

Scientific Research & Experimental Development Overview

Optimizing SR&ED

PricewaterhouseCoopers LLP

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Introduction

- Incentive program administered by Canada Revenue Agency (CRA) to encourage innovation within Canada
- Over \$1.8 billion of tax credits claimed annually; since 1985
- 75% of claims are from small companies whose R&D expenditures range from \$20,000 – \$2,000,000
- Qualifying companies get money back in the form of a refund, a reduction in taxes payable, or both
- SR&ED tax credits can provide a strategic advantage to companies that are improving their technologies to remain competitive

How does claiming SR&ED benefit Companies?

- Federal investment tax credits (ITC) equal to 20-35% of qualifying expenditures (provincial credits may also apply)
 - Salaries of personnel directly engaged in SR&ED
 - Materials consumed in SR&ED
 - Capital equipment (>50% used for SR&ED)
 - Contract payments (work conducted in support of SR&ED)
 - Third party payments (accredited research facilities)
 - Incremental overhead expenditures or 65% proxy election
- Credit can be applied against federal income taxes
 - Can be carried back 3 years or forward 20 years

Provincial Tax Credits – Ontario Innovation Tax Credit (OITC)

- A refundable tax credit equal to 10% of qualifying expenditures, subject to an expenditure limit of \$2 million (maximum OITC of \$200K per year).
- The OITC is available to all companies, not just CCPC's.
- The \$2 million expenditure limit is eroded when:
 - The previous year's Federal taxable income of the worldwide associated group is between \$400,000 and \$600,000; or
 - The previous year's Ontario taxable capital of the worldwide associated group is between \$25 million and \$50 million.

Claiming SR&ED also benefits employees

- More profit & cash flow enables investment in equipment, technology and people to help company and employees thrive
- Higher likelihood of growing the R&D/technical department – more career advancement opportunities
- More interesting projects to work on – management will be more open to higher risk projects
- An employee capable of contributing to an SR&ED project is viewed as a valuable asset to their company
- Documentation from SR&ED can help build personal achievement portfolios viewed by upper management

What is SR&ED?

- Support Work
 - Work that directly supports and is commensurate with the needs of basic research, applied research or experimental development
 - 1.Data collection
 - 2.Testing
 - 3.Computer programming
 - 4.Mathematical analysis
 - 5.Engineering
 - 6.Design
 - 7.Operations research
 - 8.Psychological research
 - Work must be performed in Canada

What is Not SR&ED?

- Market research or sales promotion
- Quality control or routine testing
- Commercial production
- Style changes
- Routine data collection
- Prospecting, exploring or drilling
- Research in the social sciences or the humanities
- Routine engineering practice

What is Not SR&ED?

- Adapting a known engineering or technological practice to a new situation where there is a high degree of certainty that the known technology or practice will achieve the desired objective – the outcome is predictable
- Solution is available in the public domain – specific to your application
- Minor modifications, troubleshooting, tweaking, optimizing, tuning
- No experimentation or analysis

SR&ED Eligibility Criteria

1. Scientific or Technological Advancement
 2. Scientific or Technological Uncertainty
 3. Scientific or Technological Content (systematic investigation)
- All three criteria must be met

1. Scientific or Technological Advancement (STA)

- Moving the knowledge/technology base to a higher level from where it was at the beginning of the project
- Must be able to demonstrate that the solution to the technological problem was not commonly available when the work was undertaken
- Seeking an advancement in the technology of the business entity doing the research (even though another entity may already have the technology)
- Advancement may be indicated by a departure from standard practice

2. Scientific or Technological Uncertainty (STU)

- Uncertainty as to whether a given objective can be achieved at all, or how best to achieve it
- Uncertainty cannot be resolved using generally-available scientific/technological knowledge or experience
- System uncertainty may arise due to the new integration and interaction of otherwise predictable system components
- Inability to correctly predict an outcome

3. Scientific or Technological Content (STC)

- Work undertaken is technical in nature
- Systematic Investigation is a process involving:
 - Scientific or technological problem definition;
 - Hypothesis; experimental testing and analysis; logical conclusions
 - Beyond standard practice (knowledge base)
- Iterative process
- Results in new or improved products or processes or expanded knowledge
- Requires documentation and use of qualified personnel

Shop Floor SR&ED

- Shop Floor SR&ED involves creating new, or improving existing processes in a commercial facility or production environment
- Cost, cycle time & quality improvements are examples of commercial drivers in a shop floor setting
- Process efficiency improvements very common in shop floor must embody technological advancement

Start and End of SR&ED Projects

- Project begins when the first technological uncertainty (as opposed to commercial or business objectives) is defined
- Project ends when the last technological uncertainty is resolved or project is abandoned

SR&ED Documentation

- Keep what you already produce
- Date all your documents
- Focus on documenting:
 - Your knowledge base progress (capabilities)
 - The technical problems encountered (what, why)
 - Your process to solve them (how, when, who, where)

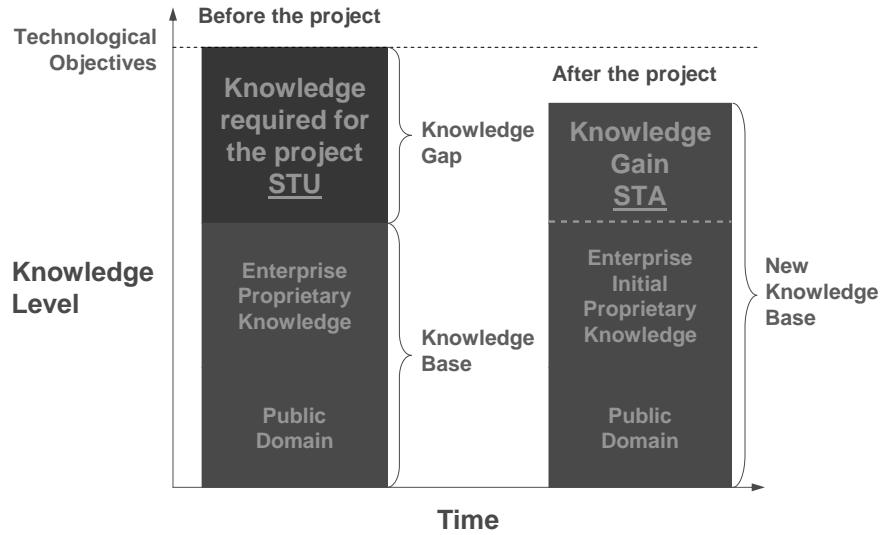
Examples of Suitable Support Documents

- Project plans showing intended work
- Correspondence; emails
- Minutes from meetings
- Computer modeling or analysis reports
- Test plans & results; pictures; drawings
- Progress review and status reports
- Project notebooks; lab notes
- Timesheets

Concept of “Knowledge Base” and “Knowledge Gap”

- KB= acquired technical knowledge in your enterprise
- KG= gap between current knowledge/capabilities and required knowledge/capabilities
- SR&ED= Effort to bridge gap through experimentation or analysis

Concept of “Knowledge Gap” and “Knowledge Base”



SR&ED Project and Business Project

Defining your SR&ED “envelope”

Business project:

- Customer oriented
- Focused on results and ROI

SR&ED project:

- Technology oriented
- Sub-project in your business project
- Focused on process and technical capability progress



Prototypes versus Custom Products

- Prototypes
 - An original model on which something new is patterned
 - Built for evaluation purposes using non standard & non commercial materials and processes
 - Little enduring value beyond SR&ED project
 - All project costs would be eligible
- Custom Products
 - Built for commercial sale
 - Mix of SR&ED and commercial work
 - Portion of the work that resolves technological uncertainty and the associated support work is eligible

Contract SR&ED

The payer is eligible to claim SR&ED if:

- The SR&ED work is done on the payer's behalf
 - The payer directs the project
 - The payer assumes the risk
 - The payer inherits the IP
 - The payer receives a service rather than a good
- Terms of contract/business relationship will determine who can claim
- Can also claim contract work carried out in support of SR&ED
- Work must take place in Canada

Experimental Production (EP)

- Purpose of EP is to evaluate a technical aspect of the project
- Experimental Production is an output of experimental development that is required to verify whether technological objectives have been met and/or if a technological advance is achievable
- Must meet 3 eligibility criteria
- Cost of production deemed to be experimental can be claimed
- Proceeds from any product sold may cause recapture of a portion of the ITCs claimed

Commercial Production with Experimental Development CP with ED

- Primary purpose is commercial production
- ED occurs in conjunction or simultaneously with CP in order to achieve an incremental improvement
- Small changes are made to process parameters while process indicators are monitored (“tweaking the process”)
- Must meet 3 eligibility criteria
- May take place over a period of days or weeks
- Objective is to obtain a set of operating parameters that results in an improved process, usually reflected in reduced costs, without sacrificing output quality
- Only the incremental costs attributable to the ED portion of CP are eligible

Routine v. SR&ED

- Routine

- Application of preexisting knowledge or techniques that achieves the expected outcome
- Good engineering using current knowledge and tools
- No scientific or technological uncertainty to overcome
- No scientific or technological advancement being sought

- SR&ED

- Recognition that existing knowledge and standard practice are inadequate (STU, KG). Advancement required.
- Inability to predict outcomes → surprises (KG)
- Seek new knowledge, improved understanding (STA)
- New technological capabilities or best practices (STA)

Questions to Help Identify SR&ED Projects

- What experiments or trials did you run last year?
- What technical problems required repeated attempts to solve?
- What progress was made regarding quality, costs, cycle times, scrap rates, life cycles, and understanding root causes?
- What are you better at technologically today v. a few years ago?
- What technology wouldn't you want your competitors to learn?
- What challenging projects and technological accomplishments would you be proud of to relate to a peer?
- What new manufacturing techniques have you developed?
- What R&D-related equipment did you purchase?
- What R&D-related contracts did you issue?

Other points to remember

- You can claim SR&ED even if you sold the item
- Must file within 18 months of fiscal year end, but can re-file to increase claim if within 18 month window
- Don't wait to complete a project – file each year
- Work claimed must have been conducted in Canada
- Keep documentation as work occurs (contemporaneous)
- SR&ED is NOT like a typical grant (apply & hope)
- SR&ED is an entitlement – if you did eligible work, you can benefit
- In many cases, your competitors are filing SR&ED – make sure you are getting your fair share

Requirements for Filing a SR&ED Claim

Two parts to a claim:

1. Scientific – technical project descriptions.
2. Financial – costing of eligible/qualifying expenditures and preparation of tax returns.

Requirements for Filing a SR&ED Claim

- Claims are filed on the basis of taxation years, including short taxation years (amalgamation, acquisition of control, etc.). The same project may be claimed over several taxation years.
- SR&ED claims include certain prescribed federal forms (e.g., Form T661, Schedule 31) as well as provincial forms.
- In order to qualify, expenditures must be in respect of a project that meets the scientific or technical standards of the program.

Method of Filing: Traditional and Proxy Elections

- Each year's SR&ED claim requires an election of either the Traditional Method or the Proxy Method.
- Each year's election is irrevocable. The method may be changed from one year to the next, but once elected for a particular year you're stuck with it.
- The Traditional Method allows the claimant to include certain overhead expenses as qualifying expenditures.
- In place of overhead expenses, the Proxy method adds 65% of qualifying salaries and wages to qualifying expenditures for purposes of calculating the ITC.

Summary of ITC and refundable ITC

	Within Expenditure Limit ¹		Not within Expenditure Limit	
	Current expenditure	Capital expenditure	Current expenditure	Capital expenditure
Qualifying corporation²				
ITC earned	35%	35%	20%	20%
Refundability	100%	40%	40%	40%
CCPC³				
ITC earned	35%	35%	20%	20%
Refundability	100%	40%	0%	0%
Other corporations				
ITC earned	20%	20%	20%	20%
Refundability	0%	0%	0%	0%

¹ The expenditure limit pursuant to subsection 127(10.2).
² Qualifying corporation other than an excluded corporation.
³ CCPC other than a aqualifying corporation or an excluded corporation.

Top 11 Tips: #11 Watch for Shop Floor SR&ED

- SR&ED is often unplanned and arises on the shop floor as a result of work carried out to correct product deficiencies or production problems

Top 11 Tips: #10
Identify Potential SR&ED Projects Early On

- As soon as your standard methods do not succeed, recognize that SR&ED could be beginning
- Early identification helps maximize claimable work and claimable expenditures

Top 11 Tips: #9
Document Your Work – Particularly Your Failures

- Don't forget or gloss-over your failures
- Focus on what you tried and what you learned from your work
- Failures underscore the technological challenge and demonstrate that your existing knowledge and standard practice were insufficient
- Final success is not a requirement for filing SR&ED

Top 11 Tips: #8
Structure Contracts in Order to Maximize Your Claim

- Since only work carried out in Canada can be claimed, where practical, conduct contracted work in Canada
- State explicitly in contracts for SR&ED carried out on your behalf that you will have the right to claim tax credits resulting from the work

Top 11 Tips: #7
Purchase Material rather than Contract Services when possible

- To be claimable, contract services must occur within Canada
- Materials purchased for SR&ED from anywhere are eligible
- For example: a contract for molding sample parts outside Canada is not claimable, whereas the purchase of molded prototype parts from outside Canada, as material for a SR&ED project, is claimable

Top 11 Tips: #6
Sweat Equity is not Claimable

- Make sure that people conducting SR&ED activities are paid

Top 11 Tips: #5
The Sale of an Item does not Disqualify a Project as SR&ED

- The sale of the proceeds of SR&ED does not disqualify the eligibility of the project
- However, the sale may reduce the amount of some expenditures that can be claimed

Top 11 Tips: #4

Consider both the Proxy and Traditional Claim Methods

- The Proxy method provides a 65% “bump-up” based on salaries, but may limit other expenditures that would be claimable under the Traditional method
- Sometimes Traditional can be better
- You can elect to use either method for each filing year, but must then apply the chosen method to all projects claimed in that year

Top 11 Tips: #3

File for SR&ED each Year that Work is Ongoing

- Don't wait for the project to be complete before filing SR&ED
- Eligible work must be claimed within 18 months of the fiscal year end in which the work occurred

Top 11 Tips: #2
File Quickly After your Fiscal Year End, with your Tax Return

- By filing SR&ED with the return, you can apply useable credits immediately
- CRA commits to process refundable claims within 120 days if filed with the return, but only within 240 days if filed as an amendment
- Previously-filed SR&ED claims can be amended, provided they are still within the 18 month period after fiscal year end
- Amended non-refundable claims may take more 365 days to process

Top 11 Tips: #1
Don't Avoid Claiming SR&ED Due to Fear of Filing Complexity

- CRA is relatively tolerant of first-time claimants – they want the program to be used, but used properly
- Early identification of SR&ED and contemporaneous collection of documentation maximizes the benefit and spreads the workload
- Service providers can reduce the filing workload and educate you to help you become more self-capable
- Recognize that there is a threshold below which the cost of claiming exceeds the benefit returned
- Claiming SR&ED is an entitlement – ignoring it leaves money on the table and puts you at a disadvantage v. your competitors who claim SR&ED

Thank you

- Contact Information

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