Future Skills Centre | Centre des Compétences futures

Project Insights Report

Building Capacity for Advancing Climate Change Leadership

PARTNERS
Academy for Sustainable Innovation (ASI)

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Ontario

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$205,000

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Executive Summary

Canada needs a climate-ready workforce with the ability to translate knowledge and information into concrete actions to address the energy transition, climate change mitigation, and adaptation.

This project explored the viability of developing a national framework for the leadership competencies required to address climate change. The project also focused on how such a framework could guide the development of climate-related micro-credentials across the skills and training ecosystem.

The project summarized some of the skills in demand in climate-related jobs, and characteristics of the short-term training and skills opportunities related to climate change across Canada. The project highlighted the diversity in how these opportunities are developed and delivered, advocating for an overarching framework to drive consistency and portability across jurisdictions.

However, the Government of Canada released its Sustainable Jobs Plan in 2023, which included more regional and sector-specific efforts to address current and future skills needs.

KEY INSIGHTS

1. The most in-demand skills across climate-related jobs in the sample were communication, project management, stakeholder engagement, leadership, collaboration, and facilitation.
2. Climate-related training opportunities are evolving rapidly, but there is considerable diversity in the competencies, learner outcomes, learner hours, and assessment methods.
3. Survey respondents preferred skills training opportunities that were virtual and of short duration.

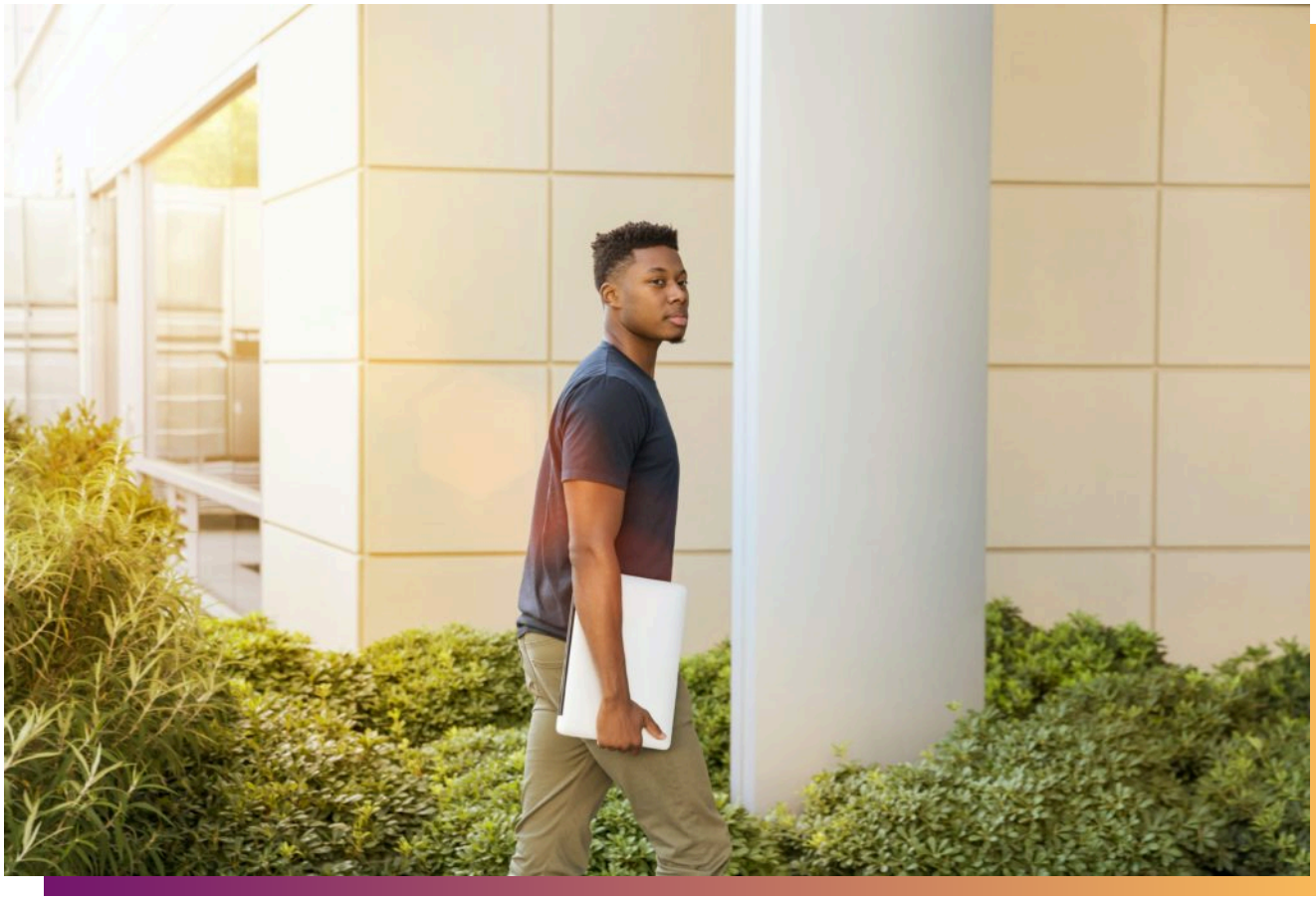
The Issue

In Canada and around the world, the impacts of climate change are accelerating. To address these impacts and their causes, Canada must accelerate economic and social transformation toward a low-carbon, climate resilient, and socially inclusive society.

This transformation needs people: a climate-ready workforce that understands and can apply creativity and leadership to a broad range of complex climate issues. To get there, the workforce requires education and training providers, communities, professional associations, businesses, non-governmental organizations, and the public sector all working together to build widespread capacity.

Targeted, short-duration programs offer cost-effective opportunities to rapidly equip workers with the necessary competencies to lead climate change solutions. However, despite an increase of climate-related programming from post-secondary institutions and other training service providers, more effort is required to introduce climate 'literacy' and green skills into their pedagogy and there are few unified standards to support such efforts. This can result in learner and employer uncertainty, limited mobility of credentials across jurisdictions, and unclear connections between climate action competencies and defined training pathways.

The Academy for Sustainable Innovation believes a national approach to climate action-related training across Canadian jurisdictions could address these gaps. Improving both recognition and transferability of qualifications would ensure competencies were commonly understood, and ease their application to sector-specific curriculum development and training programs.



What We Investigated

To better understand how to develop such a national approach, between September 2022 and September 2023, this project undertook foundational evidence gathering to better understand:

- How to equip the workforce with the leadership competencies required to address climate change;
- How to create a standard approach to leadership competency development across Canada as a baseline for a shared understanding of the current context and possible solutions; and
- How to approach a pan-Canadian effort to upskill the workforce with climate action leadership capacities.

To answer these guiding questions, the project included:

A scan and series of interviews with organizations on governance structures, program delivery methods to audiences in different stages of their careers, and relevant learnings from the organizations' experiences to date.

A literature review on the current state of corporate and public policy on climate change-related economic transitions and climate action-related workforce development challenges and approaches, both nationally and globally.

A scan of climate action-focused training opportunities and jobs across Canada.

21 exploratory interviews with leaders representing varied perspectives on the readiness of Canadian institutions to be part of a national approach to climate action leadership upskilling.

A survey of 157 workers, developed with the feedback from the exploratory interviews, to gather input on climate action competencies, perspectives on short-duration courses, and possible approaches to a pan-Canadian rapid upskilling initiative.

What We're Learning

Emerging skills demand in climate action jobs
There was an almost even split between public- and private-sector climate action jobs in the sample collected. Public-sector roles emphasized climate policy analysis, adaptation planning, education, and justice, which illustrates the public sector's role in setting policy, regulations, and strategy. Private-sector roles demanded skills in carbon accounting, greenhouse gas modeling, and emissions reductions planning, which suggests an increasing need for competence in strategy and implementation. The most in-demand skills across jobs were communication, project management, stakeholder engagement, leadership, collaboration, and facilitation. Technical competencies like those associated with climate policy analysis, adaptation planning, and emissions reductions planning were also prevalent, showing the need for specialized expertise.

Climate-related training opportunities are evolving rapidly and increasing in number
Many short-duration training opportunities exist and more are emerging, in Canada and globally, especially related to climate action. However, there is no standardization of common competencies, learner outcomes, learner hours, or assessment methods. This may create challenges for workers and employers in determining usefulness, recognition, and transferability of short-duration training.

Linking competency frameworks and micro-credentials
A national qualification framework could provide a clear and consistent way for recognizing and comparing qualifications across different levels and sectors of education and training. Other jurisdictions including New Zealand, Australia, and the European Union have used national qualification frameworks as the basis to harmonize skills-development systems, including micro-credentials.

Worker preferences for training
The findings from the survey of 157 workers corroborated other research on the preferences of workers when it comes to training and upskilling:

- Time and financial commitment for a course determines the ability to participate. Most respondents preferred courses lasting days to weeks. Respondents transitioning in their careers showed the highest interest in short-duration courses. Cost was crucial for 49% of all respondents, but was particularly important for early career professionals (56.8%).
- External recognition and formal credentials were preferred by younger, less experienced, and racialized respondents. The institution's reputation was especially important for respondents early in their careers.
- 42.7% of survey respondents preferred virtual learning while hybrid learning was chosen by 29.9%, and in-person by 10.2%.

Need to build on existing efforts
Existing Canadian providers of climate-related upskilling initiatives are already offering short-duration upskilling/reskilling programming related to climate action, climate change or sustainability, including ECO Canada, Iron & Earth, Palette Skills, CanAdapt, and Quick Train Canada.

Why It Matters

The impacts of climate change are pressing, and more attention is required to ensure that Canada has the skilled workforce it needs to make the transition to a net-zero economy. In pursuit of this, the Government of Canada released its in 2023, which included the intention to create the Sustainable Jobs Training Centre, meant to bring together workers, unions, employers, and training institutions to examine the skills of the labour force today and forecast future skills requirements to help 15,000 workers upgrade or gain new skills.

State of Skills: Sustainable jobs for economic growth

National frameworks that are sector-specific, such as the Red Seal Program referenced by the project, are ideal for specific and defined occupations, and when the skills needed are consistent across regions, such as they are with tradespeople. The Future Skills Centre funded multiple projects taking a regional and/or sectoral approach to identifying skills gaps, mapping career pathways, and developing competency frameworks for sustainability-related transitions, including in cleantech and the blue economy. The specificity of these frameworks for particular industries and regions can serve as a foundation for more collaborative work to develop the training needed.

Green-related skills and knowledge are growing in significance and are becoming widespread across many sectors and occupations, requiring more workers to upskill by building upon their existing competencies.

Read Thematic Report

Have questions about our work? Do you need access to a report in English or French? Please contact communications@fsc-ccf.ca.

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