



Project Insights Report

Workforce 2030: Rapid Upskilling for Green-Building Occupations



PARTNERS

Canada Green Building Council (CaGBC) Ontario



LOCATIONS

Ontario



INVESTMENT

\$1,230,307



PUBLISHED

September 2024



CONTRIBUTORS

Steve Richter
Senior Bilingual Policy Analyst at FSC

Executive Summary

By 2030, the Canada Green Building Council (CAGBC) estimates that with the appropriate framework and investments in place, the Canadian green-building industry could support approximately 1.5 million direct jobs. In Ontario alone, over 100,000 new construction workers are needed in the next 10 years to keep pace with future demand and retirements.

The Workforce 2030: Rapid Upskilling for Green-Building Occupations initiative aimed to train new workers for the green-building industry. The project sought to transition workers from COVID-impacted sectors, like retail and hospitality, into green-building roles by revamping curriculum design with the support of industry and education partners. This initiative was successful because it added low-carbon and green-building training content to existing programming.

The project successfully trained 587 participants, surpassing its goal of 500. Importantly, the project prioritized marginalized communities, with over 90% of training participants belonging to an equity-deserving group.

The collaborative model, which engaged both industry and training partners, ensured that the curricula and skill content aligned with employer needs. The demand-driven focus led to significant improvements in employability and skills, and career fairs contributed to tangible job placements.

Overall, the project showcased how to diversify the potential labour pool while helping employers address labour shortages in a critical sector. The project highlighted several lessons, gaps and effective ways of providing low-carbon construction skills to vulnerable workers to meet the needs of the green-building industry and, importantly, make progress toward Canada's ambitious climate goals.

KEY INSIGHTS

- 1** Low-carbon skills training can be embedded into existing programs to create important efficiencies in skills delivery.
- 2** Offering job search support alongside training significantly improved outcomes for marginalized populations: 52 participants secured interviews, with 14 obtaining full-time jobs or paid internships.
- 3** Participants emphasized the need to enhance wraparound supports—e.g., transportation support or hybrid delivery to accommodate single parents or persons in remote areas—to improve training uptake among marginalized groups.

The Issue

To achieve net-zero carbon emissions, Canada needs to prioritize low-carbon building construction. The construction sector must adopt practices that reduce environmental impact, which will produce significant benefits for jobs in the green-building sector. CAGBC estimates that with the right framework and investments, the Canadian green-building industry has the potential to create around 1.5 million direct jobs. To do this, the construction sector must embrace energy-efficient design, sustainable materials selection and advanced construction techniques that minimize carbon footprints.

A central pillar to the green-building sector is having the right workforce. However, the construction sector is confronted with persistent labour and skill shortages. In Ontario alone, more than 100,000 new construction workers are needed over the next decade to keep pace with future demand and increased rates of retirement.

This project aimed to tackle these issues by strategically integrating existing curricula with new courses tailored to fill low-carbon skill gaps by collaborating with industry and education partners to provide effective pathways to employment for participants. Efforts focused on providing training to individuals from marginalized communities and supporting their transition to the green-building sector.



What We Investigated

The project aimed to transition COVID-impacted workers into high-demand jobs. The recruitment focused on workers from marginalized communities—especially those without work experience or displaced from retail, hospitality and manufacturing—and prioritized groups under-represented in the building sector, especially women and racialized youth.

CAGBC partnered with four training delivery partners, all of which had experience serving equity-deserving groups. All of the partners were willing to have their building course curricula reviewed to incorporate low-carbon theory and practice. The plan was to test the integration of existing training programs with new green-building curricula, thereby creating new training modules that directly address gaps identified by industry. In particular, low-carbon and green-building concepts and practices were woven into selected pre-existing curricula that were already specifically marketed to learners who face multiple barriers to training (e.g., marginalized communities, individuals facing barriers to employment, those with minimal academic experience, and individuals with no experience in the trades). This involved training initiatives for both potential operators and site supervisors. In total, seven courses were updated to include low-carbon and green-building skills, and two new training programs were created from scratch for a total of nine courses.

Overall, the project sought to better understand the implications of adjusting existing curricula to include low-carbon-related elements and ultimately to increase the supply of workers skilled in new green-building techniques.

What We're Learning

The project successfully trained over 500 participants, 90% of whom identified as either racialized or women, in the latest green-building techniques. From the outset, the team allowed for consistent feedback, with an average of 91% (in 2022) and 96% (in 2023) of participants reporting that they would “recommend the program to a friend.”

Foundational skills are necessary pillars to the acquisition of new green skills

A few partners reported that the low-carbon and green-building content did not resonate with participants, as they were missing key skills and basic construction and building knowledge that would've allowed them to appreciate the content.

Job search assistance is an essential complement to training

All partners quickly realized that training more vulnerable populations without providing them with adequate support to subsequently transition into employment or additional upskilling would be inadequate. Following feedback from participants that called for additional support—such as direct contact with potential employers—the project team pivoted by creating two career fairs and inviting industry and union partners. These two fairs led to 52 participants receiving interviews and 14 being hired either full time or for paid internships.

Training along the hierarchical structure can foster positive spillovers

During the review phase, the team recognized that in order to further promote green skills in the building industry, they had to develop course material for the supervisor level. By introducing a training component for site supervisors, trained labourers and operators would be more likely to use their newly acquired skills effectively, which would have the potential to create trickle-down effects on labourers who have yet to be exposed to these concepts and practices.

Wraparound supports are needed to promote training uptake

Much of the feedback from participants centred around the importance of improving wraparound supports, which could include modifying the in-person requirement in order to support parents with young children and those living in remote areas or providing transportation subsidies to participants.

Why It Matters

Training workers for the skills needed to reduce carbon emissions in the green-building industry is important for several reasons. First and foremost, the construction sector can play a key role in reducing environmental harm, so it is imperative to adopt energy-efficient practices and designs and advance techniques that promote sustainable development. Embracing energy-efficient design, sustainable materials and advanced construction techniques sets a precedent for sustainable development.

Second, finding the right mechanisms to invest in upskilling initiatives is vital, as it ensures that the workforce is equipped with the necessary knowledge and expertise to implement these sustainable practices effectively. This project highlighted that low-carbon skills training content doesn't always need to be developed from scratch. Projects seeking to update their sectoral training materials would do well to consider how and where their materials need to be updated.

In this regard, the project shared important lessons on how to improve the effectiveness of programs designed to improve diversity and equity within the workforce.

► What's Next

The delivery partners will continue to offer most training programs with the integrated low-carbon and green-building theory developed during this project. In addition, the new site supervisor training course is now fully operational.

In addition, as part of one of their Workforce 2030 coalition workshops, CAGBC has been exploring options for employers to offer greater support to delivery partners so that they can provide improved employment services to training participants and facilitate participants' transitions into the sector. Moreover, the delivery partner responsible for the career fair intends to continue to offer it on a yearly basis considering how well it was received by all involved.

Finally, CAGBC is still actively working in training the construction and building workforce in low-carbon and green-building concepts, but the organization is also now training intermediate professionals to develop this knowledge and added capacity at the supervisor level in the industry.

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

How to Cite This Report

Richter, S. (2024). Project Insights Report: Workforce 2030: Rapid Upskilling for Green Building Occupations. Toronto: Future Skills Centre. <https://fsc-ccf.ca/projects/workforce-2030/>

Funded by the
Government of Canada's
Future Skills Program



Workforce 2030: Rapid Upskilling for Green-Building Occupations is funded by the Government of Canada's Future Skills Program. The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.