



Global research and development incentives

2021

Now, for tomorrow

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Research and development incentive overview

Research and development (R&D) play a critical role in business today. Increasingly, national economies are recognising the important role innovative companies play by introducing and promoting tax incentives and grant programmes to encourage additional research investments by businesses. The tax incentives are typically in the form of tax credits, super deductions or in some cases by cash grants. In some jurisdictions, they provide relief in the form of reduced tax rates for income in relation to the technology based intellectual property (IP).

With the increasing focus and impact of transfer pricing, IP protection, grants and capital investment to encourage and maximise return on investment in R&D, Baker Tilly network members have consolidated a high level overview of key considerations across multiple jurisdictions for businesses.

All incentives noted in this document are subject to further detailed conditions that should be assessed.

Baker Tilly network members can assist you and your global team by:

- Identifying available research activities
- Identifying qualifying IP in your company
- Analysing detailed accounting records to find costs available for jurisdictional relief
- Advising on optimal transparency and structure in the accounting records to increase consistent use of R&D tax incentives

- Considering existing and potential alternative tax planning strategies based on the rules in differing jurisdictions, considering not only the incentives for research expenditures, but various implications such as withholding taxes, available grants for job creation, and corporate tax rate reductions for the licensing of IP
- Anticipating and responding to economic and legislative changes.

Working with you, we will develop strategies to assist you in obtaining your goals of expansion and growth. Experts will jointly develop effective strategies for obtaining grants, incentives for innovation, and alternative energy/green initiatives.

Incentives are continuously set to develop and evolve. For the latest status and information, please contact your local Baker Tilly team. Contact information for each country can be found on pages 106 and 107.

Patent Box

What is a 'Patent Box'?

Patent Box regimes are intended to provide a reduced corporate income tax rate for certain income arising from the exploitation of IP generally through a percent deduction or exemption of qualified IP income. Patent or Innovation Boxes have come under the Organisation for Economic Co-operation and Development's (OECD) scrutiny to ensure they are not harmful tax practices.

The schemes in many territories have had to change so that the profits attracting the lower tax rate are multiplied by a 'nexus' fraction (R&D done in-house plus payments to third parties divided by total R&D costs). This has the effect of reducing the profits taxed at the lower rate to reflect the proportion of the R&D done in-territory rather than the R&D that is paid for. The fraction requires R&D costs to be tracked by product or IP asset making a much closer linkage between R&D performed, patent benefits and the calculations needed for these incentives.

Incentive highlights

Country	R&D incentives	Tax credit	Enhanced deduction	Patent or Innovation Box
Australia	✓	✓		
Austria	✓	✓		
Belarus		✓		
Belgium	✓	✓	✓	✓
Bulgaria				
Canada	✓	✓		
Colombia	✓	✓	✓	
China			✓	
Curacao			✓	
Cyprus				✓
Czech Republic			✓	
Denmark		✓		
France	✓	✓		✓
Germany	✓			
Ghana			✓	
Greece	✓		✓	✓
Hong Kong			✓	
Hungary	✓	✓	✓	
Iceland				
Ireland	✓	✓		✓
Israel	✓		✓	
Italy	✓	✓		✓
Japan	✓	✓		
Korea	✓	✓	✓	
Lithuania	✓		✓	
Luxembourg	✓	✓	✓	✓

Country	R&D incentives	Tax credit	Enhanced deduction	Patent or Innovation Box
North Macedonia			✓	
Malaysia	✓		✓	
Malta	✓	✓	✓	✓
Moldova	✓			
Myanmar	✓	✓		
Netherlands	✓	✓	✓	✓
New Zealand	✓	✓		
Nigeria	✓		✓	
Norway	✓		✓	
Philippines	✓		✓	
Poland	✓	✓	✓	✓
Portugal	✓	✓		
Romania			✓	
Singapore	✓		✓	
Slovakia	✓	✓	✓	✓
Slovenia	✓	✓		
South Africa	✓		✓	
Spain	✓	✓		✓
Switzerland	✓			✓
Thailand	✓		✓	
Turkey	✓		✓	✓
Ukraine				
United Kingdom	✓	✓	✓	✓
United States	✓	✓		
Zimbabwe	✓	✓	✓	



Australia



R&D eligibility checklist

If you can answer YES to all the questions below, you are likely to be eligible for the R&D tax incentive.

- **Corporation – Are you:**

- A company incorporated in Australia?
- A body corporate acting in its capacity as trustee of a public trading trust?
- A foreign company that is a resident for Australian income tax purposes?
- A foreign company incorporated in a country with which Australia has a double tax agreement that conducts R&D through a permanent establishment in Australia?

- **AU\$20,000 minimum spend** – Have you incurred annual eligible expenditure on R&D activities of AU\$20,000 or more? If not, have you contracted the R&D activities to a registered research service provider?

- **R&D activities** – Do the activities undertaken satisfy the definition of either core R&D activities or supporting R&D activities? (Note: core activities and supporting activities are defined below.)

- **Records** – Have you maintained contemporaneous records that substantiate the carrying on of the R&D activities? This may include records normally maintained to support income

tax claims, but should also include technical documentation that cover the planning and progress of R&D activities, documentation indicating how the R&D criteria have been satisfied as well as the nexus between the activities undertaken and the expenditure amounts claimed.

- **Overseas** – Were the activities undertaken in Australia? If they are being undertaken overseas, you will need to obtain an advance overseas finding, unless the overseas expenditure incurred is incidental in relation to the total expenditure of that activity.
- **Risk** – Will the client bear both the technical and financial risk associated with its R&D activities?
- **Control and ownership** – Do you have control over the undertaking of the R&D activities and effectively own the R&D results, know-how or IP? If not, is the R&D conducted solely in Australia under a written agreement for one or more related foreign companies that are resident for tax treaty purposes in a country with which Australia has a double tax agreement?

Only companies that have registered their activities with AusIndustry can claim the R&D tax incentive. Generally, the application form for registration must be lodged with AusIndustry within ten months after the end of the company's income year.



Criteria – What counts as R&D?

R&D activities are separated into two categories, being core R&D activities and supporting R&D activities.

Core R&D activities

Core R&D activities are experimental activities:

- **a)** Whose outcome cannot be known or determined in advance based on current knowledge, information or

experience but can only be determined by applying a systematic progression of work that:

- i. Is based on principles of established science, and
- ii. Proceeds from hypothesis to experiment, observation and evaluation, and leads to logical conclusions, and
- **b)** That are conducted for generating new knowledge (including the creation of new or improved materials, products, devices, processes or services).

Supporting R&D activities

Supporting activities are activities directly related to core R&D activities. Certain supporting activities can only qualify as eligible supporting R&D activities if they are undertaken for the dominant purpose of supporting core R&D activities.

Eligible expenditure

Broadly, an R&D entity can include the following expenditure in its R&D tax incentive claim:

- Expenditure incurred on R&D activities, including incidental overseas expenditure as well as expenditure on overseas activities covered by an advance overseas finding approved by Innovation Australia, amounts paid to associates (prior to year-end) and expenditure incurred to a Research Service Provider
- The decline in value of assets utilised for conducting R&D activities (including R&D partnership assets)
- Balancing adjustments for assets utilised only for conducting R&D activities (including R&D partnership assets)
- Expenditure in relation to goods and materials transformed or processed during R&D activities to produce marketable products (ie feedstock expenditure)
- Monetary contributions under the Co-operative Research Centres (CRC) programme
- The current R&D expenditure threshold is AUS\$100 million – please refer below ('proposed changes' section) for the proposed change in this regard.



Incentives available

R&D tax incentive

The tax incentive is available to body corporates and consists of two core components:

- A 43.5% refundable tax offset for eligible entities with an aggregated turnover of less than AU\$20m per year, provided they are not controlled by income tax exempt entities; or
- A 38.5% non-refundable tax offset to all other eligible entities. Unused offsets may be able to be carried forward for use in future income years, subject to satisfying the loss recoupment provisions.

The term aggregated turnover includes the turnovers of the corporation registering the R&D claim and its connected and affiliated entities.

Proposed changes

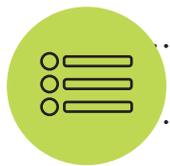
Certain changes have been proposed to the Australian R&D Tax Incentive Regime. These changes have not yet, however, been enacted.

The changes proposed are as follows:

- For companies qualifying for the non-refundable R&D tax offset (ie companies with an aggregated turnover of

AUS\$20 million or more), a premium that ties the rates of the non-refundable R&D tax offset to the incremental intensity of the R&D expenditure as a proportion of total expenditure for the year.

- An increase in the R&D expenditure limit from AUS\$100 million to AUS\$150 million per annum.
- For companies qualifying for the refundable R&D tax offset (ie companies with an aggregated turnover below AUS\$20 million, the refundable R&D tax offset:
 - Will be a premium of 13.5 percentage points above the claimant's company tax rate;
 - Will be capped at AUS\$4 million per annum, with the balance converted to a non-refundable tax offset that may be carried forward; and
 - R&D expenditure incurred on clinical trials will be exempt from the AUS\$4 million cap.
- Further proposed changes relate to improving the transparency of the program, greater enforcement activity and improved program guidance to participants.



Summary

Australia offers the following R&D tax offsets:

- 1 A 43.5% refundable tax incentive for eligible corporate entities with an aggregated turnover of less than AU\$20 million per year, provided they are not controlled by income tax exempt entities
- 2 A 38.5% non-refundable tax incentive to all other eligible corporate entities. Unused non-refundable offsets may be able to be carried forward for use in future income years, subject to satisfying the loss recoupment provisions.



Austria

Austria offers the following tax incentives to increase R&D efforts:

- Individual and corporate taxpayers can apply for an R&D bonus
- Scientists and researchers, who move to Austria to work in R&D, can apply for an allowance
- Reduction of the effective average tax rate in relation to inventions.

Aside from these (tax) incentives, it is possible to apply for grants for R&D.



Criteria – What counts as R&D?

According to Austrian law, R&D is supposed to increase the level of knowledge using scientific methods in a systematic way.

This is the case with:

- **Basic research**
(ie original research without a specific, practical goal)
- **Applied research**
(ie original research with a specific, practical goal)
- **Experimental development**
(ie the systematic use of knowledge with the aim to develop new or significantly improved materials, devices, products, procedures, methods or systems).



Incentives available

R&D bonus

An R&D bonus amounting to 14% of the sum of R&D related expenditures and investments may be granted. The sum of the expenditures and investments consists of the following:

- Wages and salaries for employees working in R&D, also fees for R&D related service contracts
- Immediate expenditures and investments if they are to be used for R&D purposes
- Financial expenditures if they are R&D related
- Overheads, if they are R&D related.

For contract research, the expenditures for the calculation basis are to be considered without VAT and are capped at €1m for each full financial year (ie a period of 12 months).

Individuals, partnerships, and corporations may apply for the R&D bonus if they have operating income.

The R&D must be conducted in a local business or local commercial unit or, in case of contract research, by an R&D facility in a member state of the EU or the European Economic Area.

To be eligible for the application, a free evaluation by the Austrian Research Promotion Agency must be submitted to the tax authorities and a form must be filed after the end of the fiscal year at the earliest and before the tax assessment comes into legal effect at the latest.

The R&D bonus is not considered as taxable income.

R&D allowance for (re-) immigrated scientists and researchers

The Ministry of Finance may award an allowance amounting to 30% of the domestic and partially also of the foreign income, for a period of maximum five years to scientists and researchers who have (re-)immigrated to Austria to conduct R&D. With this allowance, all additional costs related with migrating to Austria (eg, for house hunting, moving, language courses) are compensated for and must not be deducted again for tax purposes.

If a scientist's or researcher's main place of residence was previously in Austria, they are only eligible for the allowance, if the time elapsed between the emigration and re-immigration to Austria is a minimum of five years.

The scientist or researcher must apply for the allowance within six months after the (re-)immigration, otherwise the allowance will be denied. **The application must state the following:**

- The public interest connected with the (re-)immigration.
- The country of emigration
- The point in time of (re-)immigration
- The domiciles used in the past 10 years
- The main place of residence
- A full account of the income.

When filing the yearly tax returns, the tax authorities will check if the requirements for the allowance are still fulfilled. Therefore, the scientist or researcher must submit the relevant documentation with the regular tax returns to enable the tax authorities to undertake such a check. If the requirements are not fulfilled anymore, the allowance will not be considered, and the benefit will end automatically.

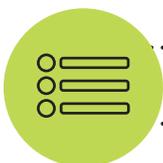
Tax reduction for income related to inventions

For income related to inventions, ie, licence fee income or income deriving from the sale of the invention, the tax rate is reduced to 50% of the effective average tax rate. **The following requirements must be fulfilled:**

- Only the inventor is entitled to the reduction of the tax rate
- The income must derive from an invention, ie, something new, that is neither state of the art, nor is it easily derived thereof by a professional and can be used commercially
- The invention must be patent protected while the income is obtained. It may be an Austrian, European, or foreign patent. Tax authorities are bound by the decision of the patent office.

Utility patents (petty patents) do not qualify as invention for income tax purposes. Also, no patents are granted, and therefore no tax reduction is possible, **for the following:**

- Discoveries, scientific theories, and mathematical methods
- The human body in its different phases of development
- The human body and its different parts, including its genes
- Aesthetic creations
- Schemes, rules and methods for performing mental acts, for games or business activities, as well as software
- The reproduction of information
- If the utilisation of an invention would offend common decency or law and order
- Procedures for surgical or therapeutic treatment or diagnostic methods
- Varieties of plants and animal breeds.



Summary

Austria offers the following tax incentives among other opportunities available:

- 1** The R&D bonus amounts to 14% of the R&D expenditures within a fiscal year
- 2** A R&D allowance may be granted to scientists and researchers (re-)immigrating to Austria
- 3** The tax rate is reduced for inventions (halving of effective average tax rate)
- 4** Losses may be carried forward to be used in future income years.



Belarus

Some tax privileges are provided to the legal entities that are carrying out such activity above. The legal entities must bound certain conditions for receiving these tax benefits.



Criteria – What counts as R&D?

The criteria is not stipulated by the legislation of the Republic of Belarus. However, it is possible to allocate obligatory existence of a novelty aspect, **the importance for science and practice and the following:**

- Developing a new product or service
- Improving an existing product or service
- Improving efficiency of processes.



Incentives available

R&D is carried out within the High Technologies Park

The High Technologies Park (HTP) was created to develop high-tech production in Belarus, this is an extraterritorial regime. The main direction of activity of HTP residents is software programming and development of informational systems.

Tax privileges granted to HTP residents:

1. Exemption from:

- Corporate income tax (excluding corporate income tax on dividends)
- VAT on turnovers from goods sales (works, services, proprietary interests in the IP)
- Land tax on land plots located in the HTP for the period of construction of buildings, designated to business activity of HTP residents, but no longer than for 3 years
- Real estate tax on fixed assets and objects of unaccomplished construction of HTP residents, situated in the territory of the HTP (excluding leased fixed assets and objects of unaccomplished construction)
- Off-shore duty in case of payment (transfer) of dividends to founders (shareholders), part of the income charged to the property owner.

2. Obligatory insurance fees are not charged for income of employees of HTP residents, when it exceeds the amount of a 1 month average wage in Belarus.

3. Reduced tax of 5% for foreign organizations, not operating through a permanent establishment in Belarus, is applied to income from dividends, interest (coupon) income from debt, royalties, license agreements, if the source of this income is HTP residents.

Customs Privileges:

Exemption from custom duties and VAT in case of import of the goods to the custom territory of Belarus for the purposes of business activity. To use this privilege, the residents must obtain the resolution of the HTP administration about the purposes of usage of these goods.

R&D carried out within the Chinese-Belarusian industrial park (Park Great Stone)

Tax privileges of residents of the Park Great Stone:

- Park Great Stone residents are exempted from the following taxes for a period of ten years as from the registration date:
 - Corporate income tax on profit from sales of domestic manufacture goods (works, services), produced in the park
 - Real estate tax on buildings and constructions (including above-standard constructions in progress), parking spaces situated in the park territory regardless of their using direction
 - Land tax on land plots in the park territory

- After ten calendar years following the year of their registration as a Park Great Stone resident within the next ten calendar years they pay corporate income tax at the rate reduced to 50%
- Within 5 calendar years, beginning with the 1st year when there was a gross profit of park residents, the 0% rate is applied to the corporate income tax and the WHT of foreign entities, not operating through a permanent establishment in Belarus, dividends and similar income are accrued to their founders (participants, shareholders and owners) by Park Great Stone residents.
- Prior to 1 January 2027 the rate of WHT on royalties accrued by Park Great Stone residents to foreign legal entities, not operating through a permanent establishment in Belarus in the form of rewards for information concerning industrial, commercial or scientific experience (including know-how), license fees, patents, drawings, utility model, scheme, formula, design or process, is 5%.
- Park Great Stone residents have a right to deduct the full amount of VAT paid on purchasing (importing to the territory of Belarus) goods (works, services), property rights used for the design, construction and equipping of buildings, located in the park but not later than 31 December of the year following the year of placing into operation of such buildings and structures
- Park Great Stone residents are exempted from customs duties and VAT on goods imported into the customs territory of Belarus for usage in the park boundary for implementation of investment projects if the residents have the resolution of the park administration on the purposes of usage of these goods etc.

Another preferences and benefits of Park Great Stone residents:

- Obligatory insurance fees are not compounded on income of employees of Park Great Stone residents (except foreign employees), which exceeds the amount of 1 month average wage in the Belarus, preceding the month during which compulsory insurance contributions shall be paid
- Park residents and their employees who are foreign citizens temporarily residing (staying) in Belarus and mobilised for implementation of investment projects in the park territory, are exempt from the mandatory insurance premiums from payments to their advantage

Outcome

Generally, the legal entity that plans to be engaged in R&D activities chooses one of the presented special modes, respectively, becomes either a resident of the HTP or a resident of the Chinese-Belarusian industrial Park Great Stone.

As a rule, if all the necessary conditions are met, the legal entity are exempted from the VAT turnover from the sale of goods (work, services, property rights) in the territory of Belarus, from corporate income tax, property tax, land tax.



Summary

The Republic of Belarus offers the following tax incentives:

- 1 Exemption from corporate income tax of the Park Great Stone residents, exemption from corporate income tax of the HTP residents (excluding corporate income tax on dividends)
- 2 Exemption from custom duties and VAT in case of import of the goods to the custom territory of Belarus for the purposes of business activity
- 3 The rate of WHT of foreign legal entities not operating in Belarus through permanent establishment (WHT) of the Park Great Stone residents - 0%. The rate of WHT of the HTP residents - 5%
- 4 Exemption from land tax on land plots located in the parks
- 5 Exemption from real tax on objects located in the parks.

Belgium



Incentives available

Belgium has several incentives to stimulate R&D and to support innovation. **The favourable tax regime includes:**

- An investment deduction/ tax credit
- A tax deduction for innovation income
- The patent income deduction (temporary – ends on 30/06/2021)
- Payroll-related incentives resulting in 80% exemption of payroll taxes
- The special expatriate status for non-resident executives.

Investment deduction/tax credit for R&D

Fixed assets used in Belgium to promote R&D into new technology are eligible for an investment deduction of 13.5% on top of the normal depreciation expense.

The deduction applies to:

- Development or acquisition of patents
- Capitalised expenses (including salary cost of staff working on R&D projects) related to development of new products/ services/advanced technology.

Belgian companies and branches of foreign companies can opt for a 13.5% one-off deduction or for an investment deduction equal to 20.5% per year. Generally, the one-off deduction is applied in the tax year in which the investment is made. Election can be made to take the deduction over the duration of the depreciation period of the R&D asset. Any unused investment deduction can be carried forward (unlimited period).

As a temporary measure, and subject to conditions, the 13.5% investment deduction is increased to 25% for investments made in the period from 12 March 2020 to 31 December 2021.

Belgian companies (and branches) that work on R&D projects with a longer investment period can choose to rather apply an R&D tax credit, as this can be carried forward for four years and is cash refundable as of the fifth year. This allows these companies to receive a cash-in, creating extra liquidity during the research and development phase.

Tax deduction for innovation income

The deduction for innovation income is an R&D tax relief of 85% on qualifying income from Intellectual Property Rights (IPR). **Qualifying Income includes:**

- Income from patents
- Breeders' rights
- Income from copyrighted software developed in the context of an R&D project
- Innovation income from orphan drugs
- Certain data and market exclusivity rights.

The 85% Deduction for Innovation Income is applied on the net amount of qualifying income, ie after expense deduction made in the R&D process. In addition, qualifying income can be reduced following the nexus condition, weighing the company's own contribution to the IPR-creation.

Formula:

$$\text{Deduction for innovation income} = (\text{qualifying IPR income} - \text{R\&D expenses}) \times \frac{\text{qualifying R\&D expenses} \times 85\%}{\text{Total R\&D expenses}}$$

Qualifying R&D expenses are own expenses and third party R&D costs. R&D expenses billed by related parties do not qualify under the nexus approach. Unused tax deductions can be carried forward.

Patent income deduction remains available until 30 June 2021

The 'old' patent income deduction remains temporarily available until 30 June 2021 for companies that acquired a patent prior to 1 July 2016. Under this grandfathered old regime, 80% of the gross patent income is exempt from corporate income tax, reducing the effective tax rate on patent income to 5%.

If the use of the patent has been licensed to another company, the gross royalty received will be considered as basis for the patent income deduction. Certain conditions/corrections apply in case the patent use is licenced to an affiliated company.

Payroll-related incentives

Companies investing in R&D can significantly reduce the payroll cost of staff working on R&D projects. They are allowed an exemption of 80% of the payroll withholding tax (wage tax) for employees working on the R&D project. Conditions with respect to educational degrees of the R&D workers may apply, however where such conditions apply most master and bachelor degrees allow for the wage tax exemption.

Thresholds apply for employees with bachelor degrees. This partial exemption benefits the employer and does not affect the net salary of the 'researcher', reducing the effective employment cost for R&D activities.

Special expatriate status for non-resident executives

Expats may enjoy a favourable taxation regime provided certain requirements are met. The regulations require the employee to have held a management position prior to the Belgian employment or to have the necessary academic background to assume a management position in Belgium. Non-executives working in specialised areas can also benefit from the expat tax regulations. Foreign executives with temporary assignments qualify for taxation as non-residents. Under this regime:

- Expat's professional income is subject to Belgian taxation only on the portion related to its activities in Belgium
- A number of allowances are considered non-taxable, subject to certain thresholds.



Summary

Belgium offers the following tax incentives which can be combined at the company's discretion:

- 1 Tax deduction of 85% on net innovative income or 80% tax deduction on patent income (the latter reducing the effective tax rate on patent income to 5%)
- 2 Increased (spread) investment deduction (13.5% - 20.5% - 25%) / refundable tax credit
- 3 Payroll incentives: wage tax relief of 80%
- 4 The expat tax regime.



Bulgaria

Bulgaria offers limited scope tax support to development activities. Research activities such as scientific or clinical research are not specifically regulated under the tax law. Under the general rules, R&D expenses are tax deductible if related to the business of the taxable person.



Incentives available

The Bulgarian Corporate Income Tax Act (CIT Act) provides for specific tax treatment of asset formed as result of development activity, **as follows:**

- For determination of the annual tax result, the taxable person shall have the right to reduce the accounting result thereof with the historical cost of an intangible fixed asset on a single occasion in the year of formation of the said asset, **where the following conditions are simultaneously fulfilled:**
 - The asset has been formed as a result of development activity
 - The development activity has been carried out in connection with the regular business activity carried out by the taxable person
- The development activity has been commissioned under market conditions to a scientific research institute or a higher school
- Where the taxable person has exercised the right under Paragraph (1), the intangible fixed asset accounted for under Paragraph (1) shall not be a tax depreciable asset

Apart from the above, the Bulgarian CIT Act currently in force does not provide for tax incentives or other special rules in connection with research and development activity.



Summary

Generally, Bulgarian tax legislation offers limited scope support to R&D activities.



Canada

In Canada, there are over 200 different government tax credits and funding incentives aimed at helping Canadian businesses (with domestic operations) finance their growth plans.

Some are open to a wide range of industries, while others are highly specific in their application. Incentives take many forms, both as refundable and non-refundable tax credits. The majority of incentives must be applied for and approved by the administering authority 30 – 60 days before any activities that might be considered eligible occur.



Criteria – What counts as R&D?

Systematic investigation or search carried out in a field of science or technology by means of experiment or analysis that is basic or applied research, experimental development and support work.

Experimental development involves the creation of new or improved products, processes, materials or devices, including incremental improvements.

Taxpayers must incur expenditure in relation to the three key criteria's below:

- Scientific or technological advancement
- Scientific or technological uncertainty
- Scientific and technical content.



Incentives available

Scientific Research and Experimental Development (SR&ED)

Under the SR&ED investment tax credit program, Canada offers some of the most generous tax savings in the world. Approximately 18,000 companies every year take advantage of this CA\$3bn incentive program.

Canada's prosperity has, to a large extent, been driven by the spirit of innovation: creating new or improving existing materials, devices, products or processes. Rudimentary experimental development work in most Canadian businesses and industries could qualify for SR&ED tax credits.

SR&ED projects are qualified after they have occurred (one of the only incentive programs which considers past activity) and must contain technological uncertainties, iterative activities/ testing and related technological advancements. Corporations earn Investment Tax Credits (ITC's) at either the 15% or 35% rate on qualified expenditures depending on ownership structure and taxable capital.

Funding can include labour, subcontracts, third party payments and materials consumed. For every eligible labour dollar, Canada provides an additional 55% for overhead costs.

ITC's are used to reduce tax payable (non-refundable 15% position) or come as refundable/cash at the 35% rate. If eligible for the 35% rate category, in Ontario for example, an additional 8% refundable provincial credit as well as potential for an additional non-refundable 3.5% credit gets added. Provincial rates vary by province.

Summation of all the rates could bring the total refund rate to over 42%. The ITC is applied through the corporation's tax return. The application must be made within 18 months of the taxation year end. ITC's (federal and provincial) can be used to offset federal and provincial tax liabilities in the same tax year and/or refunded back in cash. Unused credits can be carried forward 20 years and carried back three years.

Other government assistance (grants)

There are also government grants available in Canada for tax incentives such as investment in growth/expansion and people. Government grants are extensive, frequently change and vary between provinces. Listed below are some of the more commonly used grants below. **The criteria vary significantly between programs.**

- **Ontario Automotive Modernization Program (O-AMP) (Ontario)** - The program can provide a 50% non-repayable contribution up to CA\$100,000 for eligible activities such as technology adoption and lean manufacturing. This program is geared towards small and medium sized Ontario based automotive parts suppliers that have 2 years of financial statements, fewer than 500 employees and have at least 50% of the company's total sales revenue come from the auto supply sector.
- **Fed Dev (Ontario)** – This program provides repayable interest free loans that can cover up to 35% of eligible project costs. Funds are to assist high-growth firms to scale up, expand and support technology demonstration and the commercialization of new technologies. The program encourages the early adoption or adaptation of leading-edge technologies and processes to improve productivity. Increase businesses' capacity to grow through market diversification and entry into global markets. Foster innovation, technology adoption and digital connectivity in rural areas.
- **Southwestern/Eastern Ontario Development Fund (Ontario)** - This fund provides support for projects and investments. Companies must invest at a minimum CA\$500,000 (CA\$200,000 in rural areas) to be eligible to apply. In addition, companies need to employ at least 10 people (or 5 if you are located in a rural area) and must be committed to hiring 5 new employees

Available streams include up to 15% interest free loan funding, which based on achievement could be forgiven up to 30% as well as up to 15% grant funding for companies located outside of major urban centers.

- **Canadian Agricultural Partnership (CAP) (Federal)** - There are over 40 streams available for producers, and grants range from 25% to 50% of total costs. Eligible projects include those related to soil and erosion management, food safety, technology to improve labour productivity, pest control, marketing, animal health, deadstock management and cleaning systems. Processors may also be eligible as defined as any company that is involved in the transformation of an agricultural commodity. This can include dairy processors, canners, and food and beverage processors, such as breweries and bakeries.
- **Canada-Ontario Job Grant (Federal)** - Provides an opportunity for employers to invest in training their workforce. The programs provide a grant of up to 5/6's of total training costs for employers under 100 employees or ½ of training cost for those over 100 employees, capped at CA\$10,000 in government support per person for training costs. This grant requires training to be delivered by an eligible third-party trainer.
- **Industrial Research Assistance Program (IRAP) (Federal)** - IRAP helps companies undertake R&D leading to new or improved products or processes. R&D, in this case, should relate closer to its pure definition and must be for a small or medium-sized enterprise in Canada, incorporated and profit-oriented. They must have 500 or fewer full-time equivalent employees. It's important to have the objective to grow and generate profits through development and commercialisation of innovation and technology. IRAP involvement occurs prior to project start, can involve advisory assistance through internal government agencies and has the potential to cover the majority of direct labour costs up to 80%.



Summary

Canada offers the following tax incentives which are a few of the many opportunities available:

- 1 Canada's SR&ED program can provide rebates of approximately 65% on every labour dollar spent
- 2 The agricultural CAP program can grant 25-50% of total costs
- 3 O-AMP can provide up to CA\$100,000 for small to medium sized automotive suppliers
- 4 Training people can net up to CA\$10,000 per person
- 5 Development funds can provide a mix of interest free loans and grants
- 6 IRAP R&D assistance and guidance can capture up to 80% of direct labour costs.



China

The R&D activities refer to the systematic activities with specific goals constantly carried out by enterprises to gain and creatively apply new knowledge of science and technology, or materially improve technologies, products (services) and techniques.

The specific scope of R&D expenses includes labour costs, direct investment expenses, depreciation expenses, amortisation of intangible assets, design fees for new products, fees for formulation of procedures of new techniques, clinical test expenses for new drug development and field trial expenses for the exploration and development of technologies, other related expenses and other expenses specified by the Ministry of Finance and the State Administration of Taxation.

Eligibility

Major recognition criteria of High and New Technology Enterprise (HNTE):

- Core IP rights ownership
- Products or services falling within the scope of the category 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%-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 number of proprietary IP, capability to convert R&D findings into IP, ability of execution and management of R&D activities, and growth of sales revenue and net assets.

Major recognition criteria of Technology Advance Service Company for the corporate income tax incentives:

- Engaging in one or more of qualified technologically advanced outsourcing services (information technology outsourcing (ITO), business process outsourcing (BPO) and knowledge process outsourcing (KPO))
- Location of registration and operation in 21 model cities
- Qualified operating history
- 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);
- Providing qualified technologically advanced outsourcing services in ITO, BPO or KPO fields to overseas entities can receive a VAT exemption.



Incentives available

Incentives for HNTE status

- A reduced corporate income tax (CIT) rate of 15% for HNTEs.
- A qualified HNTE newly established in one of the five Special Economic Zones (Shenzhen, Zhuhai, Shantou, Xiamen and Hainan) or the Shanghai Pudong New Area or
- Accumulated tax loss could be carried forward for up to ten years (compared to five years for regular companies)

after 1 January 2008, the HNTE may be entitled to a two year exemption and three year half deduction from the first year it derives production or operating income.

Incentives for software enterprise

- Two-year exemption and three-year half reduction on CIT.
- Key software enterprises enjoy 10% preferential CIT rate if they are not enjoying tax exemption in that year.

Incentives for qualified technology transfer income

- 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 RMB5m, CIT may be exempted.
- If the resident enterprise's income from its technology transfer exceeds RMB5m, the enterprise income tax shall be half-exempted.

Incentives for Integrated Circuit (IC) Enterprise

- Enterprises producing IC less than 0.25 micron in width or with over RMB8bn investment can enjoy 15% preferential CIT rate.
- A five-year exemption and three year half reduction on CIT if having operation period of over 15 years. (Cannot be used with the other preferential policy.)

- Enterprise producing IC less than 0.8 micron (inclusive) in width, IC packaging or testing enterprises, IC key material production enterprises, IC special equipment production enterprises and IC design enterprises can enjoy two-year exemption and three-year half reduction on CIT.
- Key IC design enterprises enjoy 10% preferential CIT rate if they are not enjoying tax exemption in that year.

R&D expenses super deduction

- Qualified resident enterprises are allowed 175% super deduction for eligible R&D expenses for CIT purposes. Valid until 31 December 2023.
- Qualified resident manufacturing enterprises may enjoy 200% super deduction. Valid since 1 January 2021.
- Enterprise may enjoy R&D expenses super deduction in Q3 pre-filing, prior to the CIT annual tax filing.



Summary

China offers the following tax incentives:

- 1 A reduced CIT rate of 15% for HNTE status
- 2 A reduced CIT rate of 15% for TASC status
- 3 Higher employee education deduction limit (8%)
- 4 Two-year exemption and three-year half reduction for CIT
- 5 Key software enterprise may receive 10% preferential CIT rate
- 6 Tax exemption or reduction for qualified technology transfer income
- 7 A reduced CIT rate of 15% for IC enterprise
- 8 Tax exemption or reduction may be available for qualified IC enterprise
- 9 R&D expenses super deduction.



Colombia

In Colombia special tax incentives are offered to research, development and innovation (R&D). In addition, those who develop R&D activities may also apply to general tax benefits of current normative which implementation must be analysed for each particular case.



Criteria – What counts as R&D?

Innovation: The introduction of a new or improved product (good or service), process, method of marketing, or a new organisational method in the practices of the companies, the organisation of the workplace or external relations. These should have been launched in the market.

Technological development: Application of the results of the investigation, or of any other type of scientific knowledge, for the manufacture of new materials, products, for the design of new processes, production or delivery systems services, such as substantial technological improvement of materials, products, processes or systems.

Research and experimental development, including creative work carried out in a systematic way to increase the volume of knowledge, including knowledge of man, culture and society, and the use of such knowledge to create new applications.

Usually, R&D projects requires improvement of National Council of Tax Benefits in Science, Technology and Innovation - CNBT (for its acronyms in Spanish), in order to receive the tax benefits set by law.



Incentives available

Revenues not taxed for income tax purposes

- Resources intended to develop projects qualified as scientific, technologic or innovation, according to the criteria and requirements of CNBT.
- Remuneration perceived by individuals directly related to the execution of scientific, technologic or innovation activities, when said remuneration comes from resources aimed to the project, according to the CNBT regulation.

Deductions on income tax

- Companies can deduct the investment on projects of research, technological development and innovation, according to the conditions established by the CNBT. Each year, the CNBT set the total maximum of deduction and the annual maximum that individually entities can deduct. The National Government may define the percentage to deduct

that must be invested in projects of research, technological development and innovation in Small and Medium-sized Entities (SMEs).

- **Prior treatment shall also apply to:**

Donations made through universities or Colombian Institute of Educational Credit and Technical Studies Abroad - ICETEX, aimed to scholarship programmes or remission able credits approved by the Ministry of National Education, and to benefit students in levels one, two and three through full or partial study scholarships or remission able credits that may include maintenance, lodging, transportation, tuition fees and books

- Donations to researchers, groups or centres of research, technological development or innovation or research, technology development or innovation units of companies, registered and recognised by CNBT,

provided that they are exclusively destined to projects qualified as research or technological development, according to the criteria and conditions defined by the National Council of Tax Benefits in Science, Technology and Innovation

- The remuneration corresponding to the linking of personnel with a PhD degree in income-taxpayers, as long as the criteria and conditions defined by the CNBT are met for such purpose and its link is associated with the development of R & D. In the case of PhD degrees obtained abroad, the validation requirements established in the current regulations must be met, prior to their association.
- The amortization of investments in research, development and innovation projects, including software developments for internal use or for exploitation, that are not framed within the aforementioned investments and donations, will begin at the time the investment project ends, during the time that income is expected to be obtained, in installments that cannot exceed 20% of the fiscal cost. Investments in software developments intended for sale are treated as a cost or deduction at the time of disposal.

Tax Credit and discounts on income tax

- Investments on research, technological development and innovation projects qualified by the CNBT, according to the Economic and Social Politic National Council will be entitled to discount 25% of the investment in the Income Tax of the fiscal year when the investment was done. The CNBT will define the annual ceilings. The government will set the maximum discount for research, technological development and innovation projects on SMEs.

Income tax exemption

- Exemption on income tax on sales of new software with high content of innovation certified by CNBT.

Income from the development of technological value-added industries and creative activities (orange economy companies) is exempt from income tax, for a term of 7 years.

VAT exemptions y exclusions

- Equipment and elements imported by centres of research or technology recognized by Colciencias, primary, secondary, middle or higher basic education institutions recognized by the National Education Ministry, aimed to develop projects qualified as scientific, technologic or innovation by CNBT, are exempt of VAT.
- Imports of goods and equipment for scientific and technological research, donated in favor of official or non-profit entities, either by national or foreign individuals or entities, or by governments, provided they obtain a favorable rating in the committee of Non-profit entities, are excluded of VAT.
- **The following services are excluded of the sales tax:**
- Supply of web applications
- Cloud-based services
- Hosting services.

Others

- Public resources belonging to science, technology and innovation funds may be used to leverage private investment in science, technology and innovation activities, using lines of credit through second-tier financial entities.
- For the promotion of entrepreneurship, research and development of new technologies and innovation in transport infrastructure, INVIAS may incentivize the promotion of the use of new technologies, by co-financing the execution of test sections, charged to the budgets of the respective infrastructure projects under development of the respective contracts.



Summary

Colombia offers the following tax incentives:

- 1 For income tax purposes, tax benefits that imply the possibility of deducting or discounting the cost of R&D investments made, as well as not taxing the income received for carrying out R&D projects.
- 2 Tax benefits must meet the requirements and limits indicated in the law. Generally, the use of these incentives requires qualification of the project by the State.
- 3 In VAT, there is the possibility of excluding or exempting from the tax the importation of some goods and equipment for scientific and technological research. Some services associated with web applications are treated as excluded
- 4 Lastly, lines of credit and co-financing have been created to leverage the development of some of these activities.

Curaçao

Curaçao tax legislation offers a specific incentive for R&D activities called the Innovation Box and is very similar to the Netherlands Innovation Box. Royalties from qualifying intangible fixed assets will under this Innovation Box be taxed at a 0% profit tax rate.



Criteria – What counts as R&D?

A qualifying intangible fixed asset is defined as:

- An asset that is the result of research and development and for which a declaration with respect to research and development activities is issued by the Curacao 'Bureau Telecommunicatie en Post':
 - For which a patent or breeder's right has been obtained or for which the issuance of a patent or breeder's right has been requested
 - Which constitutes a copyright for protected software
 - Which entails a license to sell a certain medicine to the public
 - For which an additional protective certificate on patents issued by a patent bureau or similar institution has been obtained
 - Which constitutes a registered utility model for protection of innovation
 - Which is related to an intangible asset as mentioned under 1 through 5

- For small taxpayers: an intangible fixed asset with characteristics like those mentioned under A, that is the result of research and development for which a declaration with respect to research and development activities is issued by the Curacao 'Bureau Telecommunicatie en Post'.

A qualifying intangible fixed asset as mentioned above includes an exclusive license to use such an intangible fixed asset in a specific way, for a specific period, or in a specific geographical region.

Exploitation of intellectual and/or industrial property and similar rights

Curacao profit tax legislation uses the OECD definition of royalties as mentioned in the 2017 OECD model convention on income and capital.



Incentives available

Under the Innovation Box, a profit tax rate of 0% applies for income (royalties) from intellectual and industrial property and similar rights if these intellectual and industrial property and similar rights are developed in Curacao (Nexis approach) or bought at an at arm's length price, and these intellectual

and industrial property and similar rights are qualifying intangible fixed assets. Brands, logos and similar assets are not considered qualifying intangible fixed assets and income from such assets will not be subject to the 0% tax rate but will be taxed at the regular profit tax rate of 22% (2020).

Cyprus

Both initiatives do not explicitly relate to a R&D initiative however may be utilised by companies that are performing R&D activities.



Criteria – What counts as R&D?

Cyprus does not have an R&D initiative.



Incentives available

The new IP box regime

1. Qualifying intangible assets

'Qualifying intangible asset' means an asset which was acquired, developed or exploited by a person in furtherance of his business, (excluding IP associated with marketing) and which is the result of research and development activities and includes intangible assets for which only economic ownership exists.

These assets are:

- Patents as defined in the Patents Law
- Computer software
- Other IP assets which are legally
- Protected and they fall under one of the following:
 - i. utility models, IP assets which provide protection to plants and genetic material, orphan drug designations and extensions of protections for patents
 - ii. non-obvious, useful and novel, where the person which utilises them in furtherance of a business does not generate annual gross revenues exceeding €7,500,000 (in case of a group of companies not exceeding €50,000,000), which are certified as such by an appropriate authority in Cyprus or abroad

- iii. Business names (including brands), trademarks, image rights and other IP rights used to market products and services are not considered as qualifying intangible assets.

2. Qualifying intangible assets

Qualifying expenditure for qualifying intangible asset is the sum of total R&D costs incurred in any tax year, wholly and exclusively for the development, improvement or creation of qualifying intangible assets and which costs are directly related to the qualifying intangible assets qualifying expenditure includes, but is not limited to, **the following:**

- Wages and salaries
- Direct costs
- General expenses
- Relating to installations used for R&D
- Expenses for supplies related to R&D activities
- Costs associated with R&D that has been outsourced to non-related persons.

But do not include:

- Cost for the acquisition of intangible assets
- Interest paid or payable
- Costs relating to the acquisition or construction of immovable property
- Amounts paid or payable directly or indirectly to a related person to conduct R&D activities, regardless of whether these amounts relate to cost sharing agreement
- Costs which cannot be proved directly connected to a specific eligible intangible asset.

An up-lift expenditure will be added to the above costs, which means the lower of:

- 30% of the eligible costs
- The total amount of the cost of acquisition and outsourcing to related parties for R&D in relation to the eligible intangible asset
- Any amount received from insurance or as compensation in relation to the qualifying intangible asset
- Capital gains and other income from the sale of qualifying intangible asset
- Embedded income of qualifying intangible asset arising from the sale of products or by using procedures that are directly related to this item.

3. Overall profit

Overall profit arising from the qualifying intangible asset means the gross income accrued within the tax year, less the direct costs for generating such income.

4. Direct costs

- **Direct costs include:**
 - All direct and indirect costs incurred in earning the income from the qualifying intangible asset

- The amortisation of the cost of the intangible
- Notional interest on equity.

5. Qualifying income

Contributed to finance the qualifying income means the proportion of the overall income corresponding to the fraction of the qualifying expenditure plus the uplift expenditure over the total expenditure incurred for the qualifying intangible asset development of the qualifying intangible asset.

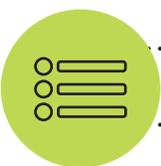
6. Calculation of taxable profit

Income includes, but is not limited to the following:

- Royalties or other amounts in connection with the use of qualifying intangible assets
- 80% of the overall profit derived from the qualifying intangible asset is treated as deductible expense. Every year the taxpayer may elect not to claim the whole or part of this allowance. In the case of a resulting loss, only 20% of the loss can be surrendered to other group companies or be carried forward to subsequent years.

7. Assets which do not qualify for the transitional provisions for the IP box regime

The cost of acquiring an intangible asset which does not qualify for the transitional provisions and which asset is used in furtherance of the business of the person can be amortised over the period of the useful life of the asset in accordance with accepted accounting principles with the maximum period being 20 years. In the case of sale of this intangible then a balancing statement must be prepared, the same way that such statement is calculated for fixed assets. Goodwill does not qualify for amortisation.



Summary

Cyprus offers the following tax incentives:

- 1 In calculating the amount of the qualifying IP profits entitled to the 80% deduction, a fraction is applied to the above IP profits based on R&D activity of the taxpayer; the higher the amount of R&D undertaken by the taxpayer itself (or via a taxable foreign PE or via unrelated third party outsourcing), the higher the amount of R&D fraction (modified nexus fraction).

Czech Republic

R&D relief is a corporate income tax relief which may reduce a company's tax bill provided the company makes a profit.



Criteria – What counts as R&D?

The basic criterion is the presence of a recognizable element of novelty and clarification of research or technical uncertainty.

Definition of R&D is:

- **Basic research** - theoretical or experimental work conducted in particular to gain new knowledge
- **Applied research** - theoretical and experimental work aimed at acquiring new knowledge and skills for the development of new or substantially improved products, processes, or services
- **Experimental development** - acquiring, shaping and using existing scientific, technological, business and other relevant knowledge and skills to design new or substantially improved products, processes, or services.



Incentives available

R&D notification

- An entity can include expenses incurred for the project from the date of notification of Tax Authority.
- The notification should contain basic identification of the entity (company name, address, tax identification number) and the name and focus of the project.

R&D project

Entities intending to use the R&D tax-deductible item must prepare a project within the corporate income tax return filing deadline. **The project need contain:**

- Basic information about company
- Project solution time
- Project objectives
- Estimated expenditure
- Monitoring and evaluation of the results
- Responsible persons
- Approval of the project.

R&D allowances

Qualifying tax deductible expenditure **must be spent on R&D, and includes:**

- Wages and salaries
- Travel costs
- Consumption of materials and goods
- Depreciation of assets.

The biggest group of expenses excluded from the tax-deductible item are services (consultancy, rent, IT services, repairs, transport). Other excluded items are licence fees and expenses supported from public funds, with the exception of services provided by universities and research institutes.

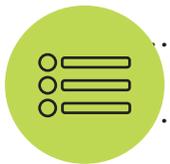
Tax deductible item

Each year, entities can deduct from the tax base all of the expenses (costs) incurred in implementing R&D projects, and, where a year's expenses exceed those of last year, 110% of the year-on-year difference can be deducted as well. The deduction can be postponed for up to three years.

Example: Expenses incurred for the R&D projects

Year	CZK
2019	10,000,000
2020	12,000,000

R&D tax-deductible item 2020 is CZK 12.2 million (10 million for 2020, plus 110% of the two-million difference).



Summary

Czech Republic offers the following tax incentives:

- 1** Tax relief on an additional 100% or 110% of allowable costs
- 2** If the entity makes a loss or is not eligible to pay tax, the tax relief can be deducted during the next three years
- 3** Using services provided by universities and research institutes is supported.

Denmark

Tax credit is considered a negative income tax intended to make liquidity available to companies having incurred R&D expenses and sustained losses during an income year.

In Denmark, the tax credit scheme was introduced in connection with section 8X of the Danish Tax Assessment Act and came into force as of the income year 2012. Its purpose was to make liquidity available to companies carrying out loss-making R&D activities and which were therefore not able to make use of the deduction rules and write-off their R&D investments. Companies can get the tax value of their losses from actual R&D spending.



Criteria – What counts as R&D?

To apply for the tax credit, the expenses must be covered by section 8B of the Danish Tax Assessment Act and written off during the year in question. **The expenses in question must relate to:**

- Development activities linked to the company itself
- Production of new or considerably improved materials, mechanisms and products, processes, systems and services.

The most common expenses covered by section 8B of the Danish Tax Assessment Act are:

- Salary expenses
- Expenses attributable to raw materials
- Expenses in connection with renting premises.

Expenses relating to the acquisition of knowhow and patent rights, including the acquisition of licence and user agreements for the above are not covered by the rules, for which reason the granting of tax credit may not be requested for this type of expenses.



Incentives available

The R&D tax credit scheme

It is a legal requirement for such R&D expenses that they are attributable to the taxpayer's business activities and that they suit a commercial purpose. Furthermore, it is possible for the taxpayer to be granted a tax relief for similar expenses incurred before having formally setting up the business.

Joint taxation

In Denmark, national, mandatory joint taxation applies to all companies and Permanent Establishment's belonging to the same group. The group definition is given in section 31C of the Danish Corporate Tax Act.

Jointly taxed companies are considered one single entity when applying the rules on tax relief. Consequently, it is the taxable income of the jointly taxed companies which determines whether the tax relief may be granted, cf. section 8X(2) of the Danish Tax Assessment Act.

Before the jointly taxed income may be calculated, each company must deduct its own losses originating from income periods prior to the joint taxation.

Depreciation and deduction

Companies can also use the deduction rules. From income year 2018, section 8B of the Danish Tax Assessment Act provide for the possibility to obtain an increased deduction of more than 100% of incurred R&D expenses. From 2018 to 2016 the deduction will increase from 101,5% in 2018 to 110,0% in 2026, as can be shown in below table:

Income year	Deduction
2018 & 2019	101.5 %
2020	103.0% (+ 27%)
2021 & 2022	105.0% (+ 25%)
2023, 2024 & 2025	108.0%
From 2026	110.0%

With effect for income years 2020 – 2022, the Danish Parliament has introduced an additional increase in the deduction, so that accumulated deduction for income years 2020 – 2020 become 130%.

The additional deduction (27% in 2020 and 25% in 2021 and 2022) may only be granted on up to a maximum of R&D expenses of DKK 845 million (2020) and DKK 910 million (2021 and 2022). The maximum threshold is determined at the level of the Danish joint taxation ie, at consolidated level.

The tax credit scheme does not apply for the increased deduction, as the scheme only apply for actual incurred R&D expenses.

However, the increased deduction (above 100%) can be carried forward as tax loss carry forward.

Refund of tax losses related to R&D expenses pursuant to the R&D tax credit regime

If the joint taxation has resulted in a deficit, it may be offset against the tax value of the R&D expenses incurred up to a maximum of 25 million in tax value per income year. If the income year is shorter than 12 months, the amount is reduced proportionally.

Companies participating in the joint taxation are considered one single entity, thus R&D losses and expenses do not have to be linked to the same company in the joint taxation. It is only a requirement that a deficit is sustained by the jointly taxed companies as whole and for expenses incurred to be covered by the rules of tax relief.

Irrespective of which company in a joint taxation that have generated a deficit or incurred R&D expenses, it is the administration company in the joint taxation to apply for the tax relief. It will also be the administration company that receive the cash tax relief, which is to be allocated to the companies in the joint taxation proportionally to their deficits, which will be reduced with the cash tax relief received.



Summary

The cash tax relief is granted and paid to the administration company in November of the following income year. No tax is levied on the relieved amount and there are no restrictions as to what the amount may be used for.



France

Technological innovation is supported through various forms in France:

Tax incentives

- In the form of tax credits, exemption of corporate income tax and exemption of employer's share of payroll social contributions.
- Each French geographical department manages the tax incentives with their own administration.
- For financial years starting on or after January 1st, 2019, royalties and capital gain generated by certain patents, software protected by copyright and other IP rights can be subject to a reduced CIT rate of 10%.

Direct incentives

- In the form of subsidies, repayable advances or interest-free loans.
- These measures are managed by public bodies (Bpifrance, ANR, ADEME) or local authorities (regions or departments).

Public support is provided to companies with well-identified and structured projects which incur R&D or innovation expenditure.



Criteria – What counts as R&D?

The required criteria for receiving tax incentives depend on the nature of the projects carried out and the size of the company. The years of existence of the company may also be taken into account.



Incentives available

Crédit d'Impôt Recherche: 'CIR' (Tax Credit for Research)

CIR is a tax credit implemented to support R&D (basic research, applied research, experimental development) of French small to medium-sized enterprises (SMEs).

A declarative tax measure (declaration form to be filed and justification file to be produced by presenting the R&D projects and R&D expenditure incurred) with possible immediate refund depending on the size of the company (SMEs meeting the definition of an EU SME).

Companies of any size can benefit from the CIR provided they are in any business sector of activity:

- That are liable to the corporate income tax or individual income tax (in the commercial and industrial benefits category for the latter)
- Whose projects incurred R&D expenditure within the calendar year.

What expenses are eligible for the CIR?

- R&D staff costs according to the time spent on R&D projects (Bonus for PhDs starting their first unlimited term employment contract, with a doubling of the payroll cost over 24 months.
- Depreciation of R&D equipment.

- Fixed operating expenses (43% of staff costs, 200% for PhDs starting their first unlimited term employment contract, 75% of depreciation cost on fixed assets).
- Patent expenses.
- Subcontracting expenses of R&D work of approved service providers (Bonus for public research organisations with amounts doubled).
- Expenses related to technology monitoring (participation in scientific conferences, subscription to databases).
- Standardisation expenses (committee attendance).

To calculate CIR = X % * (Total R&D expenditure - public incentives received on selected projects - fees of a CIR consultancy service provider based on the success fees).

X = 30% up to € 100,000,000 of expenses or 5% if higher expenses.

Crédit d'Impôt Innovation: 'CII' (Tax Credit for Innovation)

The CII is a tax credit intended to promote innovated goods in French SMEs.

A declarative tax measure (declaration form to be filed and justification file to be produced by presenting the projects of innovated goods and innovation expenditure incurred) with possible immediate refund.

Small and medium-sized companies that are liable to the corporate income tax or individual income tax (in the commercial and industrial benefits category for the latter) and whose projects incurred innovation and prototyping expenditure during the calendar year.

What can be qualified as a 'new' good for the CII?

- A good that is not yet available on the market but is intended to be.
- A good that differs from existing or previously implemented ones in terms of superior performance on the following levels:
 - Technical specifications
 - Eco-design
 - Ergonomics
 - Functionalities.

What expenses are eligible for the CII?

- Staff costs based on time spent on the development of new goods (design and production of prototypes, testing and performance validation).
- Depreciation of equipment used for prototyping new products.
- Fixed operating expenses (43% of staff costs and 75% of depreciation costs on fixed assets).
- Patents, models and designs expenditure.
- Expenses related to subcontracting to approved service providers of prototype design work for a new good.

To calculate the CII = 20 % * (Total innovation expenditure - public incentives received on selected projects - consultant fees CII to success fees. The CII expenditure base is capped to €400,000 the CII is therefore capped to €80,000.

Statut Jeune Entreprise Innovante: 'JEI' - Young Innovative Company Status

JEI status is a scheme implemented to encourage start-up companies meeting specific criteria to carry out R&D. This plan leads to these main advantages:

- Exemption of employer social security contributions for employees and corporate officers assigned to R&D and innovation (according to the current limitation, exemption of around 2% on average depending on the profile of the employees concerned)
- Exemption of corporate income tax (100% for the first profitable financial year, 50% for the second profitable financial year)
- A scheme that can be cumulated with the CIR scheme
- A scheme subject to the de minimis rule.

What are the criteria for defining a JEI*?

- To meet the definition of an SME.
- Existing since less than eight years.
- Being independent.
- To be a new company.
- To have incurred expenses for R&D representing at least 15% of total expenses that are tax deductible. during the financial year.

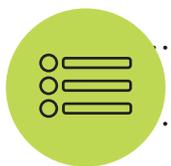
The definition of R&D for JEI is the same as for the tax credit for R&D (called CIR in French).

What are the R&D expenses taken into account to assess reaching the level of 15% of the expenses booked that are tax deductible?

- R&D staff cost for their time spent on R&D projects.
- Depreciation of fixed assets allocated to R&D.
- Fixed operating expenses (43% of staff costs and 75% of the depreciation costs of fixed assets).
- Patent expenditures.
- Sub-contracting expenses for R&D works carried out by approved service providers.

To benefit from the status of JEI, the company must meet all the criteria defining a JEI.

To secure the benefit of the status JEI, the company must submit a prior request form to the tax office (the process is called tax rescript), using dedicated templates from the tax office. The tax office has a three-month delay to answer to the request (lack of answer from the tax office means the request is accepted).



Summary

1 Tax credit for R&D (CIR)

30% of R&D expenses up to €100,000,000 of expenses or 5% of R&D expenses if higher expenses.

2 JEI status

Exemption of employer's social contributions for R&D staff over the duration of the status JEI.

Exemption of corporate income tax (100% for the first profitable financial year, 50% for the second profitable financial year).

3 Tax credit for innovation (CII)

20% of innovation expenses up to €400,000 of expenses.
Tax credit only for SMEs as defined by the EU regulations.

4 Patent/Software Box Regime

A 10% reduced CIT rate of 10% can apply on incomes (royalties & capital gains) generated by certain patents, copyrighted software and other IP rights. The French patent/software box regime is optional and is applicable as from financial years starting on or after January 1st, 2019.



Germany

Germany offers for projects starting after December 31, 2019 R&D tax incentives. Applications can be filed for the first time in 2021 with retroactive effect for research projects starting in 2020.

Generally, all research companies which, or the shareholders of which, are subject to unlimited or limited (corporate) income tax liability (ie which are not tax-exempt), are entitled to the allowance.

All taxpayers with the following classes of income are eligible:

- Income from agriculture and forestry, Art. 13 EStG (German Income Tax Act)
- Income from trade or business, Art. 15 ESt
- Income from self-employment, Art. 18 EStG.

In case of partnerships pursuant to Art. 15 Sec. 1 sentence 1 No. 2 EStG (eg, commercial partnerships such as a GmbH & Co. KG), the partnership will replace the taxpayer as beneficiary.



Criteria – What counts as R&D?

According to German law, R&D is supposed to increase the level of knowledge using scientific methods in a systematic way.

This is the case with:

- **Basic research** (ie original research without a specific, practical goal)
- **Industrial research** (ie original research with a specific, practical goal)
- **Experimental development** (ie the systematic use of knowledge with the aim to develop new or significantly improved materials, devices, products, procedures, methods or systems).

If a product or process basically already exists and the upcoming measures' main purpose is to sell or improve the production processes' productivity, profitability or regularity, the activity is no longer deemed to constitute a research and development activity under the R&D regime.



Incentives available

How is the research allowance calculated?

Entrepreneurs receive grants on the wages and salaries (subject to payroll tax) for their employees working in eligible R&D projects. Additionally, the employer's expenses for its employees' pension and other insurance contributions (pursuant to Art. 3 No. 62 EStG), if any, are also part of eligible expenses.

- The assessment basis is limited to EUR two million per fiscal year and applicant. Affiliated companies (eg group entities) may use such limit only once in total.
- The granted subsidy amount is 25% of the assessment basis, ie no more than EUR500,000 per fiscal year.
- Government R&D allowances are limited to a total amount of EUR15 million per company.

Sole proprietorships or partnerships engaged in R&D activities may apply a flat hourly rate of EUR40 for a maximum of 40 hours per week.

The allowance shall equally apply to all companies irrespective of the individual profit situation, ie it will also be paid in case of a loss.

How is the research allowance granted?

The research allowance, to which a legal entitlement exists, shall be granted only upon application. Such application must be filed with the competent tax office and will be transmitted electronically.

The application can only be filed after the end of the fiscal year during which the eligible expenses incurred; A certification must be filed together with the application. Details as to the required procedure are yet to be specified in a legal ordinance.

The assessed amount will be credited or refunded as tax prepayment within the scope of the next income tax or corporate income tax assessment (irrespective of the assessment period); in case of an individual partner, it will be credited or refunded pro rata, if applicable. Therefore, the research allowance is tax neutral, ie it does not constitute taxable income



Summary

Germany offers the following tax incentives among other opportunities available:

- 1 The R&D bonus amounts to 25% of the R&D expenditures within a fiscal year, ie no more than EUR500,000
- 2 Applications can be filed for the first time in 2021 with retroactive effect for research projects starting in 2020.

Ghana



Criteria – What counts as R&D?

R&D includes an expense incurred by a person in the process of developing the business of that person and improving business products or processes irrespective of whether the expense is of a capital nature. It however, excludes an expense incurred that is included in the cost of an asset used in the process of developing the business of that person and improving business products or processes.



Incentives available

Allowable deduction

- R&D expense shall be deducted from the income to reduce the amount of income subject to income tax to the extent that that expense is wholly, exclusively and necessarily incurred by the person in the production of the income.
- R&D expense from a separate petroleum operation shall constitute an allowable deduction provided:
 - The amount is wholly, exclusively and necessarily incurred in the acquisition or improvement of a valuable asset used in the operation; or
 - Is wholly, exclusively and necessarily incurred in acquiring services or facilities for the operation and is income of the recipient which has a source in Ghana.

Capital allowance

- An expense incurred that is otherwise included in the cost of a depreciable asset used in R&D shall be granted a capital allowance.
- R&D expenditure incurred during exploration and development operations in a separate petroleum operation shall be capitalised and subsequently a capital allowance of 20% granted after the commencement of production.
- R&D expenditure incurred during reconnaissance and prospecting operations in a separate mining operation shall be capitalised and subsequently a capital allowance of 20% granted after the commencement of production.



Greece

R&D incentives are available in the form of a super deduction 200% of expenses related to R&D, 40% depreciation rate of fixed assets and a patent box regime that exempts from taxation for the first 3 years profits from the sale of self-manufactured goods from internationally recognised patents. These incentives are awarded for eligible projects upon application and approval, and it should be noted that it is not necessary that R&D has been conducted in Greece. However, the location of the R&D should be disclosed to the relevant authorities. Finally, a new important tax incentive for angel investors has been established, with the aim to make Greek start-ups more attractive for investments.



Criteria – What counts as R&D?

Scientific and technological research activities are the creative tasks undertaken on a systematic basis in order to increase the stock of knowledge, document, and the use of this stock of knowledge to invent new applications.

The main criterion for the delimitation of scientific and technological research activities in relation to related scientific, technological and industrial activities, is the presence of a remarkable element of originality and the removal of scientific or technological uncertainty.

Qualifying expenses should be linked to the R&D project and include:

- Depreciation, construction or repair, maintenance, renovation of buildings
- Depreciation of leasing of equipment and instruments of laboratory infrastructure
- Depreciation of purchase costs of intangible assets, purchase of licenses for specialised scientific “packages” / computer programs.
- Current operating expenses such as rent or operating lease, electricity, water, fixed and mobile telephony bills, postage, etc,
- Remuneration of each level of related staff
- Expenditures for domestic and foreign travel for collaboration with laboratories, etc
- Expenditure on a wide range of consumables such as chemical and microbiological reagents, disposable components and instruments or a limited number of uses
- Expenses for the purchase of a patent in Greece and abroad
- Expenses for the issuance of a patent in Greece and abroad
- Costs of connection to databases, national and international knowledge networks, electronic libraries
- Assignment by contract to external collaborators or bodies (private laboratories and companies, public research center’s and laboratories, universities), of a specific and clearly defined part of a scientific and technological research project.



Incentives available

The costs of scientific and technological research, are deducted from the gross income of the companies at the time of the recognition, increased by one hundred percent (100%). In addition, a 3-year accelerate depreciation of 40% applies on fixed assets used in qualified R&D projects.

The profits of the company from the sale of its products, for which production an international patent was used are exempt from income tax for three consecutive years, starting from the year in which revenues from the sale of the products were made for the first time. The exemption is also granted when the products are produced in third party facilities. The company should recognize a tax-exempt reserve for the portion of revenue which corresponds to patents, however, this reserve is subject to tax in the case of distribution to the shareholders.

Eligible companies are submitting a request to the Greek authorities. The examination and approval of these expenses are carried out within a period of ten (10) months. As an alternative procedure an audit firm may provide assurance regarding the eligibility of the R&D project in order to reduce the waiting period from 10 to 6 months.

- Pharmaceuticals.
- Medical science.
- Information technology.
- Manufacturing.
- Communications.
- Energy.



Summary

The incentives that Greece offers are:

- 1 Super deduction 200% of expenses related to R&D.
- 2 Accelerated depreciation 40% for fixed assets
- 3 Tax exemption for 3 years for the profits generated by a patent which has been developed by the company and has been recognized internationally
- 4 Important tax incentives for angel investors to start-ups.

	R&D incentives	Tax credit	Enhanced deduction	Patent or innovation box
Greece	✓	✓	✓	✓

Hong Kong

There are two types of tax-deductible R&D expenditure in Hong Kong effective from 1 April 2018. These are Type A expenditure and Type B expenditure. Type A expenditure qualifies for normal 100% tax deduction. Type B expenditure qualifies for 300% deduction for the first HKD2 million and 200% deduction for the remaining amount, without any cap.



Criteria – What counts as R&D?

- Activities in the fields of natural or applied science to extend knowledge.
- Systematic, investigative or experimental activities carried on for the purposes of any feasibility study or in relation to any market, business or management research.
- Original and planned investigations carried on with the prospect of gaining new scientific or technical knowledge and understanding.
- Application of any research findings or knowledge to a plan or design for production or introduction of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of their commercial production or use.
- Expenditure on R&D may be either in the form of a payment to an R&D institution or an expenditure on in-house R&D activity undertaken by a person.



Criteria – What counts as R&D expenditure?

A payment to an R&D institution for an R&D activity related to the trade, profession or business.

A payment to an R&D institution which has, as an object, the undertaking of an R&D activity related to the class of trade, profession or business to which the trade, profession or business belongs, where the payment is used for pursuing that object.

Any other expenditure on an R&D activity related to the trade, profession or business, including capital expenditure except to the extent that it is expenditure on land or buildings or on alterations, additions or extensions to buildings.

- For an in-house R&D activity, R&D expenditure would include any expenditure for carrying out, and providing facilities for carrying out, an R&D activity. Thus, capital expenditure on plant and machinery purchased for an R&D activity related to a taxpayer's trade, profession or business is allowable in full as a deduction for the basis period during which it was incurred. If the expenditure is incurred before the trade commences, it should be treated as incurred in the first basis period.



Incentives available

Type A expenditure (100% tax deduction)

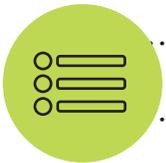
- Type A expenditure is an R&D expenditure other than a Type B expenditure.

Type B expenditure (300% deduction for the first HKD2 million and 200% deduction for the remaining amount, without any cap)

- Payment made to a designated local research institution for a qualifying R&D activity related to the trade, profession or business.
- Payment to a designated local research institution which has, as an object, the undertaking of a qualifying R&D activity related to the class of trade, profession or

business to which the trade, profession or business belongs, where the payment is used for pursuing that object.

- Qualifying expenditure related to the trade, profession or business.
- Staff costs (in the form of cash outlays) of employees engaged directly in a qualifying R&D activity (excluding directors' remuneration and benefits) and expenditures on consumables directly used in a qualifying R&D activity.
- Qualifying R&D activities are those activities which seek to "achieve an advance in science or technology" by resolving scientific or technological uncertainty.
- Qualifying R&D activities must be wholly undertaken and carried on in Hong Kong.



Summary

Hong Kong offers the following tax incentives:

- 1 100% tax deduction on Type A R&D expenditure
- 2 300% deduction for the first HKD 2 million Type B expenditure and 200% for the remaining Type B expenditure.

Hungary

R&D cost is mainly a corporate income tax (CIT) base reducing item.
In some circumstances, you may receive a direct tax benefit.



Criteria – What counts as R&D?

- Basic Research: Exploratory experimental or theoretical work that is primarily intended to acquire new knowledge necessary to understand phenomena, experiences and observations without anticipating their practical application or use.
- Applied research: Planned research or targeted research aimed at acquiring new knowledge and expertise for the development of new products, processes, technologies or services or to a significant advance in the development of existing products, processes or services.
- Experimental development: Acquire, aggregate, share, apply and use of existing scientific, technological, business and other relevant knowledge and expertise for creating or designing new, modified or improved product, process or service plans. **Experimental development may be:**
 - Activities for the definition, design and documentation of new products, processes and services
 - Activities involving the production of drafts, blueprints, plans and other documentation, if they are not intended for commercial use
- The production of prototypes not available for commercial use
- The development of commercially available prototypes and pilot projects where the prototype is necessarily the commercial end product itself and its production is too expensive to be carried out solely for demonstration and verification purposes
- The experimental manufacture and testing of products, processes and services, provided they cannot be used or modified so that they can be used in industrial applications or commercially.



Incentives available

In Hungary, CIT base can be reduced with the direct cost (under special conditions with the triple of the direct cost) of R&D activity. **Specific rules are as follows:**

R&D service contract

- CIT base can be reduced with the triple of the direct cost (maximum HUF50m) of R&D activity
- Condition of usage of incentive:
 - R&D activity is carried out in the framework of an agreement with a university, with the Hungarian Academy of Sciences or with a state-owned research institute.

R&D cost sharing

- CIT base can be reduced with direct cost of R&D activity concluded in an affiliated company.
- Condition of usage of incentive:
 - R&D activity carried out by the affiliated company is related to the revenue-raising activities of both the company wishing to deduct and the affiliated company completed the activity
 - Declaration from the affiliated company about the amount of direct cost of R&D and the amount to be considered by the incentive user company.

R&D investment

- Realisation of a research investment at least HUF100m in present value gives the right to use a corporate tax allowance - to a maximum of 80% of the tax.
- Condition of usage of incentive:
 - Qualified as a start-up investment
 - Implemented by a SME or implemented by a large enterprise in some special areas of Hungary
 - Fulfil of documentation requirements specialised by law.

Social contribution tax allowances

Employees with PhD or higher academic title

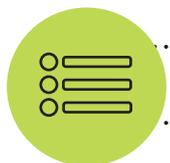
- Based on employing a researcher or developer employee with a PhD or a higher academic degree or academic title, as well as students or doctorate candidates.
- The gross salary as tax base might be reduced by HUF 200k-500k (even to zero) per employee.
- Condition of usage of incentive:
 - The taxpayer has to be considered as a research facility.

Researcher or developer employee

- Based on employing a researcher or developer employee.
- The tax allowance shall be 50% of the tax liability.
- Condition of usage of incentive:
 - The taxpayer has to be a business entity, considered as a research facility carrying out Basic Research, Applied research or Experimental Development
 - Cannot be used together with the CIT allowance.

Local business tax base reduction

- Direct cost of own R&D projects reduces the local business tax base (as the base of CIT).
- As the local business tax base is the base of innovation contribution, thus indirectly the innovation contribution tax base is reduced, too.
- Micro- and small enterprises are exempt of innovation contribution liability.



Summary

Hungary offers the following tax incentives:

- 1 Maximum HUF50m tax base reduction in CIT base if there is a contract on R&D activity with a special institute
- 2 Use of R&D costs of affiliated companies for tax base reduction
- 3 In case of R&D investment tax allowance can be received
- 4 Social contribution tax allowance
- 5 Direct local business tax benefit in the tax base and indirectly tax benefit in innovation contribution
- 6 Exemption of innovation contribution for small and medium enterprises.

Iceland



Incentives available

Tax credit scheme for R&D

Iceland offers incentives for R&D in the form of tax credits for innovation companies. The aid is granted as a reimbursement of the company's paid income tax. The tax credit is 35% of the actual R&D cost within small and medium sized companies and 25% within other. There is an annual ceiling of a total actual cost of ISK1,100m, which may include outsourced cost of up to ISK200m. Under the scheme, companies that carry out R&D projects can apply for a tax credit to the Icelandic Centre for Research (Rannís). In the case where the assessed income tax is lower than the determined tax credit or if no income tax is assessed on a legal party due to a tax loss, the tax credit is paid out.

This applies to companies that fulfill the following criteria:

- That the concept of the value-adding product/service and the business plan is well defined
- It is documented that the amount appropriated for R&D over a 12-month period equals or exceeds ISK1m
- That staff have the training, education, and experience in the area on which the concept of a value-adding product or service is based.

Tax incentives for foreign experts

Foreign experts, hired to work in Iceland, do enjoy personal tax incentives. A special tax deduction allows that only 75% of the income is considered taxable for the first three years of employment, if the foreign expert is hired with a legal person, which has domicile or a fixed place of business in Iceland and that legal person is the actual salary-payer; the foreign expert has not been domiciled in Iceland the previous five years before his recruitment; and the foreign expert has knowledge that is limited in Iceland.

Film and TV production and music recordings

Producers of films and TV material can apply for a 25% reimbursement of all cost associated with producing a film or TV program in Iceland, fulfilling certain criteria. Production costs refers to all costs incurred in Iceland deductible from the revenues of enterprises pursuant to the provisions of the Act on Income. Payments pertaining to employees and contractors are only to be included in production costs if they are verifiably taxable in Iceland. When more than 80% of the total production cost of a motion picture or television programme is incurred in Iceland, the reimbursement is calculated based on the total production cost incurred within the European Economic Area. The reimbursement scheme does not cover production of commercials or music videos.

It is possible to have 25% of cost incurred reimbursed when recording music in Iceland that has been released and made accessible to the general public. An application for reimbursement of production cost must be submitted to the Ministry of Industries and Innovation. To be eligible for reimbursement the issued sound recordings need to be available to the public and the total playback time of the sound recordings exceeds 30 minutes.



Summary

Iceland offers the following tax incentives:

- 1** Tax credit scheme for R&D
- 2** Tax incentives for foreign experts
- 3** Tax incentives for film production and music recording.



Ireland

Expenditure incurred on R&D activities in Ireland have the potential to qualify for a number of generous reliefs. In general, in order to qualify for these reliefs, the expenditure must meet the definition of R&D under s.766 of the Taxes Consolidation Act (TCA) 1997.



Criteria – What counts as R&D?

Under s.766 TCA 1997 a company must carry out R&D activities that meet the following conditions. **The R&D activity must:**

- Involve systemic, investigative or experimental activities
- Be in the field of science or technology
- Involve one or more of these categories of R&D:
 - Basic research
 - Applied research
 - Experimental development.
- Seek to make scientific or technological advancement
- Involve the resolution of scientific or technological uncertainty.



Incentives available

R&D tax credit

- Under S.766 TCA 1997 a company is entitled to a tax credit (ie a reduction in corporation tax) equivalent to 25% (or 30% for a small or micro company) of qualifying R&D expenditure incurred in an accounting period. This is in addition to the corporation tax trading deduction of 12.5%: resulting in a potential tax benefit of 37.5% (or 42.5% for a small or micro company).
- A small or micro sized company is a company with fewer than 50 employees and an annual turnover and/or balance sheet total not exceeding €10m as defined by the Annex to Commission Recommendation 2003/361/EC of 6 May 2003.
- To qualify for the relief, the company must maintain a detailed record of the R&D expenditure incurred.
- Eligible expenditure can include revenue expenses (eg salaries, materials etc) deductible for computing corporation tax along with certain capital expenditure such as plant, machinery and buildings.
- The credit is first offset against the company's current corporation tax liability. The company then has the option to carry the credit back for offset against the corporation tax liability in the preceding period. **Any remaining excess can be:**
 - Carried forward against future corporation tax liabilities, or
 - The company may elect to have any excess credit remaining paid as a cash refund by revenue over a period of three years subject to certain limits and criteria.
- It is possible for small and micro sized companies to claim an R&D tax credit in an accounting period where they have not yet commenced to trade.
- It should be noted that all of the provisions relating to small and micro sized companies are subject to a commencement order to be made by the Irish Minister for Finance pending State aid approval.

Knowledge Development Box

- The Knowledge Development Box (KDB) offers a 6.25% corporate tax rate for qualifying profits generated from certain IP such as qualifying patents and copyrighted software.
- To qualify for this reduced rate, the created IP must be the result of R&D activities, as detailed above.
- The KDB meets the 'modified nexus' approach which is endorsed by the OECD. This approach seeks to link the relief under the KDB to the proportion of qualifying R&D expenditure being carried on by the company in Ireland. The result is that the higher the percentage of R&D which is carried out on IP in Ireland, the higher the percentage of income which will qualify for this reduced rate.
- The relief must be claimed within two years from the end of the accounting period to which the claim relates.
- This relief was due to expire on 31 December 2020, however this has now been extended to at least 31 December 2022.

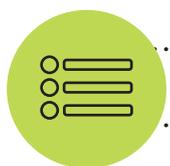
Special Assignee Relief Programme

- Special Assignee Relief Programme (SARP) provides income tax relief for certain people who are assigned to work in Ireland by their employer in the tax years 2012 to 2022. Broadly, the relief provides for a 30% discount on the income tax rate on applicable income over €75,000.
In order qualify the employee:
 - Must have worked for the employer for a minimum of six months prior to being assigned to work in Ireland

- Be assigned to Ireland to perform their duties for a minimum of 12 months
- Must not have been tax resident in Ireland for the five tax years preceding the year of arrival
- Be tax resident in Ireland in all tax years in which the relief is claimed
- Earn a basic minimum salary (excluding bonuses etc) of €75,000 per annum. The amount of employment income on which the relief can be claimed is capped at €1 million.
- To claim the relief, employers need to apply to the Irish Revenue within 90 days of the employee arriving in Ireland to take up their duties.

Capital allowances on IP

- A special capital allowances regime exists in relation to capital expenditure incurred on the creation and acquisition of specified intangible assets such as IP.
- The capital allowances can be claimed against income from "relevant activities" of a company.
Relevant activities include:
 - Managing, developing and exploiting IP
 - Sales deriving the greater part of their value from the use of IP
- The cost of the intangible asset can be written down in line with the accounting treatment or over a period of 15 years with 7% write down for 14 years and 2% write down in final year.
- There is a cap on the amount of relief that may be claimed in an accounting period. The aggregate amount of capital allowances claimed in respect of IP, plus any deductions for interest on borrowings in respect of IP, cannot exceed 80% of the trading income of the relevant trade for the accounting period.



Summary

Ireland offers the following tax incentives:

- 1** A R&D tax credit equal to 25% of qualifying expenditure. This is likely to be increased to 30% for small and micro companies
- 2** A 6.25% corporate tax rate for qualifying profits generated from certain IP
- 3** A reduction in income tax rates for certain employees assigned to work in Ireland
- 4** A special capital allowances regime for expenditure incurred on specified intangible assets.



Israel

To encourage R&D activities and investment Israeli law grants tax relief on several levels, such as the recognition of current expenses, reduced tax rates, grants and accelerated depreciation.

In general, tax benefits in Israel are permitted, inter alia, under mostly the following laws: The Income Tax Ordinance (the Ordinance) and the Encouragement of Capital Investments Law (ECI Law). Tax benefits under the ECI Law are granted to companies (individuals are not entitled to benefits under this law).

ECI law has the major objectives:

- Achieving of enhanced growth in preferred business sectors
- Encouraging Israeli industries in the international market
- Providing vast employment opportunities
- Innovation and development are being precedent under the law.



Criteria – What counts as R&D?

Research in the fields of industry, agriculture, transportation or energy (as defined under the Israeli tax ordinance).

Under the ECI Law, the R&D incentives are for companies in which the income derives from an approved, preferred or benefitted factory owned by the companies, and subject to the approval of the Innovation Authority in Israel or the Israeli tax authority.

The above income should be derived from an intangible asset owned by the plant including:

- Income from software-based services
- Income from R&D services, which generates income from its intangible assets such as services or granting a right of use
- Income from granting the right to use the intangible asset etc.



Incentives available

Israel, under the ECI law is divided into counties and national priority areas, which entitles and benefit from reduced tax rates and benefits that are being influenced from the specific area (for example: development town).

A reduced corporate tax rate for exporting industrial corporates (usually corporates that exports 25% or more of their turnover) is applied. The reduced tax rate does not depend on a specific program. The reduced tax rate for industrial corporates that meets the provisions of the ECI law can be reduced up to 7.5% nominal corporate tax rate in a 'A development area' and 16% in the rest of the country (major cities included, Tel-Aviv for example).

In addition, there are great tax benefits under the law such as accelerated depreciation that can reach up to 400% in a fiscal year for industry buildings and 200% rate of depreciation for equipment.

The ECI law also benefit corporate with a reduced withholding tax rate of 15%-20% (instead of 25%-30% for a 'regular' corporates), with no difference at the tax rates, between domestic or foreign shareholders.

Large scale industrial entities may be subject to 5% corporate tax rate should they resident in a 'A development area' and 8% in the rest of Israel.

In order to be entitled to this rate, the entities must meet the bar of X turnover that is determined in the ECI law and to act in a specific industrial field.

Investment in fixed assets may be benefited with grants at the rate of 20%-30% of the investments. This grant refers to 'A development area' corporates. Employment is also benefited under the ECI law and can provide grants up to 27.5% of the benefited corporates employees salary to a period of up to 4 fiscal years, all under provisions of the ECI law.

IP Regime

A corporate (company) which invest at least 7% of its past 3 fiscal's years revenue in R&D and employs at least 20% of R&D personal, or has annual growth of at least 25% in its revenue for a period of 3 fiscal years, or that had previously made a capital investment of 8 Million NIS, may be entitles to IP tax regime.

The state of Israel implemented on January 1st, 2017 a new IP regime that should attract corporate to establish its IP and to consolidate profits in Israel. Incomes from IP, under the provisions of the new IP in the ECI law, may be subject to 6% corporate tax rate. The main criteria are that the corporations are part of worldwide group which its annual revenue exceeds US\$2.5 Billion.

Qualifying corporates that acts in other sectors (not IP) with consolidated global annual revenue which exceeds 2.5 Billion USD entitled also to a reduces corporate tax rate of 12%. Should the corporate will settle down in a "A development area", the corporate tax rate will reduced to 7.5%.

IP regime withholding tax on dividends can be reduced up to 4% (unless bilateral agreement exempts or reduces further the WHT rate). Companies may entitle to the aforementioned tax benefits upon discretion of the Israel Innovation Authority (pre-ruling procedure).

R&D expense deduction as a current expense for tax purposes

In general, tax laws in Israel do not allow the deduction of expenses for scientific R&D from current income since these

are considered as capital expenditures and, as such, should be added to the cost of the capital amount. **To deduct these expenses as a current expenditure, the following conditions must be met:**

- The research must be performed by the owner of the plants in fields mentioned above or, at his request, to develop or promote the plant, or
- The expenses are those of a person who carries out research and does not own the plant, or that the expenses constitute participation in the financing of research performed by another person in exchange for a right in the results of the research, provided that the State of Israel participates in financing the research through a grant.

Tax benefits for R&D companies operating a technological factory

The ECI Law grants tax benefits such as reduced tax rates under certain conditions. **The following are the main points regarding R&D companies:**

- The income derives from more than one country / customs territory, or that at least 25% of the income is derived from export activity
- The income must be from a company incorporated in Israel or a partnership in which the partners are companies incorporated in Israel
- The company owns an industrial factory in Israel generating R&D income (subject to additional conditions).

It should be noted that tax rates for non-Israeli residents will be lower than an Israeli resident's rates.

Tax benefits under the Law are subject to the approval of the Innovation Authority in Israel. The Law grants reduced tax rates regarding dividends and corporate taxation. Companies that constitute a group whose total turnover exceeds ILS10bn a year are entitled to lower tax rates



Summary

Israel offers the following tax incentives:

- 1** Benefits and reliefs in restructuring transactions and allocation of rights to investors
- 2** R&D companies under the ECI Law are also entitled to a reduced corporate tax rate of between 7.5% - 12%. Additionally, they are entitled, under certain conditions, to a reduced capital gains tax rate of between 6 - 12%
- 3** Companies in which the income is generated from R&D under the ECI Law are entitled to a reduced dividend tax rate of 20% or 4% if distributed to a non-Israeli company (under additional conditions)
- 4** Israel allows the deduction for tax purposes of R&D expenses incurred by a plant owner in certain fields as mentioned above.



Italy



Incentives available

Patent Box

The Patent Box regime is a tax bonus introduced to improve the development of IP, granting tax benefits to resident and non-resident taxpayers carrying out R&D activities.

This can be used by companies, individual entrepreneurs, other bodies carrying out business activities or non-resident taxpayers with a permanent establishment in Italy if they are resident in a country with which Italy has an effective tax information exchange agreement.

The bonus concerns the following intangible assets:

- Software protected by copyright
- Patents (which can be granted or in process of being granted)
- Business and technical-industrial know how
- Other legally protected IP, such as designs and models.

Under this regime, taxpayers can partially exclude from their taxable income, for purposes of the Income Tax and of Regional Tax on Productive Activities, those qualified incomes generated from the direct exploitation of intangible or from licensing of the IP. The Patent Box agreement shall entitle the taxpayers to exclude up to 50% of their income derived from such assets.

To determine the benefit, there must be a direct nexus between R&D activities and qualified IP, as well as a direct nexus between qualified IP and qualified income. Once you exercise the option to get the access to the agreement (option granted to the holders of the right to use the qualifying IP, ie owners/ licensees), it is deemed as irrevocable for five years.

The Patent Box regime requires taxpayers to obtain an ad hoc advanced tax ruling from the Italian Revenue Agency, whose submission is mandatory for determining the amount of the portion of income arising from the direct exploitation of the qualified intangible assets. The ruling procedure is instead optional to determine the capital gain where the qualifying IP is licensed to related parties against the payment of royalties or if it is transferred between related parties.

News: Due to the challenging calculation process and the length of the time taken by the Revenue Agency to reach a deal with the taxpayers, in last part of 2019 the Government issued a new Decree that amends the ways to obtain the Patent Box benefit.

The new law allows the taxpayers to decide to calculate autonomously every year the tax benefit accrued, giving notice in the Tax return Form and renouncing to the ruling with the Revenue Agency: the benefit is immediately available for the taxpayers after filing the Income Tax return.

This procedure is optional and provides the taxpayers with a penalty protection related to the documents prepared. The Tax Authorities shall have the right to access the taxpayers and verify the methodologies used to calculate the benefit: if the papers are exhaustive, formally correct and in line with the law (which requires a documentation comparable to Masterfiles and Country Files of TP procedures), the taxpayer obtains the penalty protection, even if the amount calculated and used as tax credit is incorrect and different from the one calculated by the tax authorities during the access.

R&D tax credit

The R&D tax credit can be enjoyed by any enterprise resident in Italy – irrespective of its legal form, business sector and size – and by Italian permanent establishments of non-resident taxpayers, performing R&D activities, as long as they comply with job security requirements and social security contributions payments.

Based on the new law in force from 1 January 2020 (deeply amended as compared to the previous one), **the following R&D activities are eligible for the tax credit concerned:**

- Fundamental research, industrial research and experimental development activities in the scientific or technological field (as they will be better identified by a Ministerial Decree – not yet issued – in accordance with the OECD Frascati Manual)
- Activities, other than the previous ones, aimed at creating new or substantially improved products or production processes (as they will be better identified by a Ministerial Decree – not yet issued – in accordance with the OECD Oslo Manual)

- Design activities carried out by companies in the textile and fashion, footwear, eyewear, goldsmith, furniture, furnishings and ceramics sectors (and other sectors that will be identified by a Ministerial Decree – not yet issued), for the conception and realization of new products and samples.

The eligible expenses included in the cost base of the R&D tax credit are as follows:

- Expenses for researchers and technicians (employees or self-employed workers) directly employed in R&D activities internally carried out by the company (special and more beneficial rules may be applied for young workers)
- Depreciations, rental (or leasing) fees and other expenses relating to movable tangible assets and software used in the R&D projects, for an amount not exceeding 30% of personnel expenses indicated in the first point
- expenses for extra-muros research contracts (with counterparties resident in EU, EEA or States that exchange information with Italy), relating to the performance of R&D activities (but only for fundamental research, industrial research and experimental development activities in the scientific or technological field). Special rules may apply for contracts stipulated with Italian resident universities and research institutes. Contracts entered into with related companies are subject to the same rules applicable if the R&D activity is carried out internally within the company
- Depreciations related to the purchase from non-related parties (resident in EU, EEA or States that exchange information with Italy), also under a license of use, of industrial property rights, biotechnological invention (or other rights), within the maximum limit of EUR1,000,000 euros and on condition that they are used directly and exclusively for carrying out R&D activities
- Expenses for consultancy services related to the eligible R&D activities, up to a maximum limit of 20% of the personnel costs indicated in the first point or costs for extra-muros research contracts indicated in the third point, provided that the relevant contracts are entered into with residents of the EU, EEA or States that exchange information with Italy
- Expenses for materials, supplies and other similar products used in eligible R&D projects, carried out internally by the company also for the construction of prototypes or pilot plants, up to a maximum limit of 30% of the personnel costs indicated in the first point or, in the case of research extra-muros indicated in the third point, 30% of the costs of these contracts.

For fundamental research, industrial research and experimental development in the scientific or technological field, the R&D tax credit is recognised in an amount equal to 12% of the relative cost base, net of other contributions received for the same expenses, up to a maximum of EUR3 million euros.

For activities aimed at the realization of new or substantially improved products or production processes, the R&D tax credit is recognised in an amount equal to 6% of the relative cost base, net of other contributions received for the same expenses, up to a maximum of EUR1.5 million euro. For activities aimed at creating new or substantially improved products or production processes to achieve some specific ecological or digital innovation targets, the tax credit is recognised in an amount equal to 10% of the relevant cost base, net of other contributions received for the same expenses, up to a maximum of EUR1.5 million euros.

For the design activity, the tax credit is recognized in an amount equal to 6% of the relevant cost base, net of other contributions received for the same expenses, up to a maximum of EUR1.5 million euros.

The R&D tax credit can only be used (in three equal annual instalments) to set-off tax payments, subject to the fulfilment of certain certification obligations.

The tax credit can be combined with other tax benefits, provided that the benefits do not exceed the cost incurred.

General tax credit for fixed assets

A tax credit for investments in fixed assets can be enjoyed by any enterprise resident in Italy – irrespective of its legal form, business sector and size – and by Italian permanent establishments of non-resident taxpayers that invest (also through leasing agreements) in certain fixed assets (located in Italy), as long as they comply with job security requirements and social security contributions payments.

For investments in ‘technologically advanced’ tangible fixed assets (eg robots; these assets are listed in Annex A to the Law 11 December 2016, no. 232) **a tax credit is recognised in the amount of:**

- 40% of the cost, for the portion of investments up to EUR2.5 million
- 20% of the cost, for the portion of investments over EUR2.5 million and up to the limit of the overall eligible costs of EUR10 million.

For certain investments in intangible fixed assets aimed at technological innovation (eg certain software, these assets are listed in Annex B to the Law 11 December 2016, n.232, as supplemented by article 1, paragraph 32, of the Law 27 December 2017, n.205) **a tax credit is recognised in the amount of:**

- 15% of the cost up to the maximum limit of eligible costs of EUR700,000.

For investments in other tangible fixed assets (with certain exceptions), **a tax credit is recognised in the amount of:**

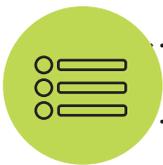
6% of the cost up to the maximum limit of eligible costs of EUR2 million (please note that this tax credit can be enjoyed also by self-employed workers).

The credit applies to investments made from 1 January 2020 until 31 December 2020 (or until 30 June 2021, provided that by 2020 the order for the purchase of the fixed asset has been accepted by the seller and an advance payment of at least 20% of the purchase price has been made).

The tax credit can only be used (in five equal annual instalments) to set-off tax payments.

For intangible fixed assets, a statement by an engineer or a qualified industrial expert is required to grant that the assets have technical features in line with those listed in the aforementioned annexes A and B (for assets with a cost not exceeding EUR 300,000, a declaration by the legal representative is enough).

The tax credit can be combined with other tax benefits, provided that the benefits do not exceed the cost incurred.



Summary

Italy offers the following R&D tax incentives:

- 1 Patent Box: exclusion (up to 50%) of the income deriving from the exploitation of certain intangibles assets
- 2 R&D tax credit: tax credit on certain eligible R&D expenses
- 3 General tax credit for fixed assets: tax credit on certain eligible expenses (investments in tangible or intangible fixed assets).

Japan

The R&D credit system allows private companies to deduct a percentage of their R&D costs from their corporation tax payments.



Criteria – What counts as R&D?

Eligible expenditures are those incurred in systematic, experimental, or investigative activities, which seek scientific or technological advancement in a field of science and technology and involve the resolution of scientific or technological uncertainty, as shown below.

- Expenditures for raw materials, labour costs and other expenditures required to conduct the said experiment and research
- Payments to third parties to carry out qualifying R&D activity (subject to certain restrictions)
- Expenditures levied in accordance with the prescriptions of the Mining and Manufacturing Technology Research Association Law.

The activity can be either basic/applied research or even experimental development. Only tax-deductible R&D expenses incurred by the Japanese entities are eligible for the credit. In addition, the expenditures must be incurred to manufacture products or to improve, design, formulate, or invent techniques.



Incentives available

Companies filing the blue returns are eligible for volume based incentive and additional incentives if applicable. The incentives described in the below are applied to the periods that start on and after 1 April 2017.

Large companies

1. Tax credit

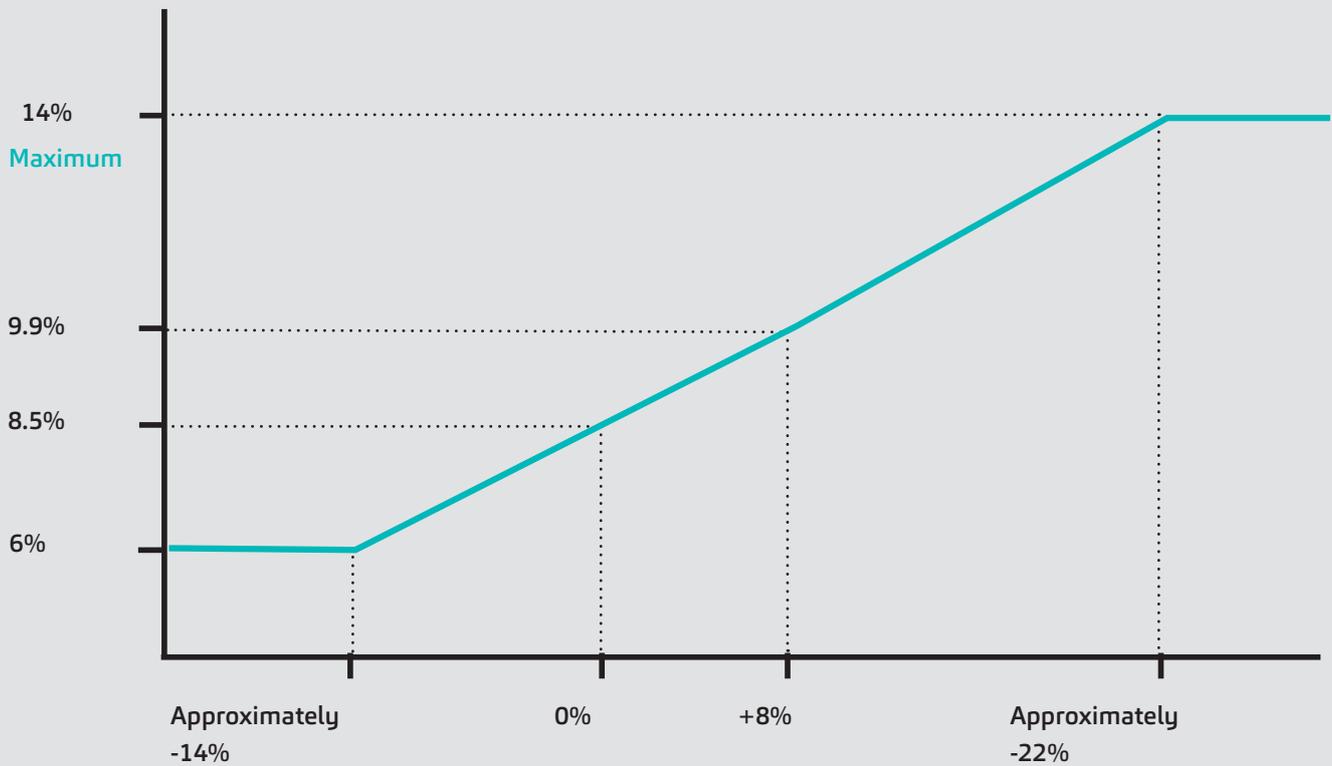
For those large companies, credit of 6%-14% can be taken based on the pro-rata increase/decrease in R&D costs as shown below. The formulas calculating tax credit rate:

- Increase / decrease rate more than +8% (Maximum: R&D costs x 14%) - R&D costs x {9.9% + (increase / decrease rate - 8%) x 0.3}

- Increase / decrease rate from -14% to +8 - R&D costs x {9.9% - (8% - increase / decrease rate) x 0.175}
- Increase / decrease rate more than -14% - R&D costs x 6%

The formulas calculating increase / decrease rate:

$$\text{Increase / decrease rate} = \frac{\text{R\&D costs} - \text{three-year average R\&D cost}}{\text{Three-year average R\&D costs}}$$



2. Tax credit ceilings

- Basic rule: corporation tax x 25% (40% for start-ups).
- In a case where R&D cost ratio is more than 10% of average gross sales, [(corporation tax) x (up to 10%)] of additional credit is applied.

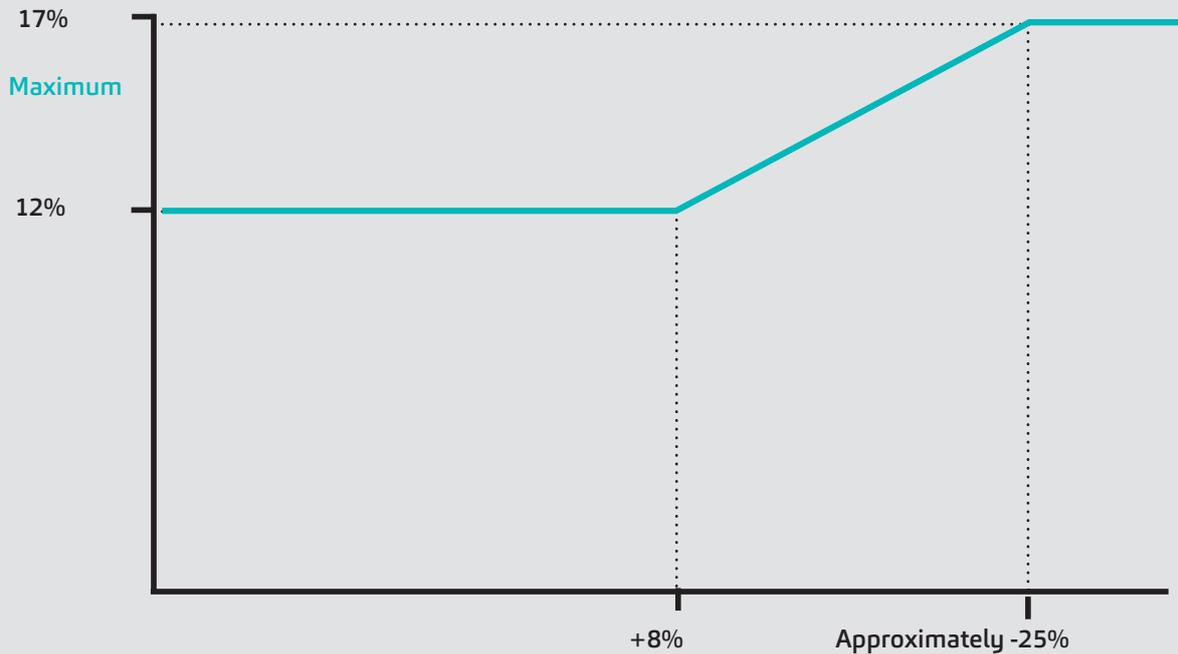
Small and medium-sized companies (SMEs)

SMEs are basically companies with a stated capital of JPY100m or less (there are other criteria).

1. Tax credit - Credit amount ranges from 12% to 17% of the gross R&D cost.

Formula calculating tax credit rate:

- Increase / decrease rate more than +8%: R&D costs x {12% + (increase / decrease rate - 8%) x 0.3}
- (Maximum: R&D costs x 17%)
- Increase / decrease rate 8% or lower: R&D costs x 12%.



2. Tax credit ceilings

- Basic rule: corporation tax x 25%.
- SMEs can choose additional credit of either (a) or (b) of the following. (a) In a case where R&D cost ratio is more than 10% of average gross sales, [(corporation tax) x (up to 10%)] of additional credit can be applied. (b) When Increase / decrease rate is more than +8%, [(corporation tax) x (up to 10%)] of additional credit can be applied.

Open innovation credit (additional credit)

Special tax credit is provided for joint R&D with a university or public research institution: or where the R&D is contracted with such entities. Royalty payments made to SMEs also qualify for this special tax credit. Tax credit.

1. Tax credit

- Special R&D cost x credit rate (varies from 20 to 30% depending on the counter part of joint R&D).

2. Tax ceilings

- Corporation tax x 10%.



Summary

Japan offers the following tax incentives:

- 1 Volume based tax incentive (up to 25%, 40% for start-ups)
- 2 Additional incentive (up to 10%)
- 3 Open innovation credit for joint R&D (up to 10%).

Korea



Incentives available

Tax credit for R&D

Where a national or a company incorporated in Korea has research and human resources development expenses incurred in a taxable year, the aggregate of the following amounts shall be subtracted from the corporate income tax for the relevant taxable year. This credit applies only to R&D expense incurred by no later than 31 December 2021.

R&D expenses for new growth and or source technologies industries:

- **Small and medium companies:** Tax credit is computed by multiplying the R&D expense incurred in the taxable year by 30%
- **Middle-standing companies listed on KOSDAQ:** Tax credit is computed by multiplying the R&D expense incurred in the taxable year by 25%
- **Others:** Tax credit is computed by multiplying the R&D expense incurred in the taxable year by 20%.

In addition, the ratio of the research and development expenses incurred for new growth engines or source technologies to the revenue for the relevant taxable year multiplied by 3 is added. The limitation is 10%. However, in case of middle-standing companies listed on KOSDAQ, the limitation is 15%.

General R&D expenses other than above item either of the following tax credit selectable:

- 30% in cases of small and medium companies; and
- 35% in cases of middle-standing companies listed on KOSDAQ.

General R&D expenses other than above item either of the following tax credit selectable:

- Tax credit equivalent to 25% (40% for middle-standing enterprise and 50% for small or medium enterprises) of the excess where the general R&D expenses incurred in the relevant taxable year exceed the general R&D expenses incurred in the immediately preceding taxable year, or

- Tax credit computed by following applicable ratio of the general R&D expenses incurred in the relevant taxable year:
 - 25% in cases of small or medium enterprises
 - 8% for middle-standing enterprise
 - Less than 2% for other enterprises according to R&D expense to sales ratio.

Taxpayers can benefit from a tax credit of less than 50% of R&D expense per year. Unused tax credits can be carried forward to the following five years.

Tax credits for investment in facilities for R&D

Where a national or a company incorporated in Korea makes an investment in facilities for R&D or facilities for commercialising a new technology (excluding any investment in used facilities and investment through lease prescribed by Presidential Decree), on or before 31 December 2021, an amount equivalent to 1% (3% for a middle-standing enterprise prescribed by Presidential Decree, or 7% for a small or medium enterprise) of that investment shall be subtracted from his/her income tax (limited to the income tax on business income) or corporate tax for the relevant tax year in which such investment incurred. Where the investment is eligible for the tax credit for R&D in paragraph one as well, taxpayer needs to select only one of two tax benefit.

Tax reduction or exemption for high-tech enterprises located in special R&D zones

Where a high-tech enterprise or a research-based company designated pursuant to Special Act on Promotion of Special R&D Zones located in a special R&D zone doing a business prescribed by Presidential Decree, such as the biotech industry or information and communications industry, the income tax or corporate tax reduction or exemption shall be granted, **as prescribed below:**

- Tax exemption by 100% of income tax or corporate tax for the taxable years ending within three years from the first day of taxable year in which the first income is generated from the business
- Thereafter, tax reduction by 50% of income tax or corporate tax for the taxable years ending within two years.

There are reduction or exemption ceilings prescribed by Presidential Decree, and elimination of overlapping among tax benefits from the same source.

Income tax reductions for foreign engineers

A foreign engineer prescribed by Presidential Decree shall be granted a 50% tax reduction on earned income from the date the company offered his/her services to a national in the Republic of Korea for 5 years (applicable only to the period until 31 December 2021).

Local tax benefits

Acquisition tax on real estate (limited to land annexed to an area within seven times the projected horizontal area of the building) acquired by a research institute affiliated with any enterprise prescribed by Presidential Decree, to use directly for its original purpose, shall be reduced by 35% (45% for new growth and or source technologies, 60% for small and medium companies,

70% for small and medium companies engaging in new growth and or source technologies) and property tax on real estate used directly for a research institute affiliated with an enterprise at the tax base date shall be reduced by 35%(45% for new growth and or source technologies, 50% for small and medium companies, 60% for small and medium companies engaging in new growth and or source technologies) until 31 December 2022, respectively.

Reduction or exemption of customs duties for goods used for research

Customs duties may be reduced by 80% on following imported goods by a qualified company for the purposes of the R&D of the industrial technology.

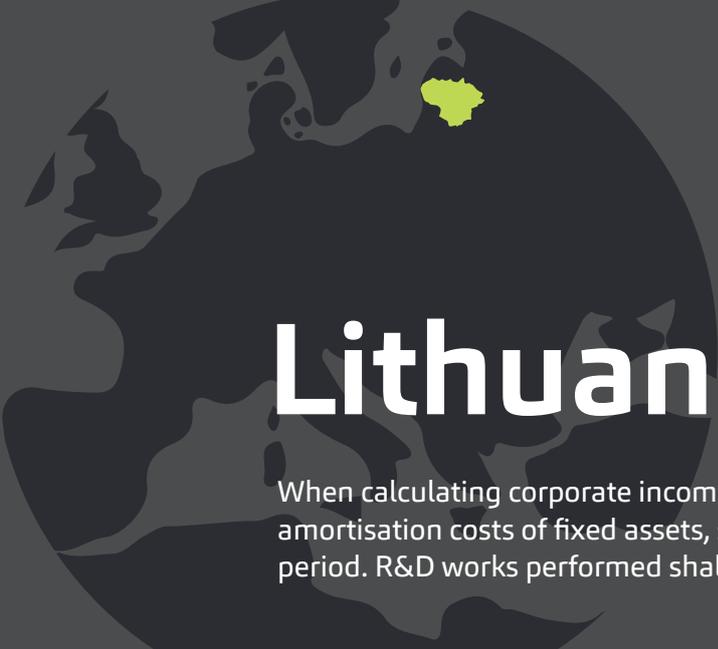
- Qualified company: research institute or company with a research centre registered with relevant government.
- Qualified item: Goods, test, samples for the purposes of the R&D of the industrial technology.



Summary

Korea offers the following tax incentives which can be combined at the company's discretion:

- 1 Tax credit on R&D expenses: 20-40% for new growth industry or source technologies, less than 25% on general R&D, 25-50% on general R&D excess of the previous years
- 2 Tax credits by 1-7% of investment in facilities for R&D
- 3 Tax reduction for high-tech enterprises by 100% of tax for three years, thereafter 50% reduction for two years
- 4 Payroll incentives for foreign engineers: wage tax relief of 50% for five years
- 5 Acquisition tax and property tax on real estate for research facility reduced by 35-70%.



Lithuania

When calculating corporate income tax, the costs of R&D, except for depreciation or amortisation costs of fixed assets, shall be deducted three times from income for the tax period. R&D works performed shall be related to the entity' regulars or intended activities.



Criteria – What counts as R&D?

- **Fundamental research:** The aim to gain new knowledge first without the intention specifically to use the received results.
- **Applied research:** The aim to gain new knowledge and initially is dedicated for specific practical aims or exercises to solve.
- **Experimental activities:** The activity based on the collected knowledge the aim of which is to create new materials, products and equipment, to install new processes systems, apply new services).



Incentives available

R&D tax incentives are deducted three times from legal entity's income in the tax period. R&D tax incentives are the following:

- Salaries business trips of employees directly involved in R&D works
- Costs for acquisition of services (consultations, leasing etc) related to R&D works and R&D works from natural or legal entities
- Costs of stock, materials and other short-term assets
- Import and input VAT from the above costs that was not deducted.



Summary

Lithuania offers the following tax incentives:

- 1** Novelty element and solution of scientific and technological uncertainty is received
- 2** By means of R&D it is aimed the progress in science and technology
- 3** Work result is important not only for the initiating company but for the undertaking company as well
- 4** It is aimed to solve the It is likely the results will be patented research or technological problem.

Luxembourg



Criteria – What counts as R&D?

Former IP regime - under grandfathering period until 30 June 2021 (article 50bis regime)

- IP rights constituted or acquired after 31 December 2007, namely copyrighted software, patents, brand and trade names, designs and models.

Current IP regime - into force since 1 January 2018 (article 50ter regime)

- IP rights constituted, developed or improved after 31 December 2007 in the context of R&D activities, namely:

- Inventions protected based on the national or international provisions in force by:

- Patents
- Utility models
- Complementary protection certificates for patents on pharmaceutical and on phytopharmaceutical products
- Complementary protection certificate extensions for paediatric medicine
- Plant breeders' rights
- Orphan drug designations

- Copyrighted software protected based on the national or international provisions in force.



Incentives available

Former IP regime (under grandfathering period)

Tax benefits:

- 80% exemption of net royalties / capital gains for CIT and MBT purposes (effective taxation of 4.99%)
- 100% exemption of eligible IP rights for NWT purposes.

IP rights acquired or developed before 1 July 2016, eligible to the former Luxembourg IP regime, benefit from the grandfathering period of five years expiring on 30 June 2021 (1 January 2021 for NWT). IP rights acquired from related parties between 31 December 2015 and 1 July 2016 are also eligible to the grandfathering period provided said rights benefitted from a similar Luxembourg or foreign IP regime at the level of the related seller.

Current IP regime

Eligible income: Royalties, capital gains, embedded income being part of the sale price of goods or services and judicial indemnities.

Tax benefits:

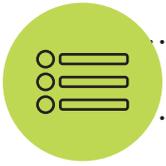
- 80% exemption of the adjusted and compensated eligible net income – after application of a specific nexus ratio – for CIT and MBT purposes (effective taxation of 4.99%)
- 100% exemption of eligible IP rights for NWT purposes.

Please note that, in addition to Luxembourg resident companies, individuals and Luxembourg permanent establishments of EEA companies are eligible to these tax benefits too.

Tax credit for software

- 8% for the share of the acquisition price not exceeding €150,000
- 2% for the share of the acquisition price exceeding €150,000.

The tax credit is limited to 10% of the tax due by the company during the tax year when the software has been acquired. The tax credit and the IP regime cannot be combined.



Summary

Luxembourg offers the following tax incentives:

- 1 Current IP regime: Effective tax rate of 4.99% on adjusted and compensated eligible net royalties and capital gains – after application of a specific nexus ratio – of a wide range of patents and of copyrighted software
- 2 Former IP regime (under grand-fathering period until 30 June 2021): Effective tax rate of 4.99% on net royalties and capital gains of patents, copyrighted software, brand and trade names, designs and models
- 3 Tax credit for the acquisition of software (from 2% to 8%).

North Macedonia



Criteria – What counts as R&D?

Revenue from R&D services is the income from basic and technical research, laboratory and other services, projects and elaborates (except those related to investments whose implementation is in progress), propaganda services, market research, advertising in media, fair events, promotion of products abroad, survey of the public opinion.

R&D under this article include:

- The way of obtaining market information
- Determination of market characteristics
- Measuring market potential
- Market share analysing
- Sales analysing
- Operation trends research
- Short-term and long-term predictions
- Examination of bids on competition
- Price research
- Testing new and existing products on the market.



Incentives available

Tax deduction for R&D income paid on foreign legal entities (withholding tax)

The tax treatment of income paid based on R&D performed by foreign legal entities, from the aspect of withholding tax is regulated by the Law on Profit Tax. According the Law on Profit Tax, withholding tax is paid on income on foreign legal entity from domestic legal entity or from permanent establishment of a foreign entity in Republic of North Macedonia. Tax rate on withholding tax is 10% from gross income paid on foreign legal entity.

The incentives from paying withholding tax arises from agreements on avoidance of double taxation signed by Republic of North Macedonia with 48 countries. Main purpose of these agreements is to avoid double taxation, which represents the taxation of the same tax case with the same type of tax that belongs to one person, in the same time period, but in two different states with independent tax administrations.

The deduction will be 10%, as stated in the agreements with full deduction (0% tax), with the exception on those agreements where the tax is lower than 10% (the tax will be paid on difference between two tax rates).

For example: If the tax rates are the same (10%) in both countries, the domestic legal entity will pay 0% withholding tax. But, when the tax rate in North Macedonia is 10% and in the other country is for example 5%, the domestic legal entity needs to pay 5% withholding tax (the difference between 10% and 5%).

When the tax rate of foreign legal entity is higher than 10%, the domestic legal entity will pay 10% as prescribed by the law.

Tax deduction for R&D income paid on foreign individual (personal income tax)

According to Personal Income Tax Law, on every service given to domestic legal entity, which foreign individual has income must be paid 10% personal income tax. But, as stated above, double taxation may be avoided (same as between two legal entities) and the tax will be reduced for income tax paid in another country, to the amount of tax rate applicable in North Macedonia, prescribed in Article 12 of Personal Income Tax Law.

All the incentives, applied above are also applicable for incomes of dividends, interests of residents and foreigners, royalties, sports and entertainment activities, management, consulting, financial services, insurance premiums, telecommunication services and lease of real estate.

Value Added Tax

According to Law on Value Added Tax, all turnover realised in the country is subject of VAT. The tax rates are 5% and 18%. In Republic of North Macedonia there is tax incentive of VAT prescribed in Article 23 and 24 of Law on Value Added Tax. The incentives from Article 23 refers to (according to this article in our jurisdiction VAT is not payable):

- Rental of residential buildings and apartments
- Postal services
- Banking and financial operations
- Insurance and reinsurance services, including the related services of insurance brokers and agents
- Games of chance and entertainment games, the performance of which is regulated by the relevant law
- Cultural services
- Radio and television
- Health services

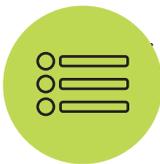
- Social care and social protection
- Child and youth care
- Education
- Funeral services and crematorium
- International transport of passengers
- Transportation services for sick and injured persons
- Use of a public road, part or object of the road.

The incentives from Article 24 refers to (according to this article in our jurisdiction VAT is payable as output VAT and in the same moment is recorded like input – so the VAT will be 0%):

- Services related with export, import and transit
- Services related with producing goods
- Services related to international air traffic
- Intermediary services exempted from VAT.

Projects financed by foreign donations

According to VAT Law there is tax exemption for projects financed by foreign donations.



Summary

Republic of North Macedonia offers the following tax incentives, depending on the type of the tax:

- 1 10% tax deduction for residents on gross income paid on foreign legal entity
- 2 10% tax deduction for residents on gross come paid on foreign individual
- 3 5% or 18% tax deduction without right to deduct, but not payable
- 4 5% or 18% VAT deduction with right to deduct
- 5 Tax deduction for projects financed by foreign donations.



Malaysia



Criteria – What counts as R&D?

In Malaysia, 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 object of acquiring new knowledge or using the results of the study for the production or improvement of materials, devices, products, produce, or processes, but does not include:

- Quality control or routine testing of materials, devices or products
- Research in the social sciences or the humanities
- Routine data collection
- Efficiency surveys or management studies
- Market research or sales promotion

- Routine modifications or changes to materials, devices, products, processes or production methods
- Cosmetic modifications or stylistic changes to materials, devices, products, processes or production methods.

Generally, the R&D activities must be geared towards the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use, and these activities are normally distinguished by their non-routine nature and the novelty of what is being created. It is also important for the R&D to be undertaken in accordance with the needs and beneficial to the Malaysian economy.



Incentives available

Contract R&D companies

Companies that provide R&D services in Malaysia to companies other than related companies are eligible for either Pioneer Status income tax exemption of 100% of their statutory income for five years or Investment Tax Allowance (ITA) of 100% of Qualifying Capital Expenditure (QCE) incurred within ten years for set-off against 70% of their statutory income. Any unutilised ITA can be carried forward to subsequent years until fully utilised.

Approved R&D companies

Companies that provide R&D services in Malaysia to related companies or any other companies are eligible for ITA of 100% of QCE incurred within ten years for set-off against 70% of their statutory income. Any unutilised ITA can be carried forward to subsequent years until fully utilised. Alternatively, should the approved R&D companies opt not to avail themselves of the

said ITA, their related companies can enjoy double deduction for payments made for services rendered by these approved R&D companies.

Capital expenditure incurred for in-house R&D

Companies that undertake in-house R&D to further their businesses are eligible for ITA of 50% of QCE incurred within ten years for set-off against 70% of their statutory income. Any unutilised ITA can be carried forward to subsequent years until fully utilised.

Revenue expenditure incurred for in-house R&D

Companies that undertake in-house R&D to further their businesses are eligible for double deduction (200% deduction) of their R&D revenue expenditure (not capital expenditure) incurred. Prior approval from the Malaysian tax authorities must be obtained in respect of the R&D projects before the claim for double deduction can be made.

Special double deduction for in-house R&D by small and medium-sized enterprise (SME)

SME companies with paid-up ordinary share capital of not exceeding RM2.5m will be given double deduction (200% deduction) on R&D revenue expenditure (not capital expenditure) incurred up to RM50,000 automatically for each year 2016 to 2018 in respect of their R&D projects submitted to the Malaysian tax authorities.

Cash contributions for R&D and payments for R&D services

Companies that make cash contributions to approved research institutes or payments for the use of services of approved

research institutes / R&D companies / contract R&D companies are eligible for double deduction (200% deduction) of the said payments made.

Commercialisation of R&D findings

Companies that invests in their subsidiary company engaged in commercialisation of R&D findings will be given a tax deduction equivalent to the amount of investment made in that subsidiary. The said subsidiary company that undertakes commercialisation of R&D findings will be given income tax exemption of 100% of its statutory income for ten years. These incentives are applicable for commercialisation of public sector R&D findings in resource-based industries (such as agriculture, oil palm, wood, rubber) and non-resource-based industries (limited to promoted activities by the government).



Summary

Malaysia offers the following tax incentives for R&D:

- 1 Contract R&D company - Pioneer Status income tax exemption of 100% for five years or ITA of 100% on QCE incurred for ten years against 70% of statutory income
- 2 Approved R&D company - ITA of 100% on QCE incurred for ten years against 70% of statutory income
- 3 In-house R&D - ITA of 50% of QCE incurred for ten years against 70% of statutory income
- 4 In-house R&D - Double deduction (200% deduction) of R&D revenue expenditure incurred
- 5 In-house R&D by SME – Special double deduction (200% deduction) of R&D revenue expenditure incurred up to RM50,000 automatically for each year 2016 to 2018
- 6 Double deduction (200% deduction) of cash contributions made to approved research institutes or payments for the use of services of approved research institutes / R&D companies / contract R&D companies
- 7 Company that invest in its subsidiary company engaged in the commercialisation of R&D findings - Tax deduction equivalent to the amount of investment made in the said subsidiary
- 8 Subsidiary company that undertake the commercialisation of R&D findings - income tax exemption of 100% of its statutory income for ten years.

Malta



Criteria – What counts as R&D?

In general, R&D is understood to include:

Industrial Research: Planned research or critical investigation aimed at the acquisition of 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 components 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.

Experimental Development: 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 may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services.

Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions where

the primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes.

Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements.

Effective Collaboration: Collaboration between at least two independent parties to exchange knowledge or technology, or to achieve a common objective based on the division of labour where the parties jointly define the scope of the collaborative project, contribute to its implementation and share its risks, as well as its results. One or several parties may bear the full costs of the project and thus relieve other parties of its financial risks. Contract research and provision of research services are not considered forms of collaboration.



Incentives available

Exploring Research Grant Scheme

This scheme aims to support businesses carrying out feasibility studies to determine the technical and commercial challenges and carrying out preliminary activities that will enable businesses to make more knowledgeable decisions in the development of the intended research and development project.

This support measure takes the form of a cash grant of up to fifty thousand euro (€50,000) which shall cover a percentage of the eligible costs depending on the size of the undertaking,

capped at a) 50% of eligible costs if the beneficiary is a Large Undertaking; b) 60% of eligible costs if the beneficiary is a Medium-Sized Undertaking; c) 70% of eligible costs if the beneficiary is a Small Undertaking.

The Exploring Research Grant aims to support costs incurred for carrying out a feasibility study in relation to a proposed R&D project. The eligible costs shall be wage costs, costs related to contractual research, technical knowledge and patents and other operational costs incurred specifically for carrying out the study. All eligible costs shall be calculated excluding Value Added Tax (VAT) and any other recoverable taxes or duties.

Supported projects must commence within 12 months from the date the funding is approved and must be implemented and finalised within 40 weeks of the commencement date.

Qualifying employment in innovation and creativity

Non-resident individuals in roles which are currently not addressed by the local market and which are employed in an eligible office may benefit from a flat income tax rate of 15% for a consecutive period up to four years commencing from the year immediately preceding the year of assessment in which the person is first liable to tax in Malta (provided that a number of conditions are satisfied). Extension may also be possible subject to approval being granted.

An eligible office shall cover employment in a role directly engaged in:

- Industrial research and experimental development.
- Product development, meaning the detailed specification and development of new tangible products and product or process innovation, relating to the implementation of significant improvements to tangible products and industrial processes aimed at increasing current capabilities, including customisation and localisation.
- Systematic, logical, scientific, inquisitive, investigative manipulation of data using quantitative and qualitative techniques for the creation of new knowledge and further development of products and services.
- Mathematical synthesis and modelling.
- Senior management roles, if such roles are directly responsible for a team of at least three persons carrying out the tasks mentioned above and reports directly to the Board of Directors or the head of the organisation with which the person is employed.

The individuals in eligible office must be in possession of relevant qualifications and must also be in possession of relevant qualifications as required by such scheme.

Research and Development

The incentive aims to assist undertakings that carry out Industrial Research and Experimental Development required for acquisition of knowledge leading to the development of innovative products and solutions. The measure also encourages cooperation between firms by providing additional assistance for collaborative Industrial Research or Experimental Development projects. These projects may include projects endorsed by the Eureka Network and projects accepted under the Euro Stars framework of the European Commission.

Projects must seek to address a technological challenge through a structured approach within an established time frame, which should not exceed 36 months in project duration. This time frame should be established when the request for support is submitted to the Corporation.

This incentive mainly takes the form of a tax credit, but the Corporation (that is, Malta Enterprise) may also consider approving the support as a cash grant. Cash grants are awarded at the sole discretion of the Corporation.

When cash is required as support for the project, the applicant must commit not to commence the project prior to the formal approval of the aid from the Corporation. In requesting fiscal (tax credits) support, the applicant may submit an application within six (6) months of commencement of the project

The maximum levels of aid that may be provided under this incentive are as follows:

Category of research and development project	Small undertaking	Medium undertaking	Large undertaking
Experimental development projects	45%	35%	25%
Industrial research projects	70%	60%	50%

A Project may receive an additional 15% of eligible costs over the above percentages, up to a maximum aid intensity of 80% of eligible costs, **if one of the following conditions is satisfied:**

- The project involves effective collaboration as prescribed by the Scheme
- The results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software within one year of completion of the project and such intention is declared at application stage.

The following costs are considered as eligible as long as they are incurred **in relation to an approved Industrial Research or Experimental Development project:**

- Personnel costs
- Instruments and equipment
- Contractual research, technical knowledge and patents
- Other operating expenses including additional overheads and other operating expenses, including costs of materials, supplies and similar products, incurred directly as a result of the project.

Deduction of capital expenditure in relation to IP and IP rights

In cases where the IP and IP rights are deemed to be capital assets, the Malta Income Tax Act allows a person to deduct expenses of a capital nature incurred on such IP or IP rights if it has been proved to the satisfaction of the Director General – Inland Revenue that such expenditure has been incurred in the production of the income of such person. Thus, such deductions can be claimed both in cases where the income derived from such IP or IP rights is deemed to be of an active nature, as well as where income is deemed to be of a passive nature.

It is important to note that such expenditure must be spread equally over the life of the IP or IP rights, but in any case, over a minimum period of three consecutive years, the first being that in which the said expenditure has been incurred.

Patent Box deduction

This incentive establishes a fiscal regime for income arising from patents, similar intellectual property Rights and copyrighted software. Additionally, the rules establish that small companies may utilise the patent box rules on income from any intellectual property based on an invention that could be patented.

A tax payer qualifying for the Patent Box deduction will be entitled to deduct a percentage of its income from taxable income. This deduction will be adjusted depending on the percentage resulting from dividing the qualifying IP expenditure by the total expenditure related to the particular IP.

EUREKA and EUROSTARS

EUREKA is an inter-governmental network that supports market-oriented R&D and innovation projects by industry, research centres and universities across all technological sectors. Through a EUREKA project a consortium develops new products, processes and/or services for which they agree upon the IP rights and build partnerships to penetrate new markets.

EUROSTARS is a joint initiative of the European Commission and the EUREKA network. The initiative provides funding for market-oriented R&D with the active participation of R&D performing SMEs. The SME must dedicate at least 10% of its turnover or full-time equivalent (FTE) to research activities.



Summary

Malta offers the following tax incentives:

- 1 Reduced personal tax rate for non-resident employees which are currently involved in R&D activities (which are not addressed by the Maltese market).
- 2 Incentives aimed at supporting undertakings intending to undertake industrial research and experimental development projects in carrying out R&D feasibility studies in preparation for these projects.
- 3 Undertakings carrying out R&D feasibility studies may receive up to €50,000 per project (if conditions are satisfied).
- 4 A tax credit/cash grant aimed to assist undertakings that carry out Industrial Research and Experimental Development required for acquisition of knowledge leading to the development of innovative products and solutions.
- 5 Deduction of capital expenditure in relation to acquisition of IP and IP rights.
- 6 Patent Box deduction.



Moldova

In the Republic of Moldova, the practical implementation of innovations and the transfer of technologies resulting in new or improved products and services, competitive on the market, is carried out through the creation and operation of science and technology parks and innovation incubators.



Criteria – What counts as R&D?

Under s.766 TCA 1997 a company must carry out R&D activities that meet the following conditions. **The R&D activity must:**

- Involve systemic, investigative or experimental activities
- Be in the field of science or technology
- Involve one or more of these categories of R&D:
 - Basic research
 - Applied research
 - Experimental development.
- Seek to make scientific or technological advancement
- Involve the resolution of scientific or technological uncertainty.



Incentives available

Science and Technology Park and/or the Innovation Incubator

To facilitate the creation and activity of science and technology parks and innovation incubators, the state, through the central and local public administration authorities, offers the following facilities to the administrator and residents of the science and technology park and the innovation incubator:

- The attribution in free use to the administrator of the public property goods for the creation and development of the science and technology park and/or of the innovation incubator
- Granting financial allocations, distributed through competition, within the programs and projects in the sphere of research and development, innovation and technology transfer, including for the creation and/or development of the infrastructure of the science and technology park and/or of the innovation incubator
- Granting donations, sponsorships and investments

- The application by the administrator of the science and technology park for the residents of the respective park of the reduction coefficient established when calculating the payment for rent/lease of public property, established in the state budget law for the respective year: in the first and second year of activity within the science and technology park - 0.3, in the third year - 0.4, in the fourth year - 0.5
- Applying the exemption of payment for the rent/ lease of public property goods by the administrator of the innovation incubator in the first and second year of activity of the residents
- The application by the administrator of the innovation incubator for the residents of the respective innovation incubator of the reduction coefficient established when calculating the payment for rent/lease of public property established in the state budget law for the respective year in the third year of activity of the residents - 0.5.

If the science and technology park and/or the innovation incubator is founded based on private property, the owner of the respective patrimony independently establishes the tariffs for the provision of services, including the rent/lease of goods.

Value added tax and customs duties

According to the customs and fiscal legislation, the customs authorities will perform customs clearance of the goods and services (according to the List of goods and services to be imported or procured on the territory of the Republic of Moldova by the resident of the science and technology park or the resident of the innovation incubator necessary to realize the project of innovation and technology transfer (hereinafter - the approved list), imported by the residents of science and technology parks and innovation incubators, without the collection of value added tax and customs duty. For the application of the exemption of the value added tax and the customs tax, the residents of the science and technology parks and of the innovation incubators will have to present to the customs bodies and to the economic agents, suppliers on the territory of the Republic of Moldova, the certificate, issued by the administrator of the park or the incubator, where appropriate, regarding holding the status of resident of science and technology park or innovation incubator.

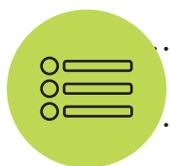
The economic agents from the territory of the Republic of Moldova deliver goods and services to the residents of the

science and technology parks and to the residents of the innovation incubators, with exemption from value added tax (according to the approved list).

The services of organisations in the field of science and innovation accredited by the National Council for Accreditation and Attestation are exempt from VAT without the right to deduct. The exemption will be granted starting with the fiscal period in which the organisation in the field of science and innovation was accredited by the National Council for Accreditation and Attestation. In case of withdrawal of the accreditation certificate, the organisation will be deprived of the right to exemption starting with the fiscal period in which the accreditation certificate is withdrawn.

Income tax

In accordance with the provisions of the Fiscal Code, non-taxable sources of income are considered the revenues of legal entities obtained from the use of external financial sources within the international projects and grants related to the development of education and research.



Summary

Moldova offers the following tax facilities:

- 1** Residents of science and technology parks and innovation incubators are exempt from value added tax and customs duty on imported goods and services
- 2** The residents of the science and technology parks and of the innovation incubators are exempted from the value added tax on the goods and services purchased by them on the territory of the Republic of Moldova
- 3** The services of organisations in the field of science and innovation accredited by the National Council for Accreditation and Certification are exempt from VAT without the right of deduction
- 4** The income of the legal persons obtained following the capitalization of the external financial sources within the international projects and grants related to the development of education and research are considered non-taxable sources of income.

Myanmar



Criteria – What counts as R&D?

- Generally, tax incentives can be provided to investors based on industry sectors or geographical locations in Myanmar.
- Investments in Myanmar are governed by the Myanmar Investment Commission and the Directorate of Investment and Company Administration.
- There are no specific R&D incentives in Myanmar, other than deductions for R&D expenditures under the Myanmar Investment Law incentives packages which allow deductions of R&D expenditures carried out in the country for the business activities that would benefit the development of the country.



Incentives available

Tax Incentives under the Myanmar Investment Law

An investment permit granted by the Myanmar Investment Commission for eligible activities can receive the following tax benefits:

- Corporate income tax exemption for three, five or seven years depending on the location of the investment
- Corporate income tax exemption for profits re-invested within one year (including in another sector)
- Certain exemptions of Customs Duty and Commercial Tax (GST/VAT)

- Same personal income tax rates as Myanmar citizens for expatriates
- Accelerated depreciation
- Refunds of customs duties on re-export.

Special economic zones

Special economic zones under the Myanmar Special Economic Zones Law are categorised as 'free zones' which are for export and 'promoted zones' for the domestic market.



Summary

Myanmar offers the following tax incentives:

- 1 R&D expenditure deductions as well as accelerated depreciation
- 2 Myanmar Investment Law: Three-, five- or seven-year corporate tax exemption as well as on re-investment
- 3 Free zones: seven years corporate tax exemption, corporate tax rate reduction of 50% for following five years
- 4 Promoted zones: five years corporate tax exemption, corporate tax rate reduction of 50% for following five years.



The Netherlands

The Dutch government aims to stimulate technical innovation in The Netherlands with schemes, grants and other incentives for entrepreneurs. Any innovative entrepreneur in the Netherlands can make use of the R&D, such as the WBSO or the Innovation Box.

Next to these general schemes and grants, there are special funds and grants in the Netherlands for more specific technical developments.



Criteria – What counts as R&D?

- If the R&D project seeks to achieve the development of technically new physical products, technical scientific research, or
- The development of technologically new software (or parts thereof), or
- The development of technologically physical production process (or parts thereof), or
- Technical-scientific research seeking to explain phenomena, or
- Analysis of the technical feasibility of an R&D project.



Incentives available

WBSO – Compensation of salary costs for R&D

The WBSO scheme subsidises the wage cost of employees carrying out R&D and other costs and investments regarding R&D. The WBSO is an incentive that reduces wage tax and social security contributions for the R&D project. The benefit of the WBSO is a tax credit in the annual wage tax return. Companies can apply for this incentive if the following conditions are met:

- The proposed R&D activities take place in your own company
- The development is accompanied by technical problems
- The technological development is new to your organisation
- The R&D work has yet to take place.

If you are eligible for the WBSO (companies), you receive a contribution towards the wage costs of employees carrying out R&D with a tax credit of payroll tax. The R&D payroll tax deduction amounts to 32% of the first €350,000 of the wage costs and other R&D costs per calendar year. For the remaining R&D (wage) costs, the allowance amounts to 16%. The allowance for start-ups (specific rules apply) amounts to 40% of

the first €350,000 and 16% for the remaining R&D (wage) costs. These mentioned amounts are only valid for the year 2020. The self-employed entrepreneur must meet other conditions. Self-employed entrepreneurs must spend at least 500 hours on R&D activities within one calendar year. Self-employed entrepreneurs are entitled to a fixed tax reduction of €12,980 Dutch Income Tax. In addition, self-employed starting entrepreneurs could receive an additional tax reduction of €6,494. This additional tax-reduction is applicable if the entrepreneur having his first business activities since the previous five years and if the entrepreneur has not applied for the R&D deduction for more than two times.

Innovation Box- Reducing corporation tax

The Innovation Box aims to simulate technical innovation in the Netherlands. Profits derived from self-developed intangibles that qualify for the Innovation Box regime are taxed at an effective 7% rate (2021: 9%). To apply for the Innovation Box, companies must meet certain conditions. As of 1 January 2017, a distinction is made between 'small' and 'large' taxpayers. The conditions are the following:

Small:

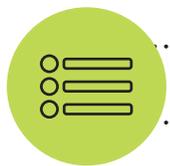
A 'small' taxpayer must have a R&D certificate to get access to the innovation box. A taxpayer is considered small, if the taxpayer meets the following thresholds:

- A total (global group-wide) net turnover less than €250m over a period of five years, and
- The qualifying intangible assets generate less than €37.5m in profits over a period of five years.

Large:

Taxpayers that exceed either one of these thresholds are considered as large taxpayers. To have access to the Innovation Box, large taxpayers must have, besides an R&D certificate, one of the following exclusive licenses:

- A patent or plant breeder's right, or
- A permit from an EU member state to trade medicines, or
- A supplementary protection certificate from the patent centre, or
- A registered utility model to protect innovation, or
- A biological pesticide, or
- Software.



Summary

The Netherlands offers the following tax incentives:

- 1 32% tax credit (up to 40% for start-ups) of the first €350,000 and 16% for investments exceeding €350,000, in R&D wage costs and other R&D expenses and investments
- 2 Effective tax rate of 5% on qualifying income attributable to innovations
- 3 Tax reduction of €12,980 for the income tax for the self-employed entrepreneur
- 4 An additional tax reduction of €6,494 for self-employed starters.



New Zealand

New Zealand has several R&D incentives available, which include:

- A 15% R&D tax credit, available to businesses undertaking specified R&D activity
- The ability to cash out some tax losses
- The ability to defer expenditure.



Criteria – What counts as R&D?

- Research must be original, following a planned investigation that is carried out with a view to gain new scientific or technical knowledge and understanding.
- Development takes place when a project uses research findings to produce new, innovative or substantially improved materials, devices, products, processes, systems or services.



Incentives available

15% R&D tax credit

This incentive, available from the start of the 2019/20 year, provides a 15% tax credit for taxpayers who undertake specified R&D activity. Taxpayers covered include sole traders, partnerships, companies, joint ventures and trusts, but excludes government departments and charities.

To be eligible, a taxpayer must both:

- Perform a core R&D activity in New Zealand themselves or through an R&D contractor in New Zealand; and
- Carry on a business through a fixed establishment in New Zealand.

The taxpayer must also either:

- Own the results of their R&D activities (or a member of their corporate group, who is resident in New Zealand or in a country New Zealand has a double tax agreement with, owns the results); or
- Be able to use the results of their R&D activities for no extra cost.

The expenditure on R&D must be at least NZ\$50,000 in the year, with a cap of NZ\$120 million per annum. The cap can be exceeded if approval is granted.

A taxpayer must file both their income tax return and a supplementary return in order to obtain the R&D tax credit. The supplementary return is due 30 days following the due date for filing of their usual income tax return.

From the 2020/21 year onward, general approval must be obtained from Inland Revenue before lodging an R&D tax credit claim. The application for general approval must be lodged by the 7th day of the 2nd month after the taxpayer's year end (for example, a 31 March year end must lodge the application by 7 May).

The R&D tax credit is refundable in some circumstances, broadly related to the amount of employment related taxes (PAYE, Fringe Benefit Tax and Employer's Superannuation Contribution Tax) the taxpayer has paid.

R&D loss tax credit for companies

This incentive is aimed at New Zealand tax resident start-up companies that are in a loss-making position. Companies that are in a loss-making position can elect to cash out tax losses related to their R&D activities instead of carrying them forward.

Broadly, the tax credit is equal to 28% of the amount of eligible R&D expenditure in an income year with a cap applying to the amount that can be claimed (NZ\$1,700,000 of expenditure for the 2019/20 year, with the cap increasing to a maximum cap of NZ\$2,000,000 of expenditure from the 2020/21 year onwards).

In addition to the above, the company must satisfy the following criteria:

- The IP and know-how resulting from the R&D activities must vest in the company solely or jointly; and
- The wage intensity threshold must be satisfied. This essentially means that more than 20% of the company's labour expenditure must be attributable to R&D activities undertaken by the company.

The cash out is intended to be a 'loan' only and is essentially paid back when the company starts generating profits for which no loss is available to offset against.

R&D repayment tax would be imposed if one of the following 'loss recovery events' occur:

- The company disposes of the IP
- The company no longer meets the requirements for the R&D loss tax credit

- There is a significant change in shareholding
- A liquidator is appointed.

Deferral of R&D expenditure

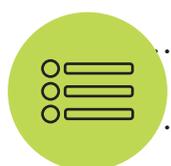
Taxpayers can choose to allocate certain R&D deductions to income years after the income year in which the expenditure was incurred. This flexibility creates a better timing match between the recognition of income from R&D and the recognition of the expenditure. This means that the deductions will not be adversely affected by changes in shareholding arising from technology companies bringing in new equity investors after the initial development phase.

Deductibility of R&D expenditure

Immediate tax deductions are available for research expenditure incurred up until an intangible asset is recognised for accounting purposes. Any further development expenditure must be capitalised to the asset and depreciated.

Capitalised development expenditure on non-depreciable intangible assets for tax purposes can be deducted upon the intangible asset being written off for accounting purposes. However, there is a clawback provision for previously non-recognised intangible assets disposed of for consideration or re-recognised for financial reporting purposes.

Expenditure incurred that has been financed out of a government grant is restricted to the amount of the grant. The grant is excluded income and not taxable.



Summary

New Zealand offers the following tax incentives:

- 1 A 15% R&D tax credit is available for specified R&D activity. This tax credit can be refunded to businesses in some circumstances
- 2 If the company generates a loss, the company can elect to cash out the loss rather than carry the loss forward until profits are generated
- 3 Other tax incentives for inbound investment into New Zealand include:
 - No comprehensive capital gains tax
 - No death/estate taxes or duties
 - No land or property taxes
 - No stamp or gift duties
 - No financial transaction taxes
- 4 R&D expenditure may be deducted and/or deferred
- 5 Government grants are excluded income and not taxable.



Nigeria

R&D and innovations are the key to productivity and performance growth and as such fiscal incentives had been designed and offered to businesses by the Nigerian government to encourage and increase spending on R&D.

The existing tax laws in Nigeria do contain provisions for R&D tax incentives which are meant to promote R&D activities for Industrial growth and economic development.

Up to 120% of the R&D expenses in Nigeria are tax deductible provided such activities are carried out in Nigeria and are related with businesses from which income is derived and allowances or tax incentives are granted.

Development of raw materials by private industries in Nigeria increases the capacity and availability of local raw materials to be used as substitute for imported raw materials by industries in Nigeria through development of indigenous technology capacity and capability with a resultant effect of conservation of foreign exchange that would have been spent on raw material importation and job and wealth creation.



Criteria – What counts as R&D?

To qualify for any of these incentives, the company must be a resident company.

R&D costs are considered under IAS38 which deals with intangible assets. Intangible assets are defined as identifiable non-monetary assets without physical substance controlled because of past events and from which future economic benefits are expected to flow to the entity.

Research cost:

- Research activities do not meet the criteria to be recognized under IAS38 as intangible asset because, at the research stage of a project, there is no certainty that there is a probable future economic benefit that will flow to the company/entity from the project as it is not certain that the project will be successful or not. For these reasons, Research costs are therefore written off as expenses as they are incurred.

Research costs includes:

- Activities aimed at obtaining new knowledge
- The search for, evaluation and final selection of, applications of research findings and other knowledge
- The search for alternatives for materials, devices, products, processes, systems or services

- The formulation, design, evaluation, and final selection of possible alternative for new or improved materials, devices, products, systems and services.

Development costs may qualify for recognition as intangible assets provided that:

- The technical feasibility of completing the intangible assets so that it will be available for use or sale can be demonstrated
- The intention to complete the intangible asset and use or sell it must be demonstrated
- The ability to use or sell the intangible asset must be demonstrated
- How the intangible asset will generate probable future economic benefits must be shown by demonstrating among other things the existence of a market for the intangible asset itself or the output of the intangible asset or the usefulness of the intangible asset if it is to be used internally
- The ability to measure reliably, the expenditure attributable to the intangible asset during the development must be demonstrated.

Development cost includes:

- The design, construction and testing of pre-production or pre-use prototype and models
- The design of tools, jigs, moulds and dies involving new technology
- The design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production
- The design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems, or services.

The second Schedule of the Companies Income Tax Act 2007, as amended, Interpretation (f) defines 'Qualifying R&D Expenditure' as capital expenditure incurred on equipment and facilities, patents, licenses, secret formula or process or for information concerning industrial, commercial or scientific process, technical feasibility of products or processes and purchases, searching for and discovering and testing products or process for future market or use, and such other similar cost which has not brought into existence any asset.



Incentives available

Allowable deduction - Section 24 (I)(iii) Companies Income Tax Act

- All expenses which had been proved to the satisfaction of the Revenue Board to have been incurred by the company on R&D for the period are allowable as deduction against the profit from the trade or business for ascertaining the taxable profit of such trade or business.
- The amount of levy paid by the company to the National Science and technology fund for the period is allowable as deduction against the profit from the trade or business for ascertaining the taxable profit of such trade or business.

Deductible donation - section 25A Companies Income Tax Act

- The amount of donation made out of the profits of the period by the company, to a university and other tertiary or research institution for R&D purpose or as an endowment fund is, for the purpose of ascertaining profit or loss of the company for the period from any source chargeable with tax under the Companies Income Tax Act, deductible donation notwithstanding that the donation is of a revenue or capital nature provided it does not exceed an amount equal 15% of the total profits or 25% of the tax payable in the year of the donation, whichever is higher.

Deduction for R&D - Section 26 Companies Income Tax Act

- For ascertaining the profit or loss of any company for any period from any source chargeable with tax under the Companies Income Tax Act, there shall be deducted the amount of reserve made from the profit of that period by that company for R&D.

This shall not exceed an amount which is equal to 10% of the total profit of that company for that year as ascertained before any deduction is made under section 25 of the Companies Income Tax Act. Companies and other organizations engaged in R&D activities for commercialisation shall be allowed 20% investment tax credit on their qualifying expenditure for that purpose.

Capital allowance – Second Schedule (Table 1) to the Companies and Income Tax Act

Initial allowance of 95% is granted a company in the year of assessment that the company which owns and has incurred in respect of the asset a qualifying R&D expenditure, first use the asset in respect of which the qualifying R&D expenditure was incurred, for that trade and business.

Tax incentive for local raw material utilisation

Attainment of a targeted minimum utilization level of local raw material qualifies an industry for a 30% tax concession for a five-year period depending on the sector of the economy as tabled below.

Sector	Utilisation level (%)
Agro	80
Agro-Allied	70
Petrochemical	70
Engineering	65
Chemical	60
Petrochemical	70

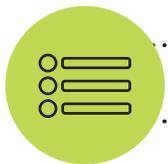
Pioneer status incentive – Industrial Development (Income Tax Relief) Act.

Pioneer status incentive are given amongst others to industries such as those involved in motion picture, video and television programme production, software development which also incur R&D cost.

This incentive exempts the company from corporate income tax for an initial three-year period, extended by the President, for another one or two years.

Local Content Guidelines for Human Capital Development in ICT (Information and Communications Technology Sector) - Relief and allowances

- 120% of qualifying expenses on Research and Development incurred by ICT training companies is allowed as tax deductible.



Summary

Nigeria offers the following tax incentives:

- 1** Levy paid to the National Science and Technology Fund allowed as deduction in ascertaining taxable profit
- 2** Donation for research provided it does not exceed an amount equal to the higher of 15% of the total profits or 25% of the tax payable in the year of the donation, shall be allowed as a deductible donation
- 3** The reserve for R&D which is equal to 10% of total profit of the company before any deduction for R&D and donation, is allowable
- 4** 20% incentive tax credit is allowed on qualifying R&D expenditure
- 5** Capital allowance (Initial allowance) of 95% is granted in the first year of utilization for qualifying R&D expenditure
- 6** 30% tax concession for a five-year period as tax incentive for utilization of local raw materials
- 7** Pioneer status incentive which gives corporate income tax holiday for an initial period of three years with the tax holiday period renewable for another one to two years.
- 8** 120% tax deduction for research and development expenses incurred by ICT training companies.



Norway

The Norwegian Government has implemented different support schemes and tax incentives mainly through The Research Council of Norway and Innovation Norway, where entities may apply for either tax deduction or external support in relation to research and



Incentives available

The SkatteFUNN R&D Tax Incentive Scheme

- SMEs and large enterprises may be granted a tax deduction of 19 % of R&D costs associated with a given R&D project.
- All branches of industry and all types of companies incorporated with a PE in Norway can apply for support from the SkatteFUNN Tax Incentive Scheme, as long as the R&D cost can be attributed to future earnings for the Norwegian company.
- To be eligible to apply, the company must seek to develop a new or improved product, service or production process through a dedicated R&D project. The project must generate new knowledge, skills and capabilities within the company.
- The tax deduction is given through the annual tax assessment, and the auditor must sign and confirm the basis of the tax credit in an accompanying form to the tax return. It is not a requirement that the company generate taxable income, hence the tax deduction will not generate a carrying forward loss, but instead be paid out by the tax authority.
- There is a limitation of the basis of deduction (cost ceiling) of NOK 25 mill in total for in-house and external resources.
- When using in-house resources, a maximum of 1850 hours per employee per calendar year is accepted. The hourly rate must not exceed NOK 700, and its calculated as 0,12 % based on the employees nominated annual salary.
- There are 2 application deadlines during the year. The application must be filed electronically on <https://www.skattefunn.no> before 1 May or 1 September, in order to be able to claim the tax credit the following calendar year. The companies must confirm that they are not in financial difficulties at the time of the application.

Innovation projects

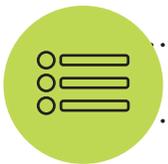
- Companies that have project, that are innovative, with growth potential and with international potential, but where the innovation project is associated with significant market and / or project risk, may apply for funding support from Innovation Norway.
- The application must be filed before the project starts, but there is no deadline. SMEs may be granted up to 70 % of the project budget, and for large entities up to 50 % of project budget. The grant is normally paid out in arrears in line with the project and agreed milestones. The funding is in accordance with the EEA regulations of public support.
- Further information regarding the application process and criteria can be looked up on Innovation Norway's homepage <http://www.innovasjon Norge.no>
- The funding support may be a combination of grants and loans for partial coverage of project development costs.

Thematically oriented programmes with funding-support schemes related to the industry of building, construction and property

- There are several thematically oriented programmes with a possibility to receive funding support. The program committee choose the application deadline for their announcements. Announcements will always be at least six weeks before the application deadline. For further information on the funding program that has been announced, see the Research Council of Norway's homepage; <https://www.forskningradet.no>

Below are some examples:

- **ENERGIX** – supports R&D project in long-term and sustainable conversion of renewable energy consumption in buildings
- **BIONÆR** – supports R&D within the use of wood in construction, and wood-based value creation
- **Nano2021** – supports R&D within the use of nanotechnology and advanced materials for reduced environmental and climate impact
- **KLIMAFORSK** – supports R&D within climate adaption and low emissions in building and infrastructure, such as roads, railways and water and sewerage systems
- **BIA program** – User-driven research-based innovation, based on the company's own strategies. BIA is an open innovation arena for projects in the fields of medicine, biotechnology, process technology, ICT, production of goods, and construction
- **EUROSTARS** – A funding scheme for SMEs which co-operate with other entities from abroad where the country has the same EUROSTARS program. The projects must develop a new product, process or service. SMEs may be funded up to 50% of the actual project costs and larges entities up to 30% of project costs. The projects have a maximum three years period, and the project results must be introduced to the market within two years of project completion, otherwise the funding may be recalled.



Summary

Norway offers the following tax incentives:

- 1 SkatteFUNN scheme: tax deduction of 19% both Large and SMEs entities of R&D costs
- 2 Thematic oriented funding support: You can apply for a certain amount of the total grant per project.
- 3 Innovation project: Funding support or loan on high risk innovation project.



Philippines



Criteria – What counts as R&D?

R&D comprise of creative work undertaken on a systematic basis in order to increase the stock of knowledge and use this stock of knowledge to devise new applications.

R&D covers three activities, basic research, applied research and experimental development.

Fundamental or Basic Research is undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts through experimental or theoretical work, without any particular application or use in view.

Applied Research is the original investigation undertaken in order to acquire new knowledge, it is, however, directed primarily towards a specific practical aim or objective.

Experimental Development is systematic work, drawing on existing knowledge gained from research and/or practical experience, which is directed to producing new materials,

products or devices, to installing new process, systems and services, or to improving substantially those already produced or installed.

To qualify for incentives provided by the Board of Investment (BOI), the activity must be included in the current Investments Priorities Plan (IPP) annually formulated by the BOI and the enterprise must be BOI-registered. These include R&D activities, establishment and operation of facilities for the conduct of clinical trials including drug trials and Centres of Excellence, business incubation hubs, fabrication laboratories, commercialisation of new and emerging technologies and products of the Department of Science and Technology or government-funded R&D.

To qualify for incentives provided by the Philippine Economic Zone Authority (PEZA), the activity must be included in the listed eligible activities under the PEZA law. Information Technology (IT) Service Export, IT Research and Development; the enterprise must be PEZA-registered; and it must be physically located inside a PEZA-registered zone.



Incentives available

Income Tax Holiday

Enterprise will, for a certain period, be granted 100% exemption from the regular income tax rate.

For BOI-registered enterprises, the periods for Income Tax Holiday (ITH) are as follows:

- New projects with a pioneer status for six years and with a non-pioneer status for four years
- Expansion projects for three years
- New or expansion projects in less developed areas for six years; and modernisation projects for three years.

For PEZA registered IT enterprises, the ITH periods are as follows:

- Pioneer projects status for six years and non-pioneer status for four years
- Expansion projects for three years.

An extension may be granted if the project complies with the prescribed criteria maximum period for eight years. Upon the expiration of the ITH period, a PEZA-registered IT enterprise shall be granted a 5% Special Tax on Gross Income earned, in lieu of all national and local taxes, except real property taxes on land owned by developers. On the other hand, a BOI-registered enterprise shall then be subject to the regular income tax rate.

Additional deductions from taxable income

For the first five years from registration, the BOI-registered enterprise is allowed an additional deduction from taxable income of 50% of the wages of additional skilled and unskilled workers in the direct labour force but only if the enterprise meets a prescribed capital to labour ratio and not be claimed with the ITH. This can be doubled if the activity is in less developed areas. PEZA registered IT enterprises are entitled to an additional deduction of 50% of training expenses, chargeable against the 3% share of the national government in the special tax on gross income.

Tax and duty-free importation

A BOI-registered enterprise engaged in R&D services and A PEZA registered IT enterprise shall be exempt from customs duties and national internal revenue taxes on its importation of required supplies/spare parts for consigned equipment or those imported with incentives, but it must have a bonded manufacturing warehouse in the Philippines and the entitlement period shall not exceed ten years from the date of registration.

Other PEZA-related incentives

During ITH period, a PEZA registered IT enterprise shall be entitled to VAT zero-rating of local purchases of goods and services, including land-based telecommunications, electrical power, water bills, and lease on the building, subject to compliance with pertinent requirements. Such enterprise shall also be exempt from expanded withholding tax.

Regional Operating Headquarters (ROHQ)

A BOI-registered ROHQ engaged in R&D services and product development shall be entitled to preferential income tax rate of 10%. Any income derived from Philippine sources by the ROHQ when remitted to the parent company shall be subject to a branch profit remittance tax of 15%. Exemption from all kinds of local taxes, fees or charges imposed by local government units, except real property tax on land improvements and equipment. Tax and duty-free importation of equipment and materials for training and conferences which are needed and used solely for its functions as an ROHQ.

Research and Development Incentives

R&D expenses are deductible in the gross income if incurred and paid during the taxable year as ordinary and necessary expenses of the BOI registered enterprises and not reported under capital account. The taxpayer has the option through election, to amortize the expense over a period of not less than 60 months beginning with the month when the benefits from the expense were realized.

Expatriate-related incentives

Non-resident foreign nationals may be employed by BOI/PEZA registered enterprises and the income of these expatriate employed shall be subject to a preferential gross income tax rate of 15%. For BOI/PEZA registered enterprise, a special multiple entry visa may be granted to the foreign personnel, his spouse and unmarried children under 21 years of age. In addition, an investor, officer, and employees of PEZA-registered enterprise shall also be entitled to such special non-immigrant visa with multiple entry privileges. Tax and duty-free importation of personal and household effects. Exemption from travel tax and specific immigration fees and requirements, subject to certain conditions.



Summary

Philippines offers the following tax incentives:

- 1 IHT for a given period dependent on the project status. Upon expiration, the gross income of a PEZA-registered enterprise shall be subject to 5% special gross income tax. Effective tax rate of 5% on qualifying income attributable to innovations
- 2 BOI-registered enterprises shall be entitled to an additional deduction on labour expenses, unless availed of the ITH. The same may be availed of by PEZA-registered in relation to its training expenses
- 3 Tax and duty-free importation of equipment, parts, etc, plus expat related incentives for both BOI/PEZA registered enterprises
- 4 PEZA related incentives, such as VAT zero-rating for locally purchased goods and exemption from withholding taxes
- 5 ROHQ related incentives, such as 10% preferential income tax rate, 15% branch profit remittance tax, exemption from local taxes, and duty-free importation of equipment, etc.



Poland



Criteria – What counts as R&D?

R&D activity is defined as creative activity involving R&D works, systematically undertaken to increase knowledge resources and to use knowledge resources to create new applications. Right to apply the R&D tax incentive is independent of the effects of the conducted R&D works. R&D tax incentive may be used by entities acting in all industries, however it will be especially applied by the companies providing

innovative services (IT, including start-ups) or developing innovative products (the pharmaceutical, technology, automotive, chemical industries and others). To apply the R&D tax incentive the taxpayer is obliged to keep separate accounts of expenses recognised as eligible costs and attach appropriate appendix to the annual tax return.



Incentives available

Decreasing income tax base by 100 – 150% of R&D eligible cost

From 1 January 2018, all entrepreneurs conducting R&D activities (regardless of their size) can benefit from an additional deduction of 100% of all qualified costs (deduction may be increased to 150% for R&D centres).

The eligible costs which may be doubly deducted from the income (within eligible limits and on the condition that the expenses will be not refunded to the taxpayer in any way) are as follows:

- Employee salaries and contributions related to R&D activity
- Costs of materials and raw materials directly related to conducted R&D activities
- Costs of expert opinions, advisory services and equivalent, as well as the costs related to acquiring results of scientific research, provided or conducted by scientific units
- Costs of the scientific and research equipment used exclusively for R&D activities
- Tax-deductible depreciation write-offs on fixed assets and intangible assets, used in R&D activity,
- Expenses for obtaining and maintaining patent, utility model rights or industrial design rights (applies to micro, small or medium-sized enterprises).

The period within which entrepreneur can deduct the cost incurred for the R&D activities is seven years.

Taxpayers starting its business activity, making loss or gaining income lower than the R&D tax incentive, may receive for the first tax year (and micro, SMEs also for the second tax year) a direct refund of the R&D tax incentive. The R&D tax allowance does not apply to income derived from activity in the Special Economic Zones (SEZ), as well as to costs that were returned to a taxpayer in any form.

Special economic zones (SEZs)

In the years 1995-2017 more than 2,000 companies started operation in the 14 SEZs which provided more than 350,000 permanent jobs and attracted capital worth over PLN 120 billion. They have proved to be a powerful tool of stimulating business development.

Entrepreneurs investing in the SEZ may benefit from income tax exemptions for new investments/new job creation. The amount of the tax incentive depending on project location, size of enterprise and value of investment expenditures.

The SEZs will operate until the end of 2026. Entrepreneurs are no longer able to obtain new permits from the Ministry of Economic Development for conducting business activity in SEZs.

As of 2018, taxpayers can apply for a decision to support a new investment within the Polish Investment Zone, which replaces the previous SEZs.

Support for new investments - Polish Investment Zone

The tax relief is available for companies carrying out new investments to be placed at any location in Poland.

Definition of new investment covers:

- Establishment of a new enterprise
- Increase of production capacity of an existing enterprise
- Diversification of the production through introduction of products which previously were not manufactured by the enterprise
- Fundamental changes to the production process of an existing enterprise.

The basis for obtaining the relief is the support decision issued. The relief can be applied for a maximum period of up to 15 years. The amount of relief, deducted from CIT or PIT, is the equivalent of eligible investment costs or two-year labour costs of newly employed employees multiplied by the percentage

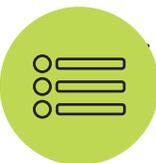
of the public aid amount allocated for a given region (set percentage in general between 10-50%).

To obtain a tax exemption, the investor will still have to incur certain amount of eligible costs and create a specific number of jobs. Unlike the old rules (SEZ), the decision on aid will depend on meeting not only quantity criteria, but also qualitative criteria.

The qualitative criteria include the need to collect at least 4 to 6 points for a particular investment project. Points can be obtained for, among others, the investment being in a desirable sector (eg IT, electronics), allocated R&D functions, creating high-paying jobs, as well as locating the project in underdeveloped areas of the country. The qualitative criteria are determined separately for industrial and service investments. The quantitative criteria regard the minimum amount of investment expenditures to be borne by the entrepreneur applying for support. Initially, the threshold is PLN 100 million, although it can be lowered even to PLN 2 million, depending on the location, size of the business and other factors.

Innovation Box

Starting from 2019, income derived from qualified intellectual property right may be taxed with the tax rate of 5%. The term "qualified IP rights" includes i.a. patents, copyrights to software, utility and industrial model protection rights, medical product registration rights etc. – subject to legal protection as well as being developed and upgraded by the taxpayer as part of its research and development activity.



Summary

- 1 Bonus of 100-150% of tax-deductible costs for taxpayers who carry out R&D activities.
- 2 Tax benefits from carrying out the business activity in one of 14 SEZs.
- 3 Tax benefits from obtaining the support decision under Polish Investment Zone.
- 4 Innovation Box - the tax rate of 5%.

Portugal

Tax Incentives Scheme for Corporate Research and Development (in Portuguese 'SIFIDE') is a tax credit that may reduce company's tax bill if the company is liable for corporation tax or, may be carry forward for eight years. To obtain this tax credit an application must be submitted to the National Innovation Agency ('ANI' for Portuguese) until the end of seventh month after the year ending.



Criteria – What counts as R&D?

- If the R&D project seeks to achieve an advance in overall knowledge or capability in a field of science or technology through the resolution of scientific or technological uncertainty and not simply an advance in its own state of knowledge or capability.
- Developing a new product or service.
- Improving existing product or service.
- Improving efficiency of processes.
- The project must relate to the company's trade - either an existing one, or one that you intend to start up based on the results of the R&D.



Incentives available

Tax incentives scheme for corporate R&D (SIFIDE)

Tax deduction of 32.5% on the costs with R&D of the year the is applying for plus 50% of the incremental cost of R&D of the year facing the average of the last two years. The costs considered to be R&D expenses are:

- Personnel costs in R&D activities
- Fixed assets (exception for land and buildings) used for R&D activities
- Some operational costs (with limitations)
- Acquiring R&D services to certified organisations to render such services
- Expenses with registration and maintenance of a patent (for SME only)
- R&D audits (for SME only).



Summary

Portugal offers the following tax incentives:

- 1 Tax credit of 32.5% (subject to additional rate) for R&D expenses
- 2 Tax credit of 10% to 25% on the acquisition of new assets concerning certain economic activities and regions
- 3 Social security exemption for first job employment
- 4 Net job creation – 150% on allowable costs
- 5 Contractual tax benefits – tax credit from 10% to 25% on acquisition of assets (only for investments above €3m).



Romania



Criteria – What counts as R&D?

The fiscal incentives are granted for activities of R&D, performed for obtaining results of the research that can be used by the taxpayer for its own purposes or for sale. These activities can be performed in Romania and/or in EU / EEA member states.

The R&D activities eligible for the extra tax deduction should fall in the categories of activities of applied research and/or of technological development, relevant for the activity performed by the taxpayer.

To assess whether R&D activities qualify for the incentives, experts should be appointed to perform an assessment and these experts should be listed in the Register of Experts in R&D (the register is still to be developed), prepared by the Ministry of National Education and Scientific Research, based on proposals of the Advisory College for Research & Development and Innovation.



Incentives available

Profit Tax

Additional deduction for R&D expenses

In calculating the taxable results, companies are granted the following fiscal incentives for R&D:

- Additional tax deduction of 50% of the eligible expenses
- Applying tax accelerated depreciation for equipment used in activities of R&D.

Fiscal incentives are granted separately for activities of R&D performed under each separate project and the deductions are not waived in case the objectives of the R&D project are not achieved.

Tax exemption for reinvested profit

Profits invested in the following items is exempt from tax: technological equipment, electronic computers and peripheral equipment, cash registers, computer programs and rights to use computer programs, produced and/or acquired (including under financial leasing) and used in performing economic activities.

For assets produced throughout several consecutive years, the incentive is granted during the period when the asset is (partially) put into function. The exemption applies only for new assets.

Taxpayers that benefit from the exemption have the obligation to keep in patrimony the assets for a period equal to at least half of their useful life, as established under applicable accounting regulations (capped at five years). In case of failure to observe this condition, rectifying tax returns have to be submitted starting with the date of applying the incentive and additional profit tax has to be paid (late payment interest and penalties are also applicable). This is not the case for assets that are transferred within reorganisation operations or during liquidation/bankruptcy, that are destroyed, lost, stolen or defective and replaced, provided that these situations are proved accordingly.

Taxpayers that benefit from this exemption cannot apply accelerated tax depreciation for the assets in question.

Exemption from profit tax in case of taxpayers who perform activity of innovation, R&D exclusively

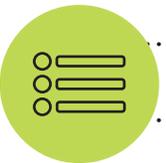
Taxpayers that perform exclusively activity of innovation, R&D and related activities are exempt from profit tax in the first ten years of activity. According to the legislation, the activity of R&D comprises scientific research (fundamental and applied), experimental development and innovation based on scientific research and experimental development.

Income tax exemption

Employees that perform activities of applied R&D and/or of technological development are exempt from income tax. To claim this exemption, the following conditions need to be fulfilled and backed-up with justifying documents:

- The position is part of the R&D department evidenced in the organisation chart
- The employer also performs activities of applied R&D and/or technological development
- The payslip for employment income, received by each employee for the activity performed as part of the project of R&D and innovation, is prepared separately for each project.

For validating the classification of activities for which the income tax exemption is granted, the employer, employee or fiscal authorities can request expertise reports prepared by experts listed in the register of experts for areas of R&D (this register is under development).



Summary

Romania offers the following tax incentives:

- 1 Fiscal incentives: additional tax deduction for profit tax purposes equal to 50% of the eligible R&D expenses; applying the accelerated tax depreciation for equipment used in R&D activities
- 2 Salaries earned by individuals who perform activities of applied R&D and/or of technological development are exempt from income tax
- 3 Taxpayers that perform exclusively activity of innovation, R&D and related activities are exempt from profit tax in the first ten years of activity
- 4 Profit invested in the following items is exempt from tax: technological equipment, electronic computers and peripheral equipment, cash device, computer programs, the right of use of computer programs which are produced and/or acquired (including under financial leasing) and used in performing economic activities.

Singapore

Any person carrying on any trade or business (the 'taxpayer') can enjoy further deductions for qualifying expenditure incurred on qualifying R&D activities undertaken in Singapore and outside Singapore, subject to conditions being met.



Criteria – What counts as R&D?

R&D is defined to mean any systematic, investigative and experimental study that involves novelty or technical risk carried out in the field of science or technology with the object of acquiring new knowledge or using the results of the study for the production or improvement of materials, devices, products, produce, or processes, **but does not include the following:**

- Quality control or routine testing of materials, devices or products
- Research in the social sciences or the humanities
- Routine data collection
- Efficiency surveys or management studies

- Market research or sales promotion
- Routine modifications or changes to materials, devices, products, processes or production methods
- Cosmetic modification or stylistic changes to materials, devices, products, processes or production methods.

The taxpayer is not required to seek prior approval from the Inland Revenue Authority of Singapore (IRAS) to claim further deductions if the R&D definition/requirements are met. However, the taxpayer is required to maintain proper documentation to substantiate the R&D claim upon request.



Incentives available

The further tax deductions which are available under the SITA for qualifying R&D expenditure incurred (net of any grants/subsidies received) are summarised as follows:

	R&D activities conducted in Singapore		R&D activities conducted outside ¹ Singapore
	In-house	Outsourced/cost-sharing agreement	
S14D	100% base deduction for qualifying R&D expenditure incurred ² (other than any amount which is deductible under Section 14)		

	R&D activities conducted in Singapore		R&D activities conducted outside ¹ Singapore
	In-house	Outsourced/cost-sharing agreement	
S14DA³	<p>Additional 150% deduction for qualifying expenditure, ie:</p> <ul style="list-style-type: none"> • Staff costs (excluding directors' fees) • Consumables • Any other item of expenditure on qualifying R&D activities which the Minister for Finance may prescribe by regulations. 	<p>Additional 150% deduction for:</p> <ul style="list-style-type: none"> • 60% of outsourced fee paid, or • Actual qualifying expenditure if this accounts for more than 60% of outsourced fee paid. 	Not applicable
S14E⁴	<p>Further tax deduction (up to 200%) was previously provided for certain R&D expenditure incurred on approved R&D projects conducted in Singapore.</p> <p>The S14E incentive has lapsed after 31 March 2020.</p>		Not applicable

1. For R&D activities conducted outside Singapore, the R&D expenditure incurred must be related to the taxpayer's trade to qualify for the S14D/S14DA deduction.
2. Section 14D deduction for qualifying R&D expenses incurred which is not related to the taxpayer's trade is only available for qualifying R&D expenses incurred up to the taxpayer's financial year ending in 2024.
3. The additional deduction of 150% under S14DA is only available for qualifying R&D expenses incurred by the taxpayer up to its financial year ending in 2024.
4. If a deduction is claimed under Section 14E, the total deductions including those under Sections 14, 14D and 14DA shall not exceed 200% of qualifying R&D expenditure incurred.



Summary

Other key points to note:

- 1 For tax deduction under S14D/S14DA, no prior approval from the tax authority is required
- 2 The qualifying R&D expenditure is net of any grant / subsidy received from the government or a statutory board
- 3 Any unutilised tax deductions can be carried forward as trade losses, subject to the usual substantial shareholders' continuity test.



Slovakia



Criteria – What counts as R&D?

Research means initial and planned projects seek to receive a new scientific or technical knowledge and development means applying research findings or other knowledge for planning or designing the production of new or significantly improved materials, equipment, products, and processes.



Incentives available

Super cost deduction

The tax base reduced by the tax loss of the taxpayer in an R&D project can be additionally reduced by:

- 200% of expenses (costs) used for R&D in the tax period covered by the tax return
- The mentioned deduction may be increased by 100% of the positive difference between the average of the total costs incurred in:
 - The R&D tax period included in the deduction and the total expenditure (costs) incurred in the immediately preceding R&D tax period included in the deduction and
 - Two immediately preceding R&D tax periods included in the deduction.

A documentation specifying the subject of the intended R&D within the last day of statutory deadline for submission of corporate income tax return is needed. Super cost deduction may be applied to the expenses, which are recorded separately from taxpayer's other expenses and by the taxpayer who does not claim incentive in form of a tax relief in the tax period.

Tax relief for investment aid beneficiaries

Investment aid is primary aimed for expansion of less developed regions of Slovakia in the areas of industry, technological and innovation centres, shared services centres and tourism.

The forms of investment aid are as follows:

- A grant for an acquisition of tangible and intangible fixed assets (max. grant up to 35% of project's allowable costs for Middle and East Slovakia)
- Income tax relief – reduction of tax base (selected conditions must be fulfilled according to Income Tax Act),
- Contribution for new working places created
- Rent or transfer of immovable property at a price lower than the fair value of the property.

Application for investment aid in technological and innovation centres, subject to approval of the relevant Slovak institution, can be submitted after fulfilment of certain conditions; general conditions depends on if the investment project is qualified as the project in priority areas or in other areas.

	Grant for acquired assets		Other forms of aid	
	Priority areas	Other areas	Priority areas	Other areas
Min. investment in EUR	100 000	200 000	50 000	100 000
Min. number of newly-created jobs	5	10	5	10
Min. multiple of average gross monthly wage	2,0	1,7	2,0	1,7

Tax relief for incentive beneficiaries

R&D incentives that are provided to legal entities or entrepreneurs based on application, subject to approval by the relevant Slovak institution, are a grant from a state budget: support for basic research, applied research or experimental development; costs for feasibility study and income tax relief - reduction of tax base.

Condition for granting R&D Incentives:

- The creation of new workplaces by applicants for incentives using their own resources in area of R&D (condition of five years functionality after providing the incentive)
- The extension of an existing R&D workplace by applicants for incentives using their own resources (condition of five years functionality of extended R&D workplaces after granting an incentive and retention of the amount of yearly expenses for R&D for five years).

Patent Box

The Patent Box grants a:

- 50% tax reduction on net incomes received from license fees resulting from internally developed patents, models, designs, software whereas such assets are recorded as intangible assets
- 50% tax reduction of income from the sale of the goods and services, which were created using internally developed patents, models, designs recorded as intangible assets.



Summary

Slovakia offers the following tax incentives:

- 1 Super deduction of costs incurred during the implementation of R&D project
- 2 Reduction of tax base or another type of investment aid depending on the region of realisation of the investment plan
- 3 Tax relief for incentive beneficiaries in area of R&D – grants and tax reliefs with limit
- 4 Patent box
- 5 State Aid approved by the European Commission, for SMEs; direct or indirect form.

Slovenia



Criteria – What counts as R&D?

Investments in R&D must be defined by the taxpayer in a business plan, which must at least include the title, a description of the R&D project, a list of the foreseen activities with the estimated costs for individual activity and period and achieved results. The business plan can be modified and updated during the performance of the activity. The tax relief form should be submitted by the end of the March for the past year by the taxable person as an annex to the CIT return.

The following conditions need to be fulfilled for the activity to qualify as R&D:

- Developing a new product or service
- The activity must be creative and the result must be uncertain
- The approach must be systematic
- The ability of portability and reproducibility.



Incentives available

Tax relief for investments in R&D

A taxpayer may claim a reduction of the tax base in the amount of 100% of the amount invested in R&D within the tax period, but not exceeding the amount of the tax base. The tax relief for R&D investment is for successful, profit-making companies. It is an incentive for companies to reduce their tax due to risky and unpredictable R&D activities.

The tax relief for investments in R&D can be obtained for expenditures for internal R&D activities, external R&D activities and on purchases of R&D equipment from related or unrelated parties which are used exclusively and permanently for the R&D activity.

The taxpayer may reduce the tax base for unused parts of the tax relief in the next five tax periods. The taxpayer cannot claim the relief for investments in R&D if they were financed from the budget of the Republic of Slovenia or the EU budget and are given as grants.

Tax relief for investments

A taxpayer may claim a reduction of the tax base in the amount of 40% of the invested amount for equipment and intangible assets within the tax period, but not exceeding the amount of the tax base. Tax relief for investments may be exercised by legal persons and individuals that perform business activities (sole proprietor) if they determine the tax base by considering actual revenue and actual expenditures. Any unused part of the tax relief can be used in the next five tax periods, but not exceeding the amount of the tax base. The taxpayer may reduce the tax base for unused parts of the tax relief in the next five tax periods.

The tax relief for investments cannot be used for the same expenditure for which the tax relief for investments in R&D was used.

The tax relief for investments can be used for the purchase of:

- Computer equipment
- The motor vehicles that are hybrid or electric passenger cars, hybrid or electric buses and buses and trucks with an engine that has minimum emissions requirements of EURO VI

- The use of machinery and work vehicles, tractors, moto cultivators and other motor vehicles, which primary purpose is not the transport of passengers and cargo
- Means of transport which are not intended for transport by road (for example water and aircraft)
- All other motor vehicles which are not primarily intended for the carriage of passengers.

This cannot be used for:

- Furniture and office equipment
- Motor vehicles
- The goodwill and rights in rem to immovable property and other similar rights
- Equipment for construction facilities if they are closely connected with the real estate or directly involved in the real estate itself or for furniture and office equipment.

Tax relief for employing

A taxpayer, who employs a person younger than 26 or older than 55 who has been registered as unemployed at Employment Service of the Republic of Slovenia for at least six months and who has not been employed by the taxpayer or a related party in the past 24 months, may be able to benefit from a tax allowance. A taxpayer may claim a reduction of the tax base in the amount of 45% of the salary of this person during the first 24 months of their employment, but not exceeding the amount of the tax base. The taxpayer may claim relief if he/she is a taxpayer according to Slovenian Corporate Income Tax Act (hereinafter CITA-2) or Personal Income Tax Act (hereinafter PITA-2) and he/she employs the person for an indefinite period in accordance with the regulations on employment relationships.

Tax relief for employing certain individuals

A taxpayer that employs trainees or students to undertake practical work may claim a reduction of the tax base in the amount of the monthly payment paid to such persons, but not exceeding the amount of the 20% of the average monthly salary of employees in the Republic of Slovenia.

A taxpayer that employs disabled persons may claim a reduction of the tax base in the amount of 50% of the salary paid to such persons, but not exceeding the amount of the tax base. A taxpayer that employs a severely disabled person or a person with a combination of total hearing loss and speech impairment, may claim a reduction of the tax base in the amount of 70% of the salary paid to such persons, but not exceeding the amount of the tax base.

Tax relief for voluntary supplementary pension insurance

A taxpayer financing a pension collective insurance scheme may claim a reduction of the tax base in the amount of the voluntary supplementary pension insurance premiums paid to the pension scheme provider for the benefit of the employees

– insured persons, either in full or in part. The pension scheme provider must have a registered office in Slovenia or in an EU member state, it should be incorporated in accordance with a pension scheme approved and it should be entered in a special register in compliance with the regulations regulating voluntary supplementary pension and disability insurance, for the year in which the premiums were paid. However, not exceeding an amount equalling 24% of the compulsory contributions for pension and disability insurance relating to employees – insured persons, and not exceeding €2,390 per year.

Tax relief for donations

A taxpayer may claim a reduction of the tax base for payments in cash and in kind up to 0.3% of the taxpayer’s taxable revenue in the tax period concerned for humanitarian purposes, disabled persons assistance, social assistance, charitable, scientific, educational, health, sporting, cultural, ecological and religious purposes and purposes of general interest, but not exceeding the amount of the tax base in the tax period. Such payments can receive Slovenian residents and residents of other EU member states or member states of the European Economic Area (EEA) which are not EU member states at the same time.

In addition to a reduction of the tax base from the previous paragraph, a tax payer may also claim a reduction of the tax base for payments in cash and in kind up to 0,2% of the taxpayer’s taxable revenue in the tax period concerned for cultural purposes and for such payments made to voluntary societies established for protection against natural and other disasters and who in the public interest perform activities for the aforementioned, but not exceeding the amount of the tax base. Such payments can receive Slovenian residents and residents of other EU member states or member states of the European Economic Area (EEA) which are not EU member states at the same time.

New legislation

According to new legislation, there are some changes related to personal income tax and corporate income tax that will be in force for tax years beginning on and after January 1, 2020. According to the new article 59.a of the CITA-2, the restriction of the reduction of the tax base is redefined. The total reduction of the tax base, including tax loss, tax reliefs (relief for investments into research and development, relief for investments, relief for employments, relief for the employment of disabled persons, relief for performing practical work in professional education, relief for voluntary additional pension insurance, relief for donations) and enforcement of unused parts of tax reliefs from previous years, won’t be able to exceed 63% of the tax base. If the company will end the tax year with a profit, it won’t be possible that the tax rate is zero and therefore the companies wouldn’t have to pay any tax, even with the enforcement of tax reliefs and losses from previous years. According to the restriction of reducing the tax base in the maximum amount of 63% of the tax base, the effective tax rate of 7% is determined.



Summary

Slovenia offers the following tax incentives to taxpayers, subject to taxation in Slovenia (tax resident or business unit of a non-resident):

- 1 Tax relief for investments in R&D – 100% of the invested amount in R&D
- 2 Tax relief for investments - 40% of the invested amount in equipment and intangible assets;
- 3 Tax relief for employing persons younger than 26 and older than 55 under certain conditions - 45% of the salary for 24 months
- 4 Tax relief for employing certain individuals - employing trainees or students: 20% of the average monthly salary of employees in Slovenia; employing disabled persons: 50 or 70% of their salary
- 5 Tax relief for voluntary supplementary pension insurance - the amount of paid premiums but not more than 24% of the compulsory contributions for pension and disability insurance relating to employees, and not exceeding €2,390 per year
- 6 Tax relief for donations - up to 0.3% and additional 0.2% of the taxpayer's taxable revenue.

All tax reliefs can be exercised by legal persons and individuals that perform business activities (sole proprietors) if they determine the tax base by considering actual revenue and actual expenditures.



South Africa

The objective of the R&D tax incentive is to encourage investment in scientific or technological R&D. In terms of the incentive, a taxpayer that is a company can qualify for a 150% deduction of certain expenditure and an accelerated depreciation allowance in respect of capital expenditure incurred directly in respect of the R&D in South Africa. To qualify for the incentive there are many requirements that must be met eg pre-approval by the Research and Development Adjudication Committee and the issuing of an approval letter by the Department of Science and Technology. This incentive ceases to apply from 1 October 2022.



Criteria – What counts as R&D?

R&D for purposes of the incentive is defined as:

Systematic investigative or systematic experimental activities of which the result is uncertain for:

- Discovering non-obvious scientific or technological knowledge
- Creating or developing
 - An invention as defined in the Patents Act
 - A functional design, capable of qualifying for registration under the Designs Act and that is innovative in respect of the functional characteristics or intended use of that functional design
 - A computer program as defined in the Copyright Act which is of an innovative nature
 - Knowledge essential to the use of such invention, functional design or computer program other than creating or developing operating manuals or instruction manuals or documents of a similar nature intended to be utilised in respect of that invention, functional design or computer program subsequent to the R&D being completed.
- Making a significant and innovative improvement to any invention, functional design, computer program or knowledge for the purposes of new or improved function; improvement of performance, reliability or quality thereof
- Creating or developing a multisource pharmaceutical product
- Conducting a clinical trial.

R&D does not include activities for the following and no R&D deduction will be allowed in respect thereof:

- Routine testing, analysis, collection of information or quality control in the normal course of business
- Development of internal business processes, unless it is mainly intended for sale, or for the granting the use or right of use or permission to use thereof to unconnected persons
- Market research, market testing or sales promotion
- Social science research, including the arts and humanities
- Oil and gas or mineral exploration or prospecting, except R&D carried out to develop technology used for oil and gas or mineral exploration
- The creation or development of financial instruments or financial products
- The creation or enhancement of trademarks or goodwill
- Costs incurred for the acquisition/registration of pre-existing inventions, designs or computer programmes.

These expenses could however still qualify for a normal tax deduction if requirements therefor are met.



Incentives available

Deduction in respect of expenditure incurred directly in relation to R&D

The company will be allowed to deduct 150% of any expenditure:

- Incurred, directly or solely in respect of the carrying on of R&D in South Africa
- In the production of income
- In the carrying on of any trade
- The R&D is approved by the Department of Science and Technology.

This incentive is only available for expenditure that is incurred on or after the date of receipt of the application for approval by the Department of Science and Technology. The company may however only claim the 150% deduction once approval has been received. This may mean an adjustment to prior year tax returns.

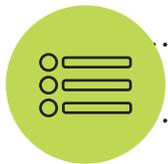
South African Revenue Service (SARS) issued an Interpretation Note, No. 50 dated 28 August 2009 and a draft interpretation note regarding this deduction in 2017.

Accelerated depreciation allowance in respect of capital expenditure incurred on plant or machinery used for qualifying R&D

- Available in respect of any new or unused plant or machinery or certain improvements thereto.
- The accelerated depreciation allowance is a deduction in respect of the cost of that machinery plant or improvement and the allowance is 50% in the first year of use; 30% in the second year and 20% in the third year of use.

Allowance on building used wholly or mainly for carrying on R&D

An allowance of 5% per year over a period of 20 years will be allowed on the cost of a building owned by the taxpayer and used for R&D.



Summary

South Africa offers the following tax incentives (subject to all requirements being met):

- 1 Tax deduction of 150% of operational expenditure incurred directly for R&D in South Africa
- 2 Accelerated depreciation allowance/ deduction of 50% (year one), 30% (year two) and 20% (year three) for capital expenditure incurred on machinery or plant used for R&D in South Africa
- 3 Allowance of 5% per year on the cost of a building used for R&D in South Africa.



Spain

Tax incentive available under Spanish law includes tax credits for expenses related to R&D and to technological innovation activities (R&D&I), which can currently be used to offset up to 42% of a company's Corporate Income Tax (CIT) liability. The Spanish system also includes the Patent Box regime, with the partial reduction of the taxable income arising from the licensing or transfer of certain intangible assets. Grants and funding instruments are also offered on the RD activities. Amounts, requirements and procedures to be followed may be different depending on the autonomous community where the company is established. ENISA is a central government agency that also offer funding projects for new business models.



Criteria – What counts as R&D?

Research activities for the discovery of new knowledge and greater understanding in scientific and technological fields, and development of the research findings to create new materials or products or to design new processes or production systems, as well as for the substantial technological improvement of pre-existing materials, products, processes or systems.

R&D activity will also include:

- The design and creation of a collection of samples to launch new products
- The development of new products or processes into a plan, schedule or design, as well as the creation of a first non-marketable prototype, initial demonstration projects or pilot projects, if these cannot be converted or used for industrial applications or for their commercial exploitation
- The creation, combination and configuration of advanced software.



Incentives available

R&D tax credit

25% tax credit can be applied over expenses incurred from R&D activities. If the expenses are higher than the average expenses during the previous two years, a 25% tax credit may be applied with the limit of the mentioned average and up to 42% over the excess amount. An additional tax credit of 17% can be availed of for staff exclusively carrying out and qualified to carry out R&D activities.

An 8% tax credit for investments made in tangible fixed assets (excluding buildings) and intangible assets that are exclusively assigned to R&D activities is also available. They should remain within the taxpayer's assets, except justified losses,

until they fulfill their specific purpose in R&D activities, except that their useful life is lower.

The basis of the deduction shall be reduced by the number of subsidies, allocated as income in the tax period, received for the promotion of these activities.

Amounts paid to hired companies to develop R&D activities on taxpayer's behalf will also benefit from this incentive. However, the credit will not apply over indirect costs (such as general company structure or financial expenses) and over all those which, despite having a direct relationship with the said activity, may not be subject to individualisation. Only applicable over those projects carried out in Spain or in any EU country, but not for those developed in third countries.

Technological innovation tax credit

A 12% tax credit can be applied in CIT calculations over costs incurred in technological innovation activities.

Additionally, to technological and engineering activities looking for new high-tech solutions, this innovation credit may also apply over acquisition of patents, licenses, know-how and designs (maximum €1m and not applicable over amounts paid to related entities). Obtaining a certificate of compliance with the quality assurance standards of the ISO9000, GMP or similar certificates may also benefit, excluding the expenses necessary for the implementation of those standards.

For the years 2020 and 2021, an increase in the tax credit has been approved, up to 25% of the costs incurred in technological innovation activities, whose result is a technological advance in obtaining new production processes or substantial improvements in any company linked to the automotive industry.

Tax refund

Tax deduction for R&D&I can be excluded from the limits on tax relief normally applied over any tax benefits in Spanish CIT, meaning that, under certain conditions, the excess may be refunded by the tax authorities through CIT return. Otherwise, the tax credit may be applied during following 18 years.

The requirements for the exclusion of the R&D&I limits are as follows:

- One tax period has passed since the tax relief was generated and the tax relief has not been applied

- An amount equal to the tax relief applied or paid has been allocated to R&D and technological innovation expenses within 24 months of the end of the tax period when the tax relief was applied or paid
- The taxpayer's average number of staff (staff in general or staff assigned to R&D and technological innovation activities) has not decreased between the end of the tax period when the tax relief was generated and the end of the reinvestment period
- The taxpayer has a report that certifies the activities are R&D and technological innovation activities or it has made an advance agreement with the Spanish tax authorities regarding the valuation of the expenses and investments of the project.

Patent Box

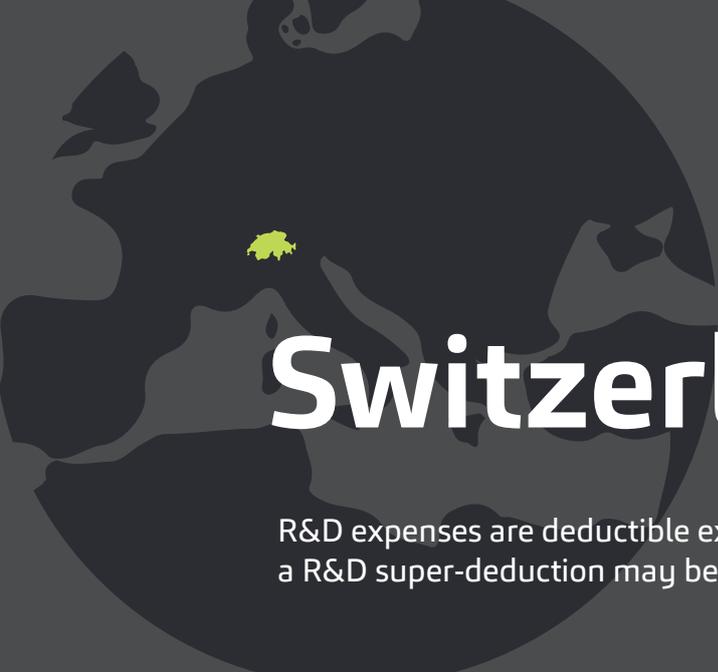
The Patent Box grants a 60% tax reduction on net incomes received for the use or the transfer of, among others, patents, technological IP, secret procedures or formulae, designs or models used within an economic activity. The recipient company should prepare the accounting registers to differentiate income and expenses related to each asset. Income to be reduced would be considered net of depreciation and of those expenses directly related to such asset on the relevant period.



Summary

Spain offers the following tax incentives:

- 1** R&D tax credit - 25% CIT tax credit (42% over excess of average previous two years) 17% staff expenses 8% intangible/tangible assets
- 2** Technological innovation tax credit - 12% CIT credit
- 3** Tax refund - Exclusion from the limits on tax relief applied over other tax deductions to get a direct refund
- 4** Patent Box - 60% of the net income derived from licensing/transfer of intangible assets is not subject to CIT.



Switzerland

R&D expenses are deductible expenses in Switzerland and under certain conditions a R&D super-deduction may be deducted.

Now, Switzerland offers the possibility to obtain tax holidays, up to a maximum of ten years, available for new activities. They can apply to R&D companies newly implemented in Switzerland or to existing companies starting R&D activities in the country.

Special tax regimes have been abolished as per December 31, 2019. Thus, the special tax regimes like holding, mixed domiciliary regimes etc. are not available anymore. A transition period of 5 to 10 years has been implemented.

However, from 1 January 2020 a new patent box regime has been implemented on cantonal and communal level.



Incentives available

From 1 January 2020 the new tax law has been introduced. Thus, the cantons introduce new R&D super-deduction incentives related to R&D, for cantonal and communal taxes, as follows.

R&D expenses

An additional R&D deduction up to a maximum of 50%. Such additional deduction would apply on the following cost:

- Cost of the personnel directly related to R&D activities performed by the company in Switzerland
- Other costs incurred by the company in connection with R&D, but up to a maximum of 35% of the personnel expenses
- And up to 80% of the cost of the Swiss company related to R&D invoiced by third parties.

Patent Box regime

Based on this new Patent Box regime, the incentive would apply to patents and similar rights.

Qualifying income could be tax exempt from cantonal and communal tax up to 90%, considering the modified nexus approach.



Summary

Switzerland offers the following tax incentives:

- 1 Tax holidays, up to a maximum of ten years
- 2 Special super-deductions on R&D activities
- 3 Special tax exemptions on income from IP rights.



Thailand



Criteria – What counts as R&D?

- For technology and innovation expenditure in Thailand including product and process innovation, a 200% deduction can be available where approved by the Director-General of the Revenue Department.
- Thailand has activity-based tax incentives which are available for certain industries under the Investment Promotion Act through the Thailand Board of Investment. Merit based incentives in addition to the activity-based incentives can be granted for, amongst other concessions, investment or expenditure in R&D. The merit incentive can allow additional years of tax exemption based on investment or expenditure made.
- Under the R&D Contractors Incentive, the Board of Investment include basic and applied research, pilot development and demonstration development, whereby a tax holiday and other incentives can be available.
- Targeted strategic activities, core technologies and services can receive corporate tax exemptions of up to ten and 15 years through the Thailand Board of Investment.
- Various incentives for the centralisation of functions in Thailand are available including the International Business Centre Incentive.



Incentives available

Technology and innovation

Provided the expenditure is approved by the Director-General of the Revenue Department, companies can deduct relevant costs of their R&D expenditures at 200%. The maximum tax reduction allowed for each company depends on the company's income for each year.

Activity based incentives

Thailand has activity-based investment incentives through the Board of Investment for certain industries.

These incentives can offer corporate income tax exemption of up to eight years, import duty exemptions/reductions and double deductions on utility costs. Targeted strategic activities, core technologies and services can receive corporate tax exemptions of up to ten and 15 years.

Further merit-based incentives can be received where the businesses are operated in decentralised zones or within an industrial estate or promoted zone.

Merit based R&D

Investment or expenditure for R&D including the provision of advanced technology training, product or package design, the development of Thai suppliers as well as license fees for Thai developed technology, can increase the investment cap allowance on corporate tax exemption for the activity based incentives (noted above) by 200%/300% of the investment/expenditure and can result in an increase in the tax holiday period granted under the activity based incentive.

R&D contractors

An eight years corporate tax exemption (without cap) and an exemption from import duty for manufacturing for export as well as exemption from Thai tax of dividends derived from promoted enterprises.

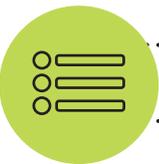
International Business Centre ('IBC')

The International Business Centre has received a positive take up and is awarded to Thai companies for providing managerial, technical, supporting services or financial management to its associated enterprises – whether situated in Thailand or abroad. Tax privileges are granted for 15 years and include exemption or reduced rates of 8%, 5%, or 3% on certain profits (with specific conditions), withholding tax exemption on dividends and 15% flat tax rate on expatriate employees.

Thailand also has a Treasury Centre and International Trade Centre incentive similar and related to the IBC.

Other incentives (subject to conditions)

- A 150% additional deduction for investment in new machinery based on the actual amount paid between 1 January and 31 December 2020.
- 200% or 150% tax allowance for payment for capital equipment.
- The Eastern Economic Corridor law that the investment will be promoted in targeted industries including aviation, digital, smart electronics, automotive, automation and robots.
- Thailand also has Industrial Estate and Custom Free Zones which offer indirect tax concessions.



Summary

Thailand offers the following tax incentives:

- 1 Technology and Innovation R&D expenditure: 200% of expenditure where approved by the Director-General of the Revenue Department
- 2 BOI - Activity Based Incentives: Three to 15 years corporate tax exemption as well as Import duty and non-tax incentives + Merit (see next)
- 3 BOI - Merit Based: Additional years of corporate tax exemption and other benefits based on R&D, decentralisation and industrial area development
- 4 BOI – R&D Contractors: Corporate tax exemption for eight years as well as import duty and dividend exemption
- 5 International Business Centre: 15 years - corporate tax exemption or reduced tax rates of 8%, 5% or 3% on certain profits, and withholding tax and personal tax reliefs and non-tax incentives.

Turkey



Criteria – What counts as R&D?

- 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.
- Software activities based on new and original designs.
- Researching and developing new productions, methods, processes and procedures.
- Researching new techniques/technologies decreasing the cost of a product while increasing its quality, standard or performance.



Incentives available

R&D Law

Innovation and R&D or design expenditures made in technology centres, R&D centres (with a minimum of 15 full-time R&D personnel), design centres (with a minimum of 10 full-time design personnel) as well as R&D and innovation or design projects supported by certain governmental institutions, foundations established by law, or international funds can enjoy the incentives provided within the scope of law no. 5746. Enterprises that are established to conduct R&D and design activities based on purchase order contracts are also deemed as R&D centres.

The incentives that will remain in effect until December 31, 2028 include:

- **100% deduction** of eligible annual R&D expenditures from the income tax base.
- **Additional 50% deduction.** Provided that a minimum improvement of 20% has been achieved in any one of the following indicators in R&D or design centres, compared to the previous year; 50% of the increase in the amount of R&D,

innovation or design expenses will also be deducted from the tax base:

- The share of R&D or design expenditures in total turnover
- The number of registered national or international patents
- The number of internationally funded projects
- The ratio of number of researchers to total number of R&D personnel
- The ratio of turnover of new products to total turnover
- **Exemption of cash subsidies** granted by public bodies and international organisations.
- **Income (withholding) Tax Exemption for Employees.** An income tax (withholding tax) exemption is applied to R&D, design, and support personnel in accordance with their academic achievements. The exemption is applied at rate of 95% for the personnel with a PhD degree or master's degree in basic sciences, 90% for the personnel with a master's degree or undergraduate degree in basic sciences, and 80% for others.

- **Social Security Contribution Relief.** 50% of employer portion of social security premiums for all full-time R&D and design personnel as well as 50% of employer portion of social security premiums for up to 10% of support personnel will be funded by government for five years.
- **Stamp Duty Exemption.** The payrolls, agreements and other documents issued for R&D and design activities are exempt from stamp duties.
- **Customs Duty Exemption** for goods imported with respect to R&D and design projects.
- **Minimum Gross Wage Support.** Subject to certain limits, the minimum gross wage equivalent of each R&D personnel employed in R&D centres that have at least an undergraduate degree in basic sciences (mathematics, physics, chemistry, or biology) will be funded by government for two years.
- **Permanent Work Permit for Foreign R&D personnel.** According to recently enacted International Workforce Law No. 6735, work permit applications lodged by foreign nationals who wish to work as R&D personnel in the companies that hold a R&D Centre Certificate in the scope of Law No. 5746, are accepted upon favourable opinion of Ministry of Science, Industry and Technology.
- **Income Tax (withholding tax) Exemption.** Wages of R&D and design personnel as well as wages of up to 10% of support personnel employed in the TDZs are exempt from income tax. The income tax exemption is not applicable to salaries for activities other than R&D, design and support. The fees for time spent by software development and R&D personnel outside the TDZ (if part of an R&D project) are also income tax exempt.
- **Social Security Contribution Relief.** 50% of employer portion of social security premiums for R&D and design personnel as well as 50% of employer portion of social security premiums for up to 10% of support personnel will be funded by government for five years.
- **Customs Duty and Stamp Tax Exemption.** The paperwork and transactions involved in the importation of goods for use in research related to software, R&D, innovation and design projects (conducted in the TDZ), and their associated customs duties and funds, are exempt from stamp tax and duties.
- **Minimum Gross Wage Support.** Subject to certain limits, the minimum gross wage equivalent of each R&D personnel employed in TDZs who has, at a minimum, an undergraduate degree in basic sciences (mathematics, physics, chemistry, or biology) will be financed by government for two years.
- **Foreign Staffing Support.** Foreign national managers and qualified R&D personnel can be employed in the TDZs.

Support for Technology Development Zones (TDZ)

According to Technology Development Zones Law No. 4691, domestic and foreign companies, real or legal entities and entrepreneurial companies, and companies established and still operating in Turkey can engage in research and development (R&D)/software/design development activities in a Technology Development Zone with the permission of its managing and operating companies. The following incentives pertaining to software development, R&D, and design activities performed in Technology Development Zones (TDZs) will remain in effect until 31 December 2028.

- **Corporate and Personal Income Tax Exemption.** The TDZ income tax exemption is applied to profits derived from the sale, transfer, or lease of intellectual property (IP) activities performed in TDZs provided that the IP gained from the R&D activity has been patented, or a patent equivalent document has been issued. The exemption basis is determined in proportion to the qualified expenditures within total expenditures. The expenditures pertaining to the costs of activities directly connected to the IP that are performed by the taxpayer as well as costs of the benefits and services that are obtained from third parties are defined as qualified expenditures.
- **VAT Exemption.** Sales of software for system management and data management, business applications, internet and mobile phone applications and military command control applications arising from software development activities in the TDZs are exempt from VAT.

Patent Box Regime

Law No. 6518, introduced the current patent box regime effective from 1 January 2015. Under this new legislation:

- A 50% reduction in corporate tax is applied towards revenue derived from lease, transfer or sale, or marketing through serial production of inventions created as a result of research, development and innovation activities, and sales of products manufactured by using inventions licensed as patents or utility models (limited to the amount of sales attributed to patents or utility models)
- The research and development costs associated with the IP need to be carried out in Turkey
- This exemption applies for any income generated as a result of breach of inventions rights or any other kind of compensation, eg insurance compensation
- The rental, transfer or sale of the immaterial rights regarding patented or utility model certified invention arising as a result of R&D, innovation and software activities realised in Turkey, will also be exempt from Value Added Tax
- The reduced tax rate also applies to acquired IP under certain conditions.

Industrial Thesis (SANTEZ) Programme

San-Tez is a government funded programme to cultivate collaboration and cooperation between universities and companies to promote new products and/or manufacturing processes as well as to endorse the development of current products and/or manufacturing processes. Direct financial support is provided for new technology adaptation, process development, quality improvement, and environmental modification projects via university partnerships:

- Up to 85% of the project budget could be supported by direct grants
- Project term is two years, with a possible extension of six months
- Expenditure on staff, travel, consumable materials, machinery equipment, consultancy, and relevant service procurements, transportation, insurance, and customs are supported
- The application file could be approved within four months, and the project supervision committee is independent.

TUBITAK support

TUBITAK (Scientific and Technological Research Council of Turkey) compensates or grants R&D related expenses and capital loans for R&D projects. Projects eligible for TUBITAK incentives:

- Concept development
- Technological research and technical feasibility research
- Laboratory studies in the translation of a concept into a design
- Design and sketching studies
- Prototype production/test production
- Construction of pilot facilities
- Patent and license studies
- Activities concerning the removal of post-sale problems arising from product design.



Summary

- 1 100% of the eligible R&D expenses are deductible from corporate or income tax base.
- 2 Based on y-o-y performance, an additional 50% deduction from tax base is granted for R&D expenses conducted in R&D or design centres.
- 3 Income tax WHT and a limited social security contribution relief is granted for eligible R&D or design centre personnel.
- 4 VAT exemption is applied to sale, transfer, or lease of IP activities performed in Technology Development Zones (TDZs) if the IP gained from the R&D activity has been patented, or a patent equivalent document has been issued. Income tax exemption is applied to all qualified profits.
- 5 Income tax WHT and a limited social security contribution relief is granted for eligible R&D or design centre personnel in TDZs.
- 6 Patent Box Regime: A 50% reduction in corporate tax is applied to profits derived from lease, transfer or sale, or marketing through serial production of inventions created as a result of R&D and innovation activities. VAT exemption is applicable to revenues derived under patent box regime.



Ukraine

Tax benefits for stimulation of R&D are provided only for governmental institutions or specialised scientific institutions. Private enterprises can receive a release from the taxation on transactions from voluntary conveyance of property to scientific institutions or if they carry out R&D at the expense of governmental funds.



Criteria – What counts as R&D?

Research or experimental activities which envisages experimental production, technical testing of products or testing of engineering procedures, creation of the necessary equipment and obtainment of IP rights on results.



Incentives available

Exemption from the VAT

The transaction on payment of cost of fundamental researches, R&D works by the person who directly receives such payment from the government budget are exempted from the tax as well as the transaction of the payment free transfer of devices, the equipment, materials to scientific institutions and scientific organisations are exempted from the tax. Temporarily, till 1 January 2025, the following transaction of an aircraft construction entities are exempted from tax:

- The import of goods for their own needs
- The supply of R&D works results on the territory of Ukraine for needs of the aircraft constructing industry

- Sold products by the entities of an industry of aircraft construction during this period are taxed on a zero rate.

Exemption from the rental fee for the special use of water

R&D institutions are exempted from the rental fee for special use of water which they use for carrying out of scientific research in the field of rice planting and for production of elite seeds of rice.

The land tax privilege

Institutions of science which are completely supported by the budget funds are exempted from the land tax.



Summary

- 1 The R&D operations which are paid from the government budget are exempted from VAT.
- 2 Certain transactions for the support of aircraft construction and space industry are exempted from VAT.
- 3 Certain transactions for the support of scientific institutions are exempted from VAT.
- 4 Research institutions are rental fee for special use of water.
- 5 Institution of science are exempted from the land tax.



United Kingdom

R&D tax relief is a corporate income tax relief that may reduce a company's tax bill if the company is profit making or potentially result in a payable tax credit if not.

The R&D Tax Relief Schemes in the UK enable companies to claim for substantial problem-solving activities. Claimants under the SME Scheme can realise up to 33p for each £1 of qualifying expenditure. Claimants under the R&D Expenditure Credit Scheme (RDEC), primarily meant for Large Companies, realise approximately 11p for each £1 of qualifying expenditure. The average claim benefit in the UK under the SME scheme is approximately £50,000.

The R&D tax relief scheme in the UK allows companies to claim R&D tax relief or R&D tax credits retrospectively, with a submission deadline of 24 months from the end of the accounting period. Eligible costs in R&D Tax Relief claims mainly relates to the time spent by the employees and external workers on performing R&D activities. However, eligible categories of expenditure also extend to subcontractor costs, consumable (materials used up in the R&D process) and software costs.

Whilst the SME & RDEC R&D Tax Relief Schemes apply to revenue-based costs, companies can also consider Research & Development Allowances (RDA) for capital costs. RDA's are a generous tax relief, which enables a 100% tax deduction on a portion of capital expenditure, if the asset is utilised for R&D activities. In addition, the Patent Box regime involves a reduction in the rate of Corporation Tax rate to 10% on profits derived from Patents.



Criteria – What counts as R&D?

The R&D project must seek to achieve an advance in a field of science or technology through the resolution of a scientific or technological uncertainty. Such uncertainties exist where a competent professional could not easily come up with a solution or was not sure if the strategy would yield positive results. **This includes, but is not limited to:**

- Developing a new process, material, device, product or service
- Making an appreciable improvement to an existing product or service

- Extending overall knowledge or capability in a field of science or technology
- Duplicating the effect of an existing process, material, device, product or service in a new or appreciably improved way.

The advance being sought must constitute an advance from publicly available knowledge or capability in the field and not a company's own state of knowledge or capability alone. Other companies may have developed similar knowledge and/or technology, however that is their trade secret, hence details are not in the public domain or are not conventional knowledge in the industry.



Incentives available

Small and medium-sized enterprises (SME) Scheme

To qualify as an SME, a company plus members of its worldwide group and other associates must have fewer than 500 employees and either i) no more than €100m turnover, or ii) no more than €86m gross assets.

The corporation tax relief on allowable R&D costs is 230% meaning that for every £100 of qualifying costs, companies can deduct the original £100 plus an additional enhanced deduction of £130 when calculating its taxable profit or loss.

If the company is loss-making for tax purposes, it may be possible to allocate this to another member of the group based in the UK or carry it forward to subsequent accounting periods. Alternatively, the company can exchange "surrenderable losses" for a cash credit at a rate of 14.5%. Surrenderable losses are the lower of i) the trading loss for the period (after the 130% deduction has been applied) or ii) 230% of the qualifying R&D expenditure.

For accounting periods starting after 1 April 2020, there is a cap on the amount repayable of £20,000 plus 3x the total PAYE & NIC contributions of the company for the year. The claim can however remain uncapped if the company creates or actively manages the intellectual property itself and does not contract more than 15% of the expenditure to a connected party.

Qualifying expenditure must fall under the following categories:

- **Staffing costs:** Salaries; employer pensions and NIC contributions; cash benefits to employees such as bonuses and reimbursed expenses (must have been incurred by the company within 9 months of the accounting period year-end). This excludes benefits in kind and dividends
- **Externally Provided Workers (EPWs):** Payments made to third party staff providers in respect to the provision of contract staff, who are managed, supervised and controlled by the claimant company. If the EPW is not part of the group of the claimant company, qualifying expenditure is limited to 65% of the actual amount paid. If the EPW provider is part of the same group, they are treated as a connected party, and the 65% limit does not apply, but care should be applied to remove any mark-up in such cases. Note, personal service companies and payments made to directors are not eligible here
- **Subcontracted activities (SME only in most cases):** This relates to payments made to contractors tasked to provide a service or product as part of the project. The treatment of qualifying expenditure here is like EPWs as above, ie 65% limitation for unconnected parties, and inclusion at cost for parties connected within the same group or through ownership
- **Consumables:** Physical materials consumed or transformed in the R&D process, including heat, light, power and water. This may include specially commissioned parts, if not capital and not resold. Careful treatment is required where first-in-class or technology demonstrators are encountered
- **Software:** Costs of software directly employed in R&D, with suitable apportionment made where only partly employed in direct R&D (excluding payments for general maintenance and support).

R&D Expenditure Credit (RDEC) Scheme

This scheme is used by those companies that fail to meet the SME definition or by SMEs undertaking subcontracted or subsidised work, eg the company is large at group level, or the project received a grant.

Companies are entitled to an RDEC tax credit equal to 13% of qualifying expenditure (was 12% for expenditure incurred prior to 1 April 2020).

The credit is taxable at the normal corporation tax rate (19%) which effectively means the benefit is worth approximately 11p for every £1 of qualifying R&D spend.

The RDEC tax credit is shown 'above the line' which means it is visible as income in the company's accounts.

The credit is offset against the company's corporation tax liability. Companies with no liability (either because they are loss making or there are losses brought forward) can obtain a cash payment of the credit. However, this payment is limited to the company's PAYE/NIC liabilities attributable to R&D staff paid in the period.

R&D capital allowances

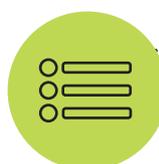
Any fixed assets used for R&D, or in which R&D is carried out, are eligible for a 100% tax deduction in the year of acquisition, if Annual Investment Allowance has been used up. Research and Development Capital Allowances, commonly referred to as RDA's, provide a generous 100% first year tax relief for fixed asset capital expenditure carried out by trading companies, individuals and partnerships. Some of the examples of qualifying expenditure for RDA are the costs of buildings in which the R&D is carried out and the equipment used to conduct the R&D activity. The expenditure for example, may be for laboratories, research facilities, offices and other research equipment.

Patent Box

Patent Box reduces the corporation tax rate on profits derived from patents and certain other qualifying rights to 10%, rather than the usual rate of 19%.

Qualifying intellectual property includes patents granted by the UK Intellectual Property Office, and the European Patent Office, as well as some supplementary protection certificates etc,

Relevant intellectual property income includes worldwide licensing and royalties, worldwide sales income from the Patent or Patent protected products, Patents used in processes or services and damages for infringement. It is necessary to show a clear methodology of how the intellectual property income is derived, or 'streamed'. The level of relevant intellectual property income that can benefit from the reduced rate of corporation tax is further reduced by an "R&D fraction". This ensures that the Patent Box regime benefits those companies engaged in 'substantial activities'



Summary

R&D tax relief can either reduce the tax liability or create a tax refund for profit making companies or result in tax credits being paid for loss making companies. If the R&D has led to a patent being granted, this will further reduce the tax liability, as the patent box benefit is taken before the effects of R&D tax relief or R&D capital allowances and therefore the effective tax rate can be much lower than 10%.



United States



Criteria – What counts as R&D?

For an activity to be qualified for the R&E Tax Credit under Internal Revenue Code (IRC) Section (§) 41, the activity must pass all elements of the 'four-part test'.

The four-part test consists of the following:

- **Business Component Test**
 - Is a new or improved product, process, computer software, technique, formula or invention which is either held for sale, lease or license or used in the taxpayer's trade or business.
- **Discovering Technological Information Test**
 - Fundamentally relies on principles of physical or biological sciences, engineering, or computer science.

- **IRC §174 Test**

- Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product.
- The ultimate success, failure, sale or use of the product is not relevant.

- **Process of Experimentation Test**

- It relates to a new or improved function, performance, reliability, or quality of the business component.
- Examples include modelling, simulation, and systematic trial and error.

Eligible expenses

To receive R&E tax credits, expenses must be one of the following:

- Qualified wages
- Supply costs
- Contract research.



Incentives available

Research and experimentation (R&E) tax credit

The United States offers a federal R&E tax credit. Taxpayers can elect a gross credit of 20% of eligible expenditures when compared to a base period using the 'Regular Credit' method, or a gross credit of 14% of eligible expenditures when compared to a base period using the so-called 'Alternative Simplified Credit' method. These credits are non-refundable. Unused credits may be carried back one year and carried forward up to 20 years.

Traditionally, these credits have only offset 'regular tax', not the Alternative Minimum Tax (AMT). From 2016, eligible small

businesses (<US\$50m in average gross receipts) can use R&E tax credits to offset AMT.

Additionally, R&E tax credits have always been limited to offsetting income taxes only. However, from 2016, eligible small business (<\$5 million in gross receipts in the tax year, and no gross receipts for any taxable year preceding the five-year taxable period ending with the taxable year) can offset up to \$250,000 in payroll taxes per year. This election may be claimed up to five times.

A credit is also available in two other categories:

- University Basic Research Credit (20% of the basic research payments to qualified organisations including colleges and universities)
- Energy Research Consortium Tax Credit (20% of the expenditures on qualified energy research undertaken by an energy research consortium).

In addition to the federal R&E tax credits described above, approximately 35 states offer similar versions of the federal credit.

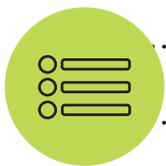
The Tax Cuts and Jobs Act (TCJA) of 2017 made several changes that have or will have a direct effect on the R&E tax credit

- The reduction in the highest marginal corporate tax rate from 35% to a single 21% rate resulted in an increase of the multiplier for the “reduced credit” from 65% to 79%, increasing the net benefit to taxpayers.

- Starting with tax years beginning after December 31, 2021, taxpayers will no longer have the choice to immediately expense or amortize the costs over a period of not less than 60 months. Instead, these costs will have to be capitalized and amortized over five years.

R&D tax treatment

- A taxpayer may either capitalise and amortise research expenditures over 60 months or alternatively may deduct in the current year (see previous section).
- For purposes of the research credit, 65% of amounts paid for contract research are eligible for the R&E tax credit.
- For basic research payments to eligible educational institutions and qualified scientific organisations, 75% of amounts paid are eligible for the R&E tax credit.



Summary

The United States offers the following tax incentives:

Research and Experimentation Tax Credit				
Regular method (gross)	Alternative Simplified method (gross)	Payroll tax election for eligible small businesses (starting 2016)	Offset AMT for eligible small businesses (starting 2016)	State Research Tax Credits (≈ 35 states)
20% of eligible research expenditures	14% of eligible research expenditures	\$250,000/year in payroll taxes (maximum of five times)	Varies by state	Varies by state
University Basic Research Tax Credit		Energy Research Consortium Tax Credit		
20% of the basic research payments to qualified organisations including colleges and universities		20% of expenditures on qualified energy research undertaken by an energy research consortium		



Zimbabwe

Incentives on R&D are available as a tax-deductible expense. R&D tax relief can either reduce the tax liability or create a tax cushion on taxable profits at the end of a financial year.



Criteria – What counts as R&D?

- i. Any expenditure incurred by the taxpayer during the year of assessment in carrying out experiments and research relating to his trade, other than capital expenditure on plant, machinery, land or premises or on the acquisition by the taxpayer of rights, whether for his trade or otherwise.
- ii. Any sum contributed by the taxpayer during the year of assessment in respect of expenditure incurred by any other person to which paragraph (i) would have applied had the expenditure been incurred by the taxpayer:

Provided that the deduction shall not exceed an amount arrived at by applying the following formula –

$$\frac{A \times B}{C}$$

• **in which:**

- **A** represents the amount of the contribution by the taxpayer
 - **B** represents the amount of the expenditure incurred by the other person referred to in this paragraph which would have been allowed as a deduction in terms of paragraph (m) had it been incurred by the taxpayer
 - **C** represents the amount of the expenditure which is incurred by the other person referred to in this paragraph in carrying out experiments and research.
- iii. An amount equal to the sum contributed by the taxpayer during the year of assessment to a scientific or educational society or institution or other like body of a public character approved by the Commissioner if the taxpayer has stipulated that the sum must be utilised by such society,

institution or body, as the case may be, solely for the purpose of industrial research or scientific experimental work connected with the trade of the taxpayer.

- iv. Any amount paid by the taxpayer during the year of assessment, without any consideration whatsoever, to a research institution approved by the Minister responsible for higher or tertiary education:
- v. The amount of any export-market development expenditure incurred by the taxpayer during the year of assessment on:
 - research into, or the obtaining of information relating to, markets outside Zimbabwe.
 - research into the packaging or presentation of goods for sale outside Zimbabwe.
- vi. Any building erected and used mainly for the purpose of carrying out industrial research or scientific experiments into improved or new methods of manufacture is defined as an industrial building.
- vii. 'Export market services means services rendered wholly or exclusively for the purpose of seeking and exploiting opportunities for the export of goods from Zimbabwe or of creating, sustaining, or increasing the demand for such exports. **The services include:**
 - Research into, or the obtaining of information relating to, markets outside Zimbabwe
 - Research into the packaging or presentation of goods for sale outside Zimbabwe.



Incentives available

Income tax allowable deductions

- The Income Tax Act (Chapter 23:06) allows 100% deduction on expenditure incurred by the taxpayer on (i), (ii) and (iii) above during the year of assessment.
- Allowable deduction on expenditure incurred on (iv) is limited to ZWL\$800 000.00 during the year of assessment.
- A 200% deduction is allowed on expenditure incurred on (v) above.
- A capital allowance of 25% per annum is granted on the cost of erecting the industrial building. The allowance is claimed as a credit against taxable income.
- Non-residents tax on fees paid by an industrial park developer in respect of the operation of his industrial park for export market services rendered by an agent of a company that exports goods from Zimbabwe:
 - Provided, however, that the fees payable to the agent do not exceed 5% of the 'free on board value' of the exports of the company for the year of assessment concerned, as confirmed on acquittance by the company of the export documentation relating to its exports in that year.



Summary

- 1 Allowable deduction of 100% R&D expenditure for income tax purposes on expenditure incurred by the taxpayer for R & D related to his/her trade.
- 2 An amount of ZWL\$800 000.00 paid to a research institution approved by the Minister of higher and tertiary education.
- 3 Capital allowance at 25% of cost, accelerated wear and tear over four years from year of construction of the industrial building.
- 4 Non-residents tax on fees does not apply where fees paid to an agent for export market services do not exceed 5% of the free on-board value of the exports of the company.

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