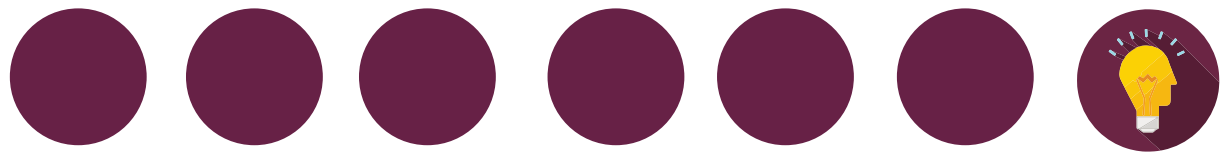
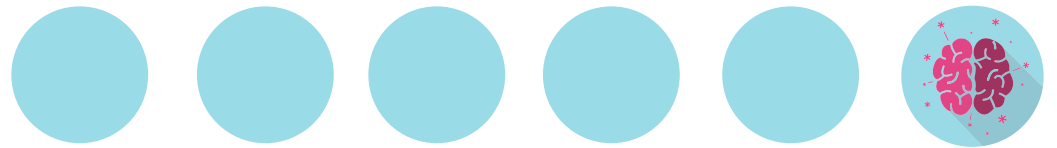
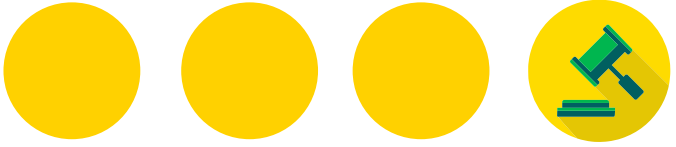


A COMPASS TO CANADA'S INNOVATION + ENTREPRENEURSHIP ECOSYSTEM





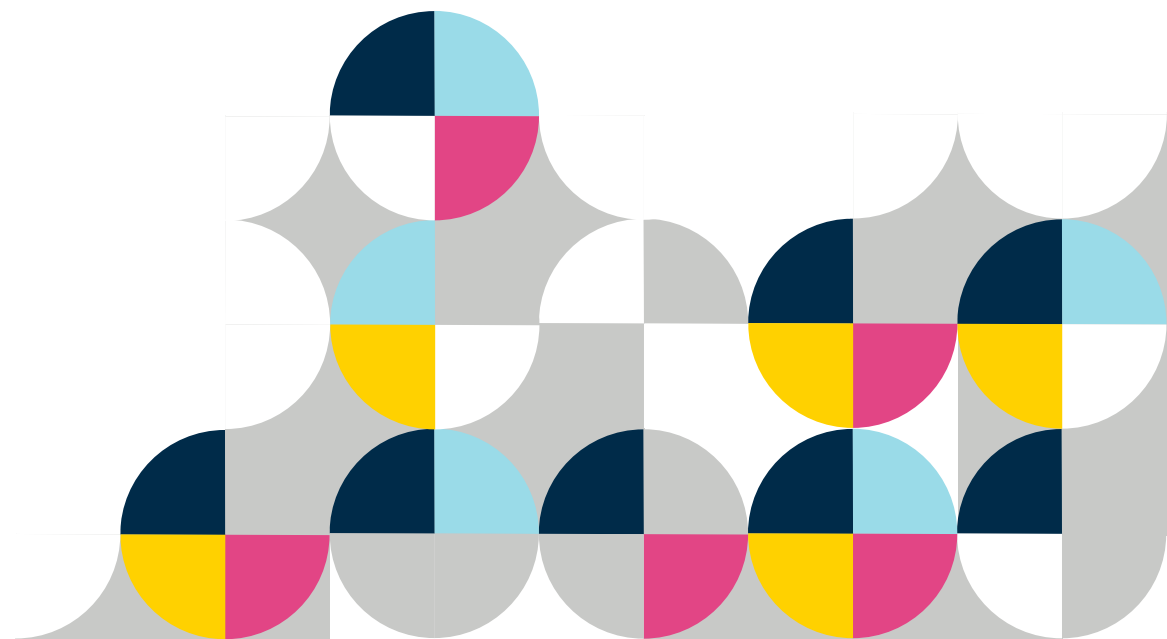
ABOUT THE BROOKFIELD INSTITUTE FOR INNOVATION + ENTREPRENEURSHIP

The Brookfield Institute for Innovation + Entrepreneurship (BII+E) is a new, independent and nonpartisan institute, housed within Ryerson University, that is dedicated to making Canada the best country in the world to be an innovator or an entrepreneur.

BII+E supports this mission in three ways: insightful research and analysis; testing, piloting and prototyping projects; which informs BII+E's leadership and advocacy on behalf of innovation and entrepreneurship across the country.

For more information, visit brookfieldinstitute.ca
Follow us on Twitter [@BrookfieldIIE](https://twitter.com/BrookfieldIIE)

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Toronto, ON
M5G 2C2





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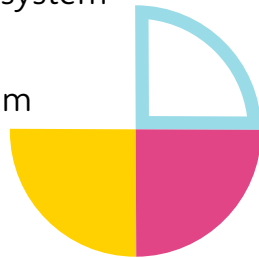
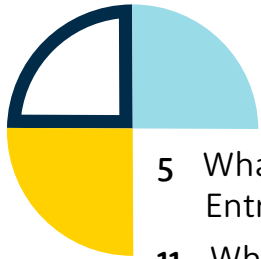
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Executive Summary

Given the ongoing growth of Canada's innovation + entrepreneurship ecosystem, it is important that we understand the roles, purpose and connections between the actors operating within it. An ecosystem-oriented approach allows us to see the actors in action - not in silos, but within networks of organizations contributing to a larger system.

This framework provides an overview of important concepts and latest thinking in innovation + entrepreneurship. It attempts to organize some of the actors that are part of Canada's innovation + entrepreneurship ecosystem. It is intended as a compass to help you navigate the considerable volume of actors and interactions in the ecosystem, and dive deeper into specific areas.

What this report does:

- + Lays the foundation for a dynamic overview of Canada's innovation + entrepreneurship ecosystem.
- + Present a conceptual framework to help navigate the variety of actors in Canada.
- + Provide profiles of the innovation + entrepreneurship ecosystem at the level of Canada's provinces and territories.

What this report doesn't do:

- + Offer a comprehensive inventory of Canada's innovation + entrepreneurship assets.
- + Provide an assessment of the system strengths and gaps.
- + Offer policy recommendations.

This framework is a work in progress. Actors in different parts of the ecosystem are best positioned to know the assets that exist. We invite any and all constructive feedback as we continue to explore the innovation + entrepreneurship ecosystem and refresh this framework on an ongoing basis.



Introduction



What is the first example that comes to mind when you think about innovation + entrepreneurship? In Canada, it's apt to be home-grown technology company Blackberry. At one point, Blackberry was the largest company in Canada and a powerful global player. Known for bringing wireless email to the masses, the company created a fundamental shift in the way people communicated, paired with devices that were ubiquitous—everyone either had or wanted one. While circumstances have since changed, what Blackberry accomplished is a prime example of Canadian innovation and disruptive entrepreneurship.

However, innovation + entrepreneurship encompass far more than one technology giant's activities. These are the processes that can occur at any level, from an office above a bagel shop to a company's global headquarters. They inspire new and existing actors, influencing the emergence of research labs and business incubators. They also work together to inspire new ideas and processes that become embedded in economic, political and social institutions. All of the factors that interact to constitute innovation + entrepreneurship are exceedingly difficult to capture in any one example, and placed within the context of a wider ecosystem to be understood. How wide exactly? We are striving to shed some light on that.

An inventory alone isn't enough to understand how and why actors are involved in Canada's innovation + entrepreneurship ecosystem, let alone how they interact. The volume of actors and their interactions make it daunting to identify and navigate the broader ecosystem. Given the sheer volume of actors involved, we recognize that this will not be a comprehensive inventory, but a living document and work-in-progress that will evolve as new actors are discovered, classified and added, and others exit. We do not expect or aim to have all the answers. Instead, we believe strongly in a collaborative approach to involving as many users and experts from the academic, business, public sector and entrepreneurial worlds as we can in finding solutions that benefit Canada.

This compass presents a framework to help navigate the variety of actors in Canada's innovation + entrepreneurship ecosystem. It helps identify and categorize key actors involved to help obtain a high-level overview. It will serve as a tool to understand how actors fit within Canada's innovation + entrepreneurship ecosystem. Whether you are a decision-maker, policy-maker or entrepreneur, we are aiming to help anyone who is interested to get the lay of the land from our perspective. This is a resource to learn about other actors, identify opportunities, discover patterns and connect with actors with similar or complementary goals.



A quick guide to
how this resource is organized:

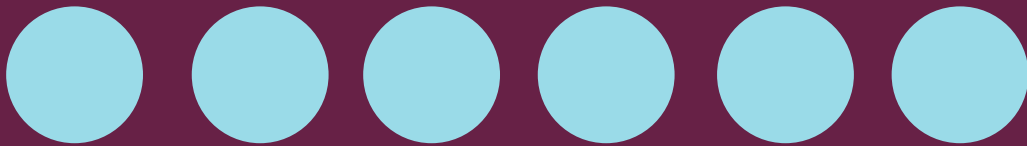
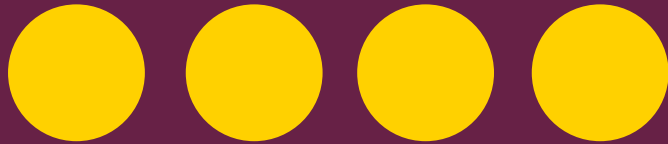
SECTION 1 provides background information on innovation, entrepreneurship, and how they work together in an ecosystem.

SECTION 2 describes the conceptual framework that helps group ecosystem actors into categories, with pointers on how to navigate the ecosystem.

SECTION 3 offers a deeper dive into each category, describing how actors contribute to Canada's innovation + entrepreneurship ecosystem. This is illuminated by a select number of profiles of key actors which can serve as landmarks in a fast-changing environment.

SECTION 4 aims to profile Canada's innovation + entrepreneurship ecosystem at the level of each of Canada's provinces and territories.

WHAT IS INNOVATION + ENTREPRENEURSHIP?



What is innovation?

Definitions of innovation vary widely.
For example:

“A new or better way of doing valued things.”
—Review of Federal Support to Research and Development

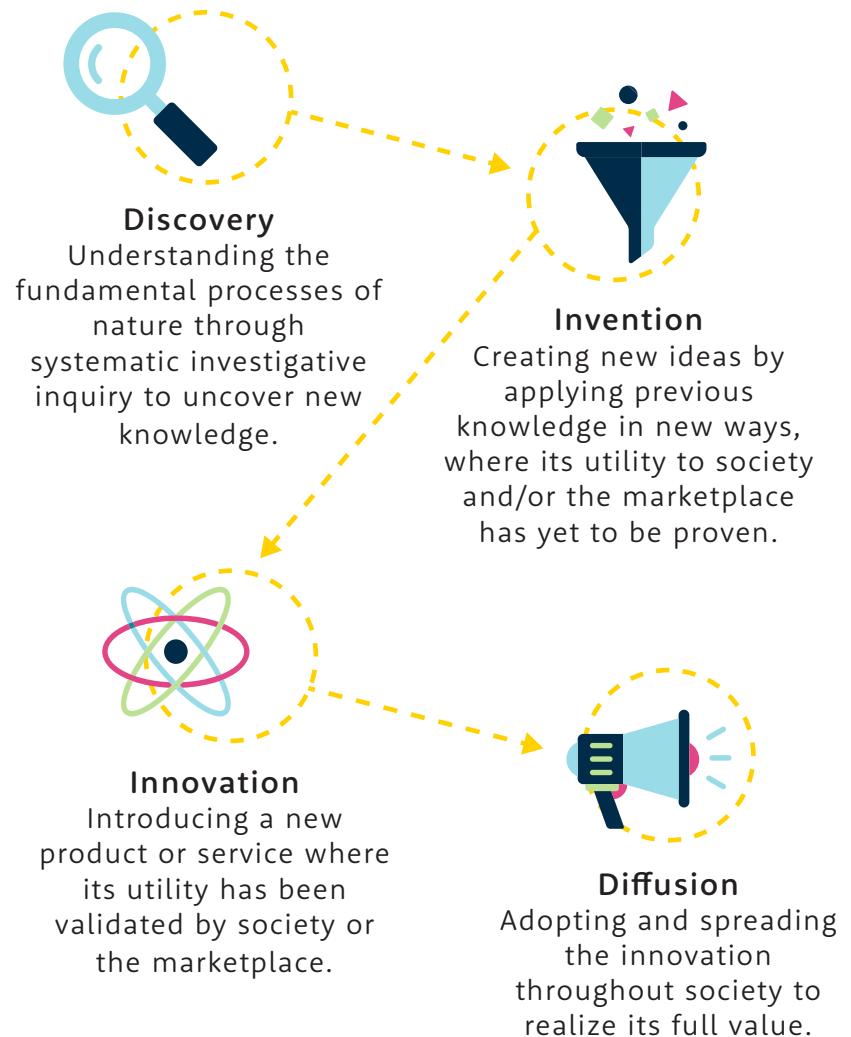
“The creation and diffusion of new products, processes and methods.”
—Organization for Economic Co-operation and Development (OECD)

“New ideas that work.”
—Nesta

“Change that creates a new dimension of performance.”
—Peter Drucker

The Brookfield Institute believes that innovation represents an improvement on the status quo: a new piece of knowledge, an enhancement to a process, a new product, or a solution to an existing problem.

There are four core concepts embedded within the process of innovation:



What does innovation look like?

The OECD defines four broad categories of innovation:¹

Product Innovation

An improvement to a good or service that moves up the value-chain or is first to market for users.

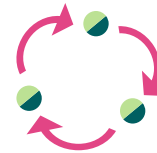


The introduction of the smartphone in the early 2000s was a game-changing, disruptive innovation.

Product innovation isn't limited to tangible products. It also operates in services, such as platforms in the sharing economy like Uber or Airbnb.

Organizational Innovation

New ways of organizing structures with the objective of being supportive of innovation.

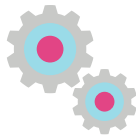


One example of an organizational structure designed to be supportive of innovation is the “lean startup” model of product development. Conventional product development cycles focus on creating a perfected, multi-featured product over a long period, usually without customer feedback as the product is in development.

Lean startup methodology focuses on developing a minimum viable product and testing it with real users to refine and improve it. It works to help innovators validate learnings.³

Process Innovation

New ways to make products and deliver them to reduce costs and increase convenience for users.



- + **Process innovation in production:** The development of new automated tools for use in manufacturing assembly lines.
- + **Process innovation in delivery:** In the 1960s, a major innovation transformed how products were delivered - the shipping container.²

Market Innovation

New ways of entering the same market through alternative channels, or accessing new markets.



When eBay entered Canada, they observed that although Canadians spend a lot of time shopping online, they rarely followed through with online transactions. Kijiji was launched to address this tendency. A classified ad listing site, it was a response to the realization that “Canadians spend a ton of time online...but they prefer transacting offline.”⁴ It's now the most popular online classified service in Canada, and ranks among the country's most popular sites.

What is entrepreneurship?

Like innovation, there are many ways to describe entrepreneurship:

“Always searching for change, responding to it, and exploiting it as an opportunity.”

—Peter Drucker

“Involves the creation of something new.”

—StatsCan

“Enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.”

—OECD

“Live in the future, then build what’s missing.”

—Paul Graham

The Brookfield Institute defines entrepreneurship as **the activity of leveraging innovation to improve the status quo**: by starting a new business, tackling a social challenge, or pursuing new ventures within an existing organization.

In short, it’s the conduit by which innovation produces tangible benefits for society.



What does entrepreneurship look like?

Entrepreneurship can be represented in three ways:

Venture Creation

The most common activity associated with entrepreneurship is the creation of a new business. There are two distinct segments of early stage businesses:

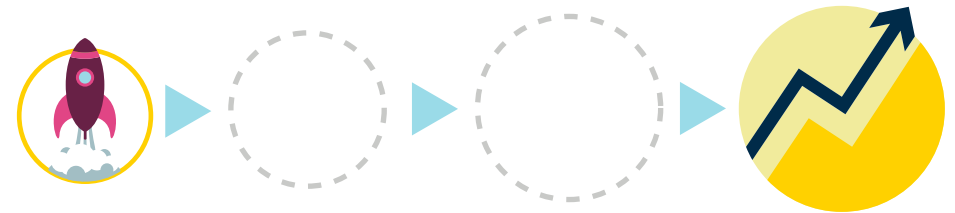
Traditional or “lifestyle” businesses: These are characterized by slow growth trajectories and a focus on serving local markets. They may or may not have a scalable business model. They are not characterized by leveraging innovations that can potentially transform markets. Some typical examples include:

- + main-street brick-and-mortar businesses
- + freelancers
- + professional services
- + artists

High-growth businesses: These businesses are characterized by fast growth trajectories and a scalable business models. They tend to leverage innovations to potentially transform markets. These businesses typically include:

- + information and communication technology, both hardware and services
- + digital media
- + life sciences
- + advanced manufacturing

In their early stages, high-growth businesses begin as startups. Then, as they begin to scale, they become scale-ups.



A **startup** is an organization formed to search for a repeatable and scalable business model.⁵

—Steve Blank

Scale-ups are enterprises with average annualised growth in employees (or in turnover) greater than 20 per cent a year over a three-year period, and with 10 or more employees at the beginning of the observation period.⁶

—Sherry Coutu

Social Entrepreneurship

As the name implies, this involves using entrepreneurial practices to solve social problems, moving outside of the purely economic realm.

“Social innovation is an initiative, product, process or program that profoundly changes the basic routines, resources, and authority flows or beliefs of any social system.”

—Social Innovation Generation (SiG)

Innovation + entrepreneurship has expanded to include generating social value in addition to economic value. Rather than privileging profits, social enterprises focus on addressing problems such as climate change, poverty reduction, and caring for an aging population.



Intrapreneurship

Finally, there is the process of initiating a new project or venture within existing organizations to improve the status quo. This integrates risk-taking approaches to disrupt established practices within large organizations.

Intrapreneurship can operate in a number of ways, for instance, as an employee-driven initiative to undertake new endeavours within an organization.



Why Innovation + Entrepreneurship?

Innovation + entrepreneurship skills are becoming increasingly critical for employment in the knowledge-based economy. A recent study estimates that 42 per cent of Canadian jobs are at risk of being automated.⁷ Given this susceptibility to disruption across the Canadian workforce, innovation within existing economically productive sectors, as well as new company creation, are crucial for continued prosperity.

Innovation is a key driver of economic growth and prosperity. It does this in two ways:

1. Increasing the inputs to economic growth, including:
 - + labour—the workforce
 - + tangible capital—physical capital such as machinery and equipment or infrastructure
 - + intangible capital—knowledge-based capital such as data organization know-how or design
2. Increasing productivity—finding new ways to transform and increase the extraction of output from inputs.

Entrepreneurship is how innovation is advanced. The OECD identifies four broad ways in which entrepreneurs can drive innovation:⁸

- + **as a disrupter**
Entrepreneurs are the key actors in introducing disruptive products or services that disrupt markets that will lead to long-term economic growth.
- + **as an opportunity identifier**
Entrepreneurs discover and exploit previous unnoticed opportunities to improve the status quo and address unmet needs.
- + **as a risk-taker**
Entrepreneurs take risks by offering new things in the face of uncertainty and by experimenting.
- + **as a resource shifter**
Entrepreneurs shift resources from lower to higher productivity activities that can lead to longer term productivity enhancements.

Innovation + entrepreneurship are intricately linked in one ecosystem, where entrepreneurship is the conduit by which innovation produces tangible benefits for society. By trying to understand how innovation + entrepreneurship interact, how they support one another, and how they can be supported together, we can move toward unlocking the greatest economic and social benefits for Canadians.

The Innovation + Entrepreneurship Ecosystem



Innovation + entrepreneurship don't function in a vacuum. They exist within an ecosystem, understood as a number of components and interactions. The performance of an innovation + entrepreneurship system not only depends on the strength of the actors that comprise the system, but also on the strengths of the relationships between these actors.

Danish organizational theorist Bengt-Åke Lundvall defined a national system of innovation as “...*the elements and relationships which interact in the production, diffusion and use of new, and economically useful knowledge...and are either located within or rooted inside the borders of a nation state.*”⁹

Each actor in an innovation + entrepreneurship system has their own role to play, and these roles are in the most part complementary. A ecosystem-oriented lens will help reveal how these actors interact with one another and the complex, dynamic processes involved in innovation + entrepreneurship.

Innovators and entrepreneurs are at the heart of a complex and layered ecosystem. They are the source of new ideas and new processes.

No man is an island entire of itself; every man is a piece of the continent, a part of the main.

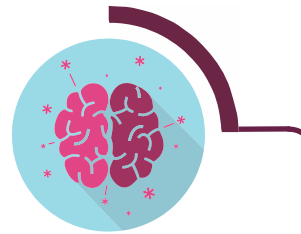
—John Donne



Navigating the Ecosystem

There are a lot of actors in Canada's innovation + entrepreneurship ecosystem, and they all play specific roles. Trying to understand how each actor contributes to the ecosystem is a difficult task given their sheer volume, their interactions, and the variety of activities they pursue.

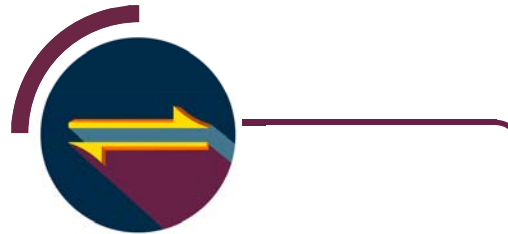
A conceptual framework greatly simplifies this task. This resource provides one to help you quickly identify key actors and how they each contribute to the ecosystem.



This resource draws on NESTA's Innovation Policy Toolkit[®] framework to identify four critical outcomes to classify actors:

KNOWLEDGE GENERATION

Actors that generate knowledge, typically in the form of research, and train people to contribute to the ecosystem.



KNOWLEDGE TRANSFER

Actors that help extract economic or social value from knowledge, including through commercialization or leveraging research-based talent to solve applied problems.



INNOVATION + ENTREPRENEURSHIP SUPPORTS

Actors that directly or indirectly support innovators and entrepreneurs.



ECOSYSTEM GOVERNANCE

Actors that support or influence the framework conditions in which innovators and entrepreneurs operate.

Selection Criteria

Given the sheer volume of actors involved with Canada's innovation + entrepreneurship ecosystem, we've limited the scope of actors we can document at this point. This inventory aims to capture the landscape of publicly supported actors, and those that undertake activities with a public policy focus within Canada's ecosystem.

To be included in this inventory, actors must meet the following criteria:

- + be active and engaged in contributing to the innovation + entrepreneurship ecosystem within Canada, as demonstrated in delivering the outcomes associated with this framework
- + undertake publicly supported activities or activities with a public policy focus
- + engage in activities at a large scale (within cities as a minimum).

Actors were collected and curated beginning in January 2016, and this process remains ongoing.

Actors were identified by:

- + conducting literature reviews and evaluations of Canada's innovation + entrepreneurship ecosystem
- + searching lists and existing databases provided by national membership-based professional associations
- + reaching out to representative organizations in provinces and territories.

Once we identified the actors, we compiled descriptions of organizational objectives and their approaches using information publicly available on their websites.

The information we collected and curated from each organization included:

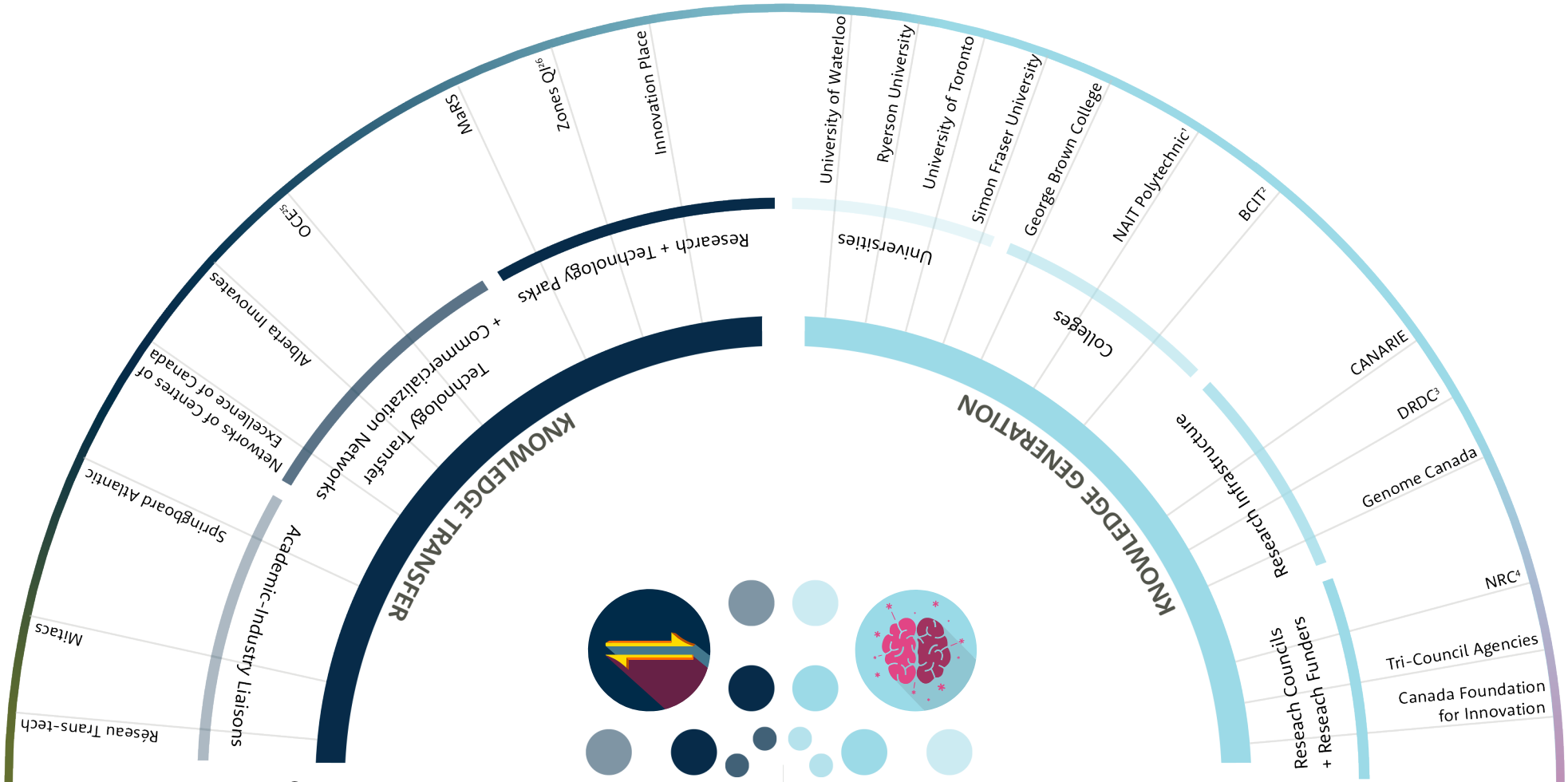
- + sources of additional information
- + organization governance—how the organization is structured
- + organizational type
- + geographic scope—geographic scale to represent area of influence
- + organizational objectives
- + focus areas—the organization's sector focus approaches
- + categorization based on framework and activity roles.

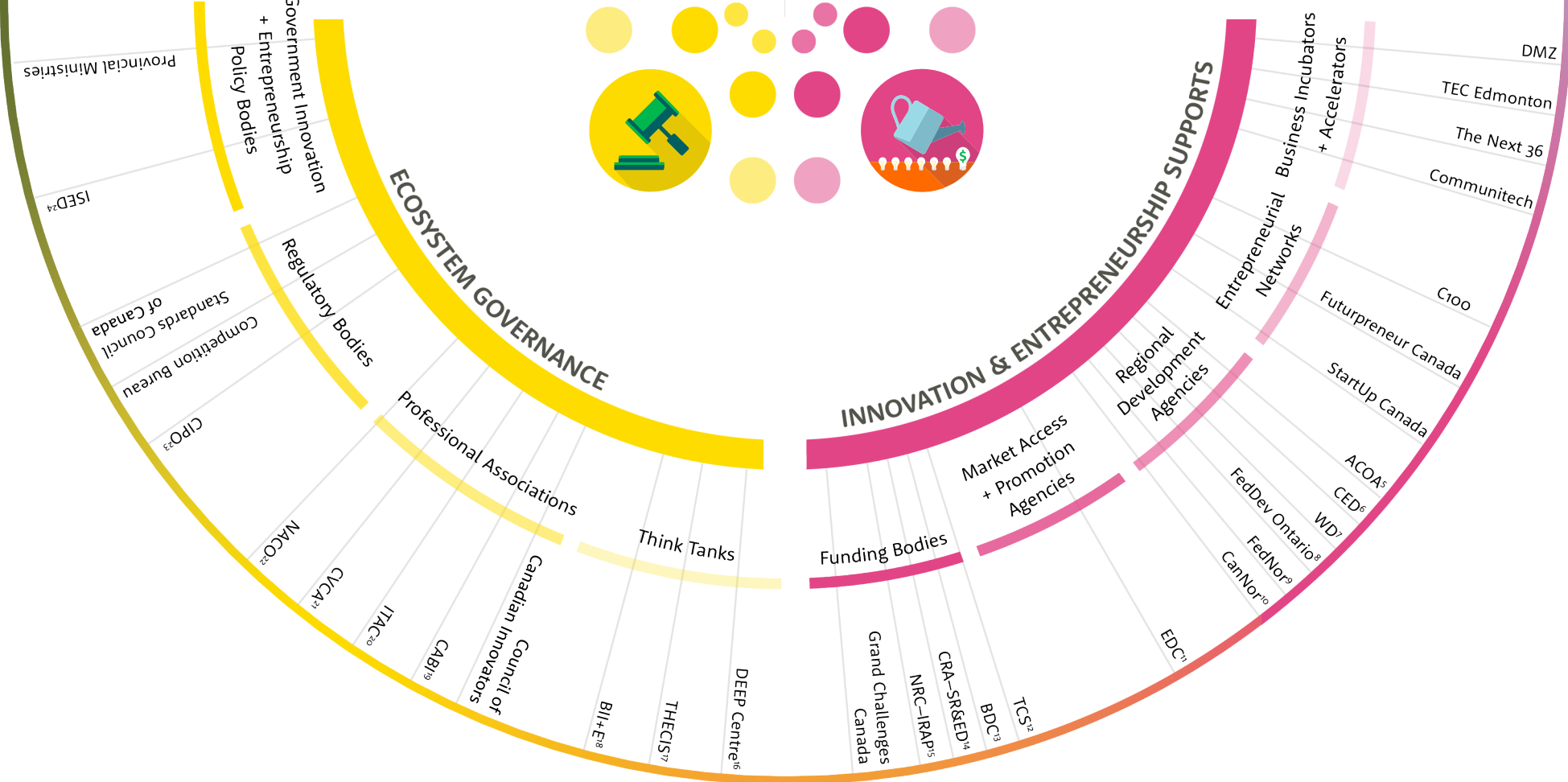




A Compass to Canadian Innovation + Entrepreneurship Ecosystem

SELECT ACTORS

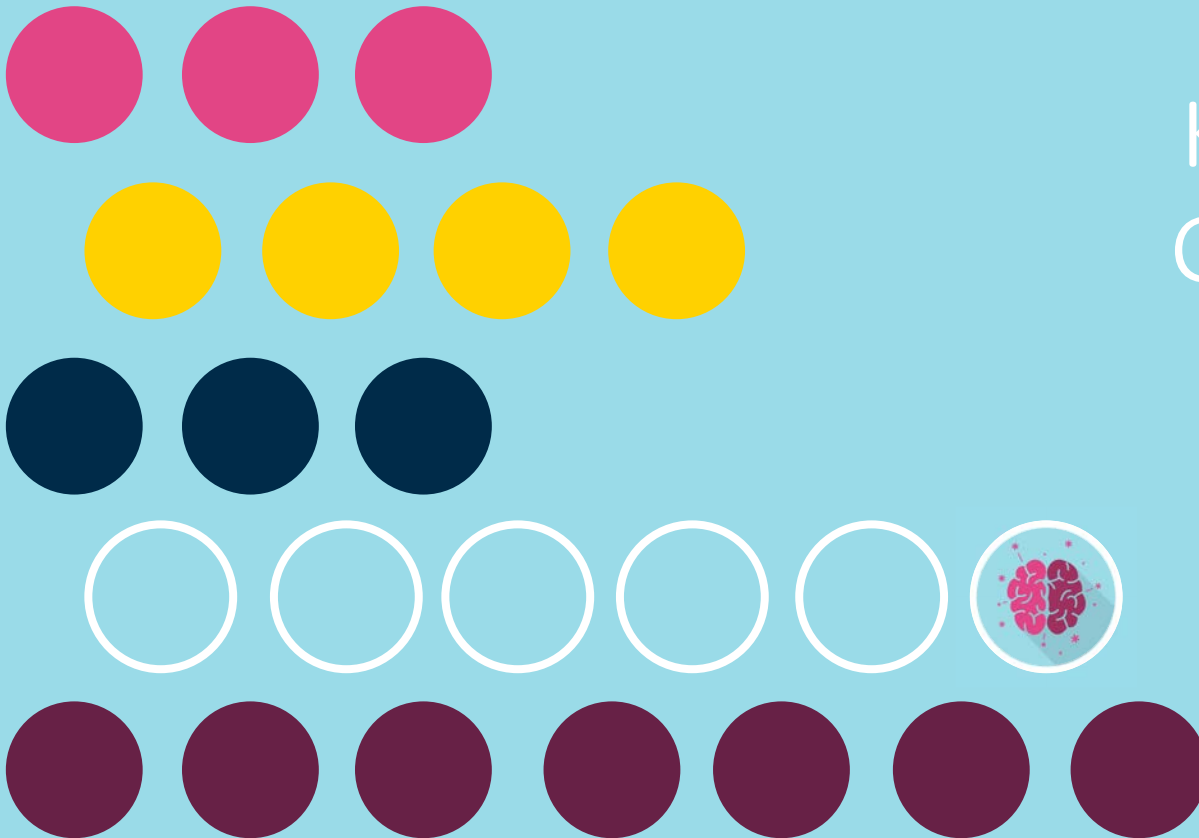




- 1 Northern Alberta Institute of Technology Polytechnic
- 2 British Columbia Institute of Technology
- 3 Defence Research and Development Canada
- 4 National Research Council
- 5 Atlantic Canada Opportunities Agency
- 6 Canada Economic Development for Québec Regions
- 7 Western Economic Diversification Canada
- 8 Federal Economic Development Agency for Southern Ontario
- 9 Federal Economic Development Agency for Northern Ontario
- 10 CanNor Canadian Northern Development Agency
- 11 Export Development Canada
- 12 The Canadian Trade Commissioner Services
- 13 Business Development Bank of Canada

- 14 Canada Revenue Agency – Scientific Research and Experimental Development Tax Incentive Program
- 15 National Research Council Industrial Research Assistance Program
- 16 The Centre for Digital Entrepreneurship and Economic Performance
- 17 The Centre for Innovation Studies
- 18 Brookfield Institute for Innovation + Entrepreneurship
- 19 Canadian Acceleration and Business Incubation
- 20 Information Technology Association of Canada
- 21 Canadian Venture Capital and Private Equity Association
- 22 National Angel Capital Association
- 23 Canadian Intellectual Property Office
- 24 Innovation, Science, and Economic Development Canada
- 25 Ontario Centres of Excellence
- 26 Zones Québec Innovation

CATEGORY 1
KNOWLEDGE
GENERATION



What is Knowledge Generation?

K

nowledge generation is the foundation of the innovation + entrepreneurship ecosystem. It involves the creation of new ideas and/or skills, which have the potential to lead to valuable innovations. It touches directly upon the processes associated with the earlier

stages of innovation, namely at the discovery and invention stages where ideas are explored, created and prototyped.

Knowledge is a necessary resource, but often insufficient for innovation on its own. Knowledge generation in itself does not always lead to innovation, as not all knowledge can be leveraged for value. The market might not generate the demand for knowledge that can lead to innovations. As such, while knowledge generation is a critical outcome for a healthy innovation + entrepreneurship ecosystem, it is only one of many potential outcomes.

There are two ways in which knowledge is usually generated:

- + research and development to generate new ideas, products and/or services
- + developing and training human capital to attain or develop knowledge-based skills

Generating knowledge pushes the frontiers of science and technology forward, presenting opportunities for innovation + entrepreneurship.



UNPACKING THIS SECTION

POST-SECONDARY INSTITUTIONS

UNIVERSITIES

COLLEGES

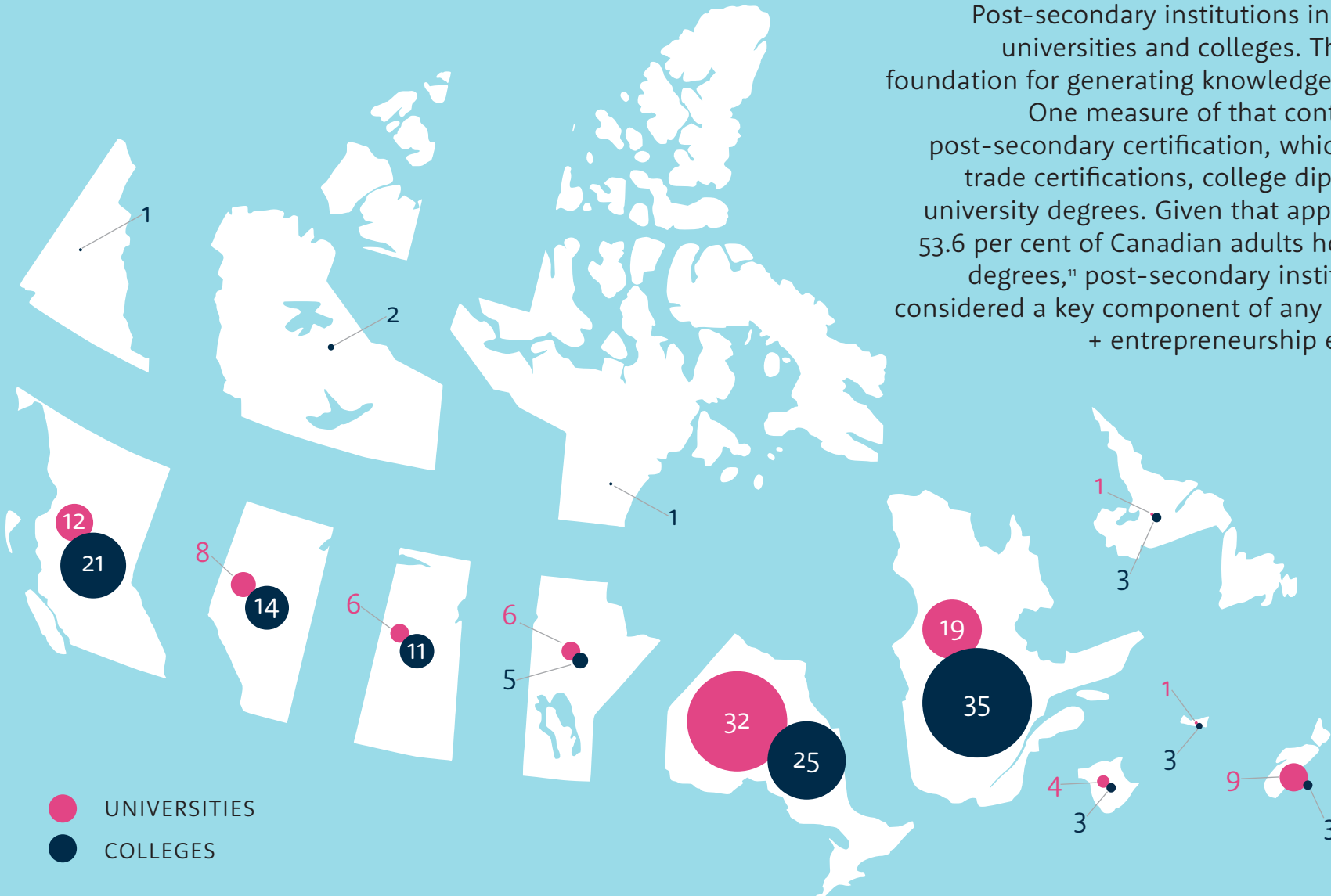
RESEARCH INFRASTRUCTURE

RESEARCH COUNCILS + RESEARCH FUNDERS

Post-Secondary Institutions

Post-secondary institutions include both universities and colleges. They are the foundation for generating knowledge in society.

One measure of that contribution is post-secondary certification, which includes trade certifications, college diplomas and university degrees. Given that approximately 53.6 per cent of Canadian adults hold tertiary degrees,¹¹ post-secondary institutions are considered a key component of any innovation + entrepreneurship ecosystem.



Universities

Universities engage two core activities among many that generate knowledge:

- + research and development activities, both basic and applied research, to advance the frontier of knowledge
- + capacity-building amongst people by developing the skills and human capital required for people to contribute to a knowledge-based economy.

Some universities offer a suite of opportunities that help advance other critical outcomes identified by this framework, such as:

- + experiential and work-integrated learning
- + opportunities for students to apply their learnings, particularly in industry settings
- + technology transfer services to help bring university research to market
- + business incubation and acceleration support.

According to [Universities Canada](#), there are 96 universities in Canada.

Key universities in Canada that are associated with innovation + entrepreneurship:



The [University of Waterloo](#) operates the largest post-secondary co-op program of its kind in the world. This program offers students work-integrated learning to develop industry experience. In 2016, Prime Minister Justin Trudeau referenced the University of Waterloo in his speech to the World Economic Forum as “a source of graduates with sparkling new ideas.”¹²



Ryerson University

[Ryerson University](#) offers a [Zone Learning](#) model that provides students with opportunities to turn their own ideas into entrepreneurial ventures. This is supported by Ryerson’s innovation ecosystem, which has grown from its successful DMZ, a leading business incubator for Canadian technology startups and the top-ranked university incubator in North America and third in the world.



[Simon Fraser University](#) offers an extensive internal innovation + entrepreneurship ecosystem for students. It offers unique entrepreneurial programs for students interested in social innovation, such as [RADIUS \(RADical Ideas, Useful to Society\)](#), a social innovation lab and business incubator.



The [University of Toronto](#) was ranked as the most innovative university in Canada in a 2015 Reuters report on the World’s Most Innovative Universities.¹³

Colleges

Colleges advance knowledge generation in many important ways, particularly with respect to training. Their applied training programs develop technical competencies valued within industry. Colleges also tend to have strong industry connections and the applied research capabilities to help solve industry problems.

According to [Colleges and Institutes Canada](#), there are 126 colleges across Canada.

Key colleges in Canada that are associated with innovation + entrepreneurship:



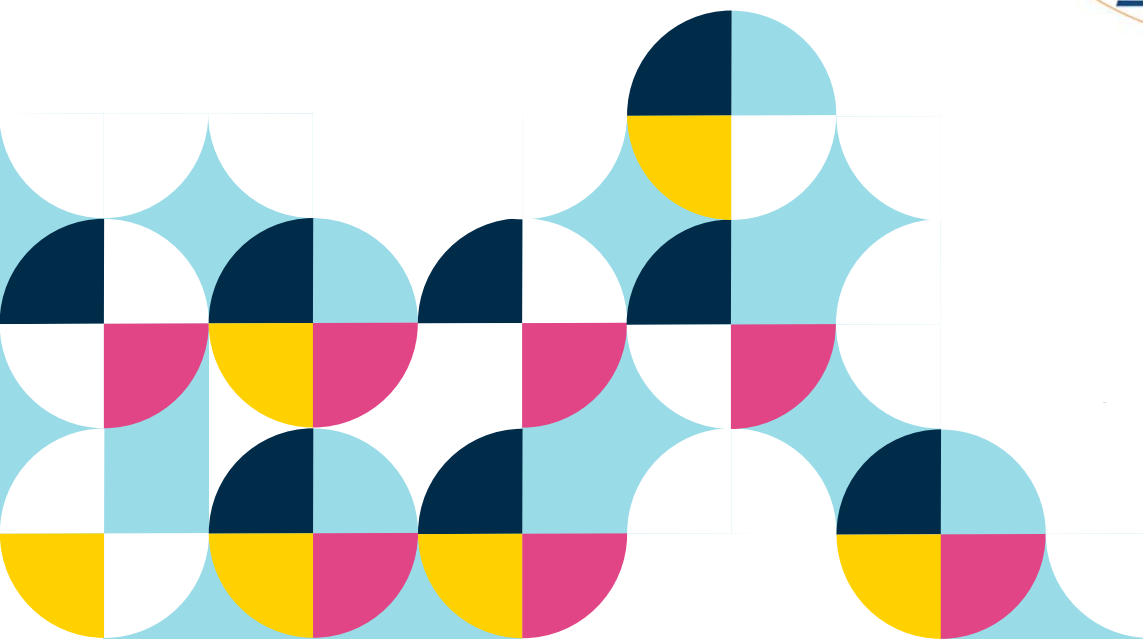
George Brown College aims to enhance its students' "innovation literacy" - the ability to creatively apply problem-solving skills to diverse real-world problems. The college facilitates experiential learning to this end.



Northern Alberta Institute of Technology (NAIT) Polytechnic is renowned for offering applied experiential learning opportunities to students through applied research projects provided by potential employers. NAIT is one of the host colleges for the Siemens Canada Engineering and Technology Academy, a unique initiative designed to provide engineering and technology students with a solid educational and professional foundation.



British Columbia Institute of Technology (BCIT) is a leader in providing students with applied experiential learning. It offers small class sizes with programs developed in partnership with leading employers. It offers specialized training in the aerospace, digital media, and transportation industries. BCIT's Technology Centre undertakes and coordinates applied research, and assists with technology transfer and commercialization.



Research Infrastructure

Research infrastructure refers to actors that support facilities, resources and services used by the research community to undertake cutting-edge research.

These include:

- + state-of-the-art equipment
- + laboratories
- + databases
- + scientific collections
- + computer hardware and software
- + communications linkages and buildings.

Having research infrastructure available is critical to equip researchers with the right tools to push the frontiers of knowledge and explore the unknown. Moreover, actors that support research infrastructure help create a research environment conducive to advancing knowledge. This is particularly valuable for the discovery stage of innovation.

Research infrastructure can be stand-alone or it can also be hosted by other actors involved in knowledge generation, including higher education learning institutions and research hospitals. The Canada Foundation for Innovation lists over 400 research laboratories located in universities, colleges and research hospitals in its [Research Facilities Navigator](#), and that is not a comprehensive list. It can also extend to corporate research and development labs.

SELECT ACTOR PROFILES



canarie

CANARIE

Mission:

To design and deliver digital infrastructure, and drive its adoption for research, education and innovation.

Further Information

CANARIE's [domestic innovation partners](#) and [100+ international partners](#)

CANARIE's [12 provincial and territorial research and education networks](#)

canarie.ca

CANARIE is a non-profit corporation that provides an ultra-high speed network to Canada's approximately 2,000 research and innovation institutions and advanced education communities.

It assists firms operating in Canada with cloud-based digital infrastructure to accelerate product development and maintain their competitive edge.

CANARIE connects the 12 provincial and territorial research networks to form Canada's National Research and Education Network, and links these partners to international research and education networks.



Defence Research and Development Canada (DRDC)

Mission:

To provide a strategic knowledge and technology advantage to advance Canada's defence and security at home and abroad.

Contacts + Further Information

The [8 locations](#) of DRDC research centres

drdc-rddc.gc.ca

DRDC invests in science and technology to forecast, cost, and deliver future readiness levels to meet operational requirements.

It generates knowledge and technology, and builds strategic partnerships with a variety of actors across the innovation + entrepreneurship ecosystem to create a robust, connected and multi-jurisdictional security and intelligence environment to meet its goals.

DRDC anticipates science and technology defence and security challenges and acts as the catalyst for an innovative defence and security sector across Canada.



Genome Canada

Mission:

To harness the transformative power of genomics for the benefit of Canadians.

Contacts + Further Information

The [locations](#) of Genome Centres

Genome Canada's [2012-2017 strategic plan](#)

genomecanada.ca

Genome Canada operates on a partnership basis at the program and research project level, connecting ideas and people across the public and private sector to find new uses and applications for genomics. It makes large-scale strategic investments in cutting-edge genomics research to fuel technology and innovation.

It translates discoveries into solutions of national importance across key sectors, and conducts applied research to improve the Canadian quality of life and strengthen the country's bioeconomy.

Genome Canada also contributes to scholarship on the ethical, environmental, economic, legal and social challenges and opportunities of genomics in all its activities. It uses that knowledge to inform policy and practice in the field of genomics to improve the possibilities that scientific discovery leads to real-world benefit.



Research Councils + Research Funders

Research councils and research funders set the research agenda and invest funds to be used by the research and development community in conducting cutting-edge research for the benefit of Canada. The research agenda will usually align with federal or provincial science and technology strategies.

Research councils and research funders may also undertake research activities themselves.

KEY ACTOR PROFILES



National Research Council (NRC)

Mission:

Partnering to provide innovation support, strategic research, scientific and technical services to develop and deploy solutions to meet Canada's current and future industrial and societal needs.

Further Information

The NRC's [areas of R&D](#)

The NRC's [programs and services](#)

The [locations](#) of the NRC's research facilities

nrc-cnrc.gc.ca

The NRC, Canada's premier organization for research and development, provides opportunities to industry partners to leverage the R&D solutions and intellectual property developed from its licensing arrangements.

It also facilitates access to advanced research infrastructure for its clients, and helps reduce the risk involved in innovation and commercialization by focusing on three priority research areas: emerging technologies, life sciences, and engineering.

The NRC directly supports small and medium-sized enterprises with advisory support and referrals through a [Concierge Service](#), and direct financial support through its [Industrial Research Assistance Program](#)—the largest direct support program of its kind in Canada.



Tri- Council Agencies

Mission:

To invest in the generation, application and sharing of knowledge, train the next generation of research talent, and build opportunities for collaboration and partnerships.

Further Information

CIHR: cihr-irsc.gc.ca

NSERC: nserc-crsng.gc.ca

SSHRC: sshrc-crsh.gc.ca

Tri-Council Agencies' Delivery Plans

[CIHR Strategic Plan](#)

[NSERC Strategic Plan](#)

[SSHRC Strategic Plan](#)

The Tri-Council Agencies comprise three major research councils that provide a significant amount of funding for post-secondary institutions in Canada.

- + The **Canadian Institutes of Health Research (CIHR)** funds health research.
- + The **Natural Sciences and Engineering Research Council of Canada (NSERC)** funds academic science and technology research.
- + The **Social Sciences and Humanities Research Council (SSHRC)** funds academic social sciences and humanities research.

The Tri-Agencies offer fiduciary support for researchers in universities, hospitals, and other institutes, and disseminate the knowledge generated by research. They facilitate interactions between researchers in academia and local, provincial, and federal governments, industry, and the broader community. (This is particularly true for NSERC, which offers the [NSERC Engage Grant](#), connecting researchers to short-term industrial research projects.)

Created by the Government of Canada in 1997, the CFI provides funding architecture to support cutting-edge research infrastructure in Canada, including equipment, databases, facilities and more, plus new programs for colleges and major science initiatives.

It funds up to 40 per cent of a project's research infrastructure costs. Research projects are assessed by three criteria: quality of the research and its need for infrastructure, contribution to strengthening the capacity for innovation, and potential benefits to Canada.

The CFI offers a variety of programs through three channels: 1) open competitions for innovative infrastructure projects, such as the [Innovation Fund](#) program, 2) an allocation-based program that helps universities recruit and retain talent, and 3) partial operating and maintenance cost offsets.



Canada Foundation for Innovation (CFI)

Mission:

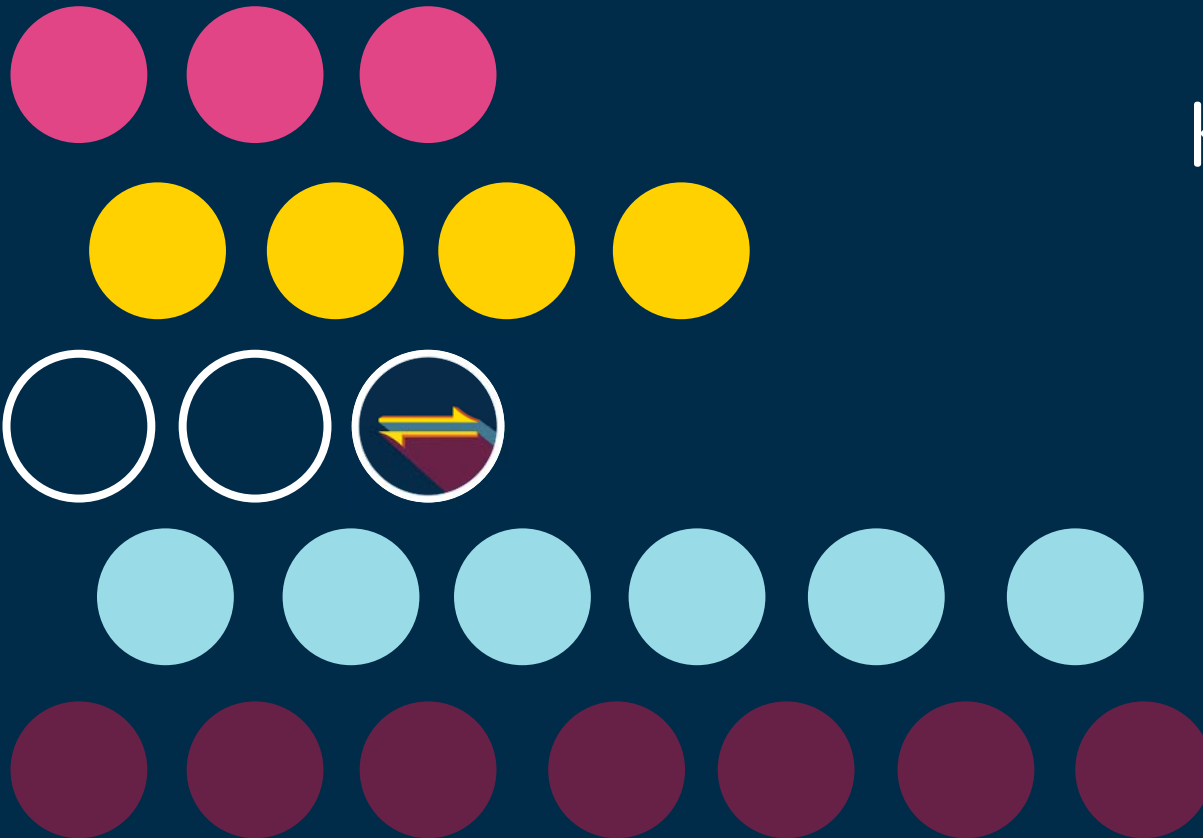
To build Canada's capacity to undertake world-class research and technology development to benefit Canadians.

Further Information:

The [locations](#) of CFI research facilities in universities, colleges and research hospitals

innovation.ca

CATEGORY 2
KNOWLEDGE
TRANSFER



What is Knowledge Transfer?



Knowledge must have some value proposition for society for it to become innovation + entrepreneurship. Knowledge transfer is the process of transforming knowledge manifested as research, science and technology into something that can go to market.

It is the capacity of the innovation + entrepreneurship ecosystem to extract value from knowledge such that it moves up the value chain.

Knowledge can be transferred to the wider innovation + entrepreneurship ecosystem in various ways, such as:

- + **Technology transfer and commercialization**—facilitating the adoption of innovations in the market
- + **Leveraging talent**—having highly qualified people work on solving problems, particularly industry problems, to improve the status quo.

Knowledge transfer as a general category of outcomes requires collaboration between a variety of actors. Many actors that contribute to knowledge transfer within an innovation + entrepreneurship ecosystem operate as innovation intermediaries. They facilitate interactions between different classes of actors to enhance connections and complementarities within the ecosystem.

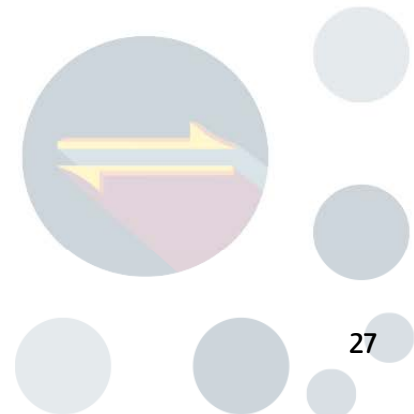


UNPACKING THIS SECTION

RESEARCH + TECHNOLOGY PARKS

TECHNOLOGY TRANSFER + COMMERCIALIZATION NETWORKS

ACADEMIC-INDUSTRY LIAISONS



Research + Technology Parks

Research and technology parks co-locate industry, governments and academics to advance innovation + entrepreneurship. They act as hosts to offer physical space to organizations, which encourages collaboration within the ecosystem.

Research parks are structured as not-for-profits focused on driving new innovations to the market. They provide the support existing knowledge-based businesses need to enable export-ready ventures to thrive in the Canadian ecosystem.

The Association of University Research & Technology Parks (AURP) Canada says research parks typically have:

- + a master development plan with potential to accommodate new and expanding knowledge-based businesses
- + an incubation and/or acceleration centre
- + a collaboration agreement with the affiliated university to drive new innovations to the market and increase technology transfer opportunities
- + a role in promoting technology-led economic development for the community or the region.¹⁴

SELECT ACTOR PROFILES



MaRS Discovery District

Mission:

To bridge the gap between what people need and what governments can provide.

Further Information

Newsletter subscription

marsdd.com

The MaRS Discovery District brings together educators, researchers, social scientists, entrepreneurs, and business experts under one roof with lab, office, event and meeting space. It offers services in six broad sectoral clusters: 1) cleantech, 2) health, 3) information & communications technology, 4) social innovation, 5) work & learning, and 6) financial technology (FinTech). It gives early-stage capital to a number of startups in those clusters through programs such as the Investment Accelerator Fund.

MaRS provides in-kind venture service support to client innovators and entrepreneurs. It partners and convenes with various stakeholders focused on fostering systems-level change across all sectors.



Zones Québec Innovation (Zones QI)

Mission:

To accelerate the intermeshing of high-tech businesses and public research platforms in Québec to facilitate commercialization of its innovations.

Further Information

The locations of Zones Québec Innovation 11 research & technology parks
zonesquebecinnovation.com

Zones QI is a collection of the province's leading 11 technology parks that serves as a regional anchor to attract and retain talent, specifically in the high-technology sector, and to connect research centres, incubation services and capital to transfer research into marketable products..

It offers accreditation to maintain quality standards in innovation zones across the province and serves as a leading voice for innovation + entrepreneurship in Québec.

Zones QI promotes Québec's innovation + entrepreneurship ecosystem to referral agents and to other potential business prospects and attracts them to invest in Québec.



Innovation Place

Mission:

To create, encourage and facilitate business opportunities in the Saskatchewan technology sector, and partner in supporting Saskatchewan's economic prosperity.

Further Information:

Innovation Place's three locations
innovationplace.com

Innovation Place is one of North America's most successful university-affiliated technology parks, contributing approximately \$830 million to Saskatchewan's economy in 2015.

With facilities in Saskatoon, Regina, and Prince Albert, it provides office space and access to laboratory equipment for researchers and tenant clients and organizes programs to bridge the gap between research and industry.

Innovation Place supports the growth of four key sectors: 1) high technology, 2) life sciences, 3) natural resources, and 4) agri-tech.

Technology Transfer + Commercialization Networks

These actors often act as intermediaries, connecting actors in the innovation ecosystem, particularly linking those involved in knowledge generation with entrepreneurs. Technology transfer and commercialization bodies provide technical support and advice to assess and then assist new knowledge and intellectual property in getting to market.

In Canada, many actors aiming to encourage commercialization of research adopt a “centres of excellence” model. These organizations aim to influence university research by facilitating a number of partnerships between universities and industry, and by providing incentives for university research to work on industry-defined problems.

SELECT ACTOR PROFILES



Networks of Centres of Excellence of Canada (NCE)

Mission:

To help build a more advanced, healthy, competitive and prosperous country.

Further Information:

The list of funded Networks and Centres of Excellence

The locations of Canada’s Networks of Centres of Excellence

nce-rce.gc.ca

The core approach of the Networks of Centres of Excellence Secretariat is to mobilize research talent and entrepreneurial talent and build opportunities, domestically and internationally, to collaborate to address specific issues in strategic areas.

The NCE facilitates collaboration between researchers across disciplines and sectors to solve major social, economic, and health issues within the Canadian context.

It offers a suite of programs convening a variety of partnerships that harness the best talent in the natural sciences, engineering, social sciences and health sciences. For instance,



Alberta Innovates (AI)

Mission:

To provide a world-class and globally competitive knowledge transfer system to support the province's innovation + entrepreneurship ecosystem.

Further Information

A list of programs that Alberta Innovates offers
albertainnovates.ca

Health Solutions—aihealthsolutions.ca

Bio Solutions—bio.albertainnovates.ca

Energy and Environment Solutions—ai-ees.ca

Technology Futures—albertatechfutures.ca

AI a research network focused on commercializing research by connecting universities, government and industry to fund and drive innovation.

It comprises four corporations: Bio Solutions, Health Solutions, Energy and Environment Solutions, and Technology Futures that support research and innovation in agriculture, food and forestry, health and disease, energy and the environment, the commercialization of technology products, and growth of technology firms.

AI also offers in-kind technical support services intended to commercialize research discoveries from advisory services to prototyping support through its Technology Development Advisors.



Ontario Centres of Excellence (OCE)

Mission:

To accelerate innovation through game-changing research leading to successful commercialization and vibrant collaboration between industry and academia, launching the next generation of products and jobs.

Further Information:

A list of programs the OCE offers
oce-ontario.org

The OCE seeks to transform Ontario into a leading jurisdiction for knowledge transfer to commercialize cutting-edge research. It's a leader in facilitating academia-to-industry collaborations, and connecting with other provincial actors like the Ontario Network of Entrepreneurs.

The OCE offers a suite of programs aimed at leveraging Ontario's research capacity in three key areas:

- 1) The Academic-Industry R&D Collaboration, including the OCE's Collaboration Voucher Program and TalentEdge Program
- 2) Programs such as Market Readiness and Mind to Market to commercialize intellectual property that emerges from publicly supported research, and
- 3) Entrepreneurship programs for youth and students across the province, such as the On-Campus Entrepreneurship Activities and the Campus-Linked Accelerators.

Academic-Industry Liaisons

Academic-industry liaisons or technology transfer offices act within universities to connect them with industry and the broader market. This can mean exposing university research to the market through technology transfer or linking talented researchers to industry problems.

Academic-industry liaisons play a key role in the overall ecosystem of actors involved with technology, often serving as a central point of contact between universities and industry. They serve two main functions:

- + evaluating the commercial potential of knowledge and intellectual property produced within the university
- + creating collaboration and partnership opportunities between university researchers and industry to work on defined research projects.

Canadian universities usually have their own set of intellectual property policies. In universities that do not have standalone academic-industry liaisons, their respective research services would manage services such as facilitating commercialization and/or academic-industry research collaborations. Universities often have a vice president of research, whose office may possess the capacity to facilitate commercialization.

SELECT ACTOR PROFILES



Réseau Trans-tech

Mission:

To promote collaboration among, contribute to the development of, and represent its members in dealings with government, scientific and business organizations and actors, with a view to stimulating the economic development of all regions of Québec.

Further Information:

reseautranstech.qc.ca

Réseau Trans-tech is the network of all College Centres for the Transfer of Technologies (CCTT). These are applied research centres affiliated with the cégeps (Collèges d'enseignement général et professionnel—the first level of post-secondary education in Québec) and colleges in Québec. CCTTs aim to support the innovation + entrepreneurship in the province through technical support, technological development, and providing information and training.

Réseau Trans-tech's work as a network for integrated applied research and technology transfer resources contributes to both enriching the training provided at colleges and cégeps in Québec and supporting the technological innovation process of business.



Springboard Atlantic

Mission:

To mobilize innovation to enhance the economic development of the region.

Further Information

Learn about Springboard Atlantic Canada's program areas.

springboardatlantic.ca



Mitacs

Mission:

To build partnerships between academia, industry and the world to create a more innovative Canada.

Further Information:

Learn about Mitacs' program areas

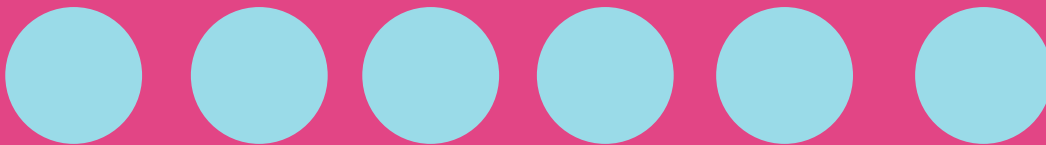
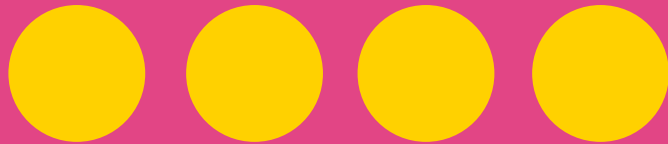
mitacs.ca

Springboard Atlantic works with 18 post-secondary institutions conducting research in Atlantic Canada to help them transfer knowledge and technology to the region's private sector. As Atlantic Canada's central academic-industry liaison body, it connects skilled professionals in academia with industry experts across a range of programs and services.

Springboard Atlantic provides subsidised support for industry engagement positions in member institutions, central support services, access to programs and expertise, and leveraged funding to support relevant opportunities for sponsoring technology development, technology acceleration, industry engagement and IP protection.

Mitacs fosters R&D in Canada by delivering training and research programs for university students and graduates to address industrial challenges. This national, not-for-profit organization, founded in 1999 as a Canadian Network of Centres of Excellence, builds partnerships that support industrial and social innovation in Canada. Mitacs gives student researchers the opportunity to work on applied and industrial research through five key programs:

- 1) Mitacs Accelerate funds four-month research internships with industry for graduate students and postdoctoral fellows.
- 2) Mitacs Elevate offers two-year postdoctoral fellowships with industry with a particular focus on R&D management and professional skills.
- 3) Mitacs Globalink funds internships for high achieving international students to conduct research in Canada, or for top Canadian students to conduct research in a Mitacs partner country.
- 4) Mitacs Step is a series of professional development workshops that improve the business and entrepreneurial skills of Canada's future R&D leaders.



CATEGORY 3
INNOVATION +
ENTREPRENEURSHIP
SUPPORTS

What are Innovation + Entrepreneurship Supports?

The final two sections of this framework centre on supporting innovators and entrepreneurs and the firms through which they operate. Supporting the capacity of these firms to innovate is critical to the innovation ecosystem.

This section profiles public and private sector actors which encourage and enable entrepreneurs to translate knowledge into economic value via innovation, and contribute to the health of the innovation ecosystem.

These actors support entrepreneurial activities in many ways:

- + **Direct financial support**—provided by federal and provincial governments, or by innovation intermediaries to:
 - + give firms timely access to capital
 - + provide access to seed, startup, and growth capital for innovative companies.
- + **Indirect financial support**—in the form of tax credit support for innovation activities and research and development.
- + **Private financial support**—Angel investors and venture capitalists can be essential to supporting firms, particularly where public sources of funding are slow or insufficient
- + **In-kind support**—which can include, but is not limited to, providing physical office space, consulting, access to networking, consulting, and access to research infrastructure.

- + **Public procurement**— Public procurement of products that enable the delivery of key public services with the potential create an important source of demand for innovative firms. It's an important lever for spurring innovation.

Public procurement can be a major part of domestic demand. Government is essentially a user with enough purchasing power to constitute a market on its own. When a government acts as a lead user to initiate the creation of markets, it can enable the early adoption of new innovative products or services. Depending on government efforts to satisfy emerging societal needs, the state could have a greater demand for innovative solutions than private consumers.¹⁵

Public procurement can include:

- + **general procurement**—when innovation serves as a criterion for public tendering
- + **strategic procurement**—when demand for specific technology is encouraged to stimulate the market for that technology
- + **direct public procurement**—when products and services are procured exclusively for public use
- + **catalytic procurement**—when a government initiates the procurement, with the products to be used exclusively by private sector users
- + **pre-commercial procurement**—when government purchases products which require further R&D, thereby helping to share risk between procurer and supplier.



- + **Levels of collaboration between actors**—Collaboration between firms and other actors in the system, in R&D or in innovation activities, is highly significant to any innovation + entrepreneurship ecosystem. Linkages and partnerships, through networking, in-kind or financial support, enable firms to operate, and generate economic and social impact.
- + **New venture creation**—The number and magnitude of spin-off companies, contracts and intellectual property agreements are critical outcome measures of supporting researchers and firms.
- + **Events focused on innovation + entrepreneurship**—Events can serve several support functions. For instance, events like the hackathons run by [Hacking Health](#) and [Open Data Day](#) use a competition model that acts as a conduit to opportunities for funding, mentorship and entry into business incubators or accelerators. Events can also act to increase potential entry points for firm creation and growth through networking opportunities and collaboration.



UNPACKING THIS SECTION

BUSINESS INCUBATORS + ACCELERATORS

ENTREPRENEURIAL NETWORKS

REGIONAL DEVELOPMENT AGENCIES

MARKET ACCESS + PROMOTION AGENCIES

FUNDING BODIES

Business Incubators + Accelerators

Incubators and accelerators are directly involved with helping support the growth of businesses.

While the differences between incubators and accelerators vary widely, they are usually distinguished as follows:

Business incubators provide startup assistance that focuses on early-stage entrepreneurs. They provide physical space and mentorship for firms, as well as a number of support services that include networking and cultivating markets.

Business accelerators provide more time-limited support for startups, in addition to seed funding. Like incubators, they offer a range of services, although they aim to accelerate high-potential firms to success, rather than focus on early-stage startups.

Incubators and accelerators are created for different reasons, depending on the actor that backs them. For example, as identified by Nesta:¹⁶

- + **Venture-backed incubators** and accelerators exist to provide better deal flows for investors
- + **Institutionally-backed** incubators and accelerators usually aim to enhance local economic development or align with a public research mandate
- + **Corporate-sponsored** incubators and accelerators are established to help tackle specific research issues or to develop an ecosystem around a core piece of technology.

SELECT ACTOR PROFILES



TEC Edmonton

Mission:

To accelerate growth of emerging technology-based companies in partnership with the community, and to contribute to Edmonton being recognized as one of North America's leading regions for wealth creation through innovation.

Further Information:

tecedmonton.com

TEC Edmonton is a non-profit joint venture between the City of Edmonton's Economic Development Corporation and the University of Alberta. Startup Canada ranked it the #1 Business Incubator in Canada in 2014.

Through its people, networks and facilities, TEC Edmonton strives to develop the region's global reputation in three ways: 1) Commercializing technology from private, university and public sources, 2) helping to build successful innovation-based companies, and 3) fostering and promoting innovation and new enterprise development.



DMZ

Mission:

To provide a world-class and globally competitive knowledge transfer system to support the province's innovation + entrepreneurship ecosystem.

Further Information

dmz.ryerson.ca

The DMZ is one of Canada's largest business incubators for emerging technology startups. Based at Ryerson University, it is open to any startup with an innovative business idea. It operates using a four-step model: educate, ideate, incubate and accelerate.

- 1) The Digital Specialization Program teaches digital skills to students who receive academic credit in the areas of business and social innovation.
- 2) StartMeUp Ryerson helps entrepreneurs devise a viable business idea.
- 3) Startups in the DMZ Incubation Program work on validating their business model, R&D, iterating their prototype, seeking out pilot customers, and conducting market research for their product. This semi-structured four-month program includes an optional additional eight months where fees may apply, determined primarily by team size, with options for equity exchanges or in-kind contributions.
- 4) The Acceleration program consists of a three-phased structured program ranging from 6 to 18 months with equity funding available.



Communitech

Mission:

To help tech companies start, grow and succeed—and have fun doing it.

Further Information:

communitech.ca

Communitech is an industry-led innovation centre that supports, fosters and celebrates a community of nearly 1,000 tech companies. It supports companies at all stages of growth and development—from startups to rapidly-growing mid-sized companies and large global players.

Communitech's community-based approach to fostering entrepreneurship is supported by strong interactions between companies and individuals that link academia, research institutions, sources of funding, technology and non-technology companies, and government at all levels.

The Communitech Hub brings together key players—from startups and global brands, to government agencies, academic institutions, tech incubators and accelerators—to foster world-leading collaboration and innovation.

The Next 36

Mission:

To increase Canadian prosperity and competitiveness by accelerating the development of the country's most talented young entrepreneurs and their ventures.

Further Information

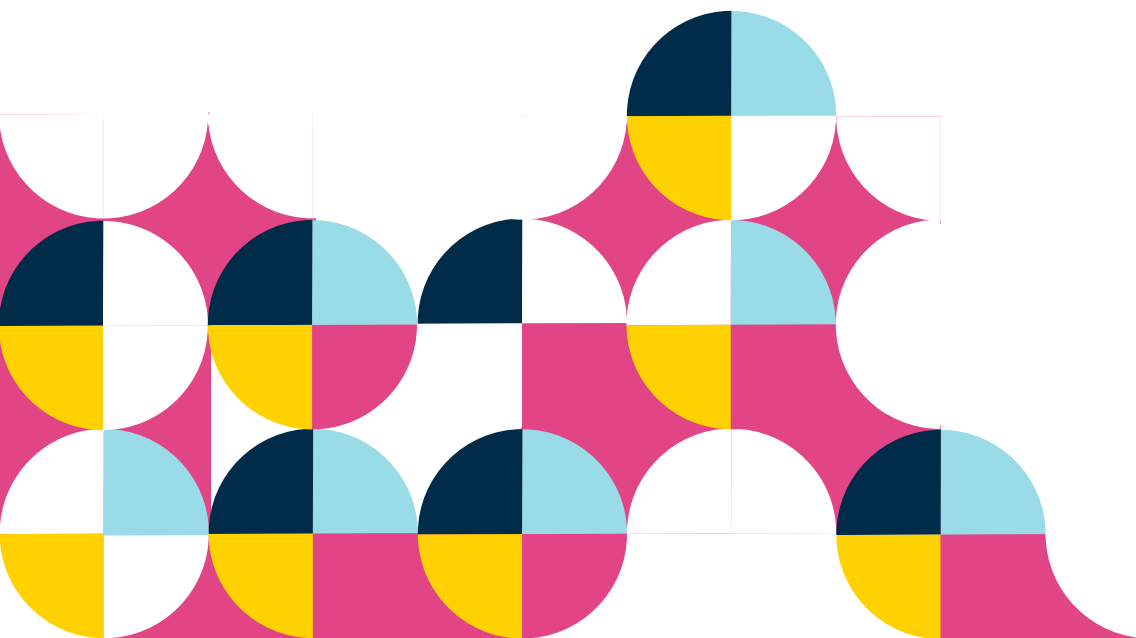
thenext36org.ca

The Next 36 provides Canada's most promising young entrepreneurs with world-class business mentorship, capital, venture building and founder development opportunities needed to launch their ventures.

Since 2010, it has supported the development of over 200 young entrepreneurs and their ventures through two key programs:

- 1) The Next 36—an annual eight-month founder development program for exceptional student entrepreneurs and recent grads that challenges 36 young Canadian innovators to build a new business venture or iterate and scale a high-potential idea. The program's core offerings include founder development, mentorship, network building, investment, a direct line to experts and in-kind products and services.
- 2) The Next Founders—a four-month program for founders of high-growth tech ventures looking to scale their venture that helps participants build relationships with an extraordinary community of business leaders, entrepreneurs, professors and investors.

Since inception, these programs have bolstered the success of industry-changing start-ups plus the creation of more than 478 new jobs and \$48 million in funding raised by alumni.



Entrepreneurial Networks

Entrepreneurial networks are organized, formally or informally, with the aim of supporting entrepreneurial projects by providing or connecting members to resources.

While this support includes financial resources and access to research, the main focus tends to be human resources. Such networks increase access to opportunities and diverse skillsets, and provide direction and motivation to members.

Entrepreneurial networks bring diverse professionals together to build social networks that are essential for entrepreneurial endeavours to succeed. These networks not only help firms operate successfully, but also help them differentiate themselves. By promoting each member's expertise and services within and outside of broader markets, they increase their members' opportunities.

SELECT ACTOR PROFILES



C100

Mission:

To help companies win on the global stage.

Further Information:

theC100.org

The C100 Association connects Canadian entrepreneurs to successful Canadian investors, entrepreneurs and executives living in the Silicon Valley tech community who are dedicated to the growth of innovation in Canada

This member-driven non-profit supports Canadian technology startups, founders and entrepreneurs through its mentorship, partnership and investment programs.

C100 strives to foster a new generation of Canadian-led technology companies poised for growth at a global scale by helping members access innovative companies, potential partners, investors and mentors.



Futurpreneur Canada (formerly CYBF)

Mission:

To play an integral role in the entrepreneurship experience of Canadians aged 18-39 by providing financing, mentoring and tools that will help them build sustainable businesses and create value.

Further Information

A [list](#) of resources and programs on offer by Futurpreneur

A [list](#) of upcoming events

futurpreneur.ca

Futurpreneur Canada organizes financing, mentoring and business programs to support entrepreneurs at all stages of growth.

Its Entrepreneurs-in-Residence program helps young entrepreneurs turn their ideas into viable businesses. Its Entreppeer program offers entrepreneurs two years of business mentoring as well as ongoing support. Its Business Resource Centre provides access to an array of resources, tools and articles to help create business plans.

In addition, in partnership with the Business Development Bank of Canada, Futurpreneur Canada also finances ventures for up to \$45,000.



Startup Canada

Mission:

To build an environment for entrepreneurship in Canada.

Further Information:

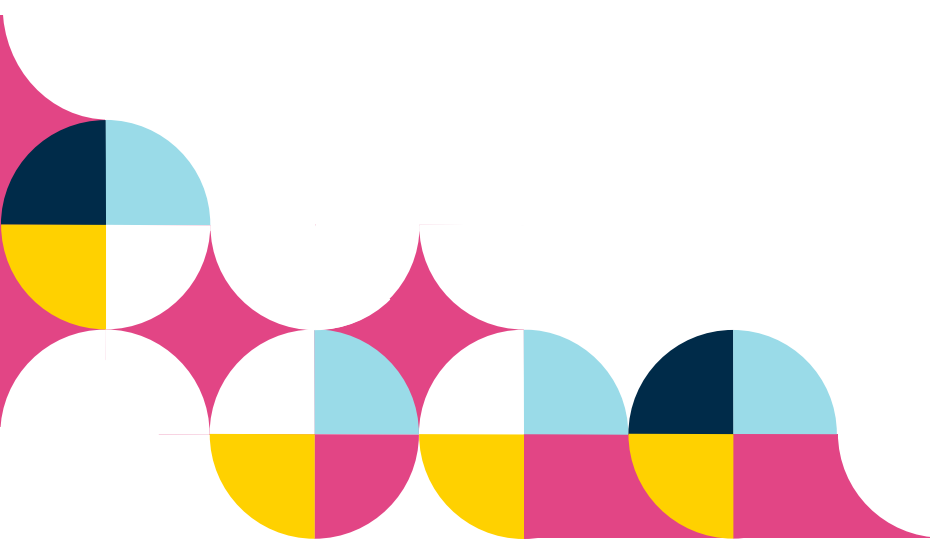
startupcan.ca

Startup Canada is internationally renowned as a best practice in fostering grassroots entrepreneurship.

It cultivates a culture of entrepreneurship and generates entrepreneurial momentum across the country through its online platforms, grassroots Startup communities, and cross-sector initiatives.

Startup Canada represents a network of more than 80,000 entrepreneurs. It oversees approximately 300 volunteers in 20 Startup communities across Canada. It has established more than 400 enterprise support partners and mentored more than 20,000 Canadians.

In addition, Startup Canada provides an online directory, marketplace for Canadian entrepreneurs, and social and mainstream media cultural campaigns, flagship events, and cross-sector initiatives.



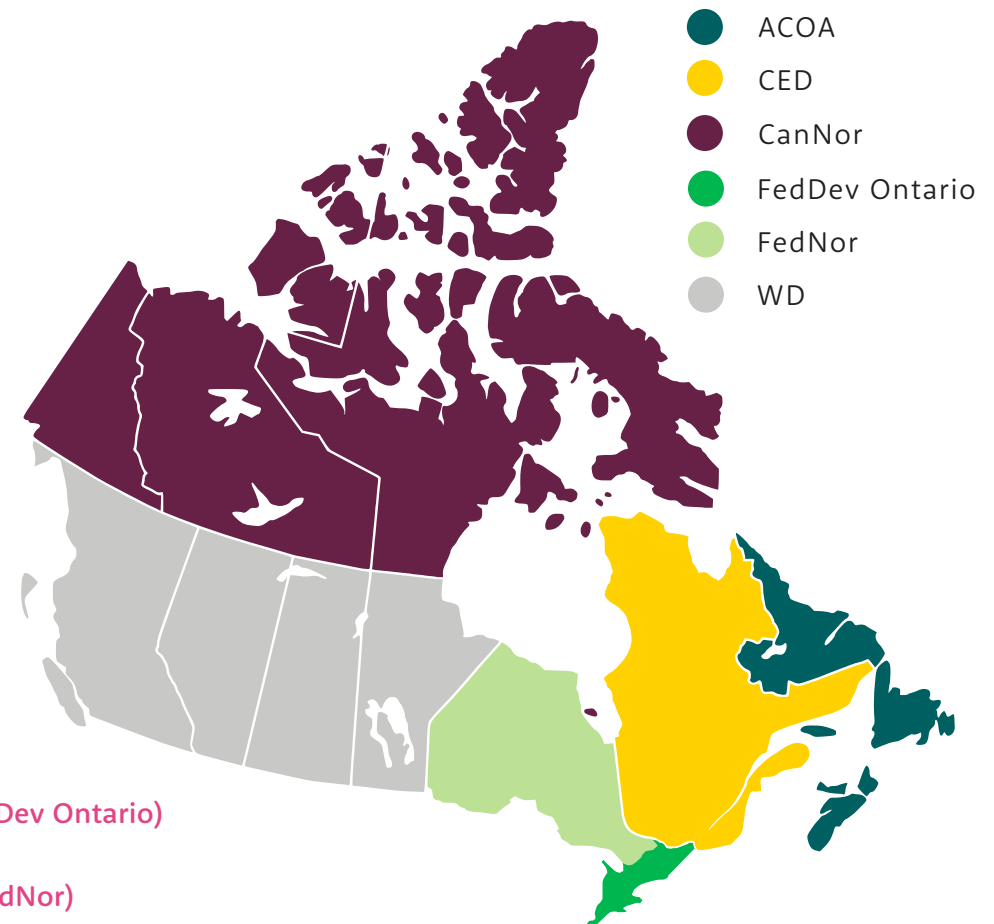
Regional Development Agencies

Regional development agencies are public bodies that foster economic development across Canada.

They support business growth, productivity and innovation and work to help small- and medium-sized businesses compete in the global marketplace. These agencies align federal economic development priorities with regional strengths. They work to support a variety of agency sectors through services, knowledge, expertise and targeted business programs that build on regional economic assets to help create, retain and grow businesses, cultivate partnerships and build strong communities.

There are six regional development agencies in Canada, all of which contribute to federal-regional coordination of Canada's innovation + entrepreneurship ecosystem:¹⁷

- + **Atlantic Canada Opportunities Agency (ACOA)**
acoa-apeca.gc.ca
- + **Canada Economic Development for Quebec Regions (CED)**
dec-ced.gc.ca
- + **Canadian Northern Economic Development Agency (CanNor)**
cannor.gc.ca
- + **Federal Economic Development Agency for Southern Ontario (FedDev Ontario)**
feddevontario.gc.ca
- + **Federal Economic Development Initiative for Northern Ontario (FedNor)**
fednor.gc.ca
- + **Western Economic Diversification Canada (WD)**
wd.gc.ca



Market Access + Promotion Agencies

Market access and promotion agencies help firms gain access to potential customers. Having access to markets, both domestically and internationally, will determine whether a firm's success or failure. Furthermore, improved market access facilitates the diffusion of new knowledge and adoption of innovations. Market access also exposes firms to more competition, encouraging firms to be more innovative to remain competitive.¹⁸

SELECT ACTOR PROFILES



Export Development Canada (EDC)

Mission:

To support and develop Canada's export trade and capacity to engage in that trade and respond to international business opportunities.

Further Information:

The **locations** of all the regional representatives located around the world

edc.ca

EDC is a self-financing, Crown corporation that operates at arm's length from the government. It provides insurance and financial services, bonding products and small business solutions to Canadian exporters and investors and their international buyers. It also supports Canadian direct investment abroad and investment into Canada.

Much of EDC's business is done in partnership with other financial institutions and through collaboration with the federal government.

The Canadian Trade Commissioner Service

The Canadian Trade Commissioner Service (TCS)

Mission:

To support and develop Canada's exports.

Further Information

The **locations** of domestic offices in Canada

The **locations** of international offices

tradecommissioner.gc.ca

The TCS is a network of more than 1,000 trade professionals working in Canadian embassies, high commissions and consulates located in 150 cities around the world and offices across Canada. It provides expert advice designed to support the growth of Canadian companies internationally, whether they export, invest or partner.

The TCS offers a broad range of services that help Canadian businesses determine if they can compete internationally, identify target markets, collate market and industry information, improve international business strategy, resolve potential disputes, and find contacts, technology sources, foreign regulatory authorities, and investment promotion agencies.

Funding Bodies

Access to finance is a key driver for firms to not only survive, but to thrive. It allows innovators and entrepreneurs to pursue innovative projects, cover expenses, and accelerate the growth of their firms. Funding bodies provide financial resources and tools to assist various types of firms at different stages of growth.

Traditional businesses for the most part can rely on debt financing by borrowing money. High-growth businesses with intellectual property may have different specialized financing needs such as venture capital financing. Furthermore, funding can be direct (i.e. grants, investments, etc.) or be indirect (i.e. tax credits).

KEY ACTOR PROFILES



Business Development Bank of Canada (BDC)

Mission:

To help create and develop strong Canadian businesses, particularly small and medium-sized enterprises, through financing, consulting services and securitization.

Further Information:

The [locations](#) of Business Centres across Canada

bdc.ca

The Business Development Bank of Canada is a federal Crown corporation and the only bank in Canada exclusively focused on entrepreneurs.

BDC financially supports small and medium-sized enterprises in concert with the financial services provided by private sector institutions. This includes low-cost consulting services as well as business loans to enhance its clients' competitiveness in local and global markets.

Through its more than 100 business centres across Canada, BDC offers clients a variety of financing options customized at the different stages of their firms' growth cycles. These include financing, securitization, growth and transition capital, venture capital, and venture capital action planning.

Scientific Research and Experimental Development (SR&ED) Tax Incentive Program —Canada Revenue Agency

Mission:

To encourage Canadian businesses of all sizes and in all sectors to conduct research and development in Canada.

Further Information

cra-arc.gc.ca/txcrdt/sred-rsde

Through the SR&ED program, the federal government provides tax incentives for:

- 1) basic research—advances scientific knowledge but has yet to devise a specific practical application of its results
- 2) applied research—advances scientific knowledge and has a specific practical application in mind
- 3) experimental development—research undertaken to create new or improve existing materials, devices, products or processes.

These incentives come in three forms: income tax deductions, investment tax credits, and, in certain circumstances, tax refunds.

The SR&ED Program is administered by the Canada Revenue Agency and provides more than \$3 billion in tax incentives to over 20,000 claimants annually.

NRC-IRAP

National Research Council Industrial Research Assistance Program (NRC-IRAP)

Mission:

To accelerate the growth of small and medium-sized enterprises by providing them with a comprehensive suite of innovation services and funding.

Further Information:

nrc-cnrc.gc.ca/irap

IRAP is Canada's premier innovation assistance program for small and medium-sized enterprises. It helps equip firms to perform research and development, commercialize new products, processes and services, and access new domestic and international markets.

IRAP provides technical and business advisory services through industrial technology advisors assigned to coach clients through all stages of the innovation-commercialization process. Its financial assistance program funds qualified firms and their R&D-related projects.

IRAP's networking and linkage services connect clients to industry experts and potential business partners. Its youth employment program helps recent graduates work in the field of research, development and commercialization of technologies.



Grand Challenges Canada

Mission:

To identify global grand challenges (a specific critical barrier that if removed would help to solve an important development problem) and fund a global community of researchers and related institutions on a competitive basis to address them.

Further Information

Learn more about Grand Challenges Canada's [programs](#)
grandchallenges.ca

Grand Challenges Canada supports bold ideas that integrate science and technology, social and business innovation to save and improve lives in low- and middle-income countries.

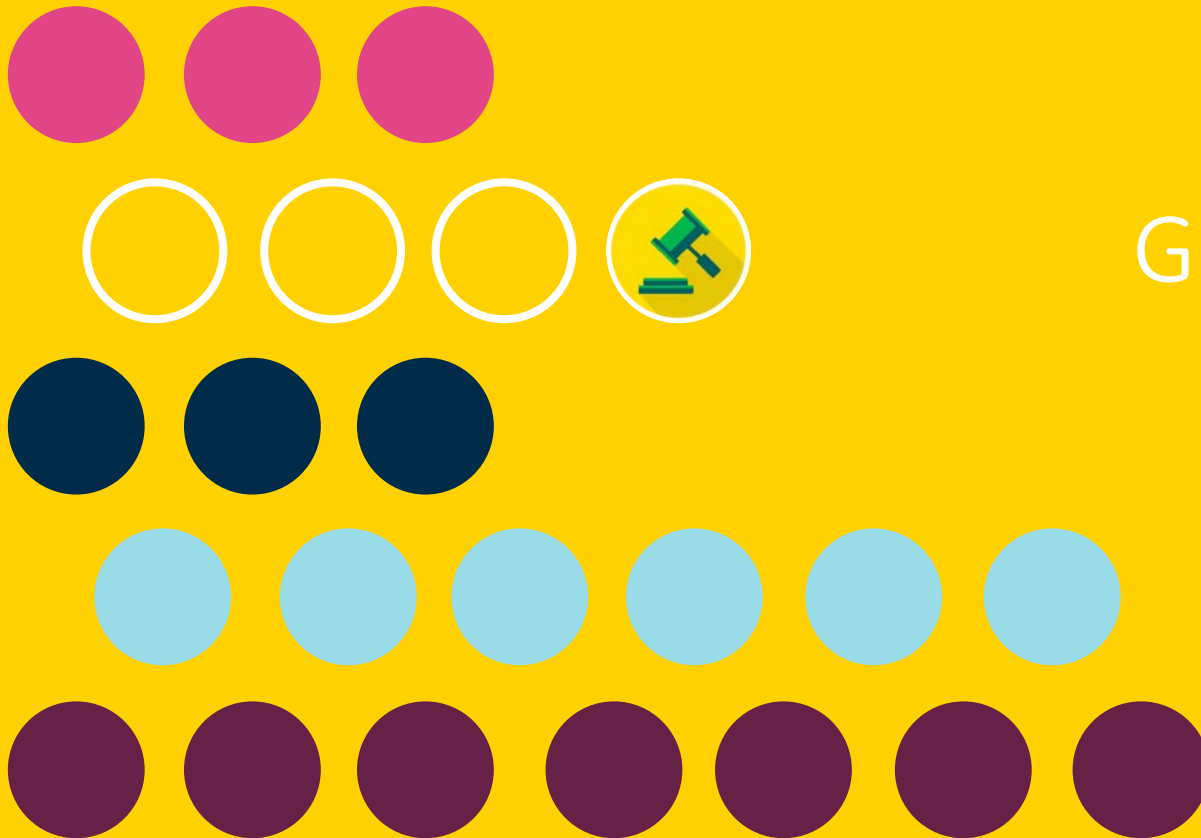
Its core objectives are to:

- 1) identify grand challenges, notably in the area of global health
- 2) mobilize the Canadian and international scientific communities to address those challenges
- 3) support the implementation and commercialization of the solutions that emerge.

It takes an evidenced-based approach to development innovation to help the poorest and most vulnerable populations. Grand Challenges works closely with Canada's International Development Research Centre (IDRC), the Canadian Institutes of Health Research (CIHR) and Global Affairs Canada to catalyze scale, sustainability and impact. Its commitment to key social issues like maternal, newborn and child health (MNCH) is reflected in its programs like Saving Lives at Birth, Saving Brains, and MNCH Stars in Global Health.



CATEGORY 4
ECOSYSTEM
GOVERNANCE





What is Ecosystem Governance?

R

egulations and policies play an integral role in supporting firm innovation. They can influence the health of the innovation + entrepreneurship ecosystem—and the rates of firm innovation—for better or worse.

Government and regulatory policies shape the contexts in which firms operate. From legislation to factors such as basic infrastructure, they can either accelerate or inhibit the creation and growth of entrepreneurial firms.

Some types of policy that influence the I+E ecosystem include:

- + **Competition policy**, which plays an important role in creating markets for innovative goods and services. Competition serves as an important motivator for firms to innovate, developing better products.
- + **Trade policy** exposes firms to international markets and competition, encouraging innovative behaviour. Trade policies are particularly significant to technology-focused industries.
- + **Tax policy** can reduce barriers to engaging in innovation or entrepreneurial activities. For instance, tax credit programs like SR&ED provide incentives that lower the costs of engaging in R&D for Canadian businesses.
- + **Intellectual property policy** supports firms by protecting their proprietary rights, allowing them to recover their investments in innovation.
- + **Sector-specific regulations** can set the conditions for early adoption and diffusion of innovative products and services. For instance, since regulation influences demand, smart-labelling regulations contribute to better informed consumer choices and subsequently increase demand for innovative products.



UNPACKING THIS SECTION

GOVERNMENT POLICY BODIES

REGULATORY BODIES

PROFESSIONAL ASSOCIATIONS

THINK TANKS

Government Policy Bodies

These public sector bodies are responsible for developing the overall innovation + entrepreneurship policies and strategies that governments are responsible for pursuing. They can also be government bodies with a mandate to offer advice to decision-makers on best practices for enhancing an innovation + entrepreneurship ecosystem.

KEY ACTOR PROFILES



Innovation, Science and Economic Development Canada (ISED)

Mission:

To further the government's goal of building a knowledge-based economy in all regions of Canada and to advance the government's jobs and growth agenda.

Further Information:

canada.ca/innovation-science-economic-development

ISED is a federal institution that works in partnership with the 12 federal departments and agencies that constitute the Innovation, Science, and Economic Development Portfolio. Together, they work with Canadians in all areas of the economy and all parts of the country to improve conditions for investment, enhance Canada's innovation performance, increase Canada's share of global trade and build a fair, efficient and competitive marketplace.

ISED leverages government resources to help entrepreneurs in four key ways:

- 1) It helps firms and non-profit organizations quickly turn their ideas into new products and services.
- 2) It encourages firms to export to new markets and also attract a larger share of foreign direct investment.
- 3) It provides access to capital, information, and services to increase the growth of small and medium-sized enterprises.
- 4) It promotes new approaches to community economic development that prioritize community strengths and information infrastructures.



Provincial Ministries

ALBERTA

Ministry of Economic Development and Trade:
Science and Innovation Division
alberta.ca/economic-development-trade-organized.cfm

BRITISH COLUMBIA

Ministry of Technology, Innovation and Citizen's Services:
Technology and Innovation Branch
gov.bc.ca/citz/technologyandinnovation

MANITOBA

Ministry of Jobs and the Economy:
Research and Innovation Policy
gov.mb.ca/jec/busdev/sibd/rip

NEW BRUNSWICK

Executive Council Office
http://www2.gnb.ca/content/gnb/en/departments/executive_council.html

NEWFOUNDLAND AND LABRADOR

Department of Business, Tourism, Culture and Rural Development: Innovation and Sector Development Branch
www.btcdrd.gov.nl.ca/department/contact_sib.html

NORTHWEST TERRITORIES

Ministry of Industry, Tourism and Investment
iti.gov.nt.ca

NOVA SCOTIA

Department of Business
novascotia.ca/business

NUNAVUT

Department of Economic Development and Transportation
gov.nu.ca/edt

ONTARIO

Ministry of Economic Development and Growth
ontario.ca/page/ministry-economic-development-and-growth

Ministry of Research and Innovation
ontario.ca/page/ministry-research-and-innovation

PRINCE EDWARD ISLAND

Innovation PEI
innovationpei.com

QUÉBEC

Ministère de l'Économie, de la Science et de l'Innovation: Bureau de la sous-ministre adjointe à l'Innovation
economie.gouv.qc.ca/accueil

SASKATCHEWAN

Innovation Saskatchewan
innovationsask.ca

YUKON

Department of Economic Development
economicdevelopment.gov.yk.ca

Regulatory Bodies

Regulatory bodies influence demand-driven innovation policy. They use regulation to encourage innovations and their diffusion through stimulating demand and promoting their early adoption. This can increase the competitiveness of companies by driving demand for innovations, as well as increase speed to market, lowering the risks of commercialization.

SELECT ACTOR PROFILES



Canadian Intellectual Property Office (CIPO)

Mission:

To contribute to Canada's innovation and economic success.

Further Information:

<http://www.ic.gc.ca/eic/site/cipointernet-interne/topic.nsf/eng/Home>

CIPO is a Special Operating Agency associated with ISED that administers and processes most intellectual property in Canada.

It strives to increase Canadians awareness, knowledge, and effective use of IP. CIPO's areas of activity include patents, trademarks, copyrights, industrial designs, and integrated circuit topographies.

CIPO's core activities include:

- 1) providing greater certainty in the marketplace through high-quality and timely IP rights
- 2) fostering and supporting invention and creativity through knowledge sharing
- 3) raising awareness to encourage innovators to better exploit IP
- 4) helping business compete globally through international cooperation and the promotion of Canada's IP interests
- 5) administering Canada's IP system and office efficiently and effectively.



Competition Bureau

Mission:

To ensure that Canadian businesses and consumers prosper in a competitive and innovative marketplace.

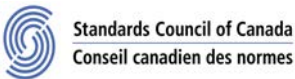
Further Information

competitionbureau.gc.ca

The Competition Bureau is an independent law enforcement agency that prevents anti-competitive behaviour and deceptive business practices, reviews mergers to ensure they do not stifle competition, and empowers consumers and businesses.

It has the ability to take appropriate legal action against actors who contravene its legislation, referring criminal matters to the Attorney General of Canada or bringing civil matters before the Competition Tribunal or other courts depending on the issue.,

In addition, the Bureau advocates before government to promote compliance in the private sector, engages with domestic and international partners, and liaises with key stakeholders such as the business community, consumer groups, the legal community, and the Canadian public.



Standards Council of Canada

Mission:

To promote efficient and effective standardization that strengthens Canada's competitiveness and social well-being in Canada.

Further Information:

scc.ca

The Standards Council of Canada leads and facilitates the development and use of national and international standards and accreditation services in order to advance the national economy, support sustainable development, benefit the health, safety and welfare of workers and the public, assist and protect consumers, facilitate domestic and international trade and further international cooperation in relation to standardization.

It works with stakeholders and customers in promoting efficient and effective standardization that improves Canadians' quality of life and also represents the interests of Canadians on standardization in foreign and international forums.

Professional Associations

Professional associations are collective bodies that play an intermediary role between association members and the government.

These groups represent a wide variety of members that can include actors directly involved with contributing to the overall ecosystem (e.g., incubators, research bodies, universities, etc.) and/or knowledge-intensive professions and firms.

Professional associations offer a variety of services to their members that can include:

- + accreditation and standards
- + communication
- + self-regulation
- + benchmarking
- + networking events (conferences, social events, meetups, etc.)
- + best practices and technical advice to members
- + policy advocacy.

Together, these activities contribute to the broader innovation + entrepreneurship ecosystem and influence the environment in which their members operate.

SELECT ACTOR PROFILES



Council of Canadian Innovators (CCI)

Mission:

To lobby the Canadian government on behalf of scaling and commercializing local tech firms.

Further Information:

Website in progress.

The Council of Canadian Innovators is a recently established coalition of Canada-based technology companies that wants to help Canadian tech firms scale up.

It aims to be the voice for Canadian-based high-growth companies that:

- + are home-grown tech companies (not Canadian subsidiaries of foreign companies)
- + have annual sales totalling at least US\$15 million
- + are increasing revenues rapidly via “organic” growth rather than acquisitions
- + intend to scale for global expansion.

The Council of Canadian Innovators will serve as a collective voice lobbying government for more favourable innovation + entrepreneurship policies, including support of revenue growth and improving access to talent for scaling firms.



Canadian Acceleration and Business Incubation (CABI)

Mission:

To advance the success of business incubators and accelerators across Canada while enhancing the knowledge and skills of these professionals and promoting a better understanding of the business incubation and acceleration role in Canada's economic development.

Further Information

cabi.ca

Its primary activities include:

- + accreditation—It has established a national standard for business incubators and accelerators allowing member organizations to become accredited and recognized nationally in the designation process.
- + certification—It reviews and recommends organizations to Citizenship and Immigration Canada for certification under the federal government's Start-up Visa Incubator/Accelerator program.
- + communication—As the voice for business incubators and accelerators, it communicates developments in national and international incubation and acceleration best practices.
- + partnerships—It promotes strategic partnerships nationally and internationally to benefit members, and many of these alliances protect public and private interests in the industry.
- + training—It organizes training sessions, conferences, seminars, and workshops to support the development, design and operations of business incubators and accelerators across the country.
- + consulting—It provides professional support services and tool-kits.



Information Technology Association of Canada (ITAC)

Mission:

To promote and enhance the significant contribution that digital technology can make to Canada's economic prosperity.

Further Information:

itac.ca

ITAC, Canada's national ICT business association, aims to see Canada become a leading digital society that delivers domestic prosperity and competitiveness in a global market. It is committed to growing an innovation ecosystem across Canada that:

- + increases productivity through the robust adoption of new technologies
- + drives innovation and competitiveness and works to
- + improve the talent pool, skills and diversity of the tech sector
- + modernizes how the public sector uses information technology.

Among the benefits members derive from this non-profit are policy advocacy, networking opportunities, professional development, and the promotion of the benefits of adopting new technologies in industry.



Canadian Venture Capital and Private Equity Association (CVCA)

Mission:

To improve Canada's venture capital and private equity industry and drive innovation and growth.

Further Information

cvca.ca

The CVCA aims to be the voice of Canada's venture capital and private equity industry.

Members include Canadian venture capital and private equity firms, international investors, debt and equity providers, institutional funds, government entities, angel and family offices, and industry service providers.

The CVCA advocates on behalf of the industry to ensure sound public policy that encourages a favourable environment for investment. It broadens industry awareness through market research, professional development events and networking opportunities to help members make the best decisions for their investments. And it provides the most comprehensive database on Canadian private capital investments, exits and fundraising activities.



National Angel Capital Organization (NACO)

Mission:

To professionalize Angel investment in Canada and evolve it into a new asset class of investment.

Further Information:

nacocanada.com

NACO is a non-profit national industry association that helps ensure access for Canadian entrepreneurs to resources they need to develop and commercialize their innovative companies locally.

It accelerates a thriving, early-stage investing ecosystem in Canada by connecting individuals, groups and other partners that support Angel-stage investing.

For its members, NACO provides intelligence, tools and resources; facilitates key connections across networks, borders and industries; and helps to inform policy affecting the Angel asset-class.

It achieves these things primarily through running industry events, offering members a number of professional development tools, running research initiatives focused on industry data, and bringing forward programs that support the efforts of Angel investor groups in Canada.



Think Tanks

Think tanks, says author and scholar Andrew Rich, are “independent, non-interest-based, non-profit organizations that produce and principally rely on expertise and ideas to obtain support and to influence the policymaking process.”¹⁹

Typically, think tanks position themselves as independent bodies that leverage expertise to influence policymaking. Their work is usually aimed at political decision-makers, and can range from producing credible research to establishing access to government institutions and political officials, and contributing to public discourse through editorials, articles and commentary.

KEY ACTOR PROFILES

deepcentre



The Centre for Digital Entrepreneurship and Economic Performance (DEEP Centre)

Mission:

To provide thought leadership and rigorous research in the pursuit of public policy innovation and economic prosperity.

Further Information:

deepcentre.com

The DEEP Centre is an economic policy think-tank based in Waterloo, Ontario. Its methodology combines in-depth analysis of case studies, econometric data and existing literature, along with interviews with thought leaders and practitioners around the world.

Showcased in a series of public reports, case studies, conferences and workshops, its resulting analysis of competitive strategies across the globe aims to provide policymakers with unique insights into how to build a competitive edge in fostering innovation and growth in their jurisdictions.

Among the DEEP Centre’s topics of research are:

- + mapping the changing drivers of economic success in the global economy
- + evaluating the impact of digital technologies on entrepreneurialism, innovation, and competitiveness across industries
- + identifying powerful new policy levers that governments can use to foster innovation, economic development and employment in their jurisdictions.



The Centre for Innovation Studies (THECIS)

Mission:

To help public and private sector clients make better decisions about innovation.

Further Information

thecis.ca

THECIS is a non-profit organization based at the University of Calgary that provides independent research services into innovation systems and acts as a catalyst for public and private sector clients to make better decisions about innovation. It focuses on studying and promoting innovation in Western Canada and is also the Canadian host of the [Global Entrepreneurship Monitor](#), the world's largest study of entrepreneurship.

THECIS serves three core functions:

- 1) Creating new knowledge and building insights into how the innovation systems functions and policies that can improve it.
- 2) Providing opportunities for exchange of ideas through events.
- 3) Dissemination of information through Newsletters, events and other informal education activities, particularly for graduate students.

The Brookfield Institute for Innovation + Entrepreneurship is an independent and nonpartisan institute, housed within Ryerson University, that is dedicated to making Canada the best country in the world to be an innovator or an entrepreneur.

BII+E supports this mission in three ways: insightful research and analysis; testing, piloting and prototyping projects; which informs the Institute's leadership and advocacy on behalf of innovation and entrepreneurship across the country.



Brookfield Institute for Innovation + Entrepreneurship (BII+E)

Mission:

To make Canada the best country in the world to be an innovator or entrepreneur.

Further Information:

brookfieldinstitute.ca



PROVINCIAL PROFILES

- ALBERTA
- BRITISH COLUMBIA
- MANITOBA
- NEW BRUNSWICK
- NEWFOUNDLAND AND LABRADOR
- NOVA SCOTIA
- ONTARIO
- PRINCE EDWARD ISLAND
- QUÉBEC
- SASKATCHEWAN
- TERRITORIES

This framework attempts to provide a national overview of Canada’s innovation + entrepreneurship ecosystem. However, given the nature of Canada’s federal political system, a national view alone will be incomplete.

The intergovernmental aspect is immensely important as provinces are responsible for key parts of the ecosystem.

This section provides a high-level profile of actors in the innovation + entrepreneurship ecosystem in each province. We refer to source lists from national associations (refer to Further Information in the Appendix) and have followed up with conversations from stakeholders in each province where possible to understand the provincial and territorial context.

This won’t be a comprehensive view of the ecosystem, and we recognize that many actors are not captured. Nonetheless, we expect this to be a good starting point to help navigate the key actors in each respective provincial/territorial jurisdiction. This is a tool we intend to update regularly. If you notice there are actors that are not included, we invite you to let us know.

KNOWLEDGE TRANSFER

2 TECHNOLOGY PARKS include Edmonton Research Park and Innovate Calgary

3 FEDERALLY FUNDED NETWORK CENTRES OF EXCELLENCE include AUTO21, GlycoNet, and TECTERRA - Geomatics Lab

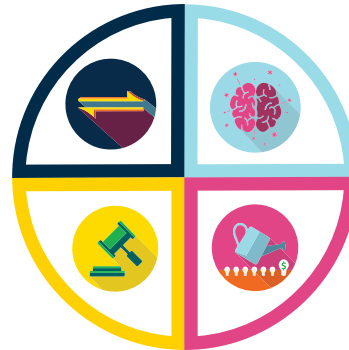
ECOSYSTEM GOVERNANCE

Ministry of Economic Development and Trade, responsible for coordinating and leveraging Alberta's I+E ecosystem to increase business startups and commercialization of ideas

Alberta Research and Innovation Authority, the advisory body that offers strategic advice to the government on innovation and entrepreneurship in the province

PROFESSIONAL ASSOCIATIONS such as the Alberta Council of Technologies (ABCTech), Digital Alberta, and BioAlberta

The Centre for Innovation Studies (THECIS)
see page 57 for details



KNOWLEDGE GENERATION

8 UNIVERSITIES such as the University of Alberta, and University of Calgary

14 COLLEGES such as the Northern Alberta Institute of Technology (NAIT), and Southern Alberta Institute of Technology (SAIT), a polytechnic institute

30 CANADA FOUNDATION FOR INNOVATION RESEARCH LABS

INNOVATION + ENTREPRENEURSHIP SUPPORTS

13 BUSINESS ACCELERATORS AND INCUBATORS such as TEC Edmonton and the Centre for Research & Innovation

Alberta Enterprise Corporation invests in Alberta-based venture capital to grow the province's pool of venture capital

Alberta Innovates - Technology Futures, a corporation within the Alberta Innovates network that provides commercialization support for technology-based firms

Alberta Women Entrepreneurs, a for-profit organization that supports women entrepreneurs in the province

Business Link, Alberta's hub to help entrepreneurs start their own businesses

Connectica, A service that connects entrepreneurs and innovators to programs

REGIONAL DEVELOPMENT AGENCY: Western Diversification—See page 42 for details

Alberta International Offices, responsible for advancing advocacy, trade promotion, and investment attraction in the province

BRITISH COLUMBIA

KNOWLEDGE TRANSFER

9 FEDERALLY FUNDED NETWORK CENTRES OF EXCELLENCE such as Accel-RX, the Centre for Drug Research and Development, and NeuroDevNet

2 RESEARCH + TECHNOLOGY PARKS include Discovery Parks and Vancouver Island Technology Park

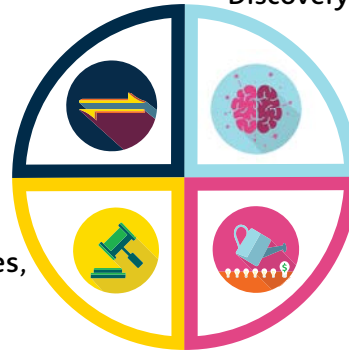
ECOSYSTEM GOVERNANCE

BC Ministry of Technology, Innovation and Citizen's Services, responsible for developing and implementing policies for research and innovation in BC

BC Premier's Technology Council, provides strategic advice to the Premier on all technology-related issues in the province

PROFESSIONAL ASSOCIATIONS, such as AdvantageBC, British Columbia Technology Industry Association (BCTIA), and LifeSciences BC

Centre for Policy Research on Science and Technology (CPROST)—think tank based at Simon Fraser University to inform government on science and technology policy



KNOWLEDGE GENERATION

12 UNIVERSITIES such as the University of British Columbia, and Simon Fraser University

21 COLLEGES such as the British Columbia Institute of Technology (BCIT)

84 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

RESEARCH FUNDERS that include:

British Columbia Knowledge Development Fund (BCKDF), the province's primary funding vehicle for research infrastructure

Discovery Foundation, a registered charity promoting the development of the technology sector through education

Michael Smith Foundation for Health Research, funds research focused on health sciences to keep BC's health research sector globally competitive

INNOVATION + ENTREPRENEURSHIP SUPPORTS

23 BUSINESS INCUBATORS AND ACCELERATORS such as Launch Academy and Venture Labs

BC Innovation Council, a Crown agency of British Columbia that directly supports startups and develops entrepreneurs in a variety of sectors

Trade and Invest British Columbia supports market access for international enterprises in BC and BC enterprises for international markets

MentorshipBC, an online service matching entrepreneurs and small business owners with successful entrepreneurs that act as mentors

REGIONAL DEVELOPMENT AGENCY: Western Diversification (WD)—See page 42 for details

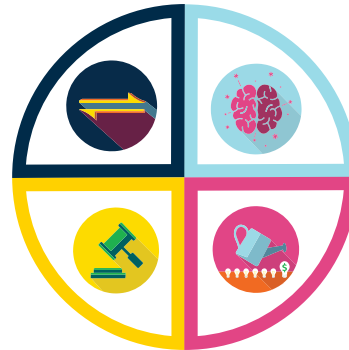
KNOWLEDGE TRANSFER

1 FEDERALLY FUNDED NETWORK CENTRE OF EXCELLENCE, the Translating Emergency Knowledge for Kids (TREKK)

ECOSYSTEM GOVERNANCE

Science, Innovation and Business Development: Research and Innovation Policy Division, responsible for developing, analyzing and communicating policies related to research, innovation, and science & technology in Manitoba

PROFESSIONAL ASSOCIATIONS such as the Information and Communication Technologies Association of Manitoba (ICTAM), and the Life Science Association of Manitoba



KNOWLEDGE GENERATION

6 UNIVERSITIES such as the University of Manitoba

5 COLLEGES such as Red River College

18 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

Research Manitoba, a primary research funding body that coordinates research funding in the province

INNOVATION + ENTREPRENEURSHIP SUPPORTS

3 BUSINESS INCUBATORS AND ACCELERATORS such as Innovate Manitoba, and Manitoba Technology Accelerator

Manitoba Trade and Investment helps to support the growth of Manitoba's economy through increased exports and to attract direct foreign investments into Manitoba

Entrepreneurship Manitoba offers a range of services to businesses and entrepreneurs at every stage of the business life cycle

REGIONAL DEVELOPMENT AGENCY: Western Diversification (WD)—See page 42 for details

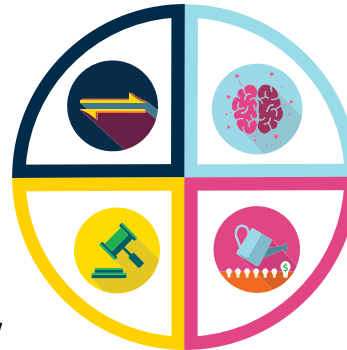
KNOWLEDGE TRANSFER

Knowledge Park, the research + technology park that serves to house knowledge-based companies to facilitate a partnership with the University of New Brunswick

ECOSYSTEM GOVERNANCE

New Brunswick Research and Innovation Council, an advisory body to New Brunswick's Executive Council on all aspects of research and innovation-related activities in New Brunswick

PROFESSIONAL ASSOCIATIONS such as TechImpact, BioNB, Health + Life Science New Brunswick and NB+



KNOWLEDGE GENERATION

4 UNIVERSITIES such as the University of New Brunswick

3 COLLEGES for example, the Collège communautaire du Nouveau-Brunswick

6 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

New Brunswick Research and Productivity Council, a crown corporation that offers 13,000 square feet in lab space for research and development

New Brunswick Health Research Foundation, a research funder that coordinates, fund and support health research

INNOVATION + ENTREPRENEURSHIP SUPPORTS

3 BUSINESS INCUBATORS AND ACCELERATORS such as Propel ICT and Planet Hatch

New Brunswick Innovation Foundation, a non-profit crown corporation that serves as a funding body to invest in applied research projects and new growth-oriented enterprises

Opportunities NB provides support services for local businesses, foster high-growth opportunities and pursue foreign companies to locate within the province

Pond-Deshpande Centre, an entrepreneurial support centre based out of the University of New Brunswick

REGIONAL DEVELOPMENT AGENCY: Atlantic Canada Opportunities Agency (ACOA)—See page 42 for details



NEWFOUNDLAND AND LABRADOR



KNOWLEDGE TRANSFER

1 FEDERALLY FUNDED NETWORK CENTRE OF EXCELLENCE,
LookNORTH

KNOWLEDGE GENERATION

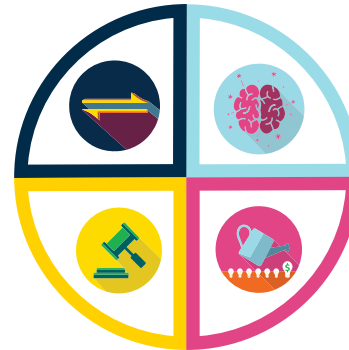
1 UNIVERSITY, Memorial University of Newfoundland

3 COLLEGES, including the College of the North Atlantic

4 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

Research & Development Corporation of Newfoundland and Labrador (RDC), a crown corporation focused on increasing research and development capacity in the province particularly in the business sector

ECOSYSTEM GOVERNANCE



Department of Business, Tourism, Culture and Rural Development - Innovation and Sector Development supports industry, new ventures, labour and research institutions involved in innovation-related activities

PROFESSIONAL ASSOCIATIONS, such as the Newfoundland and Labrador Association of Technology Industries (NATI)

INNOVATION + ENTREPRENEURSHIP SUPPORTS

2 BUSINESS INCUBATORS AND ACCELERATORS such as The Genesis Centre, a Memorial University-based incubator

REGIONAL DEVELOPMENT AGENCY: Atlantic Canada Opportunities Agency (ACOA)—See page 42 for details

KNOWLEDGE TRANSFER

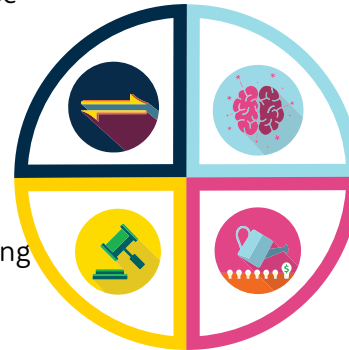
Perrenia, a research + technology park focused on agriculture and the agri-food industry, providing resources and technical knowledge to create value

2 FEDERALLY FUNDED NETWORK CENTRES OF EXCELLENCE include the Children and Youth In Challenging Contexts, and Marine Environmental, Observation, Prediction and Response Network

ECOSYSTEM GOVERNANCE

Nova Scotia Department of Business, responsible for creating the right environmental conditions for innovation and entrepreneurship in the province

PROFESSIONAL ASSOCIATIONS include:
Digital Nova Scotia, provincial ICT industry association
Bionova, provincial life sciences industry association



KNOWLEDGE GENERATION

9 UNIVERSITIES such as Dalhousie University and Saint Mary's Xavier University

3 COLLEGES such as Nova Scotia Community College

22 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

Nova Scotia Research and Innovation Trust (NSRIT) supports research infrastructure in the province by matching national funding from the Canada Foundation for Innovation

INNOVATION + ENTREPRENEURSHIP SUPPORTS

Centre for Entrepreneurship Education and Development, delivers programs aimed at advancing and supporting entrepreneurial culture in the province

6 BUSINESS INCUBATORS AND ACCELERATORS including Volta and Venture Solutions Inc.

Nova Scotia Business Inc. a private-sector economic development agency with a public mandate to support investment attraction and market exports

Innovacorp, a crown corporation that invests in promising early-stage entrepreneurs in information technology, clean technology and life sciences in the province, combining venture capital with business mentoring and incubation facilities

Regional Enterprise Networks, provide regional economic leadership and help to develop regional economic development strategies in partnership with businesses, the province, and municipalities

REGIONAL DEVELOPMENT AGENCY: Atlantic Canada Opportunities Agency (ACOA)—See page 42 for details

ONTARIO

KNOWLEDGE TRANSFER

6 RESEARCH + TECHNOLOGY PARKS such as the MaRS Discovery District and the David Johnston Research + Technology Park

Ontario Centres of Excellence (OCE), see page 31 for details

Ontario Partnership for Innovation and Commercialization, a network of technology transfer experts located across nine member universities

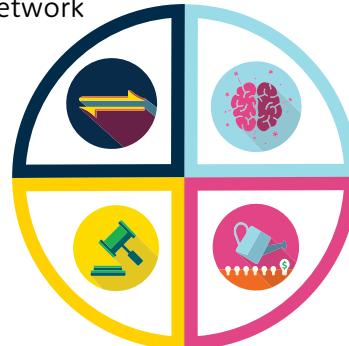
19 FEDERALLY FUNDED NETWORK CENTRES OF EXCELLENCE IN ONTARIO includes the Stem Cell Network, and the Canadian Water Network

ECOSYSTEM GOVERNANCE

Ministry of Economic Development and Growth oversees key strategies and programs that support Ontario's research excellence, commercialization, and entrepreneurship networks

PROFESSIONAL ASSOCIATIONS such as Life Sciences Ontario and the Ontario Clean Technology Alliance

THINK TANKS such as the DEEP Centre, Brookfield Institute for Innovation + Entrepreneurship, and the Innovation Policy Lab



KNOWLEDGE GENERATION

32 UNIVERSITIES, including the University of Toronto, Ryerson University, and Waterloo University

26 COLLEGES, for example, George Brown College

RESEARCH FUNDERS include:

Ontario Research Fund, funds research institutions to help support the operational costs of large-scale transformative research

Banting Research Foundation, a public foundation based in Ontario that funds biomedical research in Canada

RESEARCH INFRASTRUCTURE includes the Ontario Institute for Cancer Research, Ontario Brain Institute, and the Perimeter Institute for Theoretical Physics

INNOVATION + ENTREPRENEURSHIP SUPPORTS

55 BUSINESS INCUBATORS AND ACCELERATORS such as the DMZ, OneEleven, Creative Destructions Lab, and Communitech

Ontario Network of Entrepreneurs (ONE Network), a collaborative network of organizations across Ontario designed to help provide resources for entrepreneurs and businesses. Includes **17 Regional Innovation Centres** for innovative and technology-based companies and **57 Small Business Enterprise Centres** for traditional SMEs

Ontario Venture Capital Fund, a joint initiative with the government and institutional investors to support investments into Ontario-based high-growth firms

REGIONAL DEVELOPMENT AGENCIES: Federal Economic Development Initiative for Northern Ontario (FedNor) and Federal Economic Development Agency for Southern Ontario (FedDev Ontario)—See page 42 for details

PRINCE EDWARD ISLAND

KNOWLEDGE TRANSFER

Synapse Applied Research and Industry Service, an independently-incorporated enterprise aiming to support the University of PEI's technology transfer activities

KNOWLEDGE GENERATION

1 UNIVERSITY, the University of Prince Edward Island

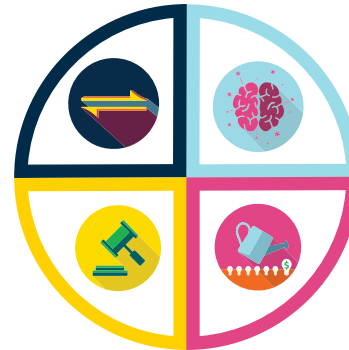
2 COLLEGES, the College Acadie and Holland College

4 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

ECOSYSTEM GOVERNANCE

Innovation PEI, the government body charged with developing and designing programs to support innovation + entrepreneurship in PEI

PROFESSIONAL ASSOCIATIONS, such as Gameplan



INNOVATION + ENTREPRENEURSHIP SUPPORTS

2 BUSINESS INCUBATORS AND ACCELERATORS, include LaunchPad PEI and Prince Edward Island BioAlliance

Invest PEI, a government partnership involving all three levels of government to attract foreign investment into the province

REGIONAL DEVELOPMENT AGENCY: Atlantic Canada Opportunities Agency (ACOA)—See page 42 for details



QUÉBEC

KNOWLEDGE TRANSFER

8 FEDERALLY FUNDED NETWORK CENTRES OF EXCELLENCE, include the ArcticNet, MiQro Innovation Collaborative Centre, and CDQM

Réseau Trans-tech, see page 32 for more details

Zones Innovation Québec, see page 29 for more details

ECOSYSTEM GOVERNANCE

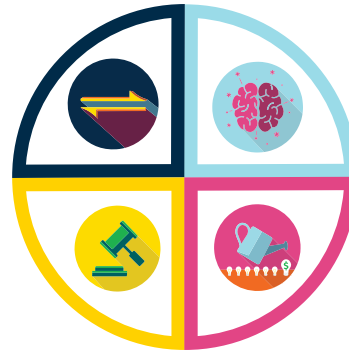
Ministère de l'Économie, de la Science et de l'Innovation, responsible for setting the policy strategy for Québec's economic development and research

Chief Scientist Advisor, advises provincial government on matters of science and research, and represents Québec's research community internationally

Professional Associations, such as Québec Technology Association (AQT) and BIOQuébec

The J.W. McConnell Family Foundation, acts as a source of thought leadership on social innovation

Fondation de l'entrepreneuriat promotes a culture of entrepreneurship throughout Québec, and produces the annual "Indice entrepreneurial Québécois" which takes stock of the state of entrepreneurship in the province



KNOWLEDGE GENERATION

19 UNIVERSITIES, such as McGill University and Laval University.

39 COLLEGES, such as Cégep de Saint-Hyacinthe and Cégep de la Gaspésie et des Îles

87 CANADA FOR INNOVATION FUNDED RESEARCH LABS

Fonds de recherche du Québec, a provincial research funding stream that supports research along three streams: health, nature and technology, society and culture

INNOVATION + ENTREPRENEURSHIP SUPPORTS

25 BUSINESS INCUBATORS AND ACCELERATORS, including Founderfuel and Founders Institute

Investissement Québec, offers guidance to enterprises that are looking to set up in Québec, and facilitate access to the global market

QuébecInnove, a network of organizations that convene actors in the innovation + entrepreneurship ecosystem

REGIONAL DEVELOPMENT AGENCIES: Canada Economic Development for Québec Regions (CED)—See page 42 for details

SASKATCHEWAN

KNOWLEDGE TRANSFER

Innovation Place, see page 29 for details

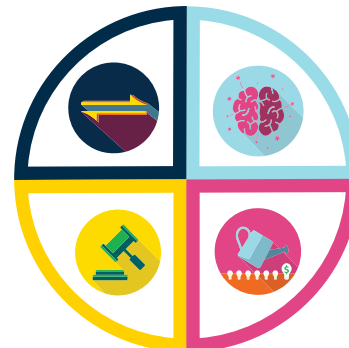
Saskatchewan Research Council, provides research and development support and helps to commercialize research for client firms

1 FEDERALLY FUNDED NETWORK CENTRE OF EXCELLENCE, the Pan-Provincial Vaccine Enterprise

ECOSYSTEM GOVERNANCE

Innovation Saskatchewan aims to develop policies and programs that create an enabling environment to realize Saskatchewan's innovation priorities

PROFESSIONAL ASSOCIATIONS, such as the Saskatchewan Advanced Technology Association



KNOWLEDGE GENERATION

6 UNIVERSITIES, such as the University of Saskatchewan, and First Nations University

11 COLLEGES, such as Saskatchewan Polytechnic

14 CANADA FOUNDATION FOR INNOVATION FUNDED RESEARCH LABS

INNOVATION + ENTREPRENEURSHIP SUPPORTS

SquareOne, provides entrepreneurs with services and technical support

Raj Manek Mentorship Program, leading provider of mentorship to small and medium-sized enterprises in Saskatchewan

1 BUSINESS INCUBATOR, includes Saskatoon Ideas Inc.

REGIONAL DEVELOPMENT AGENCY: Western Diversification (WD)—See page 42 for details

TERRITORIES

KNOWLEDGE TRANSFER

Synapse Applied Research and Industry Service, an independently-incorporated enterprise aiming to support the University of PEI's technology transfer activities

ECOSYSTEM GOVERNANCE

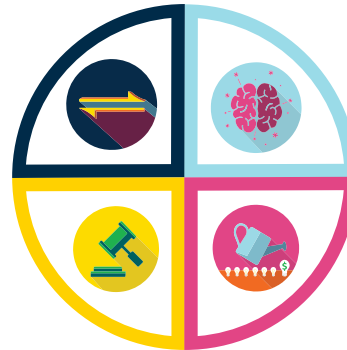
YUKON, Economic Development Yukon

NORTHWEST TERRITORIES, Ministry of Industry, Tourism and Investment

NUNAVUT, Department of Economic Development and Transportation

KNOWLEDGE GENERATION

4 COLLEGES, such as Yukon College, Nunavut Arctic College and Aurora College
RESEARCH INFRASTRUCTURE, includes Canadian Network of Northern Research Operators, Yukon Research Centre and the Aurora Research Institute



INNOVATION + ENTREPRENEURSHIP SUPPORTS

REGIONAL DEVELOPMENT AGENCIES: the Canadian Northern Economic Development Agency (CanNOR)—See page 42 for details

PROVINCIAL INVESTMENT PROMOTION AGENCIES: Invest Yukon and Invest NWT

FUNDING BODIES include:

Nunavut Development Corporation, territorial corporation of the government of Nunavut that makes equity investments in a select number of Nunavut-based firms

Nunavut Business Credit Corporation, territorial corporation of the government of Nunavut that offers lending opportunities for entrepreneurs

Northwest Territories Business Development & Investment Corporation—territorial corporation of the government of Northwest Territories that funds and helps grow SMEs

Provincial+ Territorial Innovation Strategies

Learn more about Alberta's policy direction at:

Alberta Research & Innovation Plan (2012) — vision for home-grown research

Building an Integrated Knowledge Economy (2008)—ICT sector strategy

Alberta's Health Research and Innovation Strategy (2010)—life sciences sector strategy

Learn more about British Columbia's policy direction at:

#BCTECH Strategy (2016)—High tech sector strategy

BC Innovation Council Service Plan – Delivery plan for innovation + entrepreneurship programs

Jobs Plan (2014)—vision for BC's job growth in a variety of sectors

Learn more about Manitoba's policy direction at:

Manitoba Innovation Strategy (2014)—vision for growing innovation + entrepreneurship ecosystem

Learn more about New Brunswick's policy direction at:

Strategies for Innovation (2012) — recommendations for growing innovation + entrepreneurship ecosystem

New Brunswick Information & Communications Technology Sector Strategy (2012) — ICT Sector strategy

Learn more about Newfoundland and Labrador's policy direction at:

Innovation: A Blueprint for Prosperity (2006) — vision for home-grown innovation + entrepreneurship ecosystem

Learn more about the Northwest Territories' policy direction at:

Support to Entrepreneur and Economic Development Policy – funding support for entrepreneurs

Economic Opportunities Strategy (2013) – implementation plan for economic development

Building a Path for Northern Science (2009) – vision for homegrown scientific research

Learn more about Nova Scotia's policy direction at:

The Way Ahead for Nova Scotia (2010) – stock-take and recommendations for Nova Scotia's I+E ecosystem

Report of the Nova Scotia Commission on Building our New Economy (2014) – recommendations on Nova Scotia's economic future

Learn more about Nunavut's policy direction at:

Small Business Support Program Policy (2011) — support for SMEs

Strategic Investments Program Policy (2015) – guidelines for investing into innovation projects

Learn more about Ontario's policy direction at:

Seizing Global Opportunities: Ontario's Innovation Agenda (2008) –vision for a home-grown innovation + entrepreneurship ecosystem

Ontario Life Sciences Commercialization Strategy (2010) – Life sciences sector commercialization strategy

Impact: A Social Enterprise Strategy (2014) – social enterprise strategy
Towards an Ontario Health Innovation Strategy – healthcare system innovation strategy

Learn more about Québec's policy direction at:

Québec's National Research and Innovation Policy (2014) – vision for home-grown research

Learn more about Saskatchewan's policy direction at:

The Saskatchewan Plan for Growth (2012) – vision for home-grown economic growth by 2020

Find more information:

Where can you go to get a list of UNIVERSITIES in Canada?

For this Compass framework, we drew on the list of member universities provided by [Universities Canada](#).

Where can you go to get a list of COLLEGES in Canada?

We primarily referred to the list of member colleges and institutes provided by [Colleges and Institutes Canada](#).

Where can you go to get a list of RESEARCH INFRASTRUCTURE FACILITIES in Canada?

While we don't have a comprehensive list of research infrastructure facilities in Canada, we found the [Canada Foundation for Innovation's Navigation Tool](#) helpful.

Where can you go to get a list of RESEARCH + TECHNOLOGY PARKS in Canada?

We worked off of the list of R&T Parks by the [Association of University Research Parks](#).

Where can you go to get a list of FEDERALLY FUNDED CENTRES OF EXCELLENCE in Canada?

We used a list of networks and centres by sector, funded by the [Networks of Centres of Excellence of Canada](#).

Where can you go to get a list of BUSINESS INCUBATORS + ACCELERATORS in Canada?

Take a look at the list collected by the [Centre for Digital Entrepreneurship + Economic Performance](#).

Endnotes

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- ³ Ries, E. (2011). The Lean Startup. US: Crown Business.
- ⁴ Silcoff, S. (2016). From Kijiji to VC. The Globe and Mail. Retrieved from <http://www.theglobeandmail.com/report-on-business/careers/careers-leadership/janet-bannister-real-ventures-lunch/article28329625/>
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- ¹² The Canadian Opportunity. Prime Minister's address to World Economic Forum Signature Session. News, Jan. 20, 2016. Retrieved from <http://pm.gc.ca/eng/news/2016/01/20/canadian-opportunity-address-right-honourable-justin-trudeau-prime-minister-canada>
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