



August 2021

A Pan-Canadian Coalition Supporting a Climate-Focused Economic Recovery

**Proposal to Government Agencies
and Other Funding Bodies**



Canadian Colleges for a
Resilient Recovery

Les Collèges canadiens pour
une relance économique résiliente

Background

Canadian Colleges for a Resilient Recovery (C2R2) is a coalition of leading polytechnic institutions from across Canada, including colleges, cégeps, and institutes of technology. ([Appendix A](#))

By working as a collective of leading institutions with an established commitment to sustainability, C2R2 intends to be one of the driving forces in providing the skills required to transition to a clean economy in Canada. With a vision to “build back better” from the COVID-19 crisis, our institutions are positioned to quickly develop thousands of training and applied research opportunities to help Canadians access new careers, support the transition to a low carbon economy, and foster inclusion, diversity, and equity.

The coalition is working together to expedite the rapid development and deployment of new and synchronized curriculum and research initiatives in support of resilience in cities, towns and rural areas across Canada.

A truly resilient economy is inclusive and equitable. Deeply integrated in the coalition’s aim is the creation of inclusive opportunities that enhance equity and continue to further truth and reconciliation with First Nations, Inuit and Métis peoples.

C2R2 members are leaders in many areas of education, training and applied research, and hold particular strength with respect to climate action and sustainability across a number of sectors. Since August of 2020, C2R2 has been forging training and research opportunities that are key enablers of federal



government priorities related to our economic recovery by getting people back to work with a focus of enabling the green economy. A great deal of work has been done to create a Canada-wide competency framework for curriculum and outcomes-based research. In order to ensure that C2R2’s work reflects the needs of business and industry, the coalition has established influential advisory networks, bringing together a cross-section that represents the voice of large industry sectors, Indigenous, youth and other under-represented groups to the planning table. ([Appendix B](#))

C2R2 connects post-secondary leaders from coast to coast to coast, enhanced by the ability to deploy even more broadly into all parts of the country through alliances with Colleges and Institutes Canada (CICan) and Polytechnics Canada.



The Opportunity

C2R2 provides the opportunity to quickly implement a broad range of applied training opportunities, deployed through virtual and hybrid delivery methods that best meet student needs. By coordinating our educational offerings and their implementation, we can get individuals trained and engaged in employment that is aligned to the development of a vibrant green economy and provides increased mobility.

Our pan-Canadian approach intrinsically distils best practices from all of our members and shares them across the network. Within C2R2, we are familiar with each other's strengths and structures, and can rapidly establish industry-driven curriculum development working groups in all disciplines. This avoids redundancy and incompatibilities, and instead fosters efficiency, transferability, scalability and standardization to promote student mobility.

In addition to course development, C2R2 will create internship and experiential learning opportunities to improve access to employment. We will support industry partners with access to faculty expertise and resources to develop, test and advance green technology through applied research projects. We will jointly assemble comprehensive corporate and sectoral professional development programs that lead to life-long learning and upskilling pathways.

A partnership with C2R2 provides the opportunity to engage in a comprehensive, consolidated pan-Canadian project through a single mechanism that provides efficiency

and the ability to scale quickly. Our network comprises of the best polytechnic institutions from around the country and yet is nimble enough to remain responsive and focused.

Our work will be driven by business and community and completed in a way that authentically engages Indigenous communities, integrates the youth voice through an alliance with Student Energy, and is informed by Indigenous business leaders through the Canadian Council for Aboriginal Business (CCAB). C2R2 has implemented a governance structure that ensures curriculum, work experience and applied research are inclusive and clearly align to goals of equity, diversity and inclusivity.

In the first three years, up to 25,000 individuals (and over 100,000 at scale) will be trained or re-trained for careers in the green economy by enabling the regional strengths of individual institutional members to be deployed broadly across the entire country using micro-credentialing and other short form training modes and continuing education offerings.



Components of the Strategy

1. Education and Training

Training programs in 20 sectors across 7 broad industry areas including clean energy, construction, sustainable agriculture, resource management, digital transformation, urban/transportation and the service industry will be developed and micro-credentials and equivalent credentials awarded at the completion. Over a period of 3 years of delivery, 25,000 individuals will be trained. Micro-credentials will be portable, stackable and delivered in a flexible manner using existing structures across Canada such as BC Campus and E-Campus Ontario which will contribute to pathways linked to broader qualifications in service of national labour market mobility. Training will develop competency in the technical skills related to each sector area as well as develop the employability skills industry partners identified as critical. Training will also integrate innovative technologies such as simulation and augmented and virtual reality to ensure it can be flexibly delivered in communities across the country.

2. Work Experience

Industry partners will have access to funding to support paid internships, work placements and employer incentives with a commitment to retain strong employees beyond the funded period.

3. Applied Research

Industry partners will be able to access up to \$30,000 per applied research project. Applied research work conducted through colleges, cégeps and polytechnics is recognized as a viable and impactful mechanism by industry partners to develop, test, and improve technologies that will be essential if Canada is to implement new technologies required to meet 2030 carbon reduction targets. This relatively modest investment per project will be an enabler to engage college faculty and resources in the projects based on strength areas of C2R2 members. Applied research through colleges and polytechnics is very attractive to business partners as the industry partners retain any intellectual property developed.

4. Equity, Diversity, and Inclusion

Equitable access and opportunities for under-represented individuals is a key priority for this project and C2R2 has made a commitment to bring those voices to the table to identify and address the key barriers and ensure the wrap-around supports are available to increase opportunities for student success. Barriers such as transportation, access to child-care, housing and living expenses, tuition and resource costs will be supported through this part of the investment. Mentorship support will also enable individuals to access supports to help with their own transition back to an educational and workplace setting.



Investment Required

Strategic Component	Deliverable	Investment Required millions of dollars
Education and Training	Development of up to 500 micro-credentials across 20 sectors and the deployment of these micro-credentials (or equivalent qualifications/continuing education credits) free of charge to up to 25,000 participants over 4 years (1 year of development and scale-up, 3 years of delivery)	75
Work Experience Funding	Creation of up to 10,000 paid internship positions, funded up to \$5,000 per experience	50
Applied Research Projects	500 applied research projects funded over the course of the project with an estimate of 4 students per project for a total of 2,000 students engaged in totality related to applied research	15
Equity, Diversity, and Inclusion	Wrap-around supports to reduce and eliminate barriers to participation	25
Administrative Oversight	12% of total project	20
Total		\$185 million



Conclusion

Canada has ambitious goals and targets related to education and training that will be a key enabler in long-term recovery from the COVID-19 pandemic and will enable the transition to a greener economy, creating better opportunity to meet greenhouse gas reduction targets. Colleges, polytechnics, and cégeps have a proven track record of doing exactly what is required and C2R2 connects a national network of leaders, creating the conditions to scale and deploy quickly and completely across the entire country. C2R2 is an efficient mechanism for government agencies or other funding bodies to engage 15 sector leaders in a single relationship to deliver training, workforce development and applied research.

We look forward to the opportunity to work with others in the detailed development of the project including deliverables, success metrics and final budget.

C2R2 is ready for the challenge!



Appendices

Appendix A

Founding Partners of Canadian Colleges for a Resilient Recovery include:



[Algonquin College](#) | Ontario



[Aurora College](#) | Northwest Territories



[British Columbia Institute of Technology](#) | British Columbia



[Cégep de Rimouski](#) | Quebec



[CNETE du Cégep de Shawinigan](#) | Quebec



[Holland College](#) | Prince Edward Island



[Mohawk College](#) | Ontario



[Nova Scotia Community College](#) | Nova Scotia



[Okanagan College](#) | British Columbia



[Red River College](#) | Manitoba



[Saskatchewan Indian Institute of Technologies](#) | Saskatchewan



[Saskatchewan Polytechnic](#) | Saskatchewan



[Seneca College](#) | Ontario



[Southern Alberta Institute of Technology](#) | Alberta



[Yukon University](#) | Yukon



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resilientcolleges.ca

Appendix B

National Industry Advisory Council members include:



Canadian Council for Aboriginal Business



Canada Green Building Council



Canadian Renewable Energy Association



Canadian Electricity Association



Canadian Clean Tech Alliance



Colleges and Institutes Canada



Dunsky Energy Consulting



Efficiency Canada



Forest Products Association of Canada



Polytechnics Canada



Student Energy




Synchronex



Tech-Access Canada



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Algonquin College

C2R2 Steering Group Co-Chairs

Paul Armstrong
Chief Operating Officer
Mohawk College

Anna Burke
Vice President Academic
Nova Scotia
Community College

Hasan Malik
Provost and Vice President
Academic
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