

# Introduction to R&D Tax Credits in Canada

## with

### Worked Examples for Small and Large Companies

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#### **Notice**

This document is of a general nature and should be taken as “indicative” of opportunities rather than “definitive” to any specific situation or circumstance. It is intended to illustrate the basic concepts of a complex topic and as such the information and examples have been simplified for clarity. This document is not intended to be applied or construed as advice for any specific business situation nor is it intended to cover all possible permutations of this topic such as might arise in an operating business.

All matters of taxation are determined by government legislation which is subject to change and while we update our findings from time-to-time, we cannot guarantee that this or any version is current as you read it. While every reasonable attempt has been made to present information that is correct and current at the date of publication, we make no guarantee that this information is accurate at the time you read it or that it will continue to be accurate in future.

No one should act upon this information without appropriate professional advise specific to the facts and circumstances of their particular situation.

Please contact our office or your tax advisor for the latest information, regulations and procedures related to this topic.

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## ***about Scitax ...***

Scitax Advisory Partners LP is a Canadian professional services firm with specialist expertise in planning, preparing and defending Scientific Research and Experimental Development (SR&ED) tax credit claims.

Our services include: structuring / re-organizing R&D operations to optimize SR&ED benefits, tabulation of expenditures, writing of project technical descriptions and setting-up compliance record systems. We deliver our finished product to the tax preparer embedded in a CRA form T661 as an electronic data file ready for direct import into tax preparation software.

We also advise / assist our clients in dealing with Canadian tax authorities (CRA) on SR&ED and related matters.

Normally we work in concert with our Client's existing tax preparers. However chartered accountants at our sister firm of Cadesky and Associates LP are available as needed for advice on any specific taxation issues such as may arise during the course of our work.

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# Introduction

In Canada, tax is paid at both federal and provincial (i.e. state) levels of government.

Both the federal government and most provincial governments provide funding for scientific and technological R&D through a system of tax credits.

The official title of this system of R&D tax credits is the . . .

***Scientific Research & Experimental Development*** tax credit  
... abbreviated **SR&ED**

The SR&ED program is administrated by the **Canada Revenue Agency**

... abbreviated **CRA**

All taxpayers anywhere in Canada are eligible to receive R&D tax credits at the federal level. Eligibility for R&D tax credits at the provincial level is predicated on two considerations; First the province must have an R&D credit and second, you must be a taxpayer in that province.

In addition to being done by a Canadian taxpayer, the R&D work must be done **in Canada**.

“Taxpayer” means:

- Individuals
- Partnerships of individuals and / or corporations
- Private corporations
- Public corporations (meaning its shares are traded on a public stock exchange)

In provinces with an R&D tax credit, eligibility for the provincial tax credit is automatically triggered by eligibility at the federal level. However some provinces do not allow the same full range of expenditure types as are eligible at the federal level.

Depending on whether the taxpayer is a corporation or not, together with its income and ownership structure, these R&D tax credits benefit the taxpayer in either of two ways:

- Reduced taxes payable
- A cash refund even if no taxes payable

In an average year, this system of funding contributes approximately \$4.5 billion to private sector R&D in Canada.

Although operationally administered by CRA, the SR&ED rules are codified in legislation. While the rules are subject to adjustment from time to time, Canada’s SR&ED program is permanent has been in continuous operation for over 25 years.

## Key Concepts

1. The SR&ED benefit applies to the cost of conducting a systematic investigation in Canada that is aimed at overcoming a technological obstacle in order to achieve a scientific or technological advancement. Successful achievement of an outcome is not a criteria to qualify for the benefit.
2. SR&ED benefits are allowed in addition to the normal business expense deduction that a Canadian taxpayer would otherwise be allowed for R&D expenditures.
3. Most small Canadian Controlled Private Corporations (“CCPC”s) receive SR&ED benefits as a cash refund – even if the taxpayer has no taxable income or tax payable. Canada is one of the very few countries in the world to offer an R&D tax credit with this type of “cash refund” benefit.
4. For large and foreign owned corporations (“non-CCPC”s), SR&ED benefits are calculated at a lower rate and are paid in the form of an investment tax credit (ITC) which can only be used to reduce taxes payable. This ITC can either be applied immediately to reduce taxes in the current year, applied retroactively up to 3 years back or “saved” and carried forward up to 20 years. This allows non-CCPCs to effectively monetize their SR&ED benefits as / when they become taxable.
5. Individuals, un-incorporated businesses and partnerships are also eligible to receive a cash benefit, but at a significantly lower rate than CCPC’s. Therefore organizations of these types that undertake R&D should consider incorporating themselves as a private corporation.
6. For CCPC’s, excessive taxable income and / or taxable capital can cause a significant “grind-down” (i.e. reduction) of SR&ED benefits. CCPC’s must ensure careful tax planning to avoid suffering this disappointing outcome.
7. Wages, materials, contracted R&D services, overhead and equipment are all eligible SR&ED expenditures at the federal level. However, provincial level SR&ED benefits may or may not apply to all of these categories e.g. some provinces do not cover materials, equipment or overhead.
8. There is no upper limit on the amount of SR&ED benefit that can be claimed. However for CCPCs there is a reduction in benefits when the total claimed expenditures exceed \$3M.
9. SR&ED benefits are allowed on both current and capital expenditures. However, for taxpayers eligible for a refundable benefit, only 40% of the capital expenditure attracts a cash refundable with the balance as an ITC.
10. Income received from the sale of R&D results (e.g. taxpayer is selling an R&D service) may act to reduce the eligible SR&ED expenditure. The reduction is significantly affected by the nature of the contract between the R&D seller and the R&D buyer.
11. Only R&D work carried out in Canada is eligible for SR&ED. Recent amendments to legislation make allowance for up to 10% of the wage expenditures to be for work outside Canada, but only if that work is directly associated with (and vital) to an SR&ED project undertaken by the taxpayer in Canada.
12. To claim SR&ED, the taxpayer must identify specific projects and associated expenditures that meet CRA’s definition of eligible R&D work.
13. The claim must include a detailed written technical description for each project being claimed. This technical description must include both a description of the activity (i.e. the systematic investigation) and a justification of the project’s eligibility in terms of technological advancement .
14. Claims must be filed within 18 months of fiscal year end using the prescribed CRA form set (i.e. “T661”). This form requires substantial technical and financial information. It must be correctly prepared in order to avoid the claim being rejected by CRA as incomplete. Furthermore CRA may not accept additional information on claims that are ruled incomplete after filing deadline even if the original claim was filed in time.
15. CRA regularly audits both scientific, technical and financial aspects of SR&ED claims. Every CRA taxation services office has a team of engineers and scientists who perform reviews and site audits of SR&ED claims.

# Comparison of Canada and United States R&D Tax Credits

## US R&E System (@ April 2010)

- Maximum benefit rate is 20%. Little or no extra from individual states.
- Not refundable. No cash benefit. No tax payable means immediate benefit.
- Requires the taxpayer to choose between different methods of calculation, all of which are complex and difficult to comprehend without expert assistance.
- Benefit is calculated only on the increase in R&D expenditures year over year.
- Non-permanent, must be renewed by government each year. Years pass in which no credit is available. Since 1987 the R&E credit has been unavailable at least 12 times, often for periods of 12 months or more.

## Canadian SR&ED System (@ April 2010)

- Maximum benefit rate is 35% plus additional 10% to 37.5% from provinces.
- Benefits for small private companies are particularly generous.
- Benefit on actual expenses incurred in each year.
- Provides cash refund to qualifying CCPC's even if no tax payable.
- As can be expected with such rich benefit rates, there is frequent detailed auditing of both scientific and financial claim eligibility.
- Permanent and highly stable. Long-term commitment from government. The SR&ED program has been in operation for 20 years and is generally considered to be a cornerstone of Canadian Government Economic Development Policy.

	Canada	US
Wages & Salaries	Yes	Yes
Overhead	Yes, 65% of wages	No
Capital Equipment	Yes	No
Materials	Yes	Yes
Contracted Research	Yes	Some (65% to 75%)
Work Done Abroad	Some (up to 10%)	No

# Processing of Claims by CRA

## **Gate #1 – Filing is complete?**

- All information / data provided?
  - ▼ Correct / current version of form T661 used?
  - ▼ Written description of claimed R&D work undertaken that was undertaken in this taxation year (i.e. the “systematic investigation”)?
  - ▼ Written justification that R&D work being claimed involved seeking a “scientific or technological advancement” and what specific “technological obstacle / uncertainty” obstructed that advancement?
  - ▼ Wages and other expenditures identified for each project in the claim?
  - ▼ Details of incoming and outgoing contract payments for R&D services?
  - ▼ Names and qualifications of key personnel involved in each project?

## **Gate #2 – Received on time?**

- < 6 months from year end = fast track processing (120 to 240 days)
- 6 to 18 months from year end = slower processing (8 to 16 months)
- > 18 months from year end = rejected and forever lost

## **Gate #3 – Technical audit**

- Claimed activities meet CRA definition of eligible R&D activity?
- Scientific and technical records and / or working papers corroborate work done in claimed period?

## **Gate #4 – Financial audit**

- Taxpayer entitled to claim as CCPC and qualifies for high-rate refundable benefit?
- Invoices and pay records to support claimed costs?
- Time records to support allocation of man-hours to specific projects?
- Any incoming contract payments to reduce the benefit?

## **Gate #5 – Dispute resolution** (in the event of disagreement with technical or financial audit outcome)

- Second opinion by audit supervisor at local CRA office.
- Notice of Objection – triggers a second audit by a separate independent group of auditors within CRA.
- Tax Court of Canada – taxpayer contests CRA ruling in a formal court process that is completely independent of CRA influence.

# Criteria for Eligible R&D Activity

All of the following three criteria must be met for an R&D activity to qualify as eligible SR&ED :

1. A technological or scientific **Advancement** is sought
  - New to world (generally eligible)
  - New application (probably eligible)
  - New to company (may be eligible)
  
2. **Technological Uncertainty / Obstacle** obstructs the advancement
  - An initial attempt to apply the “standard practice” failed
  - Competent professionals with appropriate training and credentials could not devise a solution from within their “oeuvre” of professional knowledge
  - Insufficient information or data is available to enable application of standard engineering practices
  - Potentially useful solutions exist but are unavailable in the public domain
  - Key properties of materials are unknown
  - Vital relationships are unknown or unproven
  - Interactions of components in a complex system cannot be reliably modeled or predicted
  
3. **Systematic Investigation** an iterative process of experimentation is employed in an attempt to resolve the uncertainty and achieve the advancement
  - Theory or idea conceived
  - Experiments conducted to test idea
  - Measurements are made and recorded
  - Results are compared to a “control” group or standard
  - Idea evolved based on findings in an iterative process
  - Investigation process continues until technological uncertainty is resolved at which point the SR&ED eligible work ends

The outcome of the R&D activity (i.e. success or failure) is **not** a criteria for eligibility.

# What R&D Expenditures Are Covered?

## 1. Current expenditures

- Wages & salaries of scientific / technical personnel directly engaged in R&D
- Materials consumed in R&D, i.e. net of recoveries from sale
- Payments to third party sub-contractors whom you hire to perform R&D on your behalf

## 2. Capital expenditures

- Instruments, machinery & equipment
- In some cases may also include fittings and equipment for R&D laboratories
- Excludes purchase of property, buildings or IP
- Must be
  - intended for R&D use at time of purchase
  - used primarily for R&D purposes

## 3. Overhead

- Two options
  - Proxy Method: 65% of wages and salaries
  - Traditional Method: Actual as required and incurred in relation to the claimed R&D work

## 4. Excluded

- Training
- Travel, meals, accommodation and entertainment
- Outside Canada: Only R&D work carried out in Canada is eligible for SR&ED. However, recent amendments to legislation make allowance for up to 10% of the wage expenditures to be for work outside Canada, but only if that work is directly associated with (and vital) to an SR&ED project undertaken by the taxpayer in Canada.
- Legal fees, accounting fees, patent fees etc.

## 5. Certain payments or assistance received in respect of the claimed activity may act to reduce the eligible expenditures

- Government grants - NSERC, CIRDF, IRAP, SDTC etc.
- Forgivable loans
- Payments received from customers for R&D services or sale of R&D results. NB: There are certain cases when such payments would not act to reduce SR&ED benefits. However, this is a complex matter which is beyond the scope of this document.

# Tax Credit Financial Terminology

## ■ Normal business deduction

- Expenditures on R&D act to reduce taxable income exactly like any other business expense

\$100 spent on R&D, reduces taxable income by \$100

## ■ Super-deduction

- R&D expenditure produces higher than normal deduction

\$100 spent on R&D, reduces taxable income by \$200

## ■ Immediate or accelerated write-off

- Faster depreciation of capital assets such as R&D equipment or purchased IP

\$100 spent on depreciable R&D equipment or IP reduces taxable income by \$100 in first year instead of \$33 per year for three years

## ■ Investment tax credit

- Direct reduction of taxes payable by all or some % of the R&D expenditure

at ITC rate of 20%, an R&D expenditure of \$100 reduces payable tax of \$1,000 down to \$980

## ■ Refundable cash benefit

- Benefit paid in cash, even if no taxable income

At ITC rate of 35%, an R&D expenditure of \$100 reduces tax payable of \$10 to \$0 and generates a refund cheque of \$25

# Simple Overview of SR&ED Benefit Rates

## (for Ontario)

### 1. for a **Canadian Controlled Private Corporation (CCPC)**

- Federal benefit of up to 35% of R&D expenditures as a cash refund
- Ontario Innovation Tax Credit benefit of up to 10% of R&D expenditures up to \$3M as a cash refund
- Both Federal (35%) and Ontario (10%) benefit rates are diminished (i.e. ground down) as the following boundary conditions are exceeded: taxable income >\$500K, taxable capital >\$10M, claimed R&D expenditures >\$3M.
- Ontario Research and Development Tax Credit of 4.5% to offset the inclusion of the Federal SR&ED benefit into Ontario taxable income as a result of harmonization.

### 2. for a **Public Corporations**

Federal benefit of 20% of R&D expenditures as an investment tax credit (ITC) but no cash refund. ITC may be either applied to reduce taxable income in the current tax year or carried forward 20 years or backward 3 years.

Ontario Innovation Tax Credit benefit of up to 10% of R&D expenditures up to \$3M as a cash refund providing the corporation does not have taxable income above \$500K or taxable capital in excess of \$25M.

Ontario Research and Development Tax Credit of 4.5% to offset the inclusion of the Federal SR&ED benefit into Ontario taxable income as a result of harmonization.

### 3. for **Others** (i.e. unincorporated businesses, individuals and partnerships)

Federal benefit of up to 20% of R&D expenditures as a cash refund

No Ontario benefits

#### Notes:

- i. Figures given for both federal and provincial benefit rates are diminished (i.e. ground down) as a function of taxable income and taxable capital. While a full discussion of these factors is beyond the scope of this document, for tax year ends after 2009 the boundary conditions for the onset of this diminishment are: taxable income >\$500K, taxable capital >\$10M and claimed expenditures >\$3M.
- ii. Above apply to organizations with permanent establishments in Ontario. Most other provinces also have their own specific R&D benefits ranging from 10% to 40%.
- iii. Assumes all R&D work done at a permanent establishment in Ontario.

## Example #1 SR&ED Benefit for a Small Private Corporation

### Summary - see detailed calculation on next slide

R&D Expenditure

\$1,000 (incl. \$500 of wages)

Ontario OITC refundable SR&ED benefit at 10%

(\$133) as **Cash Refund** even if no tax is payable

Ontario Research and Development Tax Credit at 4.5%

(\$54) as Investment Tax Credit

Federal refundable SR&ED benefit at 35%

(\$399) as **Cash Refund** even if no tax is payable

Statutory business expense deductions from income

( \$64) Harmonized Expense Deduction

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Net After Tax Cost of \$1,000 expenditure

**\$351**

#### Assumptions:

1. Canadian Controlled Private Corporation located in Ontario
2. Eligible for OITC. ORDTTC not waived.
3. Applicable for taxation years ending after Dec 31, 2009
4. Taxable capital for associated group <\$10M for preceding tax year
5. Taxable income for associated group <\$500K for preceding tax year
6. Taxable income for associated group <\$500K for current tax year
7. All wages are in respect of non-specified employees (i.e. no employee owns >10% of company)
8. The prescribed proxy amount is used to calculate overhead
9. There are no capital expenditures

## Example #1 SR&ED Benefit for a Small Private Corporation

### Detailed Calculation

R&D Expenditure		Rates
R&D Wages	\$500	
Other Current R&D Cost (Materials, Sub-Contractors)	\$500	
<b>Total Cash Expenditures</b>	<b>\$1,000</b>	(A)
Overhead by Proxy Method (65% of wages)	\$325	
<b>Total SR&amp;ED Eligible Expenditures</b>	<b>\$1,325</b>	(A.1)
<b>Ontario Benefit</b>		
OITC (Ontario Innovation Tax Credit) @ 10% of A.1	\$133	10.0%
ORDTC (Ontario Research and Development Tax Credit) @ 4.5% of A.1 minus OITC	\$54	4.5%
<b>Total Ontario Benefit</b>	<b>\$187</b>	(B)
<b>Federal Benefit</b>		
Total SR&ED Eligible Expenditures	\$1,325	
Less Total Ontario Benefit	\$187	
Amount Eligible for Federal Benefit	\$1,138	C.1
Federal SR&ED Credit @ 35% of C.1		
<b>Total Federal SR&amp;ED Benefit</b>	<b>\$398</b>	(C) 35.0%
<b>Expense Deduction from Taxable Income (Federal and Ontario)</b>		
Total Cash Expenditures	\$1,000	
Remove Ontario SR&ED Benefits	\$187	
Remove Federal SR&ED Benefits	\$398	
Remaining Deductible Expense	\$415	(D.1)
<b>Effective Savings from Expense Deduction</b>	<b>\$64</b>	(D) 15.5%
<b>Calculation of Net After Tax Cost of \$1,000 of Current Expenditures</b>		
<b>A - B - C - D =</b>	<b>\$350</b>	

#### Assumptions:

1. Canadian Controlled Private Corporation located in Ontario
2. Eligible for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Dec 31, 2009
4. Taxable capital for associated group <\$10M for preceding tax year
5. Taxable income for associated group <\$500K for preceding tax year
6. Taxable income for associated group <\$500K for current tax year
7. All wages are in respect of non-specified employees (i.e. no employee owns >10% of company)
8. The prescribed proxy amount is used to calculate overhead
9. There are no capital expenditures

## Example #2 SR&ED Benefit for a Public Corporation

### Summary - see detailed calculation on next slide

R&D Expenditure

\$1,000 (incl. \$500 of wages)

Ontario OITC refundable SR&ED benefit at 10%

(\$133) as **Cash Refund** even if no tax is payable

Ontario Research and Development Tax Credit at 4.5%

(\$54) as Investment Tax Credit

Federal refundable SR&ED benefit at 20%

(\$228) as **Investment Tax Credit** (NOT cash refund as is case for small corp. example)

Statutory business expense deductions from income

(\$182) Harmonized Expense Deduction

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Net After Tax Cost of \$1,000 expenditure

**\$404**

#### Assumptions:

1. Public corporation located in Ontario
2. Eligible for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Dec 31, 2009
4. \* Taxable capital for associated group <\$10M for preceding tax year
5. \* Taxable income for associated group <\$500K for current tax year
6. All wages are in respect of non-specified employees (i.e. no employee owns >10% of company)
7. The prescribed proxy amount is used to calculate overhead
8. There are no capital expenditures
  - \* Required to qualify for Ontario OITC

## Example #2 SR&ED Benefit for a Public Corporation

### Detailed Calculation

R&D Expenditure		Rates
R&D Wages	\$500	
Other Current R&D Cost (Materials, Sub-Contractors)	\$500	
<b>Total Cash Expenditures</b>	<b>\$1,000</b>	(A)
Overhead by Proxy Method (65% of wages)	\$325	
<b>Total SR&amp;ED Eligible Expenditures</b>	<b>\$1,325</b>	(A.1)
<b>Ontario Benefit</b>		
OITC (Ontario Innovation Tax Credit) @ 10% of A.1	\$133	10.0%
ORDTC (Ontario Research and Development Tax Credit) @ 4.5% of A.1 minus OITC	\$54	4.5%
<b>Total Ontario Benefit</b>	<b>\$187</b>	(B)
<b>Federal Benefit</b>		
Total SR&ED Eligible Expenditures	\$1,325	
Less Total Ontario Benefit	\$187	
Amount Eligible for Federal Benefit	\$1,138	C.1
Federal SR&ED Credit @ 20% of C.1		
<b>Total Federal SR&amp;ED Benefit</b>	<b>\$228</b>	(C) 20.0%
<b>Expense Deduction from Taxable Income (Federal and Ontario)</b>		
Total Cash Expenditures	\$1,000	
Remove Ontario SR&ED Benefits	\$187	
Remove Federal SR&ED Benefits	\$228	
Remaining Deductible Expense	\$585	(D.1)
<b>Effective Savings from Expense Deduction</b>	<b>\$181</b>	(D) 31.0%

### Calculation of Net After Tax Cost of \$1,000 of Current Expenditures

$$A - B - C - D = \underline{\underline{\$404}}$$

#### Assumptions:

1. Public corporation located in Ontario
  2. Eligible for OITC. ORDTC not waived.
  3. Applicable for taxation years ending after Dec 31, 2009
  4. \* Taxable capital for associated group <\$10M for preceding tax year
  5. \* Taxable income for associated group <\$500K for current tax year
  6. All wages are in respect of non-specified employees (i.e. no employee owns >10% of company)
  7. The prescribed proxy amount is used to calculate overhead
  8. There are no capital expenditures
- \* Required to qualify for Ontario OITC

**END**

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