



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Canada

An initiative of the European Union





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Introduction



This document presents an overview of the cluster policy in Canada. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the OECD Economic [Surveys: Canada 2021](#).

The “Economic Surveys” present the major challenges faced by the country, evaluates the short-term outlook, and makes specific policy recommendations.

The COVID-19 pandemic has caused an unprecedented economic shock to the Canadian and global economy. In the face of a global pandemic, Canada's Superclusters rose to the challenge of COVID-19 by creating 74 projects, leading-edge innovations and initiatives to keep Canadians safe and help the Canadian economy recover¹. The Superclusters have fostered new partnerships, attracted industry investment, and supported a wide array of projects related to Canada's COVID-19 pandemic response.

The Government of Canada mobilized two of its existing Superclusters formed under the Innovation Superclusters Initiative to leverage Canadian expertise and financially supported innovative responses to the spread of COVID-19 in Canada: the Digital Technology Supercluster; and the Next Generation Manufacturing Canada Supercluster. Both launched specialized COVID-19 Programs to allocate up to \$110 million (EUR 93,25 million) of existing federal funding.²

¹ Canada's Supercluster projects: COVID-19 response. April, 2021. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00021.html>

² Innovation Supercluster Initiative and Funding for Canadian Innovations Targeting the Effects of COVID-19, April. 2020. Available at: <https://www.bennettjones.com/Blogs-Section/Innovation-Supercluster-Initiative-and-Funding-for-Canadian-Innovations-Targeting-COVID-19>.

01

National cluster policy, programmes and initiatives



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1. National cluster policy, programmes and initiatives

Policy type:	National cluster policy	Regional cluster policy
<i>Policy name:</i>	<u>Innovation Superclusters Initiative (ISI)</u>	<u>Strategic Clusters competition (Quebec)</u>
POLICY OBJECTIVES 	<p>Strengthening cooperation between companies or industry and RTDI actors</p> <p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Connect to global supply chains</p> <p>Enhancing the visibility of clusters</p> <p>Promoting social and sustainable economy and other solidarity-based initiatives</p> <p>Fostering innovation and strengthening innovation ecosystems</p>	<p>Supporting the development of cluster organisations</p>
	<p>In 2017 the federal government announced the Innovation Superclusters Initiative (ISI) which allowed any Canadian cluster to connect with other similar organisations with the aim to developing the so-called superclusters (a network of clusters). In 2018, the five successful superclusters were announced by the Innovation,</p> <ul style="list-style-type: none"> • Science and Economic Development Canada: • Canada's Ocean Supercluster • SCALE.AI • Next Generation Manufacturing supercluster 	<p>The Strategic Clusters competition is an annual contest organised by the Quebec Government. Les Fonds de recherche du Québec – Nature et Technologies (FRQNT) releases this competition on an annual basis and provides successful clusters with a minimum of \$300,000 (EUR 196,720) annually for two to six years. The objective of this initiative is to provide cluster organisations with a stable income for a minimum of two years, ensuring that enough support is provided to develop.</p>



	<ul style="list-style-type: none"> • Protein Industries Canada • Canada's Digital Technology Supercluster <p>While clusters are recognised as energising the economy and acting as 'engines of growth', superclusters build on these advantages and establish long-term competitive advantages, global brand recognition as well as an enormous impact on job creation and economic growth. Through the allocated budget, the business-led superclusters are deemed as securing Canada's future as innovation leader while the initiative itself is created to respond to demands from the industry.</p>	
<p>POLICY FOCUS</p> 	<p>Cross-sectoral</p> <p>The superclusters are formed around five strategic sectors with thematic focus: digital technology, protein industries, next generation manufacturing, artificial intelligence, ocean supercluster. The superclusters focus on cross-cutting issues that touch open many economic sectors.</p>	<p>No specific focus</p> <p>The Strategic Clusters competition does not have a specific policy focus and broadly defines a 'strategic cluster' as having unique characteristics to other alike organisations operating in the same sectors or related in Quebec.</p>
<p>RESPONSIBLE AUTHORITIES</p> 	<p>In charge of drafting</p> <p>Provides funding</p> <p>Oversees the implementation</p> <p>The ISI was launched by the Canadian Government (Innovation, Science and Economic Development Canada (ISED) department) in 2017 as part of the Innovation and Skills Plan, devised to generate growth and help Canada achieve its potential as global leader in innovation. The initiative funds five industry-led consortia to 'leverage strengths, address gaps, and bring innovation ecosystem players together to work more strategically for the collective benefit of their supercluster'</p>	<p>In charge of drafting</p> <p>Provides funding</p> <p>Oversees the implementation</p> <p>The Strategic Clusters competition is led by Les Fonds de recherche du Québec – Nature et Technologies (FRQNT). The launches the call every year.</p>
	<p>SMEs</p>	<p>Cluster organisation</p>



<p>BENEFICIARIES</p> 		<p>Cluster organisations</p> <p>Start-ups</p> <p>Research organisations</p> <p>Academic institutions</p> <p>Large firms</p> <p>Technology centres</p> <p>General population</p>	
<p>The initiative is designed to foster cooperation between large companies, SMEs, start-ups, academia, cluster organisations etc. for the benefit of the regional ecosystem, leading to economic growth and job creation, which ultimately benefits the general population.</p>		<p>The grant is meant to support human and material resources that are necessary to ensure proper functioning of the cluster organisation.</p>	
<p>INSTRUMENTS</p> 		<p>Financial</p> <p>Funding specific initiatives</p>	<p>Subsidies to hire personnel</p> <p>Subsidies for material infrastructures required to ensure the proper functioning of the cluster organisation</p>
<p>Technical assistance</p>		<p>-</p>	<p>-</p>
<p>Explanation</p>		<p>The ISI allocates non-repayable contributions to the industry-led consortia. The contribution totals up to \$950 million (EUR 624 million) and should match the private sector investment.</p>	<p>The amount of the operating grant is up to \$ 600,000 (EUR 393,440) and it aims to cover approximately 50% of the human and material infrastructures required to ensure the proper functioning of the strategic cluster. The total amount granted is based needs expressed by the cluster organisations as well as other factors (e.g. the other sources of revenue, the quality of the cluster, the extent of its activities and the cluster's emergence and takes into account</p>



			the financial resources available in the different research fields)
HISTORY 	Period	Limited period (ending year to be specified)	Unlimited
	Ending year <i>(for policies with limited period)</i>	2023	-
	Starting year	2018	-
	Explanation	The initiative is designed for a limited period of five years and runs between 2018 and 2023.	Although cluster organisations are funded for up to 6 years, the initiative is launched every year.
BUDGET 	Overall	\$950 million (EUR 624 million)	-
	Annual	-	Up to \$250,000
	Source of funding	The Government of Canada \$950 million (EUR 624 million) as part of the Innovation and Skills Plan, plus private funding (unspecified)	The Government of Quebec through Les Fonds de recherche du Québec – Nature et Technologies (FRQNT)
POLICY EVALUATION	Availability	ex-ante	in-itinere
	Results	<p>The ISI is expected to close in 2023 and the results of the initiatives are not yet known. Nevertheless, the Government estimated the expected impacts ex-ante for each supercluster:</p> <ul style="list-style-type: none"> Digital Technology Supercluster <p>GDP impact over 10 years (in billions): More than \$5 billion</p> <p>Job creation over 10 years: More than 13,500 jobs</p>	The FRQNT carries out mid-term evaluations for each grant awarded to cluster organisations that receive operational funding. In addition, cluster organisations must provide the Fonds with a revised budget and a financial report every year of the funding. Based on the results of the evaluation, the committee appointed will recommend whether or not to continue the funding and provide other necessary recommendations.



		<ul style="list-style-type: none"> • Protein Industries Supercluster GDP impact over 10 years (in billions): More than \$4.5 billion Job creation over 10 years: More than 4,500 jobs • Next Generation Manufacturing Supercluster GDP impact over 10 years (in billions): More than \$5 billion Job creation over 10 years: More than 13,500 jobs • AI-Powered Supply Chains Supercluster (Scale AI) GDP impact over 10 years (in billions): More than \$16.5 billion Job creation over 10 years: More than 16,000 jobs • Ocean Supercluster GDP impact over 10 years (in billions): More than \$14 billion Job creation over 10 years: More than 3,000 jobs <p>To ensure that funds are spent effectively, The Institute for Competitiveness & Prosperity emphasised in a report (2017) the importance of establishing performance indicators for tracking policy success.</p>	
<p>POLICY ALIGNMENT WITH</p> <p>THE EU</p> <p>PRIORITIES</p> 	<p>Digitalisation</p> <p>Social inclusion</p> <p>Innovation</p>	<p>-</p>	

02

State of play of cluster policy



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2. State of play of cluster policy

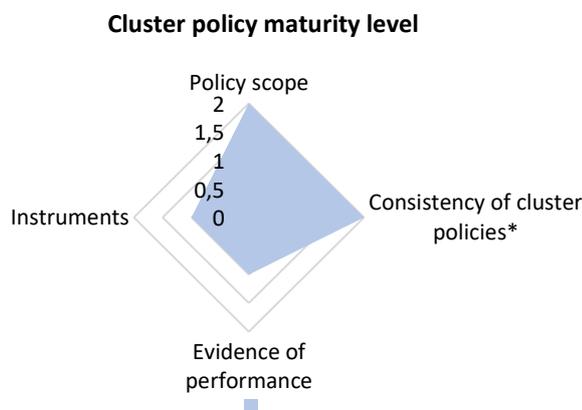
The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 1 and which are scored based on their existence:

- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- **Consistency of cluster policies:** assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity) = 2 points)
- **Evidence of performance:** the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Canada	Maximum score
Policy scope	2	2
Consistency of cluster policies*	2	2
Evidence of performance	1	1
Instruments	1	2

** This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies*





State of play of cluster policy in the country

Policy evaluation (for terminated policies)	Availability of evaluations for terminated policies <p>In 2009 the National Research Council Canada published the Portfolio Evaluation of the NRC Technology Cluster Initiatives (which ran between 2000 and 2008). The results were overall positive, showing that the investment in technology clustering has fostered research capacity and innovation opportunity more largely across Canada and has strengthened in certain regions. Stakeholders expressed their desire to see the investments continue as these have the potential to show returns. Nonetheless, the clustering process is very complex and the NRC highlighted the need for more actors to provide support consistently and on a long-term (which in effect can be seen through the ISI initiative, launched some years later where industry actors play a big role in the clustering process).</p>
Policy approach in the country	Policy support for the activities of cluster organisations Broad-based framework policies to support cooperation effectiveness
Continuity	<p>The policies identified in Canada are still ongoing and have been running for some time now. The national policy (ISI) was launched in 2018, following another national cluster policy which terminated in 2008 (The NRC Technology Cluster Initiatives). Although there is a gap between the two national policies, support was still provided to national clusters but in different forms (e.g. tax incentives). Regarding the regional policy identified in Quebec, this has been running for a very long time and has been consistent over the time.</p>
Consistency	> 10 years (but with clear continuity) <p>Canada's history with cluster policy is more than 10 years old and with clear continuity. Its history began in 1980 in Quebec when the province moved towards an approach of innovation cluster competitiveness. For this purpose, the region identified 13 clusters of which five received strategic investment (aerospace, pharmaceuticals, IT, metal and mineral refinery, and hydroelectric production and transmission), and since then the clusters have continued to develop. At national level, cluster policy dates back in 2000 when the National Research Council started working with universities, the industry, and other governmental organisations with the aim of encouraging the scale up of technology clusters across the country (eleven technology clusters were financed until 2008 and the results were positive). There has been some degree of discontinuity as since 2008, cluster swung from tax incentives to specific policies (such as the ISI in 2016).</p>

Bibliography



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Bibliography

- Canada's Supercluster projects: COVID-19 response. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00021.html>
- Cluster Map of Canada. Available at: <https://www.clustermap.ca/app/scr/is/ccmp/web#!/en/home>
- Government of Canada. Canada's new superclusters. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00008.html>
- Government of Canada. Superclusters in Canada. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00017.html>
- Government of Canada. Innovation for a better Canada. Available at: <https://www.ic.gc.ca/eic/site/062.nsf/eng/home>
- Government of Canada. Innovation Superclusters Initiative. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/home>
- Government of Canada. Funding for superclusters. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00016.html>
- Government of Canada. Digital Technology Supercluster. Available at: <http://www.ic.gc.ca/eic/site/093.nsf/eng/00011.html>
- Government of Canada. Protein Industries Supercluster. Available at: <http://www.ic.gc.ca/eic/site/093.nsf/eng/00012.html>
- Government of Canada. Next Generation Manufacturing Supercluster. Available at: <http://www.ic.gc.ca/eic/site/093.nsf/eng/00010.html>
- Government of Canada. AI-Powered Supply Chains Supercluster (Scale AI). Available at: <http://www.ic.gc.ca/eic/site/093.nsf/eng/00009.html>
- Government of Canada. Ocean Supercluster. Available at: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00013.html>
- Innovation Supercluster Initiative and Funding for Canadian Innovations Targeting the Effects of COVID-19, April. 2020. Available at: <https://www.bennettjones.com/Blogs-Section/Innovation-Supercluster-Initiative-and-Funding-for-Canadian-Innovations-Targeting-COVID-19>
- Institute for Competitiveness & Prosperity (2019). The Canadian Cluster Handbook. Available at: https://www.competeprosper.ca/uploads/WP_34_The_Canadian_Cluster_Handbook_Final.pdf
- Institute for Competitiveness & Prosperity (2017). Superclusters! Lessons + Opportunities for Canada. Available at: https://www.competeprosper.ca/uploads/2017_Cluster_Study_Superclusters_Lessons_and_opportunities_for_Canada_Final.pdf
- National Research Council Canada (2009). Portfolio Evaluation of the NRC Technology Cluster Initiatives. Available at: <http://archives.enap.ca/bibliotheques/2012/10/030315425.pdf>
- EOIC (2019). Cluster programmes in Europe and beyond. Available at: https://www.clustercollaboration.eu/sites/default/files/news_attachment/cluster_programmes_in_europe_and_beyond_0.pdf
- Fonds de recherche Nature et technologies Québec. Strategic Clusters 2019-2020. Available at: <http://www.frqnt.gouv.qc.ca/en/bourses-et-subventions/consulter-les-programmes-remplir-une-demande/bourse/strategic-clusters-2019-nbsp-nbsp-2020-5tq7thxq1516890344782>
- Fonds de recherche Nature et technologies Québec. Strategic Clusters – Fall 2019 competition. Available at: <http://www.frqsc.gouv.qc.ca/en/bourses-et-subventions/consulter-les-programmes-remplir-une-demande/bourse/strategic-clusters-fall-2019-competition-udp0wnzq1551898312510>
- Spencer, G.M., 2011. Cluster Atlas of Canada. A Data Profile of Resource, Manufacturing, and Service Clusters in Canadian Provinces using Data from the 2011 Census and National Household Survey. Available at:



https://www.clustercollaboration.eu/sites/default/files/international_cooperation/cluster-atlas.pdf