



RESEARCH & INNOVATION INVESTMENT SUMMARY

Prepared by: Robert Merson, April 19, 2021

It's been just over 2 years since the Canadian government has tabled a budget, and the first budget for the minority Liberals, who did not table a budget in the Spring of 2020 due to the constantly changing economic environment caused by the COVID-19 pandemic. While there are many programs focused on economic recovery, this summary focuses specifically on investments for the research & innovation sector, with a particular emphasis on the life sciences.

The most significant statement from the Finance Minister was a \$2.2 Billion commitment for biomanufacturing and the life sciences sector. This funding includes significant investment for several national organization, including:

- Canada Foundation for Innovation (\$500M over 4 years) to support bioscience capital and infrastructure
- The tri-councils (\$250M over 4 years) to establish a new biomedical research fund
- adMare (\$92M over 4 years) to support life sciences companies
- VIDO (\$59.2M over 3 years) for their Saskatoon facility
- Stem Cell Network (\$45M over 3 years starting in 2022) to support stem cell and regenerative medicine research

Additional research & innovation investments were also prominent in the budget, including:

- An additional \$100M/year for IRAP to support companies
- \$2.2B over 7 years to expand the Strategic Innovation Fund, to support innovation projects in multiple sectors
- \$400M over 6 years for a pan-Canadian Genomics strategy
- \$250M over 3 years for a new clinical trials fund administered through CIHR
- \$60M over 2 years for the Superclusters
- \$450M for venture capital of which \$50M is targeted for life sciences companies

In summary, the life sciences sector has received considerable investment in the wake of the COVID-19 pandemic, with a clear message that a domestic life sciences industry is a critical component of the economic recovery strategy.

Direct highlights from the budget are included below.

For additional information about funding for innovation in Canada, contact:

Robert Merson, Management Consultant

T : 416-669-0159

E: rmerson@mersoncorp.com

W: www.mersoncorp.com/mci



CANADIAN FEDERAL BUDGET – 2021



Excerpts on Innovation from the Canadian Federal Budget 2021

Compiled directly from budget (Source: Department of Finance, Budget 2021)

Highlights and section titles by R. Merson

Strengthening Canada's Bio-manufacturing and Life Sciences Sector (Section 1.5)

Budget 2021 proposes to provide a total **\$2.2 billion over seven years towards growing a vibrant domestic life sciences sector**. This support would provide foundational investments to help build Canada's talent pipeline and research systems, and support the growth of Canadian life sciences firms, including:

- **\$500 million over four years**, starting in 2021-22, for **the Canada Foundation for Innovation** to support the bio-science capital and infrastructure needs of post-secondary institutions and research hospitals.
- **\$250 million over four years**, starting in 2021-22, for the federal research granting councils to create **a new tri-council biomedical research fund**.
- **\$92 million over four years**, starting in 2021-22, **for adMare** to support company creation, scale up, and training activities in the life sciences sector.
- **\$59.2 million over three years**, starting in 2021-22, **for the Vaccine and Infectious Disease Organization** to support the development of its vaccine candidates and expand its facility in Saskatoon.
- **\$45 million over three years**, starting in 2022-23, to **the Stem Cell Network** to support stem cell and regenerative medicine research.

Budget 2021 proposes to provide **\$28.6 million over five years**, beginning in 2021-22, with \$5.7 million per year ongoing, to the Public Health Agency of Canada, Health Canada, and the Canadian Food Inspection Agency, **to help address antimicrobial resistance**. Investments would support efforts to prevent the inappropriate use of antimicrobials and expand efforts to monitor the emergence of antimicrobial resistance in Canada.

Support for World Leading Research & Innovation (Section 4.6)

Supporting Innovation and Industrial Transformation

Since its launch in 2017, the **Strategic Innovation Fund** has been helping businesses invest, grow, and innovate in Canada. Through its efforts to help businesses make the investments they need to succeed, the fund is well-placed to support growth and the creation of good jobs across the Canadian economy—both now and in the future.

- Budget 2021 proposes to provide the Strategic **Innovation Fund with an incremental \$7.2 billion over seven years** on a cash basis, starting in 2021-22, and **\$511.4 million ongoing**. This funding will be directed as follows:
 - **\$2.2 billion over seven years, and \$511.4 million ongoing to support innovative projects across the economy—including in the life sciences, automotive, aerospace, and agriculture sectors.**
 - **\$5 billion over seven years to increase funding for the Strategic Innovation Fund's Net Zero Accelerator**, as detailed in Chapter 5. Through the Net Zero Accelerator the fund would scale up its support for projects that will help decarbonize heavy industry, support clean technologies and help meaningfully accelerate domestic greenhouse gas emissions reductions by 2030.



- The funding proposed in Budget 2021 will build on the Strategic Innovation Fund’s existing resources, including the \$3 billion over five years announced in December 2020 for the Net Zero Accelerator. With this additional support, the Strategic Innovation Fund will target investments in important areas of future growth over the coming years to advance multiple strategic objectives for the Canadian economy:
 - ***\$1.75 billion in support over seven years would be targeted toward aerospace*** in recognition of the longer-lasting impacts to this sector following COVID-19. This is in addition to the \$250 million Aerospace Regional Recovery Initiative, outlined in section 4.2, providing a combined support of \$2 billion to help this innovative sector recover and grow out of the crisis.
 - ***\$1 billion of support over seven years would be targeted toward growing Canada’s life sciences and bio-manufacturing sector, restoring capabilities that have been lost and supporting the innovative Canadian firms and jobs in this sector. This is an important component of Canada’s plan to build domestic resilience and improve long-term pandemic preparedness proposed in Chapter 1, providing a combined \$2.2 billion over seven years.***
 - ***\$8 billion over seven years for the Net Zero Accelerator*** to support projects that will help reduce Canada’s greenhouse gas emissions by expediting decarbonization projects, scaling-up clean technology, and accelerating Canada’s industrial transformation. More details are in Chapter 5.

Renewing the Pan-Canadian Artificial Intelligence Strategy

Budget 2021 proposes to provide ***up to \$443.8 million over ten years***, starting in 2021-22, in support of the Pan-Canadian Artificial Intelligence Strategy, including:

- \$185 million over five years, starting in 2021-22, to support the commercialization of artificial intelligence innovations and research in Canada.
- \$162.2 million over ten years, starting in 2021-22, to help retain and attract top academic talent across Canada—including in Alberta, British Columbia, Ontario, and Quebec. This programming will be delivered by the Canadian Institute for Advanced Research.
- \$48 million over five years, starting in 2021-22, for the Canadian Institute for Advanced Research to renew and enhance its research, training, and knowledge mobilization programs.
- \$40 million over five years, starting in 2022-23, to provide dedicated computing capacity for researchers at the national artificial intelligence institutes in Edmonton, Toronto, and Montréal.
- \$8.6 million over five years, starting in 2021-22, to advance the development and adoption of standards related to artificial intelligence.

Launching a National Quantum Strategy

Budget 2021 proposes to provide ***\$360 million over seven years***, starting in 2021-22, to launch a National Quantum Strategy. The strategy will amplify Canada’s significant strength in quantum research; grow our quantum-ready technologies, companies, and talent; and solidify Canada’s global leadership in this area. This funding will also establish a secretariat at the Department of Innovation, Science and Economic Development to coordinate this work.



Revitalizing the Canadian Photonics Fabrication Centre

Budget 2021 proposes to provide ***\$90 million over five years*** on a cash basis, starting in 2021-22, to the National Research Council to retool and modernize the Canadian Photonics Fabrication Centre. This would allow the centre to continue helping Canadian researchers and companies grow and support highly skilled jobs.

Launching a Pan-Canadian Genomics Strategy

Budget 2021 proposes to provide ***\$400 million over six years***, starting in 2021-22, in support of a Pan-Canadian Genomics Strategy. This funding would provide \$136.7 million over five years, starting in 2022-23, for mission-driven programming delivered by Genome Canada to kick-start the new Strategy and complement the government's existing genomics research and innovation programming. Further investments to grow Canada's strengths in genomics under the Strategy will be announced in the future.

Conducting Clinical Trials

Budget 2021 proposes to provide ***\$250 million over three years***, starting in 2021-22, to the Canadian Institutes of Health Research to implement a new Clinical Trials Fund.

Supporting Innovation Superclusters Initiative

To help ensure those superclusters that made emergency investments to support Canada's COVID-19 response and others can continue supporting innovative Canadian projects:

Budget 2021 proposes to provide ***\$60 million over two years***, starting in 2021-22, to the Innovation Superclusters Initiative.

Promoting Canadian Intellectual Property

Building on the National Intellectual Property Strategy announced in Budget 2018, the government proposes to further support Canadian innovators, start-ups, and technology-intensive businesses. Budget 2021 proposes:

- ***\$90 million, over two years, starting in 2022-23, to create ElevateIP***, a program to help accelerators and incubators provide start-ups with access to expert intellectual property services.
- ***\$75 million over three years, starting in 2021-22, for the National Research Council's Industrial Research Assistance Program*** to provide high-growth client firms with access to expert intellectual property services.

These direct investments would be complemented by a Strategic Intellectual Property Program Review that will be launched. It is intended as a broad assessment of intellectual property provisions in Canada's innovation and science programming, from basic research to near-commercial projects. This work will make sure Canada and Canadians fully benefit from innovations and intellectual property.

Capitalizing on Space-based Earth Observation

Budget 2021 proposes to provide:

- ***\$80.2 million over eleven years***, starting in 2021-22, with \$14.9 million in remaining amortization and \$6.2 million per year ongoing, to Natural Resources Canada and



Environment and Climate Change Canada *to replace and expand critical but aging ground-based infrastructure to receive satellite data.*

- ***\$9.9 million over two years, starting in 2021-22, to the Canadian Space Agency to plan for the next generation of Earth observation satellites.***

Science and Technology Collaboration with Israeli Firms

Budget 2021 proposes to provide additional funding of ***\$10 million over five years***, starting in 2021-2022, and \$2 million per year ongoing, ***to expand opportunities for Canadian SMEs to engage in research and development partnerships with Israeli SMEs as part of the Canadian International Innovation Program.*** This will be sourced from existing Global Affairs Canada resources. The government also intends to implement an enhanced delivery model for this program, including possible legislation.

Support for Canadian Entrepreneurs (Section 4.3)

- Budget 2021 proposes to provide up to ***\$101.4 million over five years***, starting in 2021-22, to Innovation, Science and Economic Development Canada ***for the Small Business and Entrepreneurship Development Program.***
- To provide affordable financing, increase data, and strengthen capacity within the entrepreneurship ecosystem, Budget 2021 proposes to provide ***up to \$146.9 million over four years***, starting in 2021-22, ***to strengthen the Women Entrepreneurship Strategy.*** Women entrepreneurs would have greater access to financing, mentorship, and training. Funding would also further support the Women Entrepreneurship Ecosystem Fund and the Women Entrepreneurship Knowledge Hub.
- Budget 2021 proposes to provide up to an additional ***\$51.7 million over four years***, starting in 2021-22, to Innovation, Science and Economic Development Canada and the regional development agencies ***for the Black Entrepreneurship Program.***
- Budget 2021 proposes to provide Public Services and Procurement Canada ***\$87.4 million over five years*** starting in 2021-22, and \$18.6 million ongoing. This funding will be used ***to modernize federal procurement and create opportunities for specific communities by diversifying the federal supplier base.***
- Budget 2021 proposes to provide ***\$500 million over five years***, starting in 2021-22, and \$100 million per year ongoing, to expand the ***Industrial Research Assistance Program to support up to 2,500 additional innovative small and medium-sized firms.***
- Budget 2021 proposes to make available up to ***\$450 million on a cash basis over five years***, starting in 2021-22, for ***a renewed Venture Capital Catalyst Initiative*** that would increase venture capital available to entrepreneurs.
 - ***\$50 million*** of this amount would be dedicated to support venture capital ***investments in life science technologies.***
 - ***\$50 million*** of this amount would support a new ***Inclusive Growth Stream*** to increase access to venture capital for underrepresented groups, such as women and racialized communities.
- Budget 2021 proposes to provide ***\$21.3 million over five years***, starting in 2021-22, and \$4.3 million per year ongoing, to Global Affairs Canada for the continuation of the ***International Business Development Strategy for Clean Technology.***



Summary Investment Tables

(Chapter 1 from Budget – Sections 1.5 of Table for Reference)

Protecting Canadians’ Health

millions of dollars

	2020– 2021	2021– 2022	2022– 2023	2023– 2024	2024– 2025	2025– 2026	Total
1.5. Investing in Research and Science	0	237	275	199	198	6	916
Strengthening Canada's Bio-manufacturing and Life Sciences Sector	0	251	297	206	192	0	946
Less: Funds Sourced From Existing Departmental Resources	0	-15	-29	-14	0	0	-59
Action to Address Antimicrobial Resistance	0	2	7	7	6	6	29

CANADIAN FEDERAL BUDGET – 2021



(Chapter 4 from Budget – Sections 4.6 & 4.3 of Table for Reference)

Helping Canadian Businesses Grow and Succeed

millions of dollars

	2020- 2021	2021- 2022	2022- 2023	2023- 2024	2024- 2025	2025- 2026	<i>Total</i>
4.6. Investing in World-leading Research and Innovation	0	923	1,515	2,155	1,006	526	6,125
Supporting Innovation and Industrial Transformation	0	705	1,099	1,704	768	295	4,571
Renewing the Pan-Canadian Artificial Intelligence Strategy	0	45	72	80	84	88	368
Launching a National Quantum Strategy	0	31	49	59	61	54	254
Revitalizing the Canadian Photonics Fabrication Centre	0	2	4	5	6	6	23
Launching a Pan-Canadian Genomics Strategy	0	50	86	105	81	75	398
Conducting Clinical Trials	0	34	97	119	0	0	250
Supporting the Innovation Superclusters Initiative	0	36	24	0	0	0	60
Promoting Canadian Intellectual Property	0	15	75	75	0	0	165
Capitalizing on Space-based Earth Observation	0	5	10	6	6	9	36

CANADIAN FEDERAL BUDGET – 2021



Helping Canadian Businesses Grow and Succeed

millions of dollars

	2020- 2021	2021- 2022	2022- 2023	2023- 2024	2024- 2025	2025- 2026	<i>Total</i>
4.3. Investing In Canada's Entrepreneurs	0	214	183	203	191	131	921
Supporting Entrepreneurs, Including Equity Deserving Entrepreneurs	0	20	20	20	20	20	101
Supporting Women Entrepreneurs	0	63	21	36	27	0	147
Supporting Black Entrepreneurs	0	12	12	13	14	0	52
Leveraging Procurement Opportunities	0	13	18	19	18	18	87
Expanding the Industrial Research Assistance Program	0	100	100	100	100	100	500
Investing in Canadian Innovators Through a Renewed Venture Capital Catalyst Initiative	0	1	6	11	7	-12	12
Boosting Canada's Clean Technology Exports	0	4	4	4	4	4	21

