Research and Development in Ontario

Incentives for innovation

Ontario Canada
Fast Fact
Canada ranks #1 in the G7 as the best place to invest and do business through to 2012, according to The Economist Intelligence Unit’s global business rankings forecast.
Leading global companies – DuPont, Ford, GM, Pratt & Whitney Canada, sanofi pasteur, RIM (Research in Motion), Xerox and dozens more – are performing R&D worth billions every year in Ontario, Canada.

Why? It’s as simple as 1–2–3.

1. Exceptional research talent

Brainpower drives R&D and Ontario has become a magnet for top researchers from around the world. They’re drawn here by generous funding programs, excellent lab facilities and the opportunity to work on leading-edge projects in a friendly, collaborative environment.

Our workers are smart, skilled and well-educated. A higher percentage of our workforce has completed post-secondary education than in any G7 country.

2. R&D cost competitiveness

KPMG’s Competitive Alternatives 2008, comprehensive survey of international business costs, showed that Canada offers the lowest costs among the G7 for R&D and product testing.

That same study also reports that Canada’s overall business costs were the lowest in the G7 for R&D intensive sectors such as biotech, aerospace, agri-food, chemicals, medical devices, pharmaceuticals, precision manufacturing, telecommunications, software design, and web and multimedia development.

3. Government support for innovation

The Ontario government understands the economic benefits of successful business innovation. That’s why we’re investing almost $3 billion over eight years to support research and commercialization at our universities, colleges, hospitals and research institutes – much of it in partnership with the private sector.

Canada’s R&D tax incentive program is widely recognized as one of the most generous in the world. And in Ontario, we top up that program with additional tax incentives such as the Ontario Business-Research Institute (OBRI) tax credit and the Ontario Innovation Tax Credit (OITC).

All this can add up to big savings.

Innovative companies can also take advantage of a wide range of made-in-Ontario business programs that support R&D investments such as the $1.15 billion Next Generation of Jobs Fund, Ontario’s $500 million Advanced Manufacturing Investment Strategy and many more.

And by 2013, Ontario’s combined federal-provincial corporate income tax rate will be 25%.

Ontario’s R&D advantage

These days, innovative companies can do their R&D virtually anywhere in the world – wherever they can find the right people in the right research environment at the right cost.

Research In Motion

“Research In Motion was founded in Ontario in 1984, and maintains its global headquarters in Waterloo, a hotbed of high-tech research that was named Intelligent Community of the Year in 2007. We have become one of Canada’s Top Ten R&D spenders in part because of a culture of innovation that we share with all levels of government, and with the thousands of highly trained young people who come to work for us. Our success has fuelled more diverse research in Waterloo, including the establishment of the Perimeter Institute for Theoretical Physics and the Centre for International Governance Innovation and that, along with a truly enviable quality of life, has attracted some of the best minds in the world. Quite simply, Waterloo, Ontario provided the conditions that Research In Motion needed to succeed.” Mike Lazaridis, President and Co-CEO, Research In Motion
That rich history of discovery is being advanced by the thousands of researchers in labs across the province. Within the life science sector alone, for example, 10,000 scientists, clinical investigators and other researchers at 25 research and academic hospitals conduct $850 million in research annually.

Universities, publicly funded and not-for-profit R&D facilities in Ontario

Many of Canada’s top 50 research universities are located in Ontario. The University of Toronto, McMaster, Western, Queen’s, Laurentian, Ottawa, Guelph, Waterloo and others are all internationally recognized for the quality of their research.

In addition to the hundreds of research centres at our 44 colleges and universities, Ontario hosts a wide array of publicly funded and not-for-profit research organizations.

We are continually expanding our research capacity in emerging fields. Recently, for example, we made major investments in digital media facilities at the University of Waterloo at Stratford and the Ontario College of Art and Design in Toronto.

With the ever-accelerating pace of research and product innovation in Ontario, the best way to discover what’s new with R&D in Ontario is to visit the websites of leading organizations (see inside back cover).

Globally connected

Ontario scientists are plugged into the global research community, working collaboratively with colleagues around the world on public and private-sector projects.

High-capacity optical networks provide seamless international connections for massive data flows, multi-point video conferencing and other bandwidth-hungry applications.

These connections and networks can help innovations move more easily from the lab to the global marketplace.

“At sanofi pasteur, we focus on innovative research and development and state-of-the-art manufacturing, and we’ve made significant investments, both in people and facilities, to allow us to do that job in Ontario and be a global leader. We employ 1,100 people, including highly trained and skilled researchers, technicians and support staff. Our Connaught Campus is one of the largest R&D facilities that sanofi pasteur has worldwide and being located in Ontario allows us to access enormous intellectual capital and well-developed links among universities, medical research centres and industry. The labour force is among the best-educated in the world, and the provincial government understands the potential of the life sciences industry and supports it through initiatives such as the Biopharmaceutical Investment Program (BIP). Sanofi pasteur recently partnered with the Ontario Ministry of Research and Innovation on a $100 million project to construct a new R&D facility, which includes up to $14 million in provincial funding. The government responded quickly to our application, and demonstrated the ability to work at the speed of business to attract a global investment to Ontario.”  J. Mark Lievonen, President, sanofi pasteur

Fast Fact

More than $12.5 billion in industrial and university-based R&D is performed in Ontario every year.
Highly competitive R&D tax incentives

Canada’s R&D tax incentive program ranks among the most generous in the world:
- any size business can make a claim
- the range of eligible costs in Ontario is broader than in many countries
- there is no cap on the program.

A quick overview of the federal program

The federal Scientific Research and Experimental Development (SR&ED) tax incentives, in general, consist of:
- a 100% deduction of all eligible SR&ED costs, including capital equipment
- a 20% non-refundable investment tax credit on SR&ED expenditures

The investment tax credit can offset 100% of the federal tax payable in the year, or can be carried back 3 years or forward 20 years.

For small, Canadian-controlled private corporations’ (CCPCs), the investment tax credit:
- increases from 20% to 35% up to the first $2 million of R&D each year
- is wholly or partly refundable in cash, even if the company does not have enough tax payable to use the credit.

Additional made-in-Ontario incentives

Ontario provides additional tax incentives when R&D activities are conducted directly by companies in Ontario or through eligible research institutes.
- A 20% refundable Ontario Business-Research Institute tax credit for contract R&D performed at eligible research institutes in Ontario such as universities, colleges of applied arts and technology, and research hospitals.
- For small- and medium-sized companies,
  - there is an additional 10% refundable Ontario Innovation Tax Credit for R&D.

A 10 year tax refund for new corporations that commercialize intellectual property developed at a qualifying Canadian university, college or research institute.

2009 tax changes: Ontario Research and Development Tax Credit

For taxation years ending after 2008, corporations undertaking qualifying Scientific Research and Experimental Development in Ontario are eligible for a 4.5% non-refundable tax credit.

Notes:
1. Small CCPCs have:
   - a minimum of 50% Canadian ownership
   - taxable capital of less than $15 million
   - taxable income of less than $500,000.
2. Small and medium-sized companies have taxable income less than $500,000 and taxable capital less than $15 million.

“...The University of Windsor / Chrysler Canada Automotive Research and Development Centre (ARDC) in Windsor has proven to be a role model of industry, government and academia working together. The vision that guided the establishment of the ARDC partnership in 1996 remains vital to the creation of innovative automotive technologies. This partnership provides university faculty, researchers and students the opportunity to lead and participate in state-of-the-art automotive research projects together with industry researchers in a world class automotive research facility. The Centre has received several prestigious national awards for promoting the development of highly qualified researchers and supporting automotive research and development in Ontario and throughout Canada. The Ontario government understands the vital role that this mission plays in the health of industry. Chrysler Canada’s three-way partnership with government and education continues to build our company, strengthen the economy of Ontario and Canada, and provide a strategic environment for learning and growth unrivalled by any other in Canada. It’s truly a win-win-win situation!” James Lanigan, Senior Manager, Engineering & Regulatory Affairs, Chrysler Canada
Major R&D cost savings

Federal and Ontario Scientific Research and Experimental Development (SRAED) incentives generate significant tax savings.

The federal SRAED tax credit can reduce your cost by 20%. Additional Ontario incentives can reduce your after-tax cost of $100 in R&D expenditures to less than $36.

Savings vary by the size and type of corporation. During 2009, for example, the real after-tax cost of a $100 R&D expenditure would range from $52.72 to as low as $35.28.

### Large manufacturers 2009
- **Public or foreign owned**

<table>
<thead>
<tr>
<th>R&amp;D Expenditures</th>
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<tbody>
<tr>
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<td>Federal investment tax credit—20%</td>
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<tr>
<td>Tax deduction</td>
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<td>After-tax cost of $100 expenditure</td>
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### Small and medium-sized manufacturers’ 2009
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<td>After-tax cost of $100 expenditure</td>
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### Fast Fact
Ontario offers one of the most generous R&D tax incentive programs in the world.

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### Large non-manufacturers 2009
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### Small Canadian-controlled 2009
- **Private corporations (CCPCs)**

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<td>Federal investment tax credit—35%</td>
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<tr>
<td>Tax deduction</td>
<td>$55.87 x 16.5%</td>
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Notes:
1. Federal investment tax credit is 20%.
2. Eligible Ontario research institutes include universities, colleges of applied arts and technology, research hospitals and other entities in Ontario.
3. The 4.5% refundable Ontario Business Research Institute Tax Credit.
4. The 10% refundable Ontario Innovation Tax Credit.
5. The 4.5% refundable Ontario Research and Development Tax Credit.
6. Federal investment tax credit is 20%.
7. Eligible Ontario research institutes include universities, colleges of applied arts and technology, research hospitals and other entities in Ontario.
8. Federal investment tax credit is 20%.

**Federal and Ontario Scientific Research and Experimental Development (SRAED) incentives**

- Federal 19.0% plus Ontario 12.0% = 31.0%
- Federal 19.0% plus Ontario 14.0% = 33.0%
- Federal 11% (with taxable income less than $250,000) plus Ontario 12.0% = 23.0%
Stretching your research dollars

The Ontario and Canadian government’s R&D tax incentives can cut your after-tax research costs by 47% to 64%.

To further stretch your budget, we offer a wide range of business growth and research collaboration programs.

**Ontario’s $1.15 billion Next Generation of Jobs Fund**

helps Ontario-based companies develop innovative technologies and products for global markets. The program can cover up to 15% of costs for large-scale ($25 million+) expansion projects in knowledge-intensive areas such as:

- green auto research, parts production and assembly
- clean fuels research, development and commercialization
- environmental technologies, clean industries and bio-economy
- advanced health technologies
- digital media and information and communications technology
- pharmaceutical and biotechnology research and manufacturing
- financial services
- anchor investments to support cluster development, including for the services sector.

Other programs such as the Ontario Research Commercialization Program and the Innovation Demonstration Fund offer companies additional options to offset the development cost of leading-edge products.

**Advanced Manufacturing Investment Strategy**

Our $500 million Advanced Manufacturing Investment Strategy (AMIS) can provide interest-free loans to help businesses adopt cutting-edge technologies.

Leading companies such as Procter & Gamble, Kellogg Canada, Heroux Devtek, Bioniche Life Sciences, Dofasco, Toyota Boshoku Canada and Roxul Inc. have all launched major projects with support from AMIS.

We’ve also expanded AMIS and made it easier for companies to access. The size of the potential loan has been increased to 30% of project costs, while the thresholds have been reduced to 50 jobs created or $10 million invested (down from 100 jobs/$25 million).

**Additional programs to support business growth**

More than 60 other provincial and federal programs are available to help business grow; from co-op education tax credits to the community futures program. For more details, please visit www.investinontario.com.

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“Pratt & Whitney Canada has earned a strong reputation over the years for innovation, technical excellence and proven engine reliability. This has been made possible in large part by our deep commitment to research and development and the application of leading-edge development and manufacturing processes. Pratt & Whitney Canada is the largest R&D investor in the Canadian aerospace industry and one of the top five R&D investors in the country’s private sector. The know-how and dedication of our Mississauga, Ontario employees has enabled us to develop more than 50 programs over the last 10 years. We are well positioned to meet the challenges of tomorrow.”

Alain M. Bellemare, President, Pratt & Whitney Canada
1. What types of activities and costs qualify for the R&D tax incentives?

A wide range of activities qualify for Scientific Research and Experimental Development (SR&ED) benefits in Ontario. These include:

- new product development
- development of new or improved materials
- manufacturing process improvements
- software development
- clinical trials of new drugs or medical devices.

Compared to the United States, Canada has a broader range of costs that qualify for the tax credits.

In addition, the Canadian investment tax credit generally applies to every dollar of R&D. In the U.S., the federal R&D tax credit generally applies only to incremental R&D expenses. In other words, in the U.S. you generally do not earn any R&D tax credits if your current R&D expenses do not exceed your base amount derived from your past gross receipts and past R&D spending.

2. I’m currently in a loss position. Why should I care about deductions that are just going to expire?

Write-offs of R&D costs may be deferred in Ontario. If an Ontario company does not need to take the deductions in the year they are incurred, the R&D expenses can be carried forward indefinitely.

In the U.S., R&D costs must be expensed in the year they are incurred. They then become losses, subject to expiry.

3. Aren’t taxes higher in Ontario?

No.

KPMG’s comprehensive Competitive Alternatives 2008 study of international business costs showed that, among the G7, Canada has the lowest effective corporate income tax (CIT) rate for manufacturing operations and the second-lowest effective CIT rate for non-manufacturing operations.

Ontario’s 2009 Budget proposed tax reform aims to permanently and significantly reduce business taxes for large and small enterprises across the province, including a plan to reduce the corporate income tax rate to 10%.

Ontario’s current combined federal-provincial CIT rates for general corporations and manufacturers are almost seven percentage points below the average rate of its main trading partners, the Great Lakes States. In fact, the combined CIT rate in Ontario for both general corporations and manufacturers is lower than the combined CIT rate in every one of the 50 U.S. states.

When Ontario’s proposed CIT cuts are fully implemented, our combined CIT rate will be 15 percentage points lower than the U.S. average combined federal-state general CIT rate and more than 11 percentage points below the U.S. average combined manufacturing rate.

Notes:

1. Provided three key criteria are met:
   - R&D must demonstrate scientific or technological advancement. In other words, 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 goals can be achieved
   - R&D must have scientific and technical content as evidenced by systematic, well-documented investigation.

Wages and salaries
Capital equipment
Materials
Overhead
Consulting fees

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<th>Ontario</th>
<th>United States</th>
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"IBM has been doing business in Ontario for more than 90 years. Our roots go deep and so does our commitment to research and development. IBM employs 4,800 software developers in state-of-the-art software laboratories in Markham and Ottawa, and invests more than $300 million in software R&D each year. Ontario is recognized as a pre-eminent destination for many companies competing in global industries. Its highly skilled professionals and well-trained multicultural labour force, coupled with its dynamic business environment are why companies like IBM have chosen to locate here."

Dan Fortin, President, IBM Canada
4. What about payroll taxes?
Among the G7 countries, Canada has the lowest overall labour costs, including statutory benefits (government pension plans, medical plans, etc.) as a percentage of payroll. Employee health care benefits cost Ontario companies about half as much as their U.S. counterparts. Source: MMK Consulting, 2008

5. What if my head office wants to retain ownership of the intellectual property developed in Ontario?
Your head office can do that. An Ontario corporation can claim R&D tax incentives even if its R&D costs are covered, in whole or in part, by payments from a foreign corporation or government.

The Ontario subsidiary could do R&D under contract for its foreign parent and still claim the 20% federal investment tax credit. In certain cases, the Ontario subsidiary may also be able to claim the 10% refundable Ontario Innovation Tax Credit. The 20% refundable Ontario Business-Research Institute Tax Credit may also be available where the Ontario subsidiary subcontracts some of the R&D to an eligible research institute.

A foreign corporation paying for R&D performed by an unrelated Ontario company can benefit indirectly, since the Ontario company will be able to provide the service at a lower cost due to the tax benefits it receives.

6. Will my options for structuring my R&D investment be limited?
No. You have significant flexibility in structuring your R&D investment. Foreign and Ontario companies can benefit under a variety of scenarios:
- the foreign parent can contract with its Ontario subsidiary to perform R&D
- the Ontario subsidiary of a foreign company can undertake R&D on its own
- a foreign company can contract with an unassociated Ontario company to do R&D on its behalf
- a foreign company can set up or acquire a minority interest in a small Canadian-controlled private corporation (CCPC) that performs R&D.

Fast Fact
Ontario has introduced a 10-year provincial income tax exemption for new corporations that commercialize intellectual property developed by Canadian universities, colleges or research institutes.

Thirty years ago, Leonard Lee started a woodworking and gardening tools mail-order business in Ottawa – Lee Valley Tools – that grew into a multi-million dollar chain. Then one of his best customers – a surgeon – asked him if he could develop better surgical tools and that led to the founding of Canica Design, located in Almonte, a small town about 50 km from Ottawa. Today, Canica’s innovative wound closure system is being used by hospitals and by the U.S. military in battle zones because it speeds the healing process, reduces the chance of infection and eliminates the need for skin grafts. Lee is quick to identify some of the competitive advantages his companies gain by being based in Ontario. “The well educated workforce is a great advantage because having better educated people leads to fewer product returns,” he says. “Secondly, Canadian tax policy on R&D is as good as you’re going to get anywhere and, finally, Ontario has an industrial base that includes a broad range of services: if you need packaging or good printing or electroplating, it’s all here.” Leonard Lee, President, Canica Design Inc.
"At DuPont, we see Ontario, with its proximity to major markets and technology-intensive businesses, as a great place to seek growth opportunities and new business development. For example, we’re continuing to build on the more than 50-year tradition of innovation and engineering excellence at our Kingston Research & Business Development Centre, which is a global leader in the development of polymer products and processes. We’re now operating a new production facility at Kingston too, which is manufacturing a breakthrough product that adds enormous strength and durability to end-products such as tires, belts and hoses. Our easy access to a network of leading Ontario and Canadian universities, including Queen’s in Kingston, is also valuable as we pursue expanded new biology-based research and initiatives." David Yake, Director, Research and Business Development, DuPont Canada
For more information about conducting R&D in Ontario, please visit us at:
www.investinontario.com

The world works here.

For a list of international phone numbers to contact us:
www.investinontario.com/contactus
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