

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 advice 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 benefit opportunity, 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 public 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 CCPCs. Therefore, organizations of these types that undertake R&D should consider incorporating themselves as a private corporation.
6. For CCPCs, excessive taxable capital can cause a significant "grind-down" (i.e. reduction) of SR&ED benefits. CCPCs must ensure careful tax planning to avoid suffering this disappointing outcome.
7. Wages, materials, contracted R&D services and overhead 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 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. Government and non-Government "Assistance" acts to reduce SR&ED eligible expenditures. Assistance includes any monies provided to the taxpayer to reduce out of pocket cost of performing the SR&ED. This includes payments from other companies, government grants (IRAP) and loans from government agencies (ACOA, FEDDEV, etc.).
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 and uncertainty.
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 the filing deadline even if the original claim was filed on 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.

Processing of SR&ED Claims by the 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
- **80%** of contract payments to persons or individuals you engage to provide R&D services

2. Capital expenditures

- **Excluded after 1-Jan-2014**

3. Overhead

- Two options
 - Proxy Method: Calculated as a % wages and salaries.
55% after 1-Jan-2014
 - Traditional Method: Actual as required and incurred in relation to the claimed R&D work

4. Excluded

- Purchases of intellectual property (e.g. patents)
- Training
- Work done 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.
- Government loans (FedDev, ACOA etc.)
- 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 8% on R&D expenditures of up to \$3M as a cash refund
 - Ontario Research and Development Tax Credit of 3.5% to offset the inclusion of the Federal SR&ED benefit into Ontario taxable income as a result of harmonization.
 - Both Federal (35%) and Ontario (8%) benefit rates are ground down (i.e. subject to diminishment) as a function of two parameters: the “expenditure limit” and taxable capital. For tax year ends after 2009 the onsets of this diminishment are: claimed expenditures >\$3M and / or taxable capital >\$10M

2. for **Non-CCPC Corporations**
 - Federal benefit of 15% 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 8% on R&D expenditures of up to \$3M as a cash refund
 - Ontario Research and Development Tax Credit of 3.5% to offset the inclusion of the Federal SR&ED benefit into Ontario taxable income as a result of harmonization.
 - The Ontario (8%) benefit rates is ground down (i.e. subject to diminishment) as a function of two parameters: the “expenditure limit” and taxable capital. For tax year ends after 2009 the onsets of this diminishment are: claimed expenditures >\$3M and / or taxable capital >\$10M

3. for **Others** (i.e. unincorporated businesses, individuals and partnerships)
 - Federal benefit of up to 15% of R&D expenditures 40% of which is as a cash refund with balance as an investment tax credit (ITC)
 - No Ontario benefits

Notes:

- i. 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%.
- ii. Assumes all R&D work done at a permanent establishment in Ontario.

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

Summary – see detailed calculation on next page

R&D Expenditure	\$1,275 (incl. \$500 of wages, \$500 materials and \$275 overhead by proxy method)
Ontario OITC refundable SR&ED benefit	\$102 as Cash Refund even if no tax is payable
Ontario Research and Development Tax Credit	\$41 as non-cash Investment Tax Credit
Federal refundable SR&ED benefit	\$396 as Cash Refund even if no tax is payable
Total R&D Tax Credit (Canada + Ontario)	<u>\$539</u>

Assumptions:

1. Canadian Controlled Private Corporation located in Ontario. No R&D work done outside Ontario.
2. Eligible for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Jan 1, 2014.
4. Taxable income of neither the corporation or any associated group >\$500K in either the current or preceding tax year.
5. Taxable capital of neither the corporation or any associated group >\$15M in either the current or preceding tax year.
6. Taxable income for associated group <\$500K for current tax year.
7. All R&D wages are in respect of non-specified employees (i.e. no R&D employee owns >10% of company).
8. Overhead calculated using the Proxy method.
9. There are no capital equipment expenditures.
10. There are no incoming or outgoing contract expenditures. No government assistance received.

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

Detailed Calculation

R&D Expenditure				Rates
R&D Wages	\$500		W	
Materials consumed in SR&ED	\$500		M	
	<u>\$1,000</u>			
Overhead by Proxy Method	\$275	P		55.0% of W
	<u>\$1,275</u>	A		W + M + P
Ontario Benefit				
OITC (Ontario Innovation Tax Credit)	\$102	B		8.0% of A
	\$41	C		3.5% of A - B
	<u>\$143</u>	D		B + C
Federal Benefit				
Total Federal SR&ED Eligible Expenditure	\$1,275			
Less Total Ontario Benefit	<u>\$143</u>			
	\$1,132	E		A - D
	\$396	F		35.0% of E
Total R&D Tax Credits (Federal and Ontario)				
	\$498	T.1		B + F
	\$41	T.2		C
	<u>\$539</u>			

Assumptions:

1. Canadian Controlled Private Corporation located in Ontario. No R&D work done outside Ontario.
2. Eligible for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Jan 1, 2014.
4. Taxable income of neither the corporation or any associated group >\$500K in either the current or preceding tax year.
5. Taxable capital of neither the corporation or any associated group >\$15M in either the current or preceding tax year.
6. Taxable income for associated group <\$500K for current tax year.
7. All R&D wages are in respect of non-specified employees (i.e. no R&D employee owns >10% of company).
8. Overhead calculated using the Proxy method.
9. There are no capital equipment expenditures.
10. There are no incoming or outgoing contract expenditures. No government assistance received.

Example #2 SR&ED Benefit for a non-CCPC Corporation

Summary – see detailed calculation on next page

R&D Expenditure	\$1,275 (incl. \$500 of wages, \$500 materials and \$275 overhead by proxy method)
Ontario OITC refundable SR&ED benefit	\$102 as Cash Refund even if no tax is payable
Ontario Research and Development Tax Credit	\$41 as non-cash Investment Tax Credit
Federal refundable SR&ED benefit	\$170 as non-cash Investment Tax Credit
Total R&D Tax Credit (Canada + Ontario)	<u>\$313</u>

Assumptions:

1. Public or private foreign-owned corporation located in Ontario. No R&D work done outside Ontario.
2. Eligibility for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Dec 31, 2009.
4. Taxable income of neither the corporation or any associated group >\$500K in either the current or preceding tax year.
5. Taxable capital of neither the corporation or any associated group >\$15M in either the current or preceding tax year.
6. All R&D wages are in respect of non-specified employees (i.e. no R&D employee owns >10% of company).
7. Overhead calculated using the Traditional method.
8. There are no capital equipment expenditures.
9. There are no incoming or outgoing contract expenditures. No government assistance received.

Example #2 SR&ED Benefit for a non-CCPC Corporation

Detailed Calculation

R&D Expenditure				Rates
R&D Wages	\$500		W	
Materials consumed in SR&ED	\$500		M	
Total Cash Expenditures	\$1,000			
Overhead by Proxy Method	\$275	P		55.0% of W
Total SR&ED Eligible Expenditures	\$1,275	A		W + M + P
Ontario Benefit				
OITC (Ontario Innovation Tax Credit)	\$102	B		8.0% of A
	\$41	C		3.5% of A - B
ORDTC (Ontario Research and Development Tax Credit)	\$143	D		B + C
Total Ontario Benefit				
Federal Benefit				
Total Federal SR&ED Eligible Expenditure	\$1,275			
Less Total Ontario Benefit	\$143			
Amount Eligible for Federal Benefit	\$1,132	E		A - D
Federal SR&ED Investment Tax Credit	\$170	F		15.0% of E
Total R&D Tax Credits (Federal and Ontario)				
	as Cash Refund	\$102	T.1	B
	as non-Cash Investment Tax Credit	\$211	T.2	C + F
Total		\$313		

Assumptions:

1. Public or private foreign-owned corporation located in Ontario. No R&D work done outside Ontario.
2. Eligibility for OITC. ORDTC not waived.
3. Applicable for taxation years ending after Dec 31, 2009.
4. Taxable income of neither the corporation or any associated group >\$500K in either the current or preceding tax year.
5. Taxable capital of neither the corporation or any associated group >\$15M in either the current or preceding tax year.
6. All R&D wages are in respect of non-specified employees (i.e. no R&D employee owns >10% of company).
7. Overhead calculated using the Traditional method.
8. There are no capital equipment expenditures.
9. There are no incoming or outgoing contract expenditures. No government assistance received.

Learn More – Additional Resources

- **What R&D activities qualify as SR&ED: An in-depth discussion of scientific eligibility requirements.**
 - Article Reprint [PDF]:
[*Bulletin #61 - TCC Ruling Favours Taxpayer on SR&ED \(6379249 Canada Inc. in TCC\)*](#)
 - Article Reprint [PDF]:
[*Bulletin #57 - New TCC Ruling Favours Taxpayer on "Shop Floor" SR&ED \(Abeilles Service de Conditionnement Inc.\)*](#)
 - Article Reprint [PDF]:
[*Jentel: Short and Sweet Guidance on SR&ED Eligibility" in Canadian Tax Journal, Dec 2011*](#)
- **Provincial R&D Tax Credits**
 - Article Reprint [PDF]:
[*Bulletin #63 - Astounding Differences in Provincial R&D Tax Credits*](#)
- **Dealing with Canada Revenue Agency on SR&ED matters**
 - Article Reprint [PDF]:
[*Bulletin #60 - TCC Again Takes Issue With Evidence of CRA Employees on SR&ED \(HLP Solutions Inc. in TCC\)*](#)
 - Article Reprint [PDF]:
[*Appealing an SR&ED Claim" in CA Magazine, June 2011*](#)
 - Scitax Whitepaper [PDF]:
[*What To Do If You Disagree with CRA" in Scitax whitepapers, August 2013*](#)

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