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A Summary of Research and Development Tax Incentives in Canada

The Advantages of Doing Research in Canada

Canada

THE ADVANTAGES OF DOING RESEARCH IN CANADA
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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 program 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 their research and development 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 incentives have been generously strengthened by provincial R&D tax incentives. Today, eight Canadian provinces offer their own incentive packages, relying mainly on R&D 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 22 and 50 cents per dollar spent, depending on the type of corporation and the province in which the R&D is conducted[1].

The Canadian tax incentives are considered to be quite generous by international standards and the most generous among the G7 nations[2].

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

[1] Tax Facts 2004-05, KPMG, pp. 92-95
[2] Exploring *Canada's Innovation Character: Benchmarking against Global Best,* Conference Board of Canada, September 2004.

Canadian Corporate Taxes

The three levels of government levy taxes in Canada: federal, provincial and municipal. However, only the federal and provincial governments have corporate income taxes, with municipal taxes being generally restricted to taxes on real property. To calculate the corporate income tax payable, a company simply adds the federal and provincial rates together.

Federal Corporate Tax Rates

In order to ensure that Canada's business tax system is internationally competitive, Canada has reduced its federal corporate income tax rate over the last five years. These reductions, coupled with reductions in some provincial corporate tax rates, mean that total corporate tax rates in Canada are now 5% lower than average U.S. tax rates[3].

The current tax rate is 21%, plus a surtax of 1.12%, for a total rate of 22.12%. The 2005 Canadian budget announced plans for further reductions in corporate taxes between 2008 and 2010, to reduce the federal corporate income tax rate to a total of 19% by 2010.

Details of provincial tax rates and territories appear 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 is one that does not have its shares listed on a stock exchange and is not controlled by a corporation listed on a stock exchange.

A small, Canadian-controlled private corporation is defined as one with[4]:

- minimum 50% Canadian ownership
- maximum $300,000 net income
- maximum taxable capital of $10 million

THE TAX INCENTIVES

The Canadian government encourages R&D in Canada through the use of tax incentives[5]. These incentives can take the form of both tax deductions and tax credits. Under certain circumstances, the tax credits are refundable (paid out) to the company.

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[3] The Canadian Tax Advantage, September 2002, see Finance Canada's web site under http://www.fin.gc.ca/toce/2002/cantaxadv_e.html

[4] In Quebec, a slightly different definition is used.

What Type of R&D is Eligible?

Canada Revenue Agency (CRA) 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:
- basic and applied research;
- new product development;
- development of new or improved materials;
- manufacturing process improvement;
- software development; and
- clinical trials of new drugs or medical devices.

Research that is ineligible 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;
- the commercial production of a new or improved material, device or product, or the commercial use of a new or improved process;
- style changes; and
- 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).

[5] *An Information Guide to the Scientific Research and Experimental Development Tax Incentive Program,* Canada Revenue Agency publication T4052.

Which R&D Expenses are Eligible?

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

	Canada	U.S
Wages & Salaries	Yes	Yes
Capital Equipment	Yes	No
Materials	Yes	No
Overhead	Yes	No
All Contracted Research	Yes	65%-75%

Expenditures that are ineligible for tax incentives include:

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

The tax incentives apply not 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 a foreign corporation or government.
- A Canadian subsidiary could do R&D work under contract for its foreign parent and still claim the R&D tax credits.
- A foreign corporation that pays for R&D done under contract by a Canadian company will benefit from a lower cost of R&D due to the tax incentives provided to the Canadian contractee.
- A Canadian corporation that pays for R&D done under contract by another Canadian company will receive the R&D tax credits, even though it did not actually complete the R&D work itself.

The definition of R&D work that is eligible for tax incentives is set by the federal government and is used by all provinces and territories.

All provinces and territories support R&D through income tax deductions. Additional tax incentives for R&D are offered by nine jurisdictions (the provinces of British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Quebec, Saskatchewan and the Yukon Territory). The combined federal and provincial tax support is widely recognized 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); and
- the taxable income and taxable capital of the company (these determine whether a corporation is large or small).

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

Tax credits can be either refundable, meaning that they are paid out to the company regardless of the level of taxes the company has to pay, or they can be non-refundable, meaning that they can only be used to reduce the level of taxes a corporation has to pay. Both the federal and provincial governments use formulas to calculate the refundable and non-refundable amounts of tax credits.

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

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

Case Studies

The following is a sample calculation to determine the after-tax cost of doing $100 of R&D. Since calculations must be province-specific, the province of Nova Scotia will be used as an example.

For other provinces, use the tables supplied on the following pages.
Quebec and Ontario have added incentives, which are described on pp. 11-13.

Large Public/Foreign-controlled Corporation

		Expenditures
$100 spent on qualifying scientific research and experimental development	(A)	$100.00
R&D tax credits:		
Provincial (Nova Scotia) {A x 15%}	(B)	15.00
Federal {(A-B) x 20%}	(C)	17.00
Tax benefits from deductions for 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

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

The remainder (A- B-C) can be used as a tax deduction, firstly for the federal corporate income tax of 22.12%, and also on the Nova Scotia corporate income tax of 16%. Thus, the total savings amount to $57.92 and the real cost of the R&D work is only $42.08.

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

Province	**Rate**	**Refund**	**Province**	**Rate**	**Refund**
Alberta	–	–	Ontario*	–	–
British Columbia	10%	No	Saskatchewan	15%	No
Manitoba	20%	No	Prince Edward Island*	–	–
New Brunswick	15%	Yes	Quebec**	17.5%	Yes
Newfoundland	15%	Yes	Yukon Territory	15%	Yes
Nova Scotia	15%	Yes			

* Ontario does not tax the federal tax credit (See section on Ontario).
** The Quebec tax credit is calculated only on the salary portion of the expenditures (See section on Quebec).

As of April 2005, the federal corporate tax rate for large corporations is 22.12%. Provincial and territorial corporate income tax rates vary in some instances for manufacturing and non-manufacturing corporations, and are as follows:

Manufacturing Companies		**Non-manufacturing Companies**	
Alberta	11.5%	Alberta	11.5%
British Columbia	13.5%	British Columbia	13.5%
Manitoba	15.0%	Manitoba	15.0%
New Brunswick	13.0%	New Brunswick	13.0%
Newfoundland	5.0%	Newfoundland	14.0%
Nova Scotia	16.0%	Nova Scotia	16.0%
Northwest Territories	14.0%	Northwest Territories	14.0%
Nunavut Territory	12.0%	Nunavut Territory	12.0%
Ontario	12.0%	Ontario	14.0%
Prince Edward Island	7.5%	Prince Edward Island	16.0%
Quebec	8.9%	Quebec	8.9%
Saskatchewan	10.0%	Saskatchewan	17.0%
Yukon Territory	2.5%	Yukon Territory	15.0%

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. As compared to a large corporation, for a small, Canadian-controlled private corporation, the federal corporate income tax rate is reduced to 13.12% and the federal R&D tax credit rate is increased to 35%.

The calculation for $100 of R&D work done by a small, Canadian-controlled private corporation is as follows:

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

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

Notes: The federal R&D tax credit for small, Canadian-controlled private corporations is refundable.

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

Province	Rate	Refund	Province	Rate	Refund
Alberta	–	–	Ontario*	10%	Yes
British Columbia	10%	Yes	Prince Edward Island	–	–
Manitoba	20%	No	Quebec**	37.5%	Yes
New Brunswick	15%	Yes	Saskatchewan	15%	No
Newfoundland	15%	Yes	Yukon Territory	15%	Yes
Nova Scotia	15%	Yes			

* Ontario does not tax the federal tax credit. (See section on Ontario.)
** The Quebec tax credit is calculated only on the salary portion of the expenditures. (See section on Quebec.)

The federal corporate tax rate for small, Canadian-controlled private corporations is 13.12%. The provincial and territorial corporate tax rates for small, Canadian-controlled private corporations are as follows:

Alberta	3.0%	Nunavut Territory	4.0%
British Columbia	4.5%	Ontario	5.5%
Manitoba	5.0%	Prince Edward Island	7.5%
New Brunswick	2.5%	Quebec	8.9%
Newfoundland	5.0%	Saskatchewan	5.0%
Nova Scotia	5.0%	Yukon Territory	4.0%*

Northwest Territories	4.0%		

* 2.5% for small manufacturing and processing businesses.

Some Details

Deferring Tax Deductions (Write-offs)

At the option of a company entitled to receive an R&D deduction or tax credit, these items can be deferred in Canada, unlike in some other countries such as United States. This means that the Canadian company does not need to take the deductions in the year they are incurred. This flexibility in deferring R&D deductions is designed to benefit companies that invest heavily in R&D in their start-up years and need to defer the tax benefits to later years in which they make a profit.

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 three years or carried forward up to 10 years if the deductions result in a non-capital loss for a given year; or
carried forward indefinitely on the books before being claimed.

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 unrelated 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 given preferential treatment in the following ways:

- The federal 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 $500,000.

- The federal tax credits become wholly or partly refundable in cash to the company. Current expenditures are refundable up to 100%, whereas capital expenditures are refundable up to 40%.
- Some provinces also offer enhanced incentives.

Quebec-specific Incentives[6]

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

- Quebec tax credits are available only in respect of R&D wages paid in Quebec, not other costs such as materials, equipment and overhead.
- For large corporations and foreign-controlled corporations, the Quebec R&D tax credit is calculated as 17.5% of qualified R&D wages.
- For small Canadian-controlled private or public corporations, the Quebec R&D tax credit is calculated as 37.5% of up to $2 million of qualified R&D wages, provided that the company has total assets of $25 million or less. If the company has total assets of between $25 and $50 million, the credit rate is reduced on a linear basis to a rate between 37.5% and 17.5%.
- The tax credit is refundable for all companies.
- The Quebec tax credit is not taxable for Quebec income tax purposes, meaning that the value of the tax deduction for R&D expenditures is not reduced by the amount of the credit received.

Contract R&D

Corporations entering into an R&D contract with an eligible Quebec research institute, or commencing a pre-competitive research project, are eligible for a 35% refundable tax credit on 80% of the R&D contract cost. To qualify for this tax credit, corporations must obtain an advance tax ruling regarding the contract.

Employing foreign researchers and other experts

Foreign experts working in Quebec, including researchers and business managers specializing in innovative technologies, benefit from a five-year provincial tax holiday on their salary. The tax holiday exempts 100% of salary from provincial income tax in the first two years, 75% in the third year, 50% in the fourth year, and 25% in the fifth year.

ONTARIO-SPECIFIC INCENTIVES[7]

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) with annual R&D expenditures of less than $2 million. The corporations must have a taxable income of less than $500,000 and taxable capital of less than $50 million. The credit is calculated based on current R&D expenditures (wages, materials and overhead) and 40% of capital R&D expenditures.

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[6] Tax Facts 2004-05, KPMG, pp. 82-83, 90-91.
[7] Tax Facts 2004-05, KPMG, pp. 90-91.

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 million of R&D expenditures per year. To qualify for this tax credit, corporations must obtain an advance tax ruling regarding the contract.

Other Incentives
For Ontario income tax purposes, the federal R&D tax credit is not taxable. This means that the value of the tax deduction claimed against Ontario income tax for R&D expenditures incurred is not reduced by the amount of any federal R&D tax credit received.

Ontario Case Study

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 or private, Canadian or foreign-owned owned in Ontario:

		Base Expenditures
R&D expenditures and experimental development	(A)	$100.00
R&D tax credits:		
Ontario Innovation Tax Credit {A x 10%}	(B)	10.00
Federal Tax Credit {(A-B) x 20%}	(C)	18.00
Tax benefits from deductions for R&D costs:		
Federal: {(A-B-C) x 22.12%}	(D)	15.93
Provincial: {(A-C) x 14.00%}	(E)	12.60
Net R&D after-tax cost (A-B-C-D-E)		$ 43.47

CANADA AND THE WORLD

In order to encourage R&D activities, many countries offer both tax and non-tax incentives for R&D. A study published in 2004 found Canada's tax incentives for R&D activities to be quite generous by international standards and the most generous among the G7 nations[8].

Other recent studies confirm Canada's leading position. A 2004 study by KPMG[9] examined business operating costs in 121 cities in 11 countries, including all of the G7 countries.

[8] *Exploring Canada's Innovation Character: Benchmarking Against Global Best*, Conference Board of Canada, September 2004.
[9] Competitive Alternatives: The CEOs Guide to International Business Costs, KPMG LLP, February 2004. see also www.competitivealternatives.com

Canada was found to be the overall cost leader, with a 9% cost advantage over the United States. For R&D activities, this cost advantage increases to a significant 21%.

The KPMG study examined in detail the costs of doing biomedical R&D in the 11 countries. The results, which include labour costs, leases, utilities, interest and depreciation, and taxes, are illustrated below.

Canada was found to be the most cost-effective location for carrying out biomedical R&D, ranking ahead of Australia, the U.K., and all other European countries examined, and well ahead of the U.S. and Japan. Business costs for biomedical R&D in Canadian locations were on average 16.6% lower than their U.S. counterparts.

For R&D operations involving clinical trials management and electronic systems development and testing, generally similar results were observed, with costs in Canadian locations being lower than in all European countries and 22% to 25% lower than in the United States.

REFERENCES AND CONTACTS

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

More information is available on the CRA Web site:
www.cra-arc.gc.ca/taxcredit/sred/menu-e.html

The following CRA offices will also be pleased to help you:

Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick
1313 Barrington St.
Halifax, NS B3J 2T5
Tel.: (902) 426-2386

Quebec (Montreal)
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