

The Restart Starts Here: Local Gateways to Innovation and Recovery

Submission to the House of Commons Standing Committee on Finance
Pre-budget Consultations in Advance of Budget 2021

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Submitted on behalf of the College Applied Research Taskforce

by **Dr. Marc Nantel**, Vice-President – Research, Innovation & Strategic Initiatives, Niagara College
Taskforce Chair



Recommendation

Empower SMEs, social, health and community organizations to restart the economy through a new investment of \$165M over two years in the NSERC College and Community Innovation Program (CCIP), with an option to extend this funding through the longer-term recovery:

- \$85M over two years for rapid-response and entry-level grants to improve or develop new products and services, including those involving technology adoption and green innovation.
- \$80M over two years for colleges to engage SMEs and other partners in applied research to support community recovery efforts.

Introduction

Canada's small and medium enterprises (SMEs) have borne the brunt of the COVID-19 pandemic and will face myriad challenges in the days ahead. Our national applied research network can be leveraged as a key partner in the role SMEs and others will play in restarting the economy and supporting recovery, particularly by scaling up the adoption of clean technology and advancing digitization.

The *College Applied Research Taskforce*, a group of national and regional associations representing colleges, institutes, polytechnics and CEGEPS¹, presented a joint recommendation for Federal Budget 2020 and has come together again to describe how applied research can support the objectives of Budget 2021. Our recommendation builds upon earlier submissions on the Federal Government's pandemic response in spring 2020.²

Recommendation

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Pivot to Thrive: SMEs crucial to Canada's economic recovery

Small businesses play a key role in the Canadian economy, accounting for some 42% of GDP and 48% of new jobs, making the impact of COVID-19's economic wrath of broad concern to all. In the first two months of the pandemic alone, firms with fewer than 100 employees accounted for nearly 60% of total job losses, which is twice the share of job losses they shouldered during the 2008-2009 recession.³ As of late July 2020, only 62% of Canadian SMEs reported being fully open.⁴ The effect of COVID-19 on SMEs is particularly severe "because of higher levels of vulnerability and lower resilience related to their size."⁵ According to the Royal Bank of Canada, "1.2 million jobs will be at risk as the sectors hardest hit by [COVID-19] try to adjust and there will be additional risks for women, youth and minorities, including Indigenous Canadians, who are disproportionately employed in the most disrupted parts of the small-business economy."⁶

The Federal Government's COVID-19 Economic Response Plan has to date consisted largely of emergency measures designed to support individuals and businesses through the short term, such as the Canada Emergency Response Benefit, the Canada Emergency Wage Subsidy, and various

¹ The use of the word "colleges" in this submission refers collectively to all publicly-supported colleges, polytechnics, institutes and CEGEPS in Canada. See page 7 for the list of Taskforce members.

² See for example May 2020 [joint submission to Innovation, Science and Economic Development Canada](#) (ISED) and June 2020 [submission to House of Commons FINA, INDU and HUMA Standing Committees](#).

³ Royal Bank of Canada (RBC) report [Small Business, Big Pivot](#)

⁴ [Canadian Federation of Independent Business](#)

⁵ <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/>

⁶ RBC: [Small Business, Big Pivot](#)

interest-free loans and financial deferral programs. It is clear, however, that the pandemic will have wide-ranging and long-lasting economic consequences that will profoundly change our way of life. Crucial to Canada's overall economic recovery will be the ability of SMEs to pivot to the new reality of conducting business in the post-pandemic world. For local economies and communities, the need for a robust recovery is even more critical. "Smaller firms pay a large share of local tax revenue, drive local employment and typically support local charities and community groups that national initiatives often overlook."⁷ In short, **"Canada's rebuild depends on small business's rebound."**⁸

Restarting Canada's economy depends on the ability of SMEs to innovate. Even before the pandemic, many SMEs were digital novices. "In 2017, nearly half of Canadian firms with fewer than 500 employees didn't even have a business website... Of those that did, fewer than 10% were enabled for online payment."⁹ Clearly, SMEs "were ill-prepared for the rapid economic shift that has emerged in the pandemic's wake, an abrupt lurch to a virtual marketplace that has caught many off guard."¹⁰ Governments now have the opportunity to design policies to allow the small business sector to recover.¹¹ This can include "programs, funding and incentives for technology adoption in businesses of all sizes and across all sectors to improve Canadian productivity as well as developing a technology transfer strategy to enhance the commercialization of scientific research developed in Canada's academic, research and government institutions."¹²

The solution: Applied Research at Canada's Colleges, Institutes, Polytechnics and CEGEPS

Leveraging Canada's diverse and successful network of colleges and their applied research centres can help SMEs solve their innovation challenges to rebuild a more resilient economy. Over 95% of Canadians live within 50 km of a college campus, community learning centre or applied research facility. Colleges and institutes serve as local gateways to the innovation ecosystem for thousands of SMEs and community partners every year, specializing in research that is responsive to regional economies. In 2017-2018 alone, they reported over 7,300 research partnerships, 64% of them with SMEs, who often lack the resources, specialized technology and networks to solve innovation challenges on their own.¹³ Colleges and polytechnics develop the talent employers need and provide the expertise required to develop or improve products, processes and services and enhance their partners' competitiveness, efficiency and sustainability. Partnered applied research solves innovation challenges at the "speed of business": In 2017-2018 applied research offices reported over 4,400 new processes, products, prototypes and services, 87% of which were completed in under one year. This network of over 700 college service hubs is ideally positioned to play a strong role in our nation's economic recovery and continued prosperity.

⁷ *Ibid*

⁸ RBC: <https://thoughtleadership.rbc.com/five-ways-to-help-small-business/>

⁹ RBC: [Small Business, Big Pivot](#)

¹⁰ RBC: <https://thoughtleadership.rbc.com/five-ways-to-help-small-business/>

¹¹ <https://www.oecd-forum.org/posts/micro-businesses-macro-challenges-rebooting-start-up-policy>

¹² [Canadian Chamber of Commerce](#)

¹³ <https://www.collegesinstitutes.ca/arsurvey/>

Recommended Investment Part 1:

\$85M over two years for rapid-response and entry-level grants to improve or develop new products and services, including those involving technology adoption and green innovation.

SMEs and others have been turning to college applied research centres throughout the pandemic to solve their innovation challenges, particularly as the economy reopens. The hunger for applied research is palpable: some 60% of college applied research centres report being unable to meet demand for projects from SMEs and community partners. This is complicated by many potential partners' inability to meet cash leverage requirements, with 80% of colleges reporting this as a barrier to their participation.¹⁴ An additional investment of \$85M over two years, to increase NSERC's current CCIP budget, will respond to the needs of more SMEs and community partners in the social and health sectors, compensate for the inability of many partners to meet cash leverage requirements in the short-term, and accelerate green innovation, digital and technology adoption efforts across all sectors of the economy.

This additional funding of \$85M over two years would:

- Support high-demand rapid-response programs such as CCIP Engage Grants to reduce costs and wait times for priority research projects identified by partners. It is expected that this allocation could support up to 1,300 additional projects over two years.
- Lift or lighten cash leverage requirements in CCIP grants for companies that can no longer pay due to revenue losses from the pandemic.
- Respond to increased demand across all grant types for all categories of partners.
- Increase funding for research tools and instruments, personal protective equipment (PPE) and safe work environments for students, research staff and clients.
- Create and protect jobs in local communities by strengthening the talent pipeline between colleges and their innovation partners.
- Maintain progress on meeting the objectives of the College and Community Social Innovation Fund (CCSIF), particularly related to the health and social challenges arising from the pandemic, through partnerships with local health-care authorities, Indigenous communities and non-profits.

The COVID-19 pandemic has underscored the vital need for an innovation ecosystem capable of rapid technology transfer. In an economy dominated by SMEs distributed over a vast geographical area and operating in a wide array of industries, the ability of colleges to support this effort has never been more important.

¹⁴ Survey conducted by Colleges and Institutes Canada, August 2020 (sample size = 52 institutions)

Recommended Investment Part 2:

\$80M over two years for colleges to engage SMEs and other partners in applied research to support community recovery efforts.

As leaders in technology transfer and digital adoption, colleges are ideally positioned to provide responsive local support to increase productivity and innovation in start-ups and SMEs and encourage new initiatives that advance post-pandemic priorities related to sustainability, public health, social inclusion and making supply chains more resilient. These applied research hubs are deeply embedded in their communities and network regularly with industry, universities, funders, and other innovation partners.

The ability of institutions to play this role has been severely compromised by the impact COVID-19 has had on the entire post-secondary education sector, due to decreased enrollment by international and domestic students and new expenses to transition to online education and reopen campuses safely. Even before the pandemic struck, the most recent evaluation of the CCIP concluded that the provision allowing up to 20% of grant funds to be allocated to overhead and administration is not effective in equipping colleges to respond to the innovation needs of SMEs and sustain future-oriented business development.¹⁵ These long-standing difficulties have been exacerbated by COVID-19, making it even more challenging for college applied research operations to reach their full potential as community-oriented innovation hubs. Now more than ever, college applied research offices need additional, dedicated funding to boost their capacity to respond to innovation challenges in their communities as Canada enters into the recovery and rebuilding phase post-pandemic.

This specific funding of \$80M over two years would:

- Enable colleges to proactively engage SMEs and other partners in exploring ways they can innovate to improve resiliency and boost productivity.
- Strengthen the ability of college applied research offices to work with regional economic development organizations and other actors in implementing strategies for a business-led economic recovery.
- Create resiliency within institutions to weather the immediate impact of the pandemic.
- Build and reinforce collaborations with multiple partners and stakeholders, including universities and other research institutions.
- Produce market research and business development opportunities both within Canada and overseas, to support SME growth in domestic and export markets.

A successful economic recovery policy that promotes SME innovation, talent development, and digital technology adoption “must identify the local bottlenecks and mobilise actors to address them.”¹⁶ The national network of college and institute applied research centres is experienced in providing targeted

¹⁵ Final Report: [Evaluation of the College and Community Innovation Program and SSHRC’s Community & College Social Innovation Fund](#)

¹⁶ <https://www.oecd-forum.org/posts/micro-businesses-macro-challenges-rebooting-start-up-policy>

support to local SME and community partners in matters concerning regulations and intellectual property, financing, marketing, business development and technology adoption – all vital ingredients in the pivot required for many businesses to thrive, scale their operations, and create a strategic approach to globalization in the post-pandemic world.

College Applied Research Taskforce members:

- Association pour la recherche au collégial (ARC)
- Atlantic Colleges Atlantique (ACA)
- BC Association of Institutes + Universities (BCAIU)
- BC Colleges
- British Columbia Applied Research and Innovation Network (BCARIN)
- Colleges and Institutes Canada (CICan)
- Colleges Ontario
- Council of Post-Secondary Presidents of Alberta (COPPOA)
- Fédération des cégeps
- Polytechnics Canada
- Synchronex
- Tech-Access Canada