



UK Science & Innovation Network Country Snapshot:

Canada

Canada's Science and Innovation Landscape

Expenditure and international comparators

Canada's position
in the Global
Innovation Index:

17th

Canada is the world's tenth largest economy with an export-focused market largely characterised by natural resources. Canada's ratio of domestic expenditure on research and development (GERD) to Gross Domestic Products (GDP) is 1.60%.¹ Canada's 2025 target is to increase business expenditure in Research and Development to \$30 billion, keeping pace with OECD average as a percentage of GDP.² The 2018 budget provided a boost of over C\$4 (£2.4) billion in funds to support scientific research, including financial support to Canada's granting councils and research institutes and investments in laboratories, equipment and infrastructure.

Government structures

The federal Ministry of Innovation, Science and Economic Development Canada (ISED) manages engagement on science and innovation (S&I). Minister Navdeep Bains leads the department, specifically on Innovation and Science, and Melanie Joly is the Minister for Economic Development. Dr. Mona Nemer is Canada's Chief Science Advisor. Since her appointment in 2017, departmental Science Advisors are now in place at the Canadian Space Agency, Environment and Climate Change Canada, Health Canada, the National Research Council of Canada and Natural Resources Canada. Minister Mary Ng, Minister of Small Business, Export Promotion and International Trade, works to encourage Canadian SMEs to explore new opportunities beyond North America, placing considerable focus on scaling small businesses and supporting women entrepreneurs.

Various departments and agencies conduct most scientific activities within the federal public sphere, namely: Agriculture and Agri-Food Canada, Canadian Food Inspection Agency, Canadian Space Agency, Environment and Climate Change Canada, Fisheries and Oceans Canada, Health Canada, Communications Research Centre, Defence Research and Development Canada, National Research Council, Natural Resources Canada, Public Health Agency of Canada and Transport Canada. The Canada Foundation for Innovation funds research infrastructure.

At the provincial level, departments tasked with Science and Innovation vary depending on the topical makeup of ministerial mandates.

Science policy

¹ <https://re.ukri.org/documents/2019/int-landscape-study-annex-to-final-report-july-20192-pdf/>

² <https://www.ic.gc.ca/eic/site/062.nsf/eng/00088.html>

Canadian science policy is guided by an interconnected ecosystem of departmental bodies that sit under the portfolio of ISED. Interactions with all of Canada's research and science councils fall under the portfolio of this department. Cabinet Ministers including Minister Navdeep Bains, Minister Mary Ng (Small business and international trade), Minister Maryam Monsef (Gender equality and rural economic development) and Minister Melanie Joly (Economic development) work to push forward [Canada's Science Vision](#).

The vision document sets out the following strategic pillars for science in Canada:

- Making Canadian science more collaborative
- Supporting evidence-based decision making
- Fostering the next generation of scientists
- Promoting equity and diversity in research

Canada's ten provinces and three territories also have subnational strategies for science and technology, and various programmes to boost science-related prosperity.

In 2017, the Government of Canada announced the Innovation Superclusters initiative with \$950 (£600) million investment to support five business-led pan-Canadian superclusters with the greatest potential to catapult the economy. The selected superclusters are: Artificial Intelligence-powered supply chains (Scale.AI) in Quebec; Advanced Manufacturing in Ontario; Digital Technology in British Columbia; Protein Industries in the Prairie provinces, and Ocean Superclusters in the Atlantic region.

Funding for academic research in Canada mainly comes from the three research councils, university endowments, international initiatives and partnerships with industry. Notable programmes include the Canada Excellence Research Chairs, designed to encourage leading academics around the world to relocate to Canada, the Canada First Research Excellence Fund, a ten-year programme of investment in priority areas, and the Networks of Centres of Excellence, an industry-engagement initiative.

Public support for private industrial research and development comes principally from two programmes. Scientific Research and Experimental Development (SR&ED) is an extremely popular tax incentive, while the Industrial Research Assistance Program (IRAP) is a cost-sharing programme for small and medium enterprises.

Notable reports on Canadian science and technology include [Canada's Fundamental Science Review](#), [Investing in Canada's Future](#) (2017), [Canada: A Nation of Innovators](#) (2016) and [The State of the Nation](#) (2014).

The UK Science and Innovation Network in Canada

The Science and Innovation Network (SIN) team has officers working across Canada.

- Sam Jeremy – Head of SIN Canada, Ottawa
- Meghan Hampson – Science, Innovation & Policy Officer, Ottawa
- Mario Rivero-Huguet – Head of Science & Innovation, Montreal
- Arthur Kong – Head of Science, Innovation & Policy, Toronto
- Rabia Ladha – Prosperity, Science & Innovation Officer, Calgary
- Mark Keilthy – Head of Policy, Science & Innovation, Vancouver

In addition, a dedicated team is leading during 2020 on delivery of the Canada COP26 country strategy:

- Kendra Sakaguchi – Head of Climate Change and Energy, COP26 Country Lead
- Beth Chandler – Science, Innovation & Policy Officer, Ottawa

Our priority sectors of work for 2020 include COP26, Artificial Intelligence and Data, Ageing Societies, Clean Growth, Arctic and Future Mobility. These support larger U.K. policies and strategies, in particular, the [Industrial Strategy](#) and its four [Grand Challenges](#), the [Clean Growth Strategy](#) and the [Arctic Policy](#).

More details about our work in Canada, including our priority areas, contact details and news of opportunities, can be found [here](#).