



cutting through complexity

R&D incentives and services – adding value across the Americas

2012 edition

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KPMG's global R&D incentives services

Americas Brochure

Overview

This is the first edition of KPMG's Americas (Canada, the US and Latin America) research and development (R&D) incentives guide. Herein, we provide country-specific information that summarizes the tax treatment of R&D expenditures and the specific R&D incentives that are available throughout the region to assist your decision making on where to locate your R&D programs.

One cannot ignore the impact of global economic climate changes on R&D investment. An increasing number of governments are offering businesses incentives to increase spending on R&D, as this is considered essential for productivity and for the country's future economic growth. Despite reduced tax revenue, many governments in the region continue to support R&D activities by offering, and in some cases enhancing, R&D incentives to make them more attractive to investors. Indeed, some of those countries that do not currently offer tax incentives are considering introducing new R&D incentive schemes. This is a clear indication that governments recognize the inextricable link between R&D and long-term sustained economic growth, even in the face of a major economic downturn.

As economies begin to emerge from the global financial crisis, we expect that they will focus even more on R&D investment as a catalyst for, or key driver of, future economic growth. This together with a focus on encouraging alternatives to a carbon economy is likely to be a strong impetus for further changes to R&D incentives in the coming years.

R&D in the Americas market place

In today's globalized business world, businesses in the Americas region face competition from efficient, well capitalized foreign companies as well as from familiar local competitors. It has become increasingly apparent that innovation driven by high quality R&D is vital to the long-lasting success of almost any business in the region. Tax competition is not always acknowledged by governments, but it exists.

Notwithstanding, not all countries in the Americas region invest equally in R&D. For instance:

- The United States accounts for the largest source of R&D spend in the region and, for OECD countries, accounts for 44 percent of their total R&D expenditures;
- Canada benefits from an abundance of highly qualified professionals, making the country an attractive market for R&D investments. Canadian researchers are at the forefront of important scientific developments in many fields of inquiry, ranking first among the G-7 in the number of publications produced on a per-capita basis;
- Among Latin American economies, Brazil leads in R&D investment, with broad initiatives such as creating 101 research institutes and by expending around 1 percent of its national GDP. However, both the level and growth of its world share remain relatively small in comparison to other countries in the region;
- Generally, R&D investments in Latin America have been limited by factors such as a lack of coordination between research institutions and the private sector, lower propensity of business to innovate compared with other emerging markets in OECD countries and a lack of available funding.

Americas Brochure (continued)

Nevertheless, for companies dependent on R&D, the more cash that can be channeled from savings in other areas, the more the institution can invest in R&D activities to support growth and profitability. Tax savings are one of those areas, and multinational companies are increasingly focusing on tax incentives when considering their R&D strategies.

In the Americas region, many countries that may once have inadvertently discouraged investments in R&D by requiring expenditure to be capitalized, now permit a current tax deduction for the costs of R&D activities. Many also allow enhanced deductions and/or special tax credits for R&D costs. Tax incentives are also often granted to businesses that contribute to universities and other research organizations to encourage basic research and investment in assets used in R&D activities.

Although the basic definition of R&D is similar in most countries, there are variations in country-specific taxation legislation and incentive regimes. In some countries, incentives are limited and qualification is difficult, while in others, incentives are lucrative and easily attained. The following table summarizes the types of R&D incentives and the breadth of the benefits that are available in the Americas region.

R&D incentives summary table

Country	Current deductions	Enhanced deductions	Tax credit	R&D property investment	R&D grants	Other incentives
Argentina	X		X	X	X	L.25922 – Software
Brazil	X	X	X	X	X	Various
Canada	X		X	X	X	Various
Chile	X		X		X	Various
Colombia	X	X		X	X	Various
Ecuador	X					Various
Mexico	X	X		X	X	Various
Peru	X	X		X		–
United States	X	X	X	X	X	Various
Venezuela	X			X		Variable/ discretionary

Source: KPMG R&D Incentives and Services report – 2012 edition

R&D-related considerations

The practical details of R&D incentives programs are covered in the following pages, but there are several related matters that decision-makers should consider when determining the best location and structure for their R&D activities in the Americas region.

Net cost of R&D

The relative costs of performing R&D in one country versus another (i.e. the net of respective available R&D incentives), are important factors in evaluating where and under what circumstances R&D activities should take place.



Intellectual property

The net cost of performing R&D should be considered in conjunction with the strategy for managing potential IP created by successful research, including which entity within the group funds the creation of IP, legal and economic ownership, and the tax consequences of any income generated thereafter. Moving IP within the group once it has been developed can create significant tax liabilities; therefore, the strategy for subsequent IP ownership is crucial when considering R&D activities. Several countries have introduced or are about to introduce favorable tax regimes for income arising from IP.

Transfer pricing

Whatever strategy is adopted for R&D activities and IP ownership, transfer pricing rules are likely to be relevant. Transfer pricing rules, referred to as the arm's length principle, require that intra-group arrangements are priced for tax purposes in the same way as similar arrangements between unrelated parties are. Therefore, intra-group arrangements covering, for example, R&D services, funding of R&D, management of R&D, cost-sharing arrangements for the development of IP and the licensing of IP, all need to be priced in accordance with the arm's length principle. These aspects are complex, particularly as within multinational groups, activities and responsibilities are often organized on a regional, transnational basis and private-party activities can be split in a way that independent-party activities cannot. An area that is currently receiving increased attention is the importance of associated R&D risks management, the employees who are uniquely placed to make decisions regarding the conduct of said R&D and how these contributions are evaluated for transfer pricing purposes.

Country-specific tax benefits

Many countries provide tax credits for taxes paid by a resident business to other countries; countries also offer other tax incentives to attract investment and encourage exports. The net cost of R&D performed in the country and the impact of R&D costs on other tax benefits must be considered when determining the value of said tax benefits.

Short-term economic stimulus measures

Short-term measures implemented by governments as economic stimulus packages in response to the global financial crisis, such as accelerated deduction programs for investment in tangible depreciable assets, are worth taking into account, as these may top up existing benefits delivered through R&D incentive schemes.

The equation to be solved

It is vital to consider the tax treatment of R&D costs, technology transfers, transfer pricing and other related local tax issues in any given country. Therefore, it is critical to evaluate all R&D incentives available, the impact of all R&D costs on other tax benefits and the wider IP strategy of a company for all countries in the Americas region before coming to a decision on where to locate your R&D programs.

We hope this publication delivers long-lasting value for your organization by assisting you in identifying current and future opportunities to obtain R&D incentives throughout the Americas region.



Americas Network

The Southern American states in our survey seem to have come out of the problem years in reasonably good shape.

Chile has the lowest level of public sector debt of any of the countries we have polled, and a comparatively high level of satisfaction with government action. Argentina, given its history of financial difficulty, is showing good signs of recovery, and Brazil is thought to be on course to become one of the five largest economies in the world.

But the closer we get to the US, the stronger the effect of that economy's difficulties on the surrounding countries. Both Mexico and Canada have stayed relatively untouched by recession, but both have been adversely affected by the problems experienced by their most significant neighbor.

There is admiration in many corners of the world for the US Government's stimulus program, which seems

to have played a very influential role in keeping many economies, not just that of the US, from more serious recession. Investments in the US auto industry, for example, are now seen to be reaping benefits, and the backing provided for US financial institutions has played a major part in promoting stability.

However, US businesspeople are realistic in their assessment of the burden of public debt they will have to deal with, and many do expect higher levels of taxation in one form or another.

Just as the US stimulus program has had an impact on economic activity beyond its borders, so we might expect the US solution to the problem of elevated public debt to have an influence elsewhere. The particular blend of spending and fiscal measures that the US eventually chooses to help manage its problems is of profound interest to the rest of the world.



Argentina



Brazil



Canada



Chile



Colombia



Ecuador



Mexico



Peru



United States



Venezuela





Argentina

During the last few years, the National Government of the Argentine Republic has given strategic importance to scientific and technological research. The establishment of the Ministry of Science, Technology and Productive Innovation in 2007 highlights the government's endeavors. Such political and institutional creation of hierarchy has been accompanied by sustained growth in the allocation of funds placed at the disposal of scientific and technological research.

One of the most important activities that the Ministry encourages is the incorporation of knowledge into production. During the last years, the entire science and technology sector has experienced significant growth in its budgeted resources.

The National Scientific and Technological Promotion Agency is a local decentralized entity under the authority of the Ministry of Science, Technology and Productive Innovation. The main purpose of this entity is to organize and administer instruments aimed at the promotion and encouragement of scientific-technological development and at technological innovation in the country.

The Agency, through the four funds under its administration — the Scientific and Technological Research Fund (FONCyT), the Argentine Technological Fund (FONTAR), the Fiduciary Fund for the Promotion of the Software Industry (FONSOFT) and the Argentine Sectoral Fund (FONARSEC) — promotes project financing with the purpose of improving social, economic and cultural standards in Argentina.

Definition of R&D

There is no formal definition for Research and Development (R&D) expenses in Argentina, neither on Income Tax Law nor on Regulatory Decree.

Therefore, we refer to the definition provided by the Technology Innovation Promotion Law 23877, which defines R&D as any project aimed at the following¹:

- Applied research: work aimed at acquiring knowledge to be applied to production and/or commercialization;
- Precompetitive technology research: systematic work to improve the knowledge derived from research and/or practical experiences, aimed at the production of new materials, products or devices, and aimed at implementing new processes, systems or services, including building prototypes, pilot plants or experimental facilities, and concluding with the approval of said projects;
- Improvements and enhancements: developments aimed at adapting and improving technology that usually lack the level of originality and innovation of those projects covered in the first two points.

Income tax treatment of R&D

Pursuant to the provisions of the Regulatory Decree of the Income Tax Law (Section 140), the taxpayer may opt to deduct the R&D expenses aimed at obtaining intangibles in the fiscal year in which they occur, or amortize them in a term of no longer than five years.

¹ Technology Innovation Promotion Law 23877

Deduction of expenses incurred abroad, particularly those charged by related parties, is restricted. The taxpayer must prove that these expenses are necessary to obtain and maintain its taxable income.

R&D promotion regime

Via Law 23877, the Republic of Argentina has implemented a technology innovation promotion regime that protects any R&D projects intended to increase that company's level of technology. Financing can be obtained by any production company, independent of its size or business sector, that operates in Argentina, through presenting a properly drafted project, proving the technical and administrative capacity to carry out said project, and showing the commercial ability to place the resulting product on the market.

The projects that may be granted those benefits set forth by Law 23877 (financial and tax promotion) are the following, among others:

- Developing new products, devices, materials, processes or services;
- Building prototypes;
- Performing trials during the pilot phase;
- Improving technology in relation to products or processes currently in use;
- Building pilot plants, and developing and producing product pre-series;
- Implementing production management technology;
- Developing the technology necessary to move from the pilot phase to the industrial phase.

Eligibility requirements

The projects submitted are evaluated on their quality, feasibility, adequacy, and the technical and economic viability of the proposal and credit-worthiness of the petitioner.

Registration

The companies interested in submitting a R&D project under the regime of Law 23877 may elect between the Public Call (Convocatorias Públicas) or Permanent Financing (Ventanilla Permanente) modalities. The Public Call terms set forth a submission deadline for projects. The financial projects submitted to the Permanent Financing modality have no deadline, and thus can be submitted at any moment.

R&D expense deductions

Law 23877 has no tax benefit related to the deduction of R&D expenses.

R&D tax credit

The regime grants tax credits that may be computed against income tax, in an amount between ARS 1.50 million (approximately US\$ 400,000)² and 50 percent of the total amount of the project. The credit must be utilized over a period of three years in three equal amounts per fiscal year.

The following will not be admitted as part of the total budget of the project:

- Administrative costs or costs derived from the use of energy and telecommunications;
- The utilization value of equipment and infrastructure of the beneficiary that will be allocated to the project's performance;
- The purchase or lease of real property.

² The amount correspond to the 2011 Public Call and is subject to change in the future

Grants and other incentives

Regime for the promotion of software R&D

Through Law 25922 (amended by Law 26692), the Republic of Argentina has set forth a national regime for the promotion of software development, applicable until 31 December 2019. The benefits granted by this regime are as follow:

- Tax stability;
- A tax credit bond equivalent of up to 70 percent of the social security withholdings and contributions applied to national taxes (except for the proportional amount of the income tax relating to sales in the local market). For the taxpayer receiving this benefit, this bond shall not be computable in the assessment of the taxable base of the taxpayer's income tax];
- Certificates granted for exemption from VAT withholding and/or collection regimes;
- Tax relief of 60 percent of the assessed income tax;
- IT-product imports exempt of any kind of present or future restriction on the remittance of foreign currency.

The following activities are entitled for the benefits:

- Software creation, design, development and production;
- Implementation and customization of the developed software systems;
- Related technical documentation, in basic and application terms, including the software developed to be embedded in processors used for purposes such as consoles, telephone exchanges, cell phones, machines and other devices.

Self-development activity is not subject to the benefits granted by this regime.

Whenever an individual performs any activities other than those subject to the promotion regime, it shall be understood that its main activities fall within the software industry if more than 50 percent of those activities are included under the definition of activities subject to the promotion regime.

Software companies wishing to apply for this regime must meet at least two of these requirements:

- Quality assurance;
- Investment in R&D;
- Intent to export.

Furthermore, through this national regime, the provinces and the city of Buenos Aires were invited to issue comparable promotion regulations. So far, the city of Buenos Aires and the provinces of Buenos Aires, Mendoza and Córdoba, among others, adhere to this regime and grant exemptions for their provincial taxes.



Brazil

Expenditures in research and development (R&D) in Brazil are usually treated as an immediate deductible cost. Given new accounting rules and in certain circumstances, such investments must be capitalized. With the introduction of Law 11196/05 and Decree 5798/06, many other tax incentives have been provided with the purpose of fostering research, development and innovation (RD&I) in companies based in/with production in Brazil. The incentives cover technological innovation activities and are expanded to include situations other than pure R&D activities, such as those related to technological support, IT innovative programs, patenting and patent protection. It extends the use to almost all the industrial sectors.

Definition of R&D

For the purposes of the law, technological innovation is stated as the “conceiving of a new product or manufacturing process as well as the addition of new functionalities or characteristics to the product or process that imply incremental improvements and effective quality or productivity gain, resulting in higher market competitiveness.”

Eligible activities

RD&I activities include:

- Basic research: the work performed to understand new phenomena, with the goal of developing products, processes or innovative systems;
- Applied research: the work performed to acquire new knowledge, with the goal of developing or improving products, processes and systems;
- Experimental development: systematic work delineated from pre-existing knowledge to prove or demonstrate the technical feasibility and functionality of new products, processes, systems and services, or an improvement in existing technology;
- Basic industrial technology: the measurement and calibration of machinery and equipment, the design and manufacture of instruments for measuring specific compliance certificates, including the corresponding tests, standardization and technical documentation generated and the patenting of the product or process developed;
- Technical support services: services that are indispensable to implementing and maintaining facilities or equipment that are intended exclusively for the creation of research projects, for technological innovation, and for training those human resources devoted to said projects.

Eligibility requirements

The instruction IN-RFB 1187/11 regulates the use of benefits in technological innovation. Some macro requirements are:

- The company must have a taxable income within the period;
- All expenses connected with the projects must be controlled through specified accounts;
- Goods and services must be acquired in Brazil to be eligible, with few exceptions (i.e., importation of fixed assets);
- Entities that utilize the Information Technology Law benefits (8248/91 and 10176/01) can also use the incentives, while observing certain exceptions;
- Clearance of Federal taxes (certified at each semester).

Registration

Companies that use the incentives must:

- Fill out a specific form explaining the benefits, projects and innovation structure used in the previous year and address said form to the Ministry of Science, Technology and Innovation (MCTI);
- Report annual income tax return values to the Brazilian Federal Revenue (RFB);
- Previous or posterior approval of projects to benefit from the incentives is not required.

R&D expense deductions

The Law states:

- An additional deduction of 60 percent of expenditures in technological innovation from the income tax calculation (income tax and social contribution on net profit):
 - The deduction may reach 80 percent of expenditures in RD&I if there is an addition of 5 percent of researchers hired as regular employees or moved from a different internal area;
 - If the innovative project results in IP (intellectual property), the additional deduction is 20 percent.
- Full depreciation of the assets acquired to be exclusively used in the RD&I activities;
- Accelerated amortization for intangibles assets used in RD&I.

R&D tax credit

- A 50-percent reduction on the federal excise tax (tax on manufactured products) for equipment, machinery, instruments, accessories, spare parts and tools that accompany manufactured goods used in research and technological innovation development;
- No tax-withholding incidences on overseas remittances for the registration and maintenance of trademarks and IPs (patents and cultivars).

Grants and other incentives

Special funding lines for innovation

The National Bank for Economic and Social Development (BNDES) is an agency of the Ministry of Development, Industry and Trade (MDIC) and aims to support projects that contribute to the country's development, improving the competitiveness of the Brazilian economy and raising the quality of life for its population. In its Corporate Plan 2009/2014, BNDES elected innovation, local development and regional and environmental development as the most important aspects of economic development in the current context, and as aspects that should be promoted and emphasized in all projects supported by the bank.

Direct grants for R&D projects

Brazil has a Financing Agency for Studies and Projects (FINEP) to promote the economic and social development of Brazil through providing public support on science, technology and innovation in companies, universities, technological institutes and other public and/or private institutions. The initiatives are concentrated in two areas:

- Sectorial funds for science and technology: instruments for financing research projects, development and innovation in the country. There are 16 Sector Funds, of which 14 are related to specific sectors and two across-sectors (one is focused on university and company interaction and the other is intended to support the improvement of Institutes of Science and Technology infrastructure);
- Special funding: FINEP operates its programs through financial support, refundable and non refundable, and covers all the stages and dimensions of the cycle of scientific and technological development, such as basic research, applied research, development and improvement of products, services and processes. The agency also supports the incubation of technology-based companies, the establishment of technology parks, the structuring and consolidation of research processes and market development.

Program RHAIE Innovation

The RHAIE Training Program for Human Resource Development Technology is an incentive program for micro, small and medium enterprises (SMEs) that invest in the development of research in innovation through the hiring of MScs and PhDs to manage and implement R&D programs within the companies.

State research foundations

Every state in Brazil has its own research foundation that manages all the investments on research within that particular state. These agencies are also responsible for projects between universities and companies, providing funding for selected projects and special programs for SMEs and large companies.



Canada

Canada offers one of the most favorable Research and Development (R&D) tax incentive programs among the major industrialized countries in the world. The Scientific Research and Experimental Development (SR&ED) incentive program, which is delivered through the income tax system rather than provided as a direct government grant, is the largest single source of federal government support designed to encourage industrial research and development (R&D) in Canada. According to statistics recently released by the federal government, the SR&ED program provided over C\$ 4 billion (US\$ 4.1 billion¹) in Investment Tax Credits (ITCs) to over 18,000 claimants, the majority of which were small businesses. This federal incentive program encourages Canadian businesses of all sizes and in all sectors to conduct R&D in Canada. A majority of the SR&ED ITCs fund scientific and technological advances that are incremental in nature and that lead to new, improved or technologically advanced products or processes. Various provinces also provide tax incentives for SR&ED conducted within their jurisdictions.

Definition of R&D

In general, SR&ED is defined as a systematic investigation or search carried out in a field of science or technology by means of experiment or analysis, the primary purpose of which is to advance scientific knowledge or achieve technological advancement.

R&D expense deductions

The combined federal and provincial corporate income tax rate varies from 11 percent to 33 percent, depending on the size of the corporation, ownership and provincial jurisdiction in which the company operates. Companies are entitled to an immediate deduction (no super deduction) for all qualified expenditures incurred in Canada during the year. Eligible SR&ED expenses that may be deducted include wages, materials consumed or transformed, subcontracted R&D, overhead, lease costs of equipment, payments to universities, colleges or consortia, and certain capital expenditures. As of 25 February 2008, up to 10 percent of eligible wages incurred outside of Canada may also be claimed for R&D incentives. All R&D expenditures that cannot currently be deducted may be carried back three years or forward indefinitely for future deductions.

Eligibility requirements

In order to qualify for the incentive, the following three criteria must be present:

- Scientific or technological advancement: the work must generate information that advances the understanding of scientific relations or technologies;
- Scientific or technological obstacle: uncertainty that the goals can be achieved;

¹ Historical exchange rate from 1 January 2011 to 31 August 2011: C\$ 1 = US\$ 1.0256 (Source: www.oanda.com)

- Systematic investigation: there must be evidence that qualified personnel with relevant experience in science, technology, or engineering have conducted a systematic investigation through experiment or analysis.

Work that qualifies includes:

- Basic research: work done to advance scientific knowledge without a special practical application in view;
- Applied research: work done to advance scientific knowledge with a specific practical application in view;
- Experimental development: work done to achieve technological advancement to create new materials, devices, products or processes or improve existing ones.

SR&ED also includes work that supports basic or applied research or experimental development. The support work that can be claimed is limited to engineering, design, operations research, mathematical analysis, computer programming, data collection, testing and psychological research.

Registration

Registration or preapproval is not required to apply for this tax incentive. To file an SR&ED claim, taxpayers must file an income tax return along with the prescribed Form T661, which contains detailed information on the projects being claimed. Form T661 must be filed no later than 18 months from the end of the taxpayer's taxable year. Failure to file the form by the reporting deadline precludes a taxpayer from being able to claim ITCs on the R&D expenditures incurred in that year.

R&D tax credit

The ITC rate, including refundability, varies depending on the structure of the business and the province in which the R&D is conducted:

- Credit: A 20-percent federal tax credit for all qualifying R&D costs. The rate increases to a 35-percent refundable credit for small Canadian-controlled private corporations on the first C\$ 3 million (US\$ 3.1 million) in expenditures incurred in the year, provided the company had less than C\$ 800,000 (US\$ 820,480) of taxable income and no more than C\$ 50 million (US\$ 51.3 million) in taxable capital in the prior year;²
- Provincial R&D incentives vary from 4.5 percent to 37.5 percent. Some provinces offer a fully refundable ITC.

Federal refundable ITCs are not available to non-CCPC's; however certain provinces do provide refundable ITCs without restriction to CCPC's or non-CCPC's. Unused tax credits may be carried back three years or carried forward 20 years. There is no cap on the amount of expenditures and related ITCs that may be claimed in any given year. In addition, there is no restriction on the location of intellectual property, although the taxpayer must be entitled to exploit the results of the R&D in order to be eligible for the Canadian SR&ED program.

² Historical exchange rate from 1 January 2011 to 31 August 2011: C\$ 1 = US\$ 1.0256 (Source: www.oanda.com)

Canada

(continued)

Below is a summary of the federal ITC rates applicable to SR&ED carried out in Canada through the use of different business structures.

Category	SR&ED expenditures	ITC rate	Refundable portion of ITC earned on		Non-Refundable portion of ITC earned on	
			Current expenditures	Capital expenditures	Current expenditures	Capital expenditures
Canadian controlled private corporations (CCPCs)	Up to your calculated Expenditure Limit*	35%	100%	40%	—	60%
	In excess of your calculated Expenditure Limit*	20%	40%	40%	60%	60%
Other corporations	—	20%	—	—	100%	100%
Proprietorships, partners of a partnership and trusts	—	20%	40%	40%	60%	60%

* The expenditure limit (C\$3 million maximum or US\$3.1 million) is based on the previous year's taxable income and the previous year's taxable capital. The limit is reduced when taxable income is greater than C\$500,000 (US\$512,800) or taxable capital is greater than C\$10 million (USD 10.2 million). The maximum expenditure limit is C\$2 million (US\$2.1 million) for tax years ending prior to 24 February 2008.³

Grants and other incentives

In addition to ITCs for R&D carried out in Canada, federal and provincial governments provide grants and other incentives from time to time. Examples of these other incentives include:

- Enhanced tax credits for research conducted by universities, research centres and other consortia;
- Special tax credits for industries including IT, digital media, video games and film.

³ Historical exchange rate from 1 January 2011 to 31 August 2011: C\$ 1 = US\$ 1.0256 (Source: www.oanda.com)



Chile

According to the Chilean Ministry of Economy, the key to growing national GDP lies in increasing productivity. Therefore, innovation plays an important role. The Chilean Government has set the goal to more than double the investment in Research and Development (R&D) as a percentage of national GDP by 2014, an increase from the current 0.4 percent to approximately 1.0 percent.

A package of legislative initiatives is expected to boost investment in R&D by companies, which currently represents 44 percent of the total R&D investments in the country. The goal is R&D by companies to reach 65 percent (OECD average) of the total R&D investments in the country.

Definition of R&D

Research is defined as the original, planned investigation aimed at attaining new knowledge and a greater understanding in the fields of science and technology, with the expectation to help develop, strengthen or improve the competitive capacity of the country.

Development is defined as the application of the results of research or those of any other type of scientific knowledge for the manufacturing of new materials or products, or for the design of new processes or production systems, as well as for the substantial technological improvement of materials, products, processes or pre-existing systems.

R&D activities include the manifestation of the results of research in a plan/draft, scheme or design, and the creation of initial, not-for-sale prototypes or demo projects, provided that they cannot be converted or utilized for industrial or business purposes.

R&D expense deductions

Chilean law allows companies to deduct the cost of R&D activities for corporate income tax purposes. The corporate income tax rate is 17 percent per annum. In 2011, the corporate income tax rate was temporarily increased to 20 percent. In 2012, the corporate income tax will be decreased to 18.5 percent and is expected to return to 17 percent in 2013.

General expenses related to and necessary for carrying out R&D projects can be deducted in the year in which they were incurred or over which they were over, and for up to six periods in accordance with article 31 n° 11 of the income tax law.

Intellectual property expenses and capital expenses are not deductible..

R&D tax credit

A tax credit equal to 35 percent is allowed for R&D expenses derived from agreements signed with R&D centers registered with the Production Development Corporation (CORFO), a governmental institution that supports entrepreneurs and promotes innovation technology opportunities for the development of the society. This benefit is valid until 31 December 2017.

The portion of the R&D expense that is not credit (65 percent remaining from its total value) can be deducted as a needed expense to produce income, regardless of the taxpayer's business purpose.

Any unused credit may be carried forward indefinitely.

Eligibility requirements

General common requirement for the R&D tax credits:

- The R&D credit applied in a given year may not exceed 15 percent of the annual gross income of the taxpayer and it may not exceed 5,000 Monthly Tributary Units (UTM).¹

Grants and other incentives

Chile provides a number of different governmental grant programs to encourage investment in R&D. These programs are typically governed by CORFO.

Other factors to consider

On 19 January 2012, the Chilean Congress approved legislation to introduce several changes and amendments to rules that provide tax incentives for R&D expenditures. Although the specific implications derived from these changes require careful consideration, the central aspects of these changes are as follows:

- The changes become effective six months after they have been published in the Official Gazette; publication is still pending;
- Within the same six-month period the government shall issue regulations with specific instructions regarding the application of these changes;
- When effective, taxpayers that are currently applying the benefits under the original rules will continue to apply them until the end of that calendar year; thereafter, the taxpayers will have the option to continue applying the benefits under the original rules or under the modified rules;
- The tax credit for payments under a R&D contract with an authorized R&D center will be maintained at 35 percent, but the annual credit deduction limit will be increased to approximately USD 1,250,000 once the legislation become effective;
- In addition, the R&D payments will be extended to in-house R&D activities as well as to payments made to independent contractors;
- A special temporary procedure is included for obtaining partial benefits while an institution is waiting on pending CORFO certification;
- The possibility for requesting a CORFO certification for eligible R&D projects has been extended until 31 December 2025.

¹ 1 UTM = CLP 38,557.00 (September 2011). Historical exchange rate from 1 September 2011, to 23 September 2011:
US\$ 1 = CLP 474.009 (Source: www.oanda.com)



Colombia

Research and Development (R&D) investments in Colombia are being encouraged by the country's economic growth, improvements in public safety issues and a government political planning strategy toward incentives on science, technology and innovations to increase national development.

During the first half of 2011, the Colombian government announced an increase in the science, technology and innovation activities budget to about three times the current annual budget. It is expected that the country's total investments in science, technology and innovation activities will increase from the current 0.16 percent to 0.5 percent of GDP in 2014.

Definition of R&D

In a ruling issued by the administrative department for science, technology and innovation (Colciencias) in 2011, scientific research, technological innovation and technological development are characterized as follows:

- Scientific research: it refers to a cohesive and coherent set of activities aimed at achieving one or more objectives related to the generation or adaptation of knowledge, following a defined methodology;
- Technological innovation: its purpose is to generate, adapt, master and utilize new technology in a region, industry or specific application. This technology must represent a significant advance in the region, industry or its field;
- Technological development: it refers to the application of research results or any other scientific knowledge for the manufacturing of new materials, products, process design, production systems, services and its substantial improvement.

Income tax treatment of R&D

Pursuant to the provisions of the Regulatory Decree of the Income Tax Law (Section 140), the taxpayer may opt to deduct the R&D expenses aimed at obtaining intangibles in the fiscal year in which they occur or amortize them in a term of no more than five years.

Deduction of expenses incurred abroad, particularly those charged by related parties, is restricted. The taxpayer must prove that these expenses are necessary in order to obtain and maintain its taxable income.

Eligible activities

The activities of research, technological development and innovation projects are:

- Software development in Colombia;
- New medical products developed in Colombia;
- Projects for investment in science and technology;
- Donations for projects in science and technology;
- Importing equipment by research and technological institutions that are recognized by Colciencias or educational institutions and universities that are recognized by the Ministry of Education.

Eligible requirements

To receive the benefits on new medical products and software development exemption, the following are required:

- For the development of new medicinal products that have been patented by a competent authority, the new medical products must obtain the corresponding records, permits and licenses from the relevant environmental and health authorities;
- In the case of new software development:
 - The new software has to be produced and/or processed after 27 December 2002;
 - The new software must be produced in Colombia;
 - The new software must be registered with a competent authority;
 - The new software must have high scientific research and/or technological content that must be certified by Colciencias;
 - The new software must be the result of a research project.

In order to benefit from third-party donations (that will be deducted from the company's tax payments) for projects in science and technology carried out by research centers, technological development centers, set up as nonprofit entities or centers, and research groups created by universities, the following are required:

- Previous approval by Colciencias of the project as scientific research, technological innovation and/or a technological development project;
- While the project is being assessed for qualification, Colciencias should consider its environmental impact.

Registration

In order to register a scientific, technological or innovation project at Colciencias, the following are required:

- The project researchers must provide basic information such as their educational background and work experience in the electronic application Curriculum Vitae that is sent to the Science and Technology Directorium (CvLAC);
- The project must be inscribed in Colciencias' Integrated Project Management (SIGP) through the tax incentives digital form;
- All required documents must be attached in the digital form.

The entities that use the value-added tax (IVA) benefits established for importing assets must:

- Allocate imported equipment to the development of projects that qualified as scientific research or technological innovation by Colciencias;

- Fill out an application to qualify the project and attach the documentation as required by the Registration Office in Colciencias;
- The project subject should be developed in the areas of science and technology according to the understanding of the National Science and Technology System (SNCyT);
- Only technological institutions recognized by Colciencias, educational institutions and universities recognized by the Ministry of Education can apply to this incentive;
- Within fifteen days, the qualification as a beneficiary of the exemption must be issued by Colciencias.

R&D expense deductions

The Law states:

- A tax deduction of 175 percent on the project's scientific, technological and innovative value as evaluated and approved by Conciencias. This deduction cannot exceed 40 percent of the company's net income before the deduction of the investment value; however, the difference can be carried forward for the following years. This deduction does not generate taxable income for partners or shareholders;
- The aforementioned deduction excludes the application of depreciation or amortization of assets through the production costs or operating expenses. In addition, the expenditures on capital gains are not subject to this deduction;
- In the case that financial resources for an R&D project are donated, 175 percent of the value of the donation can be deducted. This deduction cannot exceed 40 percent of net income before the deduction of the investment value; however, the difference can be carried forward for the following years;¹
- New software developed in Colombia (software is considered a creation comprised one or more of the following elements: the computer program, the program description and/or the auxiliary material) with a high content of scientific and technological research is exempt from income tax. The incomes obtained in Colombia or abroad are exempt from the income tax for a period of 10 years from 1 January 2003 to 31 December 2012;
- New medicinal products (a medicinal product is a preparation of active ingredients or ingredients present in natural resources, with or without adjuvant and presented in a pharmaceutical form), if deemed sufficiently innovative and use Colombian raw materials, are exempt from the income tax for a period of 10 years from 1 January 2003 to 31 December 2012;
- Imports of certain capital goods for technology projects by non-profit organizations and educational institutions for projects characterized as scientific research, technological innovation and technological development are exempt from IVA.

¹ These incentives will enter into force from fiscal year 2012. For fiscal year 2011, a tax deduction of 125 percent on the value of a project or the value of the donation can be carried forward and it is also subject to depreciation. It cannot exceed 20 percent of the net income before the deduction of the investment value or the donation.

Grants and other incentives

Grants

The Colombian government offers different grants and financial aid to promote scientific research, technological innovation and technological development in the country. The grants include:

- Funding scientific research and technology (debt relief) projects: only legal entities that intend to develop projects whose development does not generate direct economic benefits for said company/legal entity can apply;
- Financing projects for innovation and business development (co-financing modality): legal entities may apply for the funding of innovation projects and technological development to be developed jointly (executor and beneficiary);
- Funding innovative projects and business development (loan repayment): legal entities established in the country may apply for funding for innovative projects and business development through a credit line granted by the Foreign Trade Bank of Colombia (Bancoldex) and Colciencias;
- Financing of patent applications originating in Colombia are to be protected in the country and abroad: natural persons or legal entities with residence in the country and that are interested in obtaining funding for activities related to the protection of intangibles that can be protected through patents may apply for this grant.

Other incentives

Other incentives granted in Colombia to stimulate R&D initiatives in the country are the following:

- Institutions recognized by the Colombian Ministry of Education focused on scientific, technological or innovative project development are exempt from IVA;
- Non-profit organizations and educational institutions such as universities are exempt from income tax under Colombian law;
- Prizes and awards recognized by the Colombian government that are obtained in scientific, literary, journalistic, sports-related and artistic competitions are exempt from the income tax;
- The government also grants tax benefits to individuals who donate to and invest in R&D projects in strategic areas, such as: basic sciences, social sciences and humanities, industrial development, agricultural sciences, environment, housing, education, health, electronics, telecommunications, information technology, biotechnology, mining and energy.



Ecuador

Article 298 of the current Ecuadorian Constitution (approved on 2008) establishes that for the first time, the Ecuadorian Government will promote research through designating a percentage of its general budget.

In December 2010, the Organic Code of Production, Trade and Investments was issued; this code is intended to encourage and support industrial and scientific investigation, as well as innovation and technological transfer.

In Ecuador, there are several potential areas for research development that include environmental, natural resources, biotechnology, agricultural development, health and oceanography sectors, as Ecuador has one of the most diverse environments on the planet.

According to the most recent data census in November 2010, investment in science technology with respect to gross domestic product increased from 0.03 percent in 2003 to 0.55 percent in 2010.

Definition of R&D

For the purposes of the Organic Code of Production, the term “technological research” refers to the structure of instruments, techniques and procedures, by means of the application of the scientific method, that encompass the primary objective of discovering, describing or producing new supplies, equipment or production processes that may enhance an operation’s efficiency or a venture’s earnings.

Main drivers

Ecuador offers an interesting infrastructure in which to develop research in several areas that are considered mega-diversity “hot spots,” including the environment, natural resources, biotechnology, agricultural development, health and oceanography. The country has one of the most diverse natural areas on the planet.

R&D investment growth

Investment in Research and Development (R&D) doubled from US\$ 67 million in 2007 to US\$ 140 million in 2008. In addition, the expenditure in R&D per capita increased from US\$ 11 to US\$ 21 for the same period.

Total R&D investments

In 2008, Ecuador increased R&D investments to 0.25 percent of national GDP from the 0.14 percent in 2006. Almost 90 percent of the R&D investments were funded by the government.

Public initiatives

Ecuador is part of the Ibero-American Program on Science and Technology for Development (CYTED), participating in and promoting research projects in areas such as industrial, global changes, information technology and communications development, among others.

The Ecuadorian government signed a cooperation agreement with the European Organization for Nuclear Research (CERN) to provide scholarships for R&D and increase the numbers of researchers.

The “Prometeo” program is an initiative to attract researchers to contribute to the generation and transfer of scientific knowledge in Ecuador. The program provides economic incentives for foreign and Ecuadorian researchers, such as airfares and stipends for living expenses.

Ecuador

(continued)

The 2009-13 National Plan on Welfare (PNBV) is the government's initiative that aims to improve the quality of higher education and facilitate the transfer of knowledge in science, technology and innovation. The plan aims to promote technological modernization of small- and medium-sized companies, particularly those that work with environmentally friendly technologies, allowing for their progress and increasing their competitiveness. The plan will also invest in human capital, providing equal opportunities and access to technology and knowledge in the ongoing coordination between the state, private enterprise and universities.

R&D focus sectors

In 2008, R&D investments were mainly focused on engineering and technology (44 percent), natural sciences (16 percent), social sciences (12.9 percent), agricultural sciences (12.9 percent), medical and health sciences (nine percent) and the humanities (5.2 percent).

Tax incentives

In December 2010, the Organic Code of Production, Trade and Investments was issued; this code is intended to encourage and support industrial and scientific investigation, as well as innovation and technological transfer.

R&D expense deductions

- For the purposes of calculating income tax advance payments, the amounts that correspond to the acquisition of new assets assigned to technological innovation can be excluded;
- For the purposes of calculating income tax, during a five-year term, medium-sized companies can take an additional 100 percent deduction of the expenses incurred on the following:
 - Technical training addressed to research, development and technological innovation that improves productivity, limited to one percent of salaries and wages for the year in which the benefit was applied;
 - Expenses on the improvement of productivity through the following activities, limited to one percent of the sales: technical assistance for product development that applies research and marketing analysis; technical assistance of professional services contracted to design processes and products; performance and implementation of processes; design of packaging; development of specialized software and other business development services.
- In addition, companies that reinvest their profits in the country may obtain a 10 percent-plus income tax rate deduction on the amount reinvested in productive assets, assigned for the acquisition of goods related to research and technology that improve productivity, generating productive diversification and increasing employment;
- New established companies, new investments, individuals and undivided heritage obliged to maintain accounting are subject to the payment of an advance of income tax after the fifth year of effective operation (i.e. initiation of the process of production and trade).



Mexico

Research and Development (R&D) investment in Mexico has grown in the past years. From 2005 through 2010, the gross expenditures in R&D have oscillated between US\$ 3 billion and US\$ 5 billion per year.

This increase can be explained by the growth of industrial clusters, a higher level of qualified workforce and the influence of foreign R&D investments from Europe, Asia and the United States.

The Mexican government's strategy is to favor policies, programs, actions and projects that are oriented toward converging into a public-private vision that assumes that innovation is an endogenous source for competitiveness, hence the government's higher expenditure in R&D in recent years.

Until 2008, Mexico offered a tax credit for those taxpayers who invested in R&D; however, unlike the current global trend, the government changed its strategy and removed said tax credit, converting those resources into a direct cash incentive for R&D projects.

Definition of R&D

According to the National Science and Technology Council (CONACYT), R&D refers to those activities carried out by a company, preferably in association with universities and research centers, that intend to research, develop and innovate in strategic areas of knowledge. Such activities must have a large impact on national competitiveness, generate new high-value products, produce services and processes, nurture higher-level human resources and contribute to the production chain of a strategic sector of the economy.

Overview of R&D incentives

The function of CONACYT is to administer and evaluate R&D project proposals to be carried out in Mexico. By the end of the first half of the fiscal year, the council publishes the list of selected projects that are entitled to the stimulus and provides each company with the amounts granted in cash by July of the same year.

The program has different objectives on which the selection is based:

- Encourage the annual growth in R&D investment from the private sector in Mexico;
- Promote the linkage between enterprises, universities and research centers in order to generate value for the production chain;
- Instruct and shape human resources to create a highly qualified workforce and allocate them to R&D projects carried out by the private sector;
- Create new high-value products, processes and services that contribute to competitiveness;
- Generate intellectual property;
- Favor the creation of high-quality jobs.

The program has three different approaches:

Innovapyme

INNOVAPYME is oriented to induce small- and medium-sized enterprises (SMEs) to carry out R&D projects in technology that are preferably conducted through the universities and research centers to promote increased competitiveness.

Mexico

(continued)

Proinnova

PROINNOVA targets SMEs and large companies with R&D projects in front-running fields of the industrial sector that foment knowledge flow among universities, research centers and the private sector. The link between the mentioned entities is mandatory in order to be eligible for this approach.

Innovatec

INNOVATEC is intended for entities, regardless of size, that carry out investment in R&D focused on activities oriented toward increasing the entity's competitiveness, the development of research infrastructure, the creation of new high-quality jobs and the stimulation of the country's economic growth. A link with universities and research centers is preferable.

The following table details the potential amounts to be granted for each approach of the program as well as the maximum per project for FY 2011. For FY 2012, an increase of the amounts potentially granted would raise the maximum by 3 – 8 percent:

Approach	Size	Individual project	In association with universities and/or research center		Maximum amount per project (USD) ¹
		% of company's expense	% of company's expense	% of university's and/or research center's expense	
Innovapyme	SMEs	35%	50%	90%	1.76 million
Innovatec	SMEs and large companies	22%	30%	75%	3.03 million
Proinnova	SMEs	Not Applicable	75%	90%	2.27 million
	Large Companies	Not Applicable	50%	90%	2.27 million

Eligibility requirements

In order to be eligible for the aforementioned program, an entity must meet the following main requirements:

- Be duly constituted under Mexican legal provisions;
- Be registered under the National Scientific and Technologic Institutions and Enterprises Registration (REINECYT);
- Present the Research Development and Innovation (RD&I) projects that it intends to develop on the correspondent fiscal year;
- Present a letter, signed by the company's legal representative, attesting that it has cleared federal taxes, does not have debts with CONACYT and that its RD&I projects' information is true;
- Meet the local government's opinion regarding strategic areas.

Registration

The companies postulate for funds through the National Council of Science and Technology website. They must indicate in what approach the company fits and explain the project as such: the domain area, the period that it is supposed to last, the innovation and development that it will bring to the society, the person responsible for it, the possible results and the amount of investment required. The documentation listed below is required:

- Company overview: general information about the company that is applying and all the participating entities;
- Proposal description: complete project description;
- Letter proposing release: document assuring the truth, liability and confidentiality about the information provided and also confirming that the company does not have any debt with the government;

¹ Historical exchange rate from 1 January 2011 to 31 August 2011: US\$ 1 = MXN 11.8952 (Source: www.oanda.com)

- Information competency: document informing if the company is associated with any universities and informing about the team-members' background;
- Collaboration agreement for the project network: an intention and commitment letter from each participant.

R&D expense deductions

Investment or expenditures related with R&D activities are most likely deductible applying the general tax provisions. Depending on the nature, such expenditures can be applied against the tax profit as direct deductible expenses or as a depreciation rate. Notwithstanding the aforementioned, a 100 percent deduction is allowed for investments in assets intended to produce renewable energy.

R&D tax credit

As previously mentioned, since 2008, tax credits for R&D activities have been removed from Mexican tax provisions. The resources formerly granted as tax credits currently finance the R&D programs carried out by CONACYT, which are paid in cash to selected companies.

Grants and other incentives

The Energy Secretariat (SE) and CONACYT established a fund for scientific and technological research on energy sustainability beneficial to universities, research centers and other entities.

The resources for the fund are provided by the Mexican Oil Company (PEMEX) and are calculated every three months as a percentage of PEMEX's total income. The projected balance for FY 2011 was approximately US\$ 80 million and was distributed in a contest in which, after the official announcement, the participants submitted their proposals to the committee in charge of evaluating them and deciding the amount to be distributed to each one.

The fund for energy sustainability is aimed at four different types of projects:

- Applied research: activities related to the development of new knowledge;
- Technology development: universities and/or research centers that work with enterprises in technology development projects (pilot tests, prototypes, etc). In such cases, the enterprises must provide at least 30 percent of the resources for the project's development;
- Technological packages: activities that encourage including a commercial strategy in scientific and/or technological projects, linking research entities to an enterprise partner;
- Technology assimilation: activities aimed at integrating foreign technologies in Mexico. In case there is a partnership between the university/research centers and enterprises, the private player must provide a minimum of 30 percent of the total project cost.

CONACYT provides other R&D investment benefits through the following programs:

- Bilateral technological cooperation: available only for projects carried out between Mexican and French entities, and Mexican and Spanish entities;
- Technological innovation funds: available only for projects carried out by small or medium companies and individuals with enterprise activities;
- Sectoral Innovation Fund (FINNOVA);
- Energy sector funds: Oriented to very specific strategic projects. For FY 2011 there were four main focus areas: Greenhouse gases mitigation, biotechnology, innovative environments and transfer of infrastructure knowledge.



Peru

Research and development (R&D) investment is a key concept for developing countries such as Peru. Nevertheless, apart from Mexico and Brazil, other countries in the Latin-America region have not strongly developed the benefits and incentives for R&D that they offer.

This situation becomes more serious when one considers the subscription to free trade agreements between developed countries and developing ones.

In the case of Peru, free trade agreements have been signed with the US, South Korea, China, Singapore, Canada, Switzerland, Liechthstein, etc. Furthermore, Peru currently has a clear Customs policy; most of the Customs Duties applicable to the importation of capital goods whose development is the result of the investment in R&D done in developed countries have now been reduced to 0 percent.

The aforementioned circumstances reduce the incentives for developing countries to invest in R&D, as it is much easier and cheaper to import already existing technology rather than to invest in R&D to develop technology locally.

As a consequence, most Latin-American countries such as Peru do not have an agenda or tax provisions that regulate specific tax benefits to be applied to R&D investments; they only have a general tax regime.

Definition of R&D	There is no official R&D definition in Peru.
Eligibility requirements	Investments in R&D, depending on the kind of operations, can be qualified as expenditures or costs for tax purposes.
R&D expense deductions	<p>In general terms, unless otherwise stated by the Income Tax Law, corporations are allowed to deduct, for Corporate Income Tax assessing purposes, the expenditures that either:</p> <ul style="list-style-type: none">• Contribute to generating taxable income, even in a potential way;• Contribute to maintaining the source of taxable income. <p>These conditions, known as the Causality Principle, are the requirements that any kind of expenditure must meet in order to be considered deductible for Corporate Income Tax purposes. However, according to the Income Tax Law, some expenditures may be required to accomplish additional requirements to be deducted. Furthermore, the expenditures must be deducted by corporations on a cash-accounting basis.</p>

R&D investment for developing new products

R&D investments are qualified as a deductible cost when the R&D investment is incurred in the development of new products or services, which when traded thereafter, will generate taxable income. In such cases, the R&D investments used for creating new products (i.e., developing and manufacturing new machinery) are recovered in the following way:

- As stocks (inventory), when sold;
- As exploitable fixed assets; its depreciation is accounted as the fixed asset is used to carry out the business activity.

In the above mentioned scenario, the depreciation is applied on a straight-line method under the following annual rates:

- Fixed rate:
 - Five percent for immovable property (building and constructions).
- Maximum rates, as per the following categories:
 - 25 percent for livestock and fishing nets;
 - 20 percent for on-land-transportation vehicles (except trains) and ovens in general;
 - 20 percent for machinery and equipment used for mining, oil and building industries, except movable goods and office equipment;
 - 20 percent for hydropower goods that are part of a hydropower concession;
 - 25 percent for data processing equipment;
 - 10 percent for machinery and equipment acquired after 1 January 1991;
 - 10 percent for other fixed assets.

If by any chance the fixed asset is sold half way of its depreciation, the remaining depreciable value that exists before selling it will qualify as a deductible cost for assessing the income derived from its alienation.

R&D investment for intangibles

If the R&D investment is incurred in developing an auto-generated intangible, the R&D investment will qualify as a deductible expenditure for Corporate Income Tax assessing purposes in the year it was incurred in accordance with the Causality Principle aforementioned.

As a consequence, when such intangible is sold, there will have no cost for assessing the Corporate Income Tax Liability derived from its alienation.

If the R&D investment results in acquiring a limited life intangible, the R&D investment (purchasing price) can either be:

- Fully deducted in the taxable year in which it was incurred;
- Proportionally amortized during a period of no longer than 10 years.

Limited life intangibles are those for which their useful life is limited in nature or by law, such as: patents, copy rights, designs, plans, models, processes, secret formulas and software.

If the aforementioned intangibles are sold, their remaining amortizable value that exists before selling them will qualify as a deductible cost for assessing the income derived from their alienation.

Unlimited life intangibles are not amortizable for Corporate Income Tax purposes.



United States

Since 1981, US Federal Tax law has allowed a non-refundable tax credit for qualified research expenses. This Research and development (R&D) credit provides a tax incentive to taxpayers for performing qualified research in the US to develop a new or improved business component. Its intent is to encourage taxpayers to increase their qualified R&D activities by making the R&D credit available for incremental qualified research expenditures in excess of a base amount. Currently, the R&D credit is equal to 20 percent or 14 percent of incremental qualified research expenditures, depending on the credit calculation method elected by the taxpayer.

The R&D credit has been extended 14 times since it was enacted and was most recently extended for expenses paid or incurred from 1 January 2010 through 31 December 2011.

Definition of R&D

For the purposes of the R&D credit, qualified research is defined as research that satisfies all four parts of a four-part test. Qualified research is research that is:

- Technological in nature: relying on the physical or biological sciences, computer science, or engineering;
- Undertaken to eliminate uncertainty: relating to capability, methodology or product/process design;
- Undertaken for a permitted purpose: relating to function, performance, reliability or quality, as opposed to a cosmetic or aesthetic purpose;
- Consists of a process of experimentation: evaluating one or more alternatives.

A further three tests must be satisfied for the development of internal-use software to be considered as qualified research:

- Innovation test: the software must be innovative in that it is intended to result in an improvement that is substantial and economically significant;
- Significant economic risk test: the software development must involve significant economic risk and uncertainty due to technical risk;
- Commercially available test: the software must not already be commercially available for use by the taxpayer without modifications.

In addition, the research must be conducted in the US, Puerto Rico or a US territory to qualify.

R&D expense deductions

The expenses that may be claimed as Qualified Research Expenditures (QRE) for the R&D credit are limited to:

- (Taxable) wages: incurred in the performance, direct supervision or direct support of qualified research activities;

- Supplies: non-depreciable personal property used or consumed in conducting the qualified research activities;
- Contract research: for contract research conducted on behalf of the taxpayer in instances where the taxpayer is at financial risk, claimable at 65 percent (or 75 percent or 100 percent in certain situations).

R&D tax credit

Calculation

Traditional Method

The R&D credit is equivalent to 20 percent of the current-year QRE less the base amount.

- The base amount is the greater of:
 - The product of the fixed-base percentage and the Average Annual Gross Receipts (AAGR); and
 - 50 percent of the current-year QRE;
- The fixed-base percentage is the ratio of the QRE and gross receipts for the 1984-1988 tax years (base period);
- Start-up company rules may apply if the taxpayer did not exist in the United States in the base period or does not meet certain criteria for qualified research expenditures and gross receipts in the base period;
- Gross receipts of a foreign corporation that are not effectively conducted with a US trade or business are not counted.

The taxpayer can elect to use a second calculation method.

Alternative Simplified Credit (ASC)

The ASC method is effective for tax years ending after 31 December 2006.

It is equal to 14 percent for the tax years that ended after 31 December 2008 (12 percent for those years prior) of the:

- QRE for the tax year in excess of a base amount;
- The base amount is equal to 50 percent of the average QRE for the three preceding tax years;
- For example: ASC equals 14 percent of {current year QRE less 50 percent of the (average QRE for the three preceding tax years)};
- When a taxpayer has no QRE in any one of the three preceding tax years, the R&D credit shall be equal to 6 percent of the QRE for the current year;
- The ASC method must be selected or revoked on a timely filed original tax return.

Reduced credit election

The amount of the R&D credits, regardless of the calculation method, must be added to the taxpayer's taxable income unless an annual election is made to claim a reduced R&D credit (or reduced credit election). The reduced credit permits the taxpayer to reduce the amount of the R&D credit by 35 percent (the maximum corporate tax rate) without any add back to taxable income.

United States

(continued)

In the case of the traditional credit, the net credit rate is effectively equal to 13 percent (i.e., 65 percent of 20 percent) of the current year's qualified research expenses in excess of the base amount. Considering the minimum base amount, the maximum traditional R&D credit is equal to 6.5 percent of total qualified research expenses in the credit year.

In the case of the ASC, the net benefit is effectively equal to 9.1 percent (i.e., 65 percent of 14 percent) of the current-year QREs in excess of the base amount.

Controlled group requirements

If a taxpayer is a member of a controlled group of corporations, or a group of trades or businesses under common control, then the R&D credit must be calculated on a group basis. The R&D credit must then be allocated among members of the controlled group. Non-US entities are included, but as a practical matter, may have little to contribute to the controlled group computation.

Utilizing the Credit

Unused credit may be carried back one year and forward 20 years subject to certain limitations. The credit does not offset AMT liability.

Grants and other incentives

In addition to the federal R&D credit, many state and local jurisdictions in the US provide R&D-related tax incentives, including current tax deductions, credits and exemptions or preferential treatment for property used in R&D activities for the purpose of state and local income, sales and property taxes. A summary of the available state R&D incentives has been provided in this document.

The federal government, and many state and local governments also provide grants to conduct research, and many state and local governments offer favorable loans, tax holidays and other incentives to persuade businesses to choose locations in their jurisdictions.



Venezuela

The Venezuelan Income Tax law (Section 20, Article 27) considers the expenses for Research and development (R&D) effectively paid on the corresponding fiscal term on behalf of the taxpayer as an immediately deductible cost.

Additionally, the R&D matters in Venezuela are treated according to the Organic Law of Science, Technology and Innovation, issued by the Venezuelan National Assembly on 16 December 2010. This law created a para-fiscal contribution to the legal entities that are located in Venezuela that register earnings equal to or more than 100,000 Tributary Units (UT), approximately equal to US\$ 176,744.¹ With the resources acquired from this contribution, a fund for science, technology and innovation was created, which is subject to the approval of the local corresponding authority. The fund can finance scientific, technological and innovative projects done by the contributors of the fund and other entities.

Definition of R&D

For the purposes of the Organic Law of Science, Technology and Innovation, technological innovation is stated as the “scientific, technological and innovative activities and its applications necessary for the social, political and economical development of the country, as well as the necessary activities” (Article 23).

Eligible activities

The R&D activities for technological innovation are innovation projects related with activities that involve the generation of new knowledge or technologies to be used in the country, particularly the ones related to the following areas:

- Substitution of raw materials or parts to reduce the import of such goods;
- Creation of national productive networks;
- Utilization of new technologies to increase the quality of productions units;
- Participation, research and innovation in universities and R&D centers that are related to the incorporation of new technological processes, organizational schemes, etc., and are principally developed to resolve public concerns;
- The technological transfer process;
- Process of scientific research done by universities or research centers;
- Creation of spaces dedicated to scientific and technological research;
- Creation of data bases and free software information systems;
- Promotion and public announcements of scientific and technological programs.

¹ Exchange rate used: US\$ 1 = VEF 4.30 (KPMG Venezuela)

Venezuela

(continued)

Eligibility requirements

The legal entities located in Venezuela that generate, develop and/or transfer scientific, technological and/or cultural knowledge are eligible to benefit from the funds from the science, technology and innovation fund, provided that:

- The petitioners of funds present scientific, technological or innovative projects, plans, programs and/or activities that comply with the catalog of eligible activities specifically stated in Article 27 of the Organic Law of Science, Technology and Innovation;
- The presentation of an annual plan to be presented in the first trimester of each fiscal year;
- The express approbation of the corresponding administrative authority of the proposed R&D plan.

R&D expense deductions stated in the local income tax law

The law states that in order to obtain the net-global taxable income from the taxpayer's gross income, expenses taken with the objective to generate earnings related to R&D expenses effectively paid in the fiscal term are deductible from the entity's taxable income; this deduction is subject to the fulfillment of the following requirements:

- The expenses must be normal, in the sense that they should be customary;
- The expenses must be necessary, in the sense they are strictly needed to produce income;
- The expenses shall be directly related to the generation of income;
- The expenses must be made in a territory of the country.

Grants and other incentives

Notwithstanding the previous tax incentives, the Venezuelan National Government is entitled by Article 36 of the Organic Law of Science, Technology and Innovation, to design and execute different schemes of R&D incentives discretionally, principally in the area of formation and insertion of scientific and technological developers.

Appendix — Canada

The enclosed table provides a summary of the provincial R&D incentives available to taxpayers.

Provinces	Rate	Description
British Colombia	10%	Refundable and non-refundable tax credit foreligible expenditures incurred in British Colombia after 31 August 1999 and before 1 September 2014 by a corporation with a permanent establishment (PE) in the province
Alberta	10%	Refundable tax credit for eligible expendituresincurred in Alberta by a corporation with a PE in the province
Saskatchewan	15%	Refundable tax credit for eligible expendituresincurred in Saskatchewan by a corporation with a PE in the province
Manitoba	20%	Non-refundable and refundable tax credit foreligible expenditures incurred in Manitoba by a corporation with a PE in the province
Ontario Innovation Tax Credit (OITC)	10%	Refundable tax credit for eligible expendituresincurred in Ontario by a corporation with a PE in the province
Ontario Business-Research Institute Tax Credit (OBRICT)	20%	Refundable tax credit for eligible expendituresincurred in Ontario by a corporation with a PE in the province as part of an eligible contract with an eligible research institute
Ontario Research and Development Tax Credit (ORDTC)	4.5%	Non-refundable tax credit for eligible expenditures incurred in Ontario by a corporation with a PE in the province
Québec R&D Wage Tax Credit	Canadian-controlled corporations: 37.5% Others: 17.5%	Refundable tax credit for R&D wages of Québec-based employees of a corporation that carries out business in Canada and performs R&D in Québec, or has such work carried out on its behalf in Québec. The corporation no longer needs to have a PE in Québec This credit is also available for 50% of amounts paid to an unrelated subcontractor for R&D performed by employees in Québec and for 100% of amounts attributed to wages paid to employees of a related subcontractor in Québec
Québec Credit for contract payments to/for R&D entities and projects	35%	Refundable tax credit for contracts and other payments to certain eligible entities (only 80% of payments to unrelated persons are eligible)
New Brunswick	15%	Refundable tax credit for eligibleexpenditures incurred in New Brunswickby a corporation with a PE in theprovince
New Scotia	15%	Refundable tax credit for eligibleexpenditures incurred in Nova Scotia by a corporation with a PE in the province
Newfoundland	15%	Refundable tax credit for eligibleexpenditures incurred in Newfoundlandby a corporation with a PE in theprovince

Appendix — USA

KPMG – US State R&D Corporate Income Tax Credits

QREs: Qualified R&D expenses incurred in 2011

Any tax advice in this communication is not intended or written by KPMG to be used, and cannot be used, by a client or any other person or entity for the purpose of (I) avoiding penalties that may be imposed on any taxpayer or (II) promoting, marketing or recommending to another party any matter addressed herein.

You (and your employees, representatives or agents) may disclose to any and all persons, without limitation, the tax treatment or tax structure, or both, of any transaction described in the associated materials we provide to you, including, but not limited to, any tax opinions, memoranda, or other tax analyses contained in those materials.

The information contained herein is of a general nature and based on authorities that are subject to change. Additional restrictions or limitations may apply and other incentive opportunities may be available. Certain filing requirements or state approvals may be required to qualify for the incentives. Applicability of the information to specific situations should be determined through consultation with your tax adviser.

Provinces	Rate	Description
Arizona	For QREs ≤\$2.5m: 22% (2010) 24% (2011-2017) For QREs >\$2.5m: 13% (2010) 15% (2011-2017)	<ul style="list-style-type: none"> An incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Arizona is available on the QREs that exceed the state's base amount, as defined by the Internal Revenue Code (IRC) section 41(c), for that year. The credit generally is non-refundable, but taxpayers with less than 150 full-time employees may elect to receive a partial refund in lieu of carrying excess credits forward. A separate credit is provided for R&D associated with solar liquid fuel. Also, companies engaged in research activities may qualify for the sales and use tax and other incentives for R&D.
Arkansas	20%	<ul style="list-style-type: none"> A non-refundable, incremental tax credit for "in-house" qualified research conducted in Arkansas is available on the QREs that exceed the base amount for a period of three years and the incremental increase in qualified research expenditures for the following two years. Additional income tax credits are available for qualified businesses engaged in a research area of strategic value or involved in R&D programs sponsored by the Arkansas Science and Technology Authority. Credits also are available for biotechnology research. Companies engaged in research activities may also qualify for other incentives.
California	<ul style="list-style-type: none"> 15% for qualified-business-based R&D (24% for certain R&D) Ranges from 1.49% to 2.48% 	<ul style="list-style-type: none"> A non-refundable, incremental tax credit (which is similar to the federal research credit, in effect on 1 January 2009, with certain modifications) is available for the excess of the current year's qualified R&D conducted in California over the state's base amount. The "traditional" method is = (15% x excess of qualified expenses over a specified percentage of the taxpayer's average annual gross receipts for the four preceding taxable years) + (24% x basic research payments). The alternative incremental credit (AICR) is calculated in a similar manner to the federal AICR.
Colorado	3%	A non-refundable, incremental credit for qualified R&D (as defined by IRC section 174) conducted within a Colorado enterprise zone is available on the average QREs conducted in the same enterprise zone during the previous two tax years. Only 25% of the credit may be used in any year, with the remainder carried forward to subsequent tax years.
Connecticut	<ul style="list-style-type: none"> 1-6% based on the amount of QREs and the size of the company 20% 	<ul style="list-style-type: none"> Non-Incremental Expenditures Credit: A tax credit is available against the Connecticut corporation business tax for the total annual QREs conducted in Connecticut. Eligible expenses are those defined by IRC section 174 (as of 28 May 1993) and basic research payments as defined in IRC section 41 (as of 28 May 1993), and are not funded by the government or a person other than the taxpayer or a person included in a combined return. If the taxpayer cannot claim the credit, it may carry forward the credit or obtain a refund of 65% of the credit value up to US\$1.5 million. Incremental Expenditures Credit: A tax credit is available against the Connecticut corporation business tax for the incremental increase in QREs (as defined by the current IRC section 174) conducted in Connecticut over the preceding year. Qualified small businesses (gross income <US\$70 million) may carry unused credits forward or may obtain a refund of 65% of the credit value. Property tax, the sales and use tax, and other incentives may be available to certain taxpayers.

Provinces	Rate	Description
Delaware	Delaware's R&D credits expired 31 December 2010.	
District of Columbia	No State R&D incentives are currently offered. However, companies engaged in R&D activities may qualify for other incentives available to all industries.	
Florida	Generally 10%, with certain exceptions	Effective for tax years after 2011, credit is allowed in targeted industry businesses for excess QREs, as defined under IRC section 41, over the Florida base amount. Certain R&D expenditures may qualify for the sales and use tax, and other incentives.
Georgia	10%	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Georgia is available on the increased QREs over the Georgia base amount. The Georgia base amount is the product of the taxpayer's gross receipts in Georgia during the current year and the average of the ratios of aggregate qualified R&D expenses to gross receipts in Georgia for the preceding three taxable years, or 0.300, whichever is less. To qualify for the Georgia credit, the taxpayer must be allowed a federal research credit for the same taxable year. Credit may not exceed 50% of Georgia net income tax liability after all other credits have been applied.
Hawaii	Hawaii's credit has expired for years beginning after 2010. Certain R&D costs may qualify for sales and use tax incentives.	
Idaho	5%	A non-refundable, incremental tax credit (which generally follows the federal research credit without regard to alternative incremental methods or alternative simplified methods) for qualified R&D conducted in Idaho is available on the QREs that exceed the Idaho base amount. Certain R&D costs may qualify for the sales and use tax, and other incentives.
Illinois	The Illinois R&D credit applied to expenditures in tax years ending prior to 2011 and has now expired. Certain R&D costs may qualify for the sales and use tax, and other incentives.	
Indiana	For QREs ≤\$1m: 15% For QREs >\$1m: 10%	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Indiana and available on the QREs that exceed the Indiana base amount. For expenses incurred after 31 December 2009, a taxpayer may choose to calculate the credit as 10% of the part of the QRE that exceeds 50% of the average Indiana qualified research expense for the three preceding taxable years. If the taxpayer did not have QREs in any one of those years, the credit is equal to 5% of the Indiana QRE for the year. Certain R&D costs may qualify for sales and use tax incentives.
Iowa	6.5%	A refundable, incremental tax credit is available for the state's apportioned share of basic QREs under IRC section 41(e)(1)(A) and QREs for increasing research activities. The state's apportioned share is equal to the ratio of QRE in Iowa to total QREs. Alternatively, the credit may be calculated using the AICR in IRC section 41(c)(4), regardless of the method used on the federal return. Certain R&D costs may qualify for sales and use tax incentives, and other incentives.
Kansas	6.5%	A non-refundable, incremental tax credit for qualified R&D conducted in Kansas is available. QREs generally are R&D expenditures that are deductible under the IRC. The credit is available on the QREs that exceed the state's base amount, which is defined as the average of expenditures made in the tax year and the two preceding tax years.
Kentucky	5%	A non-refundable tax credit is available for the cost of construction of research facilities within Kentucky. Allowable costs include constructing, remodeling and equipping facilities in the state for "qualified research," as defined by IRC section 41. Note: Kentucky conforms with the IRC as of 12 December 2006.
Louisiana	<ul style="list-style-type: none"> • 8% for 100+ LA residents employed • 20% for 50-99 LA residents employed • 40% for <50 LA residents employed 	A taxpayer that employs more than 50 persons may qualify for a refundable, incremental credit for the state's apportioned share of QREs for increasing research activities (i.e., excess of current year's QRE over base amount) that would qualify for the federal research credit if the taxpayer claims a federal credit under IRC section 41(a). Taxpayers who employ less than 50 persons may claim a credit for QREs even if they did not take a federal credit. The Louisiana base amount is 70% of the average annual qualified R&D expenses within Louisiana during the three years preceding the taxable year. Certain R&D costs may qualify for sales and use or property tax incentives.
Maine	5% Incremental expenses <i>plus</i> 7.5% Basic research payments	Maine's R&D credit generally conforms with the IRC as of 31 December 1994. The credit is equal to the sum of 5% of the excess of QRE over the base amount and 7.5% of the basic research payments. The term "base amount" means the average spent on QRE over the three preceding years.

Appendix — USA

(continued)

Provinces	Rate	Description
Maryland	<ul style="list-style-type: none"> 3% Basic R&D Credit 10% Growth R&D Credit 	<p>A non-refundable tax credit is available to businesses conducting qualified R&D, as defined in IRC section 41(d), in Maryland.</p> <ul style="list-style-type: none"> Basic R&D Credit: Based on the current year QRE, not exceeding the Maryland base amount. The base amount is the average annual gross receipts for the four preceding tax years multiplied by the Maryland base percentage. In general, the Maryland base percentage is defined as Maryland R&D expenses as a percent of the total gross receipts for the preceding four years. Growth R&D Credit: Based on the increased QREs over the average for the last four years for expenses that exceed the Maryland base amount. Certain R&D costs may qualify for sales and use tax incentives, property tax incentives or other (non-tax) incentives.
Massachusetts	<ul style="list-style-type: none"> 10% incremental R&D credit <p>plus</p> <ul style="list-style-type: none"> 15% basic research payments 	<p>Massachusetts R&D credit generally conforms to the IRC as of 12 August 1991. A non-refundable tax credit is available to businesses conducting qualified research activities in Massachusetts. In general, the credit is:</p> <ul style="list-style-type: none"> 10% of the excess of QREs over the base amount; and 15% for basic research payments determined under IRC section 41(e)(1)(A) (i.e., to hospitals or universities). <p>The credit is limited to 100% of a corporation's first US\$25,000 of tax, determined before allowance of any credits, plus 75% of the tax in excess of US\$25,000. Certain R&D costs may qualify for the sales and use or other (non-tax) incentives.</p>
Michigan	1.90%	<p>A non-refundable tax credit (which generally follows the federal research credit) for qualified R&D conducted in Michigan. The credit for R&D combined with the total combined compensation and investment credit cannot exceed 65% of Michigan business tax liability. The credit ended 31 December 2011. An additional, refundable credit of 3.9% of compensation for services performed in a qualifying facility (limited to US\$2 million in a single tax year) is allowed for taxpayers engaged in R&D of a hybrid system, the primary purpose of which is propelling a motor vehicle. Certain R&D expenditures may qualify for other income tax, sales and use tax, property tax or other (non-tax) incentives.</p> <p>Note: Michigan conforms with the IRC as of 1 January 2008.</p>
Minnesota	<p>Excess QRE ≤ \$2m: 5%</p> <p>Excess QRE > \$2m: 2.5%</p>	<p>A non-refundable, incremental tax credit is available for QRE, as defined in IRC section 41(b), conducted in Minnesota. The credit is available on the QREs that exceed the Minnesota base amount for that year. Certain R&D expenditures may qualify for other income tax, sales and use tax, property tax or other (non-tax) incentives.</p>
Mississippi	No state credits for general R&D expenses are currently offered. A non-refundable credit may be available for creating jobs that require R&D skills (i.e., chemist, engineer, etc). Income tax and franchise tax credits may be available for companies engaged in R&D of clean energy and aerospace products.	
Missouri	No state credits for general R&D expenses are currently offered. However, certain R&D expenditures may qualify for sales and use tax incentives, and other (non-tax) incentives.	
Montana	The Montana R&D credit expired on 31 December 2010. Certain R&D expenditures may qualify for other tax and non-tax incentives.	
Nebraska	<p>15% of the federal credit attributable to Nebraska research;</p> <p>or</p> <p>35% of the federal credit attributable to Nebraska research for firms making expenditures in R&D activities on a college or university campus in Nebraska.</p>	<p>A refundable, incremental tax credit is available for qualified QRE (defined in IRC section 174) conducted in Nebraska.</p>
Nevada	Nevada does not impose income taxes.	

Provinces	Rate	Description
New Hampshire	10%	A non-refundable, incremental tax credit (which generally follows the federal research credits) for qualified R&D conducted in New Hampshire is available on QREs over the New Hampshire base amount, up to a maximum credit of US\$50,000 in each tax year. Note: New Hampshire conforms with the IRC as of 31 December 2000.
New Jersey	10% Incremental expenses <i>plus</i> 10% Basic research payments	A non-refundable, incremental tax credit available for qualified R&D activities conducted in New Jersey. In general, the credit is: <ul style="list-style-type: none">• 10% of the incremental increase in QREs over the New Jersey base amount; and• 10% for basic R&D payments. The amount of the credit is limited to 50% of the total tax liability and cannot reduce the tax liability below the statutory minimum.
New Mexico		Credit is provided only for qualifying small businesses (<US\$5 million total revenues and <25 full-time employees) and military transformational acquisition programs.
New York	<ul style="list-style-type: none">• 50% federal R&D credit• 18% of basis of R&D property acquired; 9% QRE; 100% training costs (capped at US\$4,000/employee)	<ul style="list-style-type: none">• The Excelsior R&D tax credit is one of four components of New York's jobs program. The R&D credit is equal to 50% of federal R&D credit (10% prior to 1 April 2011), capped at 3% of qualified R&D expenditures attributable to New York.• For eligible small (<US\$20 million gross revenues) emerging technology companies, a credit of 18% of the cost of R&D property acquired and placed in service plus 9% QRE plus 100% of training expenses (limited to US\$4,000/employee) is available.
North Carolina	<ul style="list-style-type: none">• For QREs ≤US\$50m: 25%• For QREs US\$50m-US\$200m: 25%• For QREs >US\$200m: 25%	The North Carolina non-refundable tax credit is based on a percentage of the QREs incurred by a taxpayer conducting qualified R&D in North Carolina. The credit is limited to 50% of the amount of tax against which it is claimed, reduced by other tax credits. Certain R&D expenditures may be eligible for the sales and use tax incentive, or other (non-tax) incentives.
North Dakota	25% for the first US\$100,000 of QREs in excess of the base amount <i>plus</i> 20% for QREs in excess of the base amount >US\$100,000 (8% if the taxpayers began R&D activities in North Dakota in the fifth or subsequent tax year beginning after 2007; 18% of the taxpayers earned or claimed an R&D credit in North Dakota before 2007).	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in North Dakota is available on the QREs that exceed the North Dakota base amount for that year. The credit is capped at US\$2 million/year.
Ohio	7%	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Ohio is available on the QREs that exceed the Ohio base amount for that year. The Ohio base amount is the taxpayer's average annual QRE incurred in Ohio for the preceding three tax years. Certain R&D expenditures may be eligible for sales and use tax or other (non-tax) incentives.
Oklahoma	US\$500/new employee	A credit of US\$500 is available for each new employee (not replacing a pre-existing employee) engaged in R&D in a given tax year. Employees must be paid wages or a salary of at least US\$35,000 during each year the credit is claimed. The credit is limited to a maximum of 50 new employees and must derive 50% of revenue from out-of-state purchasers. Qualified entities must be engaged primarily in R&D as defined under Industrial Group Numbers 8731, 8732, 8733 and 8734 of the SIC Manual. Certain R&D expenditures may qualify for sales and use tax incentives.

Appendix — USA

(continued)

Provinces	Rate	Description
Oregon	<ul style="list-style-type: none"> 5% 5% 	<ul style="list-style-type: none"> A non-refundable, incremental credit (which generally follows the federal research credit without regard for the AICR) is available for qualified R&D conducted in Oregon. The maximum credit may not exceed US\$2 million (US\$1 million for years beginning after 31 December 2011). Alternatively, a credit is allowed that is equal to 5% of the amount by which the QREs exceed 10% of sales in Oregon. The credit may not exceed US\$10,000 multiplied by the number of percentage points by which the qualifying R&D expenses exceed 10% of sales in Oregon. The maximum credit may not exceed US\$1 million. <p>Note: A taxpayer may elect to claim either of these credits, but not both in the same tax year. Taxpayers engaged in R&D also may be eligible for other (non-tax) incentives.</p>
Pennsylvania	10% Large companies. 20% small companies (net book assets < US\$5 million)	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Pennsylvania is available on the QREs that exceed the Pennsylvania base amount. Taxpayers engaged in R&D may also qualify for the sales and use tax, and other tax and non-tax incentives.
Rhode Island	22.5% for the first US\$25,000 of credit (or first US\$111,111 of excess QRE) <i>and</i> 16.9% for credit >US\$25,000 (or for QRE >US\$111,111)	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Rhode Island is available on the QREs that exceed the Rhode Island base amount for that year. Credit cannot reduce tax due by >50% of the tax liability otherwise payable or to less than the minimum tax. Taxpayers engaged in R&D may also be eligible for income tax credits for the purchase of certain depreciable property (including buildings) and sales and use tax incentives for qualifying equipment.
South Carolina	5%	A non-refundable credit (which generally follows the federal research credit) is available for qualified R&D conducted in South Carolina. The taxpayer must claim federal R&D credit to be eligible for the state credit. The credit may not exceed 50% of the taxpayer's remaining tax liability after all other credits have been applied. An additional 25% credit is available for QREs for feedstock and processes for cellulosic ethanol waste grease-derived biodiesel and for algae-derived biodiesel. (The ethanol and biodiesel R&D credit expires 31 December 2011). Property tax exemptions may apply for facilities of new enterprises and additions valued at US\$50,000 or more to existing facilities of companies engaged in R&D.
South Dakota	South Dakota does not impose corporate income taxes. Certain small businesses engaged in R&D may qualify for non-tax incentives.	
Tennessee	Generally US\$5,000 per job created	Qualified taxpayers engaged in R&D may be eligible for a credit on capital investment and on the creation of new jobs. The business must create at least 25 new full-time jobs (paying at least 150% of the Tennessee average occupational wage) and make a capital investment of at least US\$500,000. Additional credits may be provided depending on the level of investment and number of jobs created.
Texas	The Texas R&D credit was repealed effective 1 January 2008.	
Utah	5% of QREs in excess of the base amount plus an additional 9.2% of QREs for the current year	A non-refundable, incremental tax credit (which generally follows the federal research credit without regard to the AICR) for qualified R&D conducted in Utah is available on the QREs that exceed the Utah base amount. Sales of semiconductor R&D materials, including parts used in repairing or renovating the materials, are exempt from the sales and use tax.
Vermont	30%	A non-refundable, incremental credit (which generally follows the federal research credit) is available for qualified R&D conducted in Vermont. The credit equals 30% of the amount of the federal tax credit allowed for eligible R&E under IRC section 41(a) and that are made in Vermont.

Provinces	Rate	Description
Virginia	<ul style="list-style-type: none"> 15% of first US\$167,000 in Virginia QRE; <p>or</p> <ul style="list-style-type: none"> 20% of first US\$175,000 in Virginia QRE if the R&D is conducted in conjunction with a Virginia public or private college or university, to the extent the expenses exceed the Virginia base amount 	A non-refundable, incremental tax credit (which generally follows the federal research credit) for qualified R&D conducted in Virginia. The Virginia base amount generally is determined by calculating the percentage of the total gross receipts of the Virginia QRE for the three taxable years immediately preceding the current year (instead of a “fixed-base percentage”). Sales and use tax exemptions may also be available for certain R&D purchases.
Washington	Washington does not impose corporate income taxes. A non-refundable credit is available against the Washington Business and Occupation (B&O) Tax for certain high-technology R&D activities when QREs exceed 0.92% of taxable income for the year. The credit may not exceed the lesser of US\$2 million and the tax otherwise due. A non-refundable credit against the B&O tax is available for certain aerospace product development expenditures equal to 1.5% of qualified aerospace product development expenditures. Eligible businesses that create new jobs may qualify for a B&O credit in rural counties or in a community empowerment zone. Certain R&D expenditures also may qualify for sales and use tax incentives.	
West Virginia	<p>The greater of:</p> <p>(i) 3% of the annual QREs;</p> <p>or</p> <p>(ii) 10% of the excess QREs over the base amount.</p>	A non-refundable credit is available for taxpayers conducting qualified R&D in West Virginia. West Virginia provides its own definitions that often differ from the federal definitions. For example, this credit is based on qualified research “expenditures,” which equal the applicable percentage of depreciable property purchased for R&D plus the amount of QRE deducted by the taxpayer for federal income tax purposes. The base amount generally is the average annual qualified R&D expenditures for the three taxable years immediately preceding the taxable year. Other definitions may also vary from the federal definitions. The credit may not exceed US\$2 million. Additional corporate income tax credits are available for businesses engaged in science- and technology-related R&D in a designated high-tech research zone, park or technology center, for certain developers of patents for use in a manufacturing process or product, and for use of patents in a manufacturing process or product in West Virginia that was developed in the state. Certain purchases of tangible personal property and services used or consumed in R&D may be exempt from sales tax.
Wisconsin	5%	A non-refundable, incremental credit (which generally follows the federal research credit except that QRE does not include compensation used in computing the development zones credits) is available for qualified R&D conducted in Wisconsin. A taxpayer can elect the alternative computation method under IRC section 41(c)(4). A “Super R&D Credit” is available for up to the amount by which Wisconsin QREs exceed the average amount of QRE paid or incurred in the three preceding years multiplied by 1.25. A credit may also be claimed for new or expanded R&D facilities in Wisconsin generally equal to 5% of the amount paid or incurred to construct and equip new facilities or to expand existing facilities used for qualified R&D in Wisconsin. An enhanced credit also may be available for taxpayers engaged in certain vehicle-related or energy efficiency research.
Wyoming	Wyoming does not impose income taxes. Taxpayers engaged in R&D activities in Wyoming may be eligible for other (non-tax) incentives.	

KPMG's Global R&D Incentives Services

KPMG has established a Global R&D Incentives Services practice with a coordinated network of experienced R&D incentives specialists located in various member firms around the world, including the Americas region. Addressing local issues, but with a global mindset, the mission of the practice is to assist KPMG member firms' clients in taking advantage of R&D-related incentives and benefits that are available at a global level.

Our network of specialists assist member firm clients in obtaining tax savings related to their R&D investments in various countries. They perform coordinated multi-country R&D incentive reviews and analyses, and think beyond tax to provide help member firms' clients with insightful business advice.

Decisions on where to conduct R&D activities involve many factors, including the availability of the necessary talent and the relative costs of labor, materials and facilities. In addition, the available R&D incentives and the impact of R&D costs on other available tax benefits may play a significant role in evaluating the after-tax cost of performing R&D in one country versus another.

Accordingly, our Global R&D Incentives teams work with our network of international tax specialists to assist our member firms' clients with taxation issues that arise from:

- Cross-border R&D arrangements;
- Transfer pricing;
- Intellectual property situs and transfers;
- Withholding taxes;
- Foreign tax credits;
- Duties and tariffs.

KPMG's network enables it to assist member firms' clients in creating long-lasting value by evaluating both the available R&D incentives and the impact of R&D costs on other available tax benefits.



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