ Future investments	▸ Allowance can be carried forward to next tax period up to a maximum of four consecutive tax years.	No	Yes	No
▸ Current investments		No	Yes	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
Slovenia	General R&D tax relief	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Taxpayers can receive double tax deduction for investments in R&D: 100% CIT base deduction is available on R&D investments and certain expenses incurred. Taxpayers are entitled to general R&D tax relief corresponding to 100% of amount invested into R&D activities. The R&D tax relief and special investment tax relief cannot be claimed at the same time.
	Cash grants	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ Government is offering various cash grants and financial support for R&D activities under its operational program for implementation of EU Cohesion Policy for 2014-20. ▸ The operational program was slightly changed on 21 December 2017 based on a proposal submitted by the Slovenian Government Office for Development and European Cohesion Policy to Brussels on 11 July 2017. In line with the amendments, some part of the foreseen funds from financial instruments totaling EUR180 million in the Eastern Cohesion region were channeled into cash grants to promote investment in research and innovation, entrepreneurship and energy efficiency. ▸ On 1 July 2016 the public agency SPIRIT introduced a public tender for promotion of direct foreign investments in 2016-17, under which grants are available for R&D projects in Slovenia. Benefits are different for every case.
	Financial support -reimbursable means	<ul style="list-style-type: none"> ▸ Financial support 	<ul style="list-style-type: none"> ▸ Ministry of Finance regularly publishes list of open state aid. Financial support can be provided as a loan, guarantee or capital increase (venture capital funds) ▸ On 23 November 2017, Slovenia launched implementation of financial instruments within a framework of the implementation of the cohesion policy of the 2014-20 period. In this respect, EUR253 million is earmarked from reimbursable European funds. These funds will be managed by the Fund of Funds d.d. (SID Bank). Financial instruments are expected to promote investments and current operations with debt and equity financing. Accordingly, private operators will transfer all the benefits (e.g., lower interest rate, lower required insurance, a moratorium on repayment of a loan, longer maturity of loans) that they will obtain from the SID Bank to the final recipients (companies, public institutes, municipalities and individuals). The funds will be transferred to research, development and innovation projects and investments, small and medium-sized enterprises (for the startup of the company and the early-growth phase and for the growth and development of the company) and energy efficiency and urban development projects.
	Loans	<ul style="list-style-type: none"> ▸ Loans 	<ul style="list-style-type: none"> ▸ Legal entities established in Slovenia performing qualifying R&D activities may obtain a loan from SID Bank with favorable terms and conditions.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	▸ Unused relief can be carried forward for five tax periods.	No	Yes	No
▸ Future investments	NA	Yes	No	No
▸ Current investments ▸ Future investments	NA	Yes	No	No
▸ Future investments	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
South Africa	Section 11D	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Super deduction equal to 150% is allowed per year for qualifying direct R&D costs.
	Section 12C (1) (gA)	<ul style="list-style-type: none"> ▸ Accelerated depreciation on qualifying R&D assets 	<ul style="list-style-type: none"> ▸ Capital expenditures incurred to develop, construct or purchase new and unused assets used in conduct of qualifying R&D activities qualify for accelerated depreciation at a rate of: <ul style="list-style-type: none"> ▸ First year asset is in use: 50% ▸ Year two: 30% ▸ Year three: 20%
	Support Programme for Industrial Innovation (SPII)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ SPII Product Process Development (PPD) scheme: nontaxable and non-repayable grant is available to small, very small and micro enterprises and to individuals. Grant ranges between 50% and 85% of qualifying costs incurred during technical development stage (maximum ZAR2 million per project). Percentage is based on percentage ownership by certain disadvantaged groups. ▸ SPII Matching scheme: nontaxable and non-repayable grant is available to all enterprises and individuals. Grant ranges between 50% and 75% of qualifying costs incurred during technical development stage (maximum ZAR5 million per project). The percentage is based on the percentage ownership by certain disadvantaged groups.
	Technology and Human Resources for Industry (THRIP)	<ul style="list-style-type: none"> ▸ Cash grants 	<ul style="list-style-type: none"> ▸ A cost-sharing grant of up to ZAR8 million per year for a period of three years for approved projects engaged in applied R&D in science, engineering and/or technology.
Spain	Tax credit for R&D expenses	<ul style="list-style-type: none"> ▸ Tax credits 	<ul style="list-style-type: none"> ▸ 25% tax credit for R&D expenses incurred in the tax year. If expenses incurred exceed the average amount of those costs in preceding two years, the rate of 25% applies to amount equal to the average, while a rate of 42% applies to the excess. ▸ Additional 8% tax credit is available for investments made in tangible (excluding buildings and land) and intangible fixed assets exclusively assigned to R&D activities. ▸ Additional tax credit of 17% is available for staff expenses related to skilled researchers exclusively assigned to R&D activities. ▸ Additional 12% tax credit is available for technological innovation activities. ▸ Taxpayers meeting certain conditions may elect not to be subject to annual limitation on tax credits (25%-50%) but apply full tax credit with 20% discount (monetization procedure).
	Reduced social security contributions	<ul style="list-style-type: none"> ▸ Partial tax exemption 	<ul style="list-style-type: none"> ▸ Firms may reduce 40% of social security payments for employees dedicated full-time to research, development and technological innovation activities.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	<ul style="list-style-type: none"> ▶ Loss can be used against future taxable income, and can be carried forward indefinitely. 	Yes	Yes	No
<ul style="list-style-type: none"> ▶ Current investments ▶ Future investments 	<ul style="list-style-type: none"> ▶ Loss can be used against future taxable income, and can be carried forward indefinitely. 	No	No	No
<ul style="list-style-type: none"> ▶ Future investments 	NA	Yes	Yes	No
<ul style="list-style-type: none"> ▶ Future investments 				
<ul style="list-style-type: none"> ▶ Current investments 	<ul style="list-style-type: none"> ▶ Unused credits may not be carried back but may be carried forward for 18 years. 	<ul style="list-style-type: none"> ▶ No (but motivated report is required in order to apply monetization procedure) 	No	No
<ul style="list-style-type: none"> ▶ Current Investments 	NA	<ul style="list-style-type: none"> ▶ Yes (for companies applying incentive to 10 or more employees) 	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Patent box regime	<ul style="list-style-type: none"> Partial tax exemption 	<ul style="list-style-type: none"> Patent box regime was amended to align with BEPS Action 5. The tax incentive (60% reduction) will continue to apply, but proportionally to the “qualifying costs” (i.e., excluding outsourcing costs with related parties and intangible assets acquisition costs). Patent box may continue to apply to income deriving from transfer of intangible asset, but only when transaction is carried out between non-related parties. For assignments of IP started before 1 July 2016, the patent box regime existing when assignment was formalized can be voluntarily applied until 30 June 2021.
Sweden	Reduced social security contributions for tasks concerning commercially performed R&D	<ul style="list-style-type: none"> Reduced social security contributions 	<ul style="list-style-type: none"> Social security charges are currently rated at 31.42%. Companies may deduct 10% of net salary from social security contribution of an R&D employee. Maximum reduction in the base contribution amount is SEK230,000 per company or group, per month (or SEK2.76 million per year), which lowers actual social security charges by up to SEK867,000 annually.
	Expatriate tax regime for certain foreign experts	<ul style="list-style-type: none"> Tax exemption 	<ul style="list-style-type: none"> 25% of salary and benefits for individuals granted expatriate taxation classification is exempt from taxation. Additionally, moving expenses to and from Sweden, some travel expenses to the home country, and school fees are exempt.
Switzerland	Financial contributions	<ul style="list-style-type: none"> Contributions to investment costs Contributions to investment costs, repayable on an interest-free basis, subject to conditions 	<ul style="list-style-type: none"> To facilitate and accelerate the realization of projects, several cantons in Switzerland provide financial contributions of creditable investments.
	Tax holidays	<ul style="list-style-type: none"> Relief from capital and profit taxes at federal, cantonal and communal level for a maximum of 100% for maximum 10 years for one legal entity 	<ul style="list-style-type: none"> Various cantons may grant tax holidays for important expansion projects of existing or new companies, when such projects are of major economic importance to the respective canton. Tax holiday is granted on CIT and capital tax on a cantonal and communal level. However, if company is founded in certain areas in the cantons of Berne, Luzern, Uri, Glarus, Solothurn, St. Gallen, Graubünden, Tessin, Wallis, Neuenburg and Jura, a tax holiday on a federal level can also be obtained. In any case, there is maximum available relief of 100% for maximum of 10 years. Real estate transfer tax triggered by change of ownership may be waived on purchases of real estate or industrial land, depending on cantonal practices.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments (Note: Previous patent box regime applies until 2021 under transition rules.) 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	▸ No carryforward or carryback is permitted.	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Patent box	<ul style="list-style-type: none"> ▸ A reduced CIT rate for patent-related income in the canton of Nidwalden. 	<ul style="list-style-type: none"> ▸ The cantonal tax authority of Nidwalden has implemented benefits on net royalty or so-called net license income from use of IP. The patent box regime only applies to qualifying patent income, provided the R&D expenditure in relation to the registered patent (or similar IP, such as supplementary protection certificates or first applicant protections) occurred at the company applying for the patent box regime. Capital gains on disposal of such registered patents among affiliated companies also qualify for the patent box. The incentive for net license income from use of registered patents is a fixed statutory CIT rate of 9.7%.
	Domiciliary and mixed companies	<ul style="list-style-type: none"> ▸ The profits derived by these companies from non-Swiss sources are taxed at substantially reduced rates at the cantonal/communal level 	<ul style="list-style-type: none"> ▸ For cantonal and communal taxes, the following tax rules apply to domiciliary and mixed companies (effective tax rate on federal level of 7.83% remains): ▸ Income derived from qualifying participation (10% of share capital, 10% of profit and reserves or fair market value of CHF 1 million), including capital gains resulting from step-ups in the tax basis of such investments, is exempt from tax. ▸ Income derived from Swiss sources not described above is taxed at ordinary effective CIT rates (this rule applies only to mixed companies because domiciliary companies do not derive Swiss-source income). ▸ Income derived from non-Swiss sources is also taxed at ordinary rates. ▸ However, the tax base is substantially reduced by application of rules that take into account significance of administrative activities performed by the Swiss company (depends on intensity of its physical presence in Switzerland and level of its economical affinity to Switzerland).
	Accelerated depreciation on assets	<ul style="list-style-type: none"> ▸ Possibility to account a one-off depreciation under certain conditions (depends on different cantonal practices) 	<ul style="list-style-type: none"> ▸ The method of depreciation basically should be in line with usual business practices. However, the tax authorities in Switzerland have published the rate of depreciation that is usually acceptable and therefore treated as business-related expense. Some cantons provide the possibility to account a one-off depreciation under certain conditions (depends on different cantonal practices).
Turkey	R&D expense deduction	<ul style="list-style-type: none"> ▸ Super deduction 	<ul style="list-style-type: none"> ▸ Taxpayers are granted R&D expense deduction incentive in two ways: through R&D centers and through R&D and innovation projects. R&D expense deductions through both types are applied against CIT base, and taxpayers may deduct 100% of R&D expenditures from CIT base. ▸ Taxpayers can also take advantage of depreciation at a rate of 20% for five years for R&D asset. ▸ Starting from 1 May 2018, taxpayers can issue the depreciation rates and periods to be applied for new machinery and equipment acquired until the end of the calendar year 2019 and calculate by taking into account half the useful life of the asset.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	Yes	No	NA
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	NA	No	No	No
<ul style="list-style-type: none"> ▸ Current investments 	<ul style="list-style-type: none"> ▸ May be carried forward indefinitely. 	<p>Yes</p> <p>Projects should be approved as R&D projects by the Ministry of Science & Technology if the projects are carried out under R&D Centers, and by the Scientific and Technological Research Council of Turkey (TÜBİTAK) if the projects are not carried out under R&D Centers.</p>	Yes	Yes

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Tax exemptions	<ul style="list-style-type: none"> ▶ CIT and VAT exemption 	<p>Technology Development Zones (TDZ) incentives:</p> <ul style="list-style-type: none"> ▶ Gains derived by taxpayers operating in TDZs exclusively from software, R&D and design activities carried out in these zones are exempt from income and corporate tax until 31 December 2023. ▶ Incentives provide either R&D expense deduction (R&D incentives) or tax exemption from corporate tax and VAT for income derived from R&D and software activities in TDZs. ▶ Other forms of support for R&D activities in TDZs are payroll income tax exemption, stamp tax exemptions and social security premium support for R&D personnel wages. <p>Exemption on intellectual property (IP) rights:</p> <ul style="list-style-type: none"> ▶ Corporate tax and VAT exemptions apply to transfer, sale and leasing of patented inventions or inventions with utility model certificates. ▶ Corporate tax exemption applies to 50% of income derived from the transfer, sale or leasing of intangible rights from 1 January 2015. Corporate tax exemption also applies to 50% of income attributed to intangible rights derived from sale of invented manufactured products. If intangible patented right is used in manufacturing of any other product, 50% of income attributable to intangible right gained as result of sales of manufactured product is exempted from corporate tax.
	Cash grants	<ul style="list-style-type: none"> ▶ National and international cash grants 	<ul style="list-style-type: none"> ▶ The Scientific and Technological Research Council of Turkey (TÜBİTAK) provides up to 60% in cash grant to certain portions of eligible R&D expenses.
	Income tax withholding incentives	<ul style="list-style-type: none"> ▶ Income tax withholding incentives 	<ul style="list-style-type: none"> ▶ Income tax calculated on wages earned by R&D and assisting personnel shall be canceled at 95% for personnel with a doctorate degree or at least one graduate degree in one of the basic sciences, 90% for those with a graduate degree or an undergraduate degree in one of the basic sciences, and 80% for other personnel by deducting from the tax accrued over the withholding tax return to be submitted.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	NA	Yes Projects should be approved as R&D projects by managing company of Technology Development Zones.	Yes	Yes
▸ Current investments	NA	Yes Projects should be approved by the institution providing the cash grant.	Yes	Yes
▸ Current investments	NA	Yes Projects should be approved as R&D projects by the Ministry of Science and Technology if the projects are carried out under R&D centers; by TÜBİTAK if the projects are not carried out under R&D Centers; and by the management company if the projects are carried out at Technology Development Zones.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Social security premium support	<ul style="list-style-type: none"> ▸ Reduced social security contributions 	<ul style="list-style-type: none"> ▸ For R&D and support personnel who work in an R&D center on R&D and innovation projects, half of the social security employer's share calculated on remunerations received by R&D, design and support personnel in return for R&D and design work can be paid from a fund to be placed in the Ministry of Finance budget.
	Stamp and customs duty exemptions	<ul style="list-style-type: none"> ▸ Tax exemptions 	<ul style="list-style-type: none"> ▸ A range of documents (e.g., contracts and payroll slips) issued in relation to R&D and innovation activities (including documents issued for wage payments made to R&D or design personnel) are exempt from stamp tax. ▸ Goods imported from foreign countries in the scope of R&D projects are exempt from customs duties, and all kinds of funds, while papers issued and transactions conducted within this scope are exempt from stamp duty and fee.
	VAT exemption	<ul style="list-style-type: none"> ▸ Tax exemption 	<ul style="list-style-type: none"> ▸ New machinery and equipment deliveries made for the exclusive use of R&D, innovation and design activities are exempted from VAT from 1 May 2018 to 31 December 2019.
UK	Super deduction	<ul style="list-style-type: none"> ▸ Enhanced tax deduction over and above the usual corporation tax deduction 	<ul style="list-style-type: none"> ▸ R&D incentive is currently available for SMEs as an enhanced deduction of 230% from 1 April 2015 of qualifying spend. This deduction is available before tax as a deduction against taxpayers' profits chargeable to corporation tax. ▸ The enhanced deduction scheme for large companies is no longer available after accounting period ending 31 March 2016. ▸ A cash refund may be obtained for SMEs making a claim if the enhanced deduction exceeds the company's tax base for that given year.
	Tax credits	<ul style="list-style-type: none"> ▸ Tax credit to operating income as a percentage of qualifying spend 	<ul style="list-style-type: none"> ▸ Large companies incurring qualifying R&D expenditures after 1 April 2013 may elect to make an R&D Expenditure Credit (RDEC) claim. ▸ A 12% (currently 9.72% post-tax) taxable credit is available for qualifying expenditure from 1 January 2018.
	Research and development allowance (RDA)	<ul style="list-style-type: none"> ▸ First-year allowance on qualifying capital expenditure 	<ul style="list-style-type: none"> ▸ Provides 100% tax relief in the year of acquisition for capital expenditure on plants, machinery and buildings (but not land) used for the purposes of carrying out R&D activities.

R&D incentives summary matrix – EMEIA (2019) (continued)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
▸ Current investments	NA	Yes Projects should be approved as R&D projects by the Ministry of Science and Technology if the projects are carried out under R&D centers; by TÜBİTAK if the projects are not carried out under R&D Centers; and by the management company if the projects are carried out at Technology Development Zones.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.
▸ Current investments	NA	Yes Projects should be approved as R&D projects by the Ministry of Science and Technology if the projects are carried out under R&D centers; by TÜBİTAK if the projects are not carried out under R&D Centers; and by the management company if the projects are carried out at Technology Development Zones.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.	Yes Income tax withholding, customs, stamp tax and social security premium supports are applicable together with corporate income tax exemptions or R&D expense deduction. It depends on the approval of the projects by the related association or ministry. Therefore, it is indirectly subject to annual compliance and certification.
▸ Current investments	NA	Yes	No	No
▸ Current investments		No	No	No
▸ Current investments	▸ If PAYE and NIC caps limit the credit available, the amount it is limited by is carried forward to next accounting period.	No	No	No
▸ Current investments	NA	No	No	No

*This country qualifies for Horizon 2020 funding.

R&D incentives summary matrix – EMEIA (2019) (continued)

Jurisdiction	Names of incentives	Incentive types	Description of benefits
	Patent box regime	<ul style="list-style-type: none"> ▸ Reduced effective tax rate 	<ul style="list-style-type: none"> ▸ Provides for effective CIT rate of 10% on profits derived from qualifying patents and certain similar IP rights. ▸ From 1 July 2016, patent box regime has been changed to align with BEPS Action 5. Subject to grandfathering rules, from 1 July 2016 the company must break down its overall patent box profit into separate profit streams attributable to individual patents, products or product families and then apply a “nexus fraction” to each resultant profit stream. When grandfathering conditions are met, it will be possible for company to continue to use the pre-modified nexus rules with respect to relevant qualifying IP rights until 2021.

R&D incentives summary matrix – EMEIA (2019)

Applicability	Carryforward/carryback option	Preapproval required	Annual compliance required	Certification required
<ul style="list-style-type: none"> ▸ Current investments ▸ Future investments (Note: Previous patent box regime applies until 2021 under transition rules.) 	NA	No	No	No

Contacts

Argentina

Gustavo Scravaglieri
gustavo.scravaglieri@ar.ey.com
+54 11 4510 2224

Australia

Jamie Munday
jamie.munday@au.ey.com
+61 2 9276 9087

Austria

Christoph Harreither
christoph.harreither@at.ey.com
+43 1 211 70 1171

Michael Obernberger
michael.obernberger@at.ey.com
+43 1 211 70 1381

Belgium

Hendrik Serruys – People Advisory Services
hendrik.serruys@be.ey.com
+32 3 270 14 68

Pieter Van Den Berghe – International Tax Services
pieter.van.den.berghe@be.ey.com
+32 478 40 15 73

Chris Thijs – Business Tax Services
chris.thijs@be.ey.com
+32 3 270 14 06

Wouter Desmet – Subsidia
wouter.desmet@be.ey.com
+32 9 242 51 06

Bart Wyns – Subsidia
bart.wyns@be.ey.com
+32 9 242 51 44

Maarten Vandewaerde – Subsidia
maarten.vandewaerde@be.ey.com
+32 494 846 852

Brazil

Frederico H. God
frederico.h.god@br.ey.com
+55 11 2573 3232

Jose Paulo S. Peixe
jose.peixe@br.ey.com
+55 11 2573 4379

Henrique Almeida
henrique.almeida@br.ey.com
+55 11 2573 3407

Canada

Susan G. Bishop
susan.g.bishop@ca.ey.com
+1 416 943 3444

Chile

Alicia Dominguez
alicia.dominguez@cl.ey.com
+56 2 676 1288

China (mainland)

Jenson Tang
jenson.tang@cn.ey.com
+86 21 2228 2045

Chuan Shi
chuan.shi@cn.ey.com
+86 21 2228 4306

Derrick Chen
derrick.chen@cn.ey.com
+86 21 2228 6463

Colombia

Margarita Salas
margarita.salas@co.ey.com
+57 1 484 7000

Josep Albert
josep.albert@co.ey.com
+57 1 484 7000

Czech Republic

Ondřej Janeček
ondrej.janecek@cz.ey.com
+420 225 335 360

*This country qualifies for Horizon 2020 funding.



Martin Hladký

martin.hladky@cz.ey.com
+420 225 335 645

France

Patrice Lefeu

patrice.lefeu@fr.ey.com
+33 (0)1 46 938 866

Xavier Dange

xavier.dange@ey-avocats.com
+33 1 55 61 11 28

Thibaut Grandchamp de Cueille

thibaut.grandchamp.de.cueille@ey-avocats.com
+33 1 55 61 14 38

Agnès Serero

agnes.serero@ey-avocats.com
+33 1 55 61 14 15

Germany

Frank Burkert

frank.burkert@de.ey.com
+49 40 36132 21155

Kerstin Haase

kerstin.haase@de.ey.com
+49 40 36132 20284

Lena Ebsen

lena.ebsen@de.ey.com
+49 40 36132 20281

Hong Kong

Cherry Lam

cherry-lw.lam@hk.ey.com
+852 2849 9563

Charlotte Wong

charlotte.wong@hk.ey.com
+852 2629 3040

Hungary

Tibor Palszabo

tibor.palszabo@hu.ey.com
+36 30 280 5243

Péter Vaszari

peter.vaszari@hu.ey.com
+36 30 280 5979

India

Rahul Patni

rahul.patni@in.ey.com
+91 226 192 1544

Indonesia

Ben Koesmoeljana

ben.koesmoeljana@id.ey.com
+62 21 5289 5030

Ireland

Ian Collins

ian.collins@ie.ey.com
+353 1 221 2638

Israel

Itay Zetelny

itay.zetelny@il.ey.com
+972 3 6276181

Sigal Griba

sigal.griba@il.ey.com
+972 3 6278250

Italy

Bologna

Mario Ferrol

mario.ferrol@it.ey.com
+39 051 278434

Florence

Angelo Rabatti

angelo.rabatti@it.ey.com
+39 055 5524441

Milan

Marco Magenta

marco.magenta@it.ey.com
+39 02 85143529

Marta Pensotti Bruni

marta.pensotti-bruni@it.ey.com
+39 02 85143260

Rome

Domenico Borzumato

domenico.borzumato@it.ey.com
+39 06 85567111

Giacomo Albano

giacomo.albano@it.ey.com
+39 06 85567338

Treviso

Valeria Mangano

valeria.mangano@it.ey.com
+39 0422 625165

Turin

Guido Sodero

guido.sodero@it.ey.com
+39 011 5165297

Verona

Alexia Pinter

alexia.pinter@it.ey.com
+39 045 83929526

Japan

Koichi Sekiya

koichi.sekiya@jp.ey.com
+81 3 3506 2447

Balazs Nagy

balazs.nagy@jp.ey.com
+81 90 2149 1351

Lithuania

Indrė Zakalskytė

indre.minkuviene@lt.ey.com
+370 5 274 2130

Luxembourg

Bart Van Droogenbroek

bart.van.droogenbroek@lu.ey.com
+352 42 124 7456

Christian Schlessler

christian.schlessler@lu.ey.com
+352 42 124 7500

Malaysia

Amarjeet Singh

amarjeet.singh@my.ey.com
+60 3 7495 8383

Shalini Chandrarajah

shalini.chandrarajah@my.ey.com
+60 3 7495 8281

Mexico

Francisco Bautista Plancarte

francisco.bautista@mx.ey.com
+52 55 5283 1454

Pablo Macías Calleja

pablo.macias@mx.ey.com
+52 55 5283 1300 ext. 3604

Netherlands

Ben Kiekebeld

ben.kiekebeld@nl.ey.com
+31 88 40 78457

Bram de Nies

bram.de.nies@nl.ey.com
+31 88 40 78461

New Zealand

Tim Benbow

tim.benbow@nz.ey.com
+64 27 2071 073

Paul Dunne

paul.dunne@nz.ey.com
+64 21 285 2865

Norway

Arild Vestengen

arild.vestengen@no.ey.com
+47 24 00 25 92

Marcel Sikkema

marcel.sikkema@se.ey.com
+46 73 340 77 82

Håkon Kristian Solberg

hakon.k.solberg@no.ey.com
+47 40 21 60 95

Chris Peck

cpeck@uk.ey.com
+44 20 7980 0936

Philippines

Jules E. Riego

jules.e.riego@ph.ey.com
+632 8948117

Fidela T. Isip-Reyes

fidela.t.isip-reyes@ph.ey.com
+632 8948204

Poland

Pawel Tynel

pawel.tynel@pl.ey.com
+48 660 440 169

Portugal

Pedro Paiva

pedro.paiva@pt.ey.com
+35 122 607 9694

Francisco Hamilton Pereira

francisco.hamilton-pereira@pt.ey.com
+35 122 607 9699

Romania

Miruna Enache

miruna.enache@ro.ey.com
+40 21 402 41 89

Răzvan Ungureanu

razvan.ungureanu@ro.ey.com
+40 21 204 79 37

Andreea Cosmănescu

andreea.cosmanescu@ro.ey.com
+40 21 402 40 00

Russia

Ivan Rodionov
ivan.rodionov@ru.ey.com
+7 495 755 9719

Singapore

Bin Eng Tan
bin-eng.tan@sg.ey.com
+65 6309 8738

Johanes Candra
johanes.candra@sg.ey.com
+65 6309 8158

Mark Thompson
mark.thompson@sg.ey.com
+65 6309 8232

Slovak Republic

Richard Panek
richard.panek@sk.ey.com
+421 2 333 39109

Cyril Chovanec
cyril.chovanec@sk.ey.com
+421 2 333 39182

Slovenia

Lucijan Klemenčič
lucijan.klemencic@si.ey.com
+386 1 583 17 21

South Africa

Heleen Etzebeth
heleen.etzebeth@za.ey.com
+27 11 772 3435

Marinda Fourie
marinda.fourie@za.ey.com
+27 11 502 0740

South Korea

Min Yong Kwon
min-yong.kwon@kr.ey.com
+82 2 3770 0934

Spain

Víctor Gómez de la Cruz Talegón
victor.gomezdelacruztalegon@es.ey.com
+34 915 727 385

Jorge Baztarrica Ochoa
jorge.baztarricaochoa@es.ey.com
+34 917 493 157

Sweden

Marcel Sikkema
marcel.sikkema@se.ey.com
+46 73 340 77 82

Chris Peck
cpeck@uk.ey.com
+44 7388 969975

Switzerland

Roger Krapf
roger.krapf@ch.ey.com
+41 58 286 21 25

Martin Kistler
martin.kistler@ch.ey.com
+41 58 286 62 06

Thailand

Yupa Wichitkraisorn
yupa.wichitkraisorn@th.ey.com
+662 264 9090

Pathira Lam-ubol
pathira.lam-ubol@th.ey.com
+662 264 9090

Turkey

Serdar Altay
serdar.altay@tr.ey.com
+90 212 408 51 87

Ece Ünü
ece.unlu@tr.ey.com
+90 212 408 59 56

United Kingdom

Frank Buffone
fbuffone@uk.ey.com
+44 20 7951 1991

United States

Craig M. Frabotta
craig.frabotta@ey.com
+1 216 583 4948

David S. Hudson
david.hudson@ey.com
+1 202 327 8710

Alexa Claybon
alexa.claybon@ey.com
+1 720 931 4604

Josh Perles
joshua.perles@ey.com
+1 202 327 6535

Vietnam

Huong Vu
huong.vu@vn.ey.com
+84 24 3831 5100

European Union's Horizon 2020 program

Frank Burkert
frank.burkert@de.ey.com
+49 40 36132 21155

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