RESEARCH

IN CANADA

A Summary of R&D Tax Incentives in Canada

The Advantages of Doing Research in Canada

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Canadian Embassy, Berlin. Science & Technology Section
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Saving On R&D Expenditures

Promoting innovation is one of the most important tasks for any industrial society.
Over the last 30 years, Canada has developed an extensive programme of tax incentives for scientific research and development. Both the Canadian federal government and the individual provinces allow businesses to save on R&D costs if they conduct them in Canada.
The federal R&D tax treatment now includes an immediate write-off of both current costs and R&D machinery and equipment costs, as well as a 20% tax credit. The rate of R&D tax credit increases to 35% for small companies.
These federal provisions have been generously strengthened by provincial R&D tax incentives. Today, nine of ten Canadian provinces offer their own incentive packages, relying mainly on tax credits.
The tax credits significantly reduce the net cost of doing R&D in Canada and are designed to encourage risk-taking.
The result: The net after-tax cost of R&D expenditures ranges between 35 and 50 cents per dollar spent, depending on the type of corporation and the province where the R&D is conducted.
The Canadian tax incentives are considered to be the most generous among the G-7 nations.[1]

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[1] *http://www.csiic.ca/pdf/cbinnobenchreport.pdf*

This booklet introduces the federal and provincial incentives for R&D and provides examples of how the calculations work for different companies.

The Canadian R&D tax incentive program is referred to as the "Scientific Research and Experimental Development Program – SR&ED". The program is very popular among companies that conduct research and development in Canada. It is used by over 11,000 companies. The funds allocated to it account for 65% of all federal assistance for research and development and amount to over $1.5 billion a year. For further information, please contact the Economic and Commercial Section at the Canadian Embassy, Berlin (see contact addresses on page 17).

Canadian Corporate Taxes

Taxes in Canada are levied by the three levels of government: federal, provincial and municipal. However, only the federal and provincial governments have corporate taxes. A municipal corporate tax, such as the German "Gewerbeertragssteuer", does not exist in Canada. To calculate the corporate tax payable, a company simply adds the federal and provincial rates together.

Federal Corporate Tax Rates

In order to keep Canada's business tax system internationally competitive, Canada has been gradually reducing federal corporate tax rates over a period of 5 years. The current federal corporate tax rate for large industries is 21%. There is also a 1.12% surcharge, making the total rate 22.12%. As of January 2008, this surcharge will be eliminated, reducing the federal rate to 21%. Further deductions will lower the federal corporate tax rate to 19% in 2010.

These reductions, coupled with reductions in some provincial corporate taxation rates, mean that average corporate tax rates in Canada are currently below average U.S. tax rates[2] – and will be more than 6 percentage points lower by 2008. Details of provincial tax rates are given later in this booklet.

Small, Canadian-controlled Private Corporations

Small, Canadian-controlled private corporations are given preferential tax treatment, with a federal corporate income tax rate of 13.12% in total. By definition, a private corporation does not have its shares listed on a stock exchange.

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2 *The Canadian Tax Advantage, August 2003, see Finance Canada's website under http://www.fin.gc.ca/toce/2003/cantaxadv_e.html*

The definition of a small, Canadian-controlled private corporation is[3]:
- minimum 50% Canadian ownership
- maximum between $300,000 and $475,000 net income depending on the province
- maximum taxable capital of $10 million.

The Tax Incentives[4,5]

The Federal Government of Canada encourages R&D in Canada through the use of tax incentives. These incentives can function either as tax deductions or as tax credits. Under certain circumstances, the tax credits are refundable (paid out).

What type of R&D is eligible?

CRA, the Canada Revenue Agency, defines eligible R&D costs as follows:
- R&D must demonstrate scientific or technological advancement. It must involve experimentation or analysis beyond standard practice and it must 'push the barriers'.
- R&D must focus on areas of scientific or technological uncertainty where it is unclear whether, or how, the goals can be achieved.
- R&D must have scientific and technical content as evidenced by systematic, well-documented investigation, carried out by qualified personnel with relevant experience.

For example, the following activities may qualify for R&D benefits in Canada:
- new product development
- development of new or improved materials
- manufacturing process improvement
- software development
- clinical trials of new drugs or medical devices.

Research which is not eligible includes
- market research or sales promotion
- quality control or routine testing of materials, devices, products or processes
- research in the social sciences or humanities
- prospecting, exploring or drilling for, or producing, minerals, petroleum or natural gas

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[3] *In Québec a slightly different definition is used.*

[4] *"An Information Guide to the Scientific Research and Experimental Development Tax Incentive Program", T4052 (E).*

[5] *"R&D in Ontario – Incentives for Innovation", Ontario Investment Service 2004, see http//www.2ontario.com/software/RD.pdf*

- the commercial production of a new or improved material, device or product or the commercial use of a new or improved process
- style changes
- routine data collection.

The definition of R&D in Canada is consistent with the internationally accepted definition used by the Organization for Economic Co-operation and Development (OECD).

Which R&D expenses are eligible?

The following is a comparison of the R&D-related costs which are eligible for tax incentives in Canada and in the USA:

	Canada	USA
Wages & Salaries	yes	yes
Capital Equipment	yes	no
Materials	yes	yes
Overhead	yes	no
All Contracted Research	yes	65%

Expenditures not eligible for tax incentives are:

- capital expenditures for the acquisition of land or buildings
- purchase of used equipment
- current expenditures for related rental or leasehold payments
- expenditures made to acquire rights in, or arising out of, scientific research and experimental development.

The tax incentives do not apply only to in-house R&D that is financed by a Canadian corporation. For example:

- A Canadian corporation can claim tax incentives even if its R&D costs are covered, in whole or in part, by payments from <u>a foreign corporation or government</u>.
- The Canadian subsidiary could do R&D under contract for its foreign parent and still claim the tax credits.
- A foreign corporation paying for R&D done by an unrelated Canadian company will benefit from lower costs due to the tax incentive provided to the Canadian contractee.

The definition of R&D work that is eligible for tax incentives is set by the Federal Government and is used by all the provinces.
All provinces support R&D through income tax deductions. Additional tax incentives for R&D are offered by nine provinces (British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, Québec and Saskatchewan). The combined federal and provincial tax support is widely recognised as among the most favourable in the world.

How are the tax incentives calculated?

A number of factors influence the rates at which the R&D tax incentives are calculated. These factors include:

- the type of corporation (for example a large public or foreign corporation as compared to a Canadian-controlled private corporation)
- the amount of eligible expenditures (there are limits for the enriched rates)
- the taxable income (this determines whether a corporation is large or small)
- the amount of taxable capital employed in Canada.

The R&D tax incentives consist of two components: tax credits and tax deductions.

Tax credits can be either refundable, which means they are paid out regardless of the level of taxes the company has to pay, or they can be non-refundable, that is, they can only be used to reduce the level of taxes a corporation has to pay. Note that both the Federal and Provincial Governments have formulas that are used to calculate the amount of the refundable tax credit.

Tax deductions can be claimed for all eligible R&D expenditures. Depending on the province and the goals of the company, these deductions can be claimed over an extended time period.

A number of sample calculations follow demonstrating how the after-tax cost of doing R&D in Canada can be calculated.

Case Studies

The following is a sample calculation to determine the after-tax cost of doing $100 of R&D. Since any calculation is province-specific, the province of Nova Scotia will be used as an example.[6] For a different province, use the tables supplied on the following pages. Québec and Ontario have added incentives and these are described on pages 13 to 15.

Large Public/Foreign-controlled Corporation

Thus, for every $100 dollars of eligible R&D expenditure, a large, public or foreign-controlled Canadian corporation first deducts the tax credits for the province in which it is located. In the case of Nova Scotia, this is 15%. The federal authorities then grant tax credits on the reduced sum, at a rate of 20%.

The remainder (A-B-C) can be used to reduce the amount of payable tax. These savings arise from the federal corporate income tax of 22.12% and the provincial corporate tax rate of 16%. Thus, the total savings amount to $57.92 – and the real cost of the R&D work is only $42.08.

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[6] *"Doing R&D in Nova Scotia, Canada – The Tax Benefits", Ernst & Young, pg. 7 – 8.*

		Expenditures
$100 spent on qualifying scientific research and experimental development	(A)	$100.00
Tax Credits		
Provincial (Nova Scotia) {A x 15%}	(B)	15.00
Federal {(A-B) x 20%}	(C)	17.00
Tax benefits due to writing-off of R&D costs:		
Federal tax savings {(A-B-C) x 22.12%}	(D)	15.04
Provincial (Nova Scotia) tax savings {(A-B-C) x 16%}	(E)	10.88
Net R&D after-tax cost (A-B-C-D-E)		**$ 42.08**

Notes: The provincial tax credit rates for large public/foreign-controlled corporations are as follows:

Province	Rate	Refund?	Province	Rate	Refund?
Nova Scotia	15%	yes	Alberta	–	–
British Columbia	10%	no	Prince Edward Island*	35%	yes
New Brunswick	15%	yes	Manitoba	20%	no
Newfoundland	15%	yes	Ontario**	–	–
Saskatchewan	15%	no	Québec***	17.5%	yes
Northwest Territories	–	–	Yukon	15%	yes
Nunavut	–	–			

* Prince Edward Island offers an innovation and development tax credit separate from the federal program. This credit is for salaries (150% of expenditures) and is limited to two years.

** Ontario does not levy a provincial corporate tax on the federal tax credit. (See section on Ontario.)

*** The Québec tax credit is calculated only on the salary portion of the expenditures. (See section on Québec.)

The federal corporate tax rate for large corporations is 22.12%. In 2008 it will be 21% and 19% in 2010.

As of April 2005, the provincial corporate tax rates for large non-manufacturing corporations are as follows:

Province	Rate	Province	Rate
Nova Scotia	16.0%	Alberta	10.0%
British Columbia	12.0%	Prince Edward Island	16.0%
New Brunswick	13.0%	Manitoba	14.5%
Newfoundland	14.0%	Ontario	14.0%
Saskatchewan	14.0%	Québec	9.9%
Northwest Territories	14.0%	Yukon	15.0%
Nunavut	12.0%		

The comparable rates for large manufacturing corporations are:

Province	Rate	Province	Rate
Nova Scotia	16.0%	Alberta	10.0%
British Columbia	12.0%	Prince Edward Island	16.0%
New Brunswick	13.0%	Manitoba	14.5%
Newfoundland	5.0%	Ontario	12.0%
Saskatchewan	10.0%	Québec	9.9%
Northwest Territories	11.5%	Yukon	2.5%
Nunavut	12.0%		

Small, Canadian-Controlled Private Corporations

As outlined above, small, Canadian-controlled private corporations are given preferential treatment for federal and, in some cases, for provincial corporate income taxes, as well as higher tax credits for R&D. The calculation for $100 of R&D work done by a small, Canadian-controlled private corporation is as follows (see page 12):

Because the overall tax burden of a small, Canadian-controlled private corporation is lower than that of a large corporation, their savings through tax writeoffs are lower.

		Expenditures
$100 spent on qualifying scientific research and experimental development	(A)	$100.00
Tax Credits		
Provincial (Nova Scotia) {A x 15%}	(B)	15.00
Federal {(A-B) x 35%}	(C)	29.75
Tax benefits due to writing-off of R&D costs:		
Federal tax savings {(A-B-C) x 13.12%}	(D)	7.25
Provincial (Nova Scotia) tax savings {(A-B-C) x 5%}	(E)	2.76
Net R&D after-tax cost (A-B-C-D-E)		**$ 45.24**

Notes: The provincial tax credit rates for small, Canadian-controlled private corporations are as follows:

Province	Rate	Refund?	Province	Rate	Refund?
Nova Scotia	15%	yes	Alberta	–	–
British Columbia	10%	yes	Prince Edward Island*	35%	yes
New Brunswick	15%	yes	Manitoba	20%	no
Newfoundland	15%	yes	Ontario**	10%	yes
Saskatchewan	15%	no	Québec***	37.5%	yes
Northwest Territories	–	–	Yukon	15%	yes
Nunavut	–	–			

* Prince Edward Island offers an innovation and development tax credit separate from the federal program. This credit is for salaries (150% of expenditures) and is limited to two years.

** Ontario offers an Innovation Tax Credit for small and medium-sized enterprises. (See section on Ontario.)

*** The Québec tax credit is calculated only on the salary portion of the expenditures. (See section on Québec.)

The federal tax credit for small, Canadian-controlled private corporations is refundable.

The federal corporate tax rate for small, Canadian-controlled private corporations is 13.12% (for both the manufacturing and non-manufacturing sectors).

The provincial corporate tax rates for small, Canadian-controlled private corporations are as follows:

Province	Rate	Province	Rate
Nova Scotia	5.0%	Alberta	3.0%
British Columbia	4.5%	Prince Edward Island	4.3%
New Brunswick	1.5%	Manitoba	4.5%
Newfoundland	5.0%	Ontario	5.5%
Saskatchewan	5.0%	Québec	8.0%
Northwest Territories	4.0%	Yukon	4.0%
Nunavut	4.0%		

Some Details

Deferring Write-offs

R&D write-offs and tax credits can be deferred in Canada – unlike, for example, in the U.S. This means that the Canadian company does not need to take the deductions in the year they are incurred. Depending on the accounting practices of the company and whether the expenditure is defined as current or capital, the R&D expenditures can be:

- carried backward up to 3 years or carried forward up to 10 years if the deductions result in a noncapital loss for a given year, or
- carried forward indefinitely on the books before being claimed.

This flexibility in deferring the R&D write-offs was designed to benefit companies that invest heavily in R&D in the years shortly after start-up and need the tax deductions in the years they make a profit.

Structuring R&D Investments

Foreign and Canadian companies can benefit from R&D incentives under a variety of scenarios:

- A foreign parent contracts its Canadian subsidiary to do R&D.
- A Canadian subsidiary of a foreign company undertakes R&D on its own.
- A foreign company contracts an unassociated Canadian company to do R&D on its behalf.
- A foreign company sets up or acquires a minority interest in a Canadian-controlled private corporation.

R&D projects can be structured to suit the needs of the companies involved, without affecting their access to R&D incentives.

Conditions for Small, Canadian-controlled Private Corporations

Small, Canadian-controlled private corporations are preferentially treated in the following ways:

- The tax credit increases from 20% to 35% on the first $2 million of R&D each year. The enhanced 35% rate gradually decreases to the usual 20% rate when taxable income is between $300,000 and $475,000.
- Some provinces have added incentives.
- Tax credits are wholly or partly refundable in cash. Current expenditures are refundable up to 100%, whereas capital expenditures are refundable up to 40%.

Québec-Specific Incentives[7]

Québec offers companies doing R&D in Québec a tax credit similar to that of the other provinces, but with the following differences:

- For a Canadian-controlled private or public corporation having assets of $50,000,000 or less, the credit is 37.5% for the first $2,000,000 of <u>annual wages paid in Québec</u>.
- This reduces linearly for assets totalling between $50,000,000 and $75,000,000 to 17.5%.
- The tax credit is refundable for all companies.

• Contract R&D

Corporations entering into a R&D contract with an eligible Québec research institute, or commencing a pre-competitive research project, are eligible for a 35% refundable tax credit. To qualify for that tax credit, corporations must obtain an advance tax ruling from the Ministry of Revenue regarding the contract.

• Employing foreign researchers and other experts

Foreign individuals who have expertise in certain specialized areas of activity and who settle in Québec to work are entitled to a tax holiday. The tax holiday is in the form of a tax exemption for a maximum of five consecutive years on a portion of the salary received by these individuals. Therefore, in computing their income, such individuals may deduct 100% of their salary for the first and second years, 75% for the third year, 50% for the fourth year and 25% for the fifth year.

The following researchers and specialists, who are not resident in Canada immediately before their employment contract is signed, are entitled to the tax holiday:

- A researcher specialized in pure or applied sciences who works for a person carrying on a business in Canada and who performs R&D in Québec;
- A specialist either in the field of management or financing of innovation activities or in the marketing abroad or transfer of the latest technology, who

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7 *http://www.investquebec.com/documents/en/publications/Fiscalite-QC2006_EN.pdf*

is working for a person carrying on a business in Canada and performing R&D in Québec.

Further tax credit programs are available for specific sectors, such as biotechnology. Check with the Quebec offices for more information (see page 17 – 18).

Ontario-Specific Incentives [8]

- **Ontario Innovation Tax Credit**

A 10%, fully refundable tax credit is available to small and medium-sized corporations (public, private, foreign-owned or Canadian-controlled private corporations) with annual R&D expenditures of less than $2,000,000. The corporations must have a taxable income of less than $500,000 and taxable capital less than $50 million.

- **Ontario Corporate Tax Rates**

The general corporate tax rate is 14.0%. Manufacturers are taxed at 12% and small, Canadian-controlled private corporations are taxed at 5.5%.

- **Ontario Business-Research Institute Tax Credit**

Corporations that enter into approved contracts with eligible Ontario research institutes can claim a fully refundable 20% tax credit of the incurred R&D expenditures. This is limited to $20,000,000 of R&D expenditures per year.

Ontario Case Study

Ontario does not levy a provincial corporate tax on the federal tax credit resulting in an additional saving of about 2%.

This is a sample calculation for the net after-tax cost of doing $100 R&D for a small or medium-sized non-manufacturing company (public, private or foreign-owned) in Ontario.

			Expenditures
R&D Expenditures		(A)	$100.00
Tax Credits			
Ontario innovation tax credit {A x 10%}		(B)	10.00
Federal tax credit {(A-B) x 20%}		(C)	18.00
Tax benefits due to writing-off of R&D costs:			
Federal: {(A-B-C) x 22.12%}		(D)	15.93
Provincial: {(A-B-C) x 14%}		(E)	10.08
Federal tax credit exemption:	{C x 14%}	(F)	2.52
Net R&D after-tax cost (A-B-C-D-E-F)			**$ 43.47**

8 *http://www.cbsc.org/servlet/contentserver?pagenome=CBSC_ON/display&c=Finance&cid=1085667967192&lang=en*

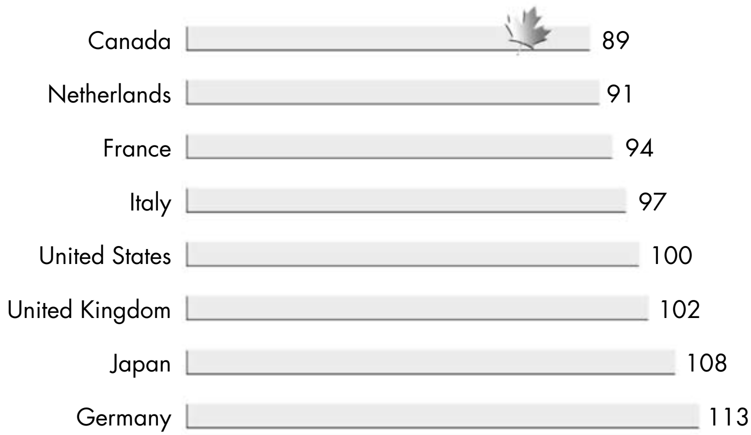
Canada and the World

In order to encourage R&D activities, many countries offer both tax and non-tax incentives. A KPMG study published in 2006[9] found that Canada is a leading promoter of R&D and provides one of the most favourable investment climates for R&D in the world.

The ‚Competitive Alternatives' study by KPMG examined the business operating costs for 121 cities in 11 countries (the G7, Luxembourg, Iceland, the Netherlands and Australia). Canada is the overall cost leader, with a 5.5% cost advantage over the US. The results showed that Canada's competitive advantage would be maintained up to a value of $US 0.95/ $1CDN. (Currently the exchange rate is $US 0.87 / $1 CDN.

The KPMG study examined in detail the costs of doing biomedical R&D in the eight countries. The results, which include labour costs, leases, utilities, interest and depreciation, and taxes, are illustrated below.

Biomedical R&D **International Results (USA = 100,00)**



Canada was found to be the cost-effective location for carrying out biomedical R&D. Similar results were observed for R&D in electronic systems, such as computer components and systems, telecom equipment, and electronic systems for automotive and aerospace applications.

9 *"Competitive Alternatives: KPMG's guide to international business costs 2006 edition". See also www.CompetitiveAlternatives.com*

References and Contacts

If you are planning R&D in Canada, the Canada Revenue Agency, CRA, offers a special preclaim project review service. This allows taxpayers to obtain a preliminary opinion on whether their planned project meets the R&D programme requirements. CRA can also provide information sessions on the R&D programme, and will assist you when submitting your first R&D-related claim.

– More information is available on the **CRA website:** www.cra.gc.ca/sred

– For further technical information on the Internet, see: **KPMG-Canada site** for reviews on tax structures and specifically R&D tax incentives:
www.rndcoach.com/fr/index.shtml and www.kpmg.ca/en/services/tax/

– For further information about Canadian R&D tax incentives, please contact:
The Canadian Embassy
Commercial & Economic Section
Leipziger Platz 17
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Telephone: (030) 203 12-361
Fax: (030) 203 12 115
E-Mail: brlin-td@international.gc.ca
http://www.kanada.de

The following Canada Revenue Agency, CRA, offices located in the various provinces will also be pleased to help you:

- **Newfoundland and Labrador**
  Prince Edward Island
  Nova Scotia
  New Brunswick
  1557 Hollis Street, 10th floor
  P.O. Box 638,
  Halifax, Nova Scotia B3J 2T5
  Telephone: (902) 426-2386
  Fax: (902) 426-4727
- **Québec (Montréal)**
  305 René Lévesque Blvd. W.
  Montréal, Québec H2Z 1A6
  Telephone: (514) 496-1317
  Fax: (514) 496-6607

- **Québec (Laval)**
  3400 Jean-Béraud Avenue
  Laval, Québec H7T 2Z2
  Telephone: (514) 338-4198 or toll free 1-888-784-8709
  Fax: (514) 956-7071

- **Québec (Québec City)**
  94 Dalhousie Road
  P.O. Box 1787
  Québec (Québec) G1K 7L3
  Telephone: (418) 648-7151 or 1-866-204-0101 ext. 648-7151
  Fax: (418) 648-5663

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  55 Bay Street N.
  Hamilton ON L8N 3E1
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