



**Future Skills Centre**  
Centre des Compétences futures

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**Future Skills Centre**

# **Focus Areas Brief**



The [Future Skills Centre \(FSC\)](#) is a forward-thinking centre for research and collaboration dedicated to driving innovation in skills development so that everyone in Canada can be prepared for the future of work. We partner with policymakers, researchers, practitioners, employers and labour, and post-secondary institutions to solve pressing labour market challenges and ensure that everyone can benefit from relevant lifelong learning opportunities. We are founded by a consortium whose members are Toronto Metropolitan University, Blueprint, and The Conference Board of Canada, and are funded by the [Government of Canada's Future Skills Program](#).

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# Pathways to Jobs

Supporting workers in Canada entering, transitioning, and advancing in the labour market

## What is the issue?

*In light of the accelerated pace of economic uncertainty driven by, among other things, accelerating technological and demographic change and the transition to a clean economy, there is an increased likelihood of rising labour market volatility, more job displacement, and heightened risk of poor employment outcomes for many Canadians. Faced with such disruptions, workers more than ever need to navigate career pathways and transition between jobs and sectors as smoothly as possible.*

The support systems that help individuals navigate these changes in Canada are often fragmented. Career guidance services are often found in the formal education systems, with uneven quality and not reaching many individuals who need guidance such as mid-career workers. Career guidance systems alone have not been able to improve persistent labour shortages, e.g. in the skilled trades. Publicly funded adult career guidance systems often have restrictive eligibility rules, which can result in strategies that leave out certain groups of people from accessing employment or moving into better jobs. A persistent lack of timely and relevant labour market information further hinders the effectiveness of these systems.

Diverse organizations across Canada draw support from public and private sources to provide training programs to the unemployed and to workers who face barriers to accessing education and training opportunities, entry and advancement in the labour market and who are vulnerable to job displacement. While training programs that help workers reskill (acquiring skills for a different job) or upskill (enhancing skills to keep up with job requirements) are essential to helping them navigate a volatile and rapidly changing job market, organizations running programs and pilot projects posting strong results struggle to scale up in the absence of sustaining public, private or blended funding, or lack of a sustainability model.

Increasing private sector employer investment in training is a key component of addressing persistent challenges related to skills mismatches, labour and skills shortages, and the exclusion of underrepresented populations from the labour market (as outlined in the SME Adaptability Focus Area). Strengthening capacity and coordination in the rest of the skills ecosystem to support better job transition pathways is an equally important component, and better coordination between these two worlds could also make a significant difference in addressing our most pressing labour market development challenges, by facilitating the flow of information between employers, labour, education, government, and the career services sector so the workforce development policy and practice keep up with evolving needs in the labour market. Canada needs systems-level solutions that can better link up different parts of the ecosystem—for example, strengthening interactions between employers and the post-secondary education system and other training providers to develop pathways to jobs that respond to evolving skills demand. Canadians in many parts of the country looking for career guidance or training encounter a fragmented system with an unclear pathway from guidance to training to employment.

## Who does this impact?

Individuals who are most affected by labour market disruption, including those with lower levels of education and training, newcomers to Canada, individuals from Indigenous and racialized communities, and other groups facing systemic barriers, are disproportionately impacted by unclear pathways to jobs. While numerous community-focused groups are effective advocates for people belonging to these groups and are a wellspring of innovation for skill-based approaches that address their specific needs, limited resources can narrow their scope of action. Here again, we find a need for more integrative approaches between employers, education systems, different orders of government and other funders. Concerted and inclusive efforts to improve pathways to jobs for Canadians is essential to fostering greater equity and inclusion, and in turn can help build community resilience and boost productivity and economic growth for everyone.

## What are the linkages to broader public policy?

Many of the most robust current support mechanisms available for workers experiencing displacement, including employment insurance, were designed for a different era when job pathways were longer and more linear – they kick in once someone has lost their existing job, and often prioritize rapid job placement rather than proactive assistance. As a result, they may fail to prioritize longer-term labour market attachment and career advancement. While there is certainly promising policy innovation in this area across Canada, no jurisdiction has yet scaled a coordinated and integrated training, education and career guidance solution. We know that career development practitioners also require support and resources to navigate the increasingly complex world of work. They need access to training themselves and tools that are designed for them and their clients to understand a rapidly changing labour market. Here again, there is a strong role for the public sector to play in supporting labour market information (LMI) systems that can produce granular and up-to-date data to support better decision making by actors in the skills and career development ecosystems.

## What are the opportunities for innovation?

There are several areas ripe for innovation, and alongside its partners, Future Skills Centre (FSC) has been testing approaches to better support Canadians in their pathways to jobs. We consider the following several areas ripe for further innovation:

- Reducing the amount of time needed to help individuals upskill or reskill through new delivery options (more flexibility and leveraging technology). Targeting training content through better assessments of people's existing knowledge and skills gaps can further reduce time-to-train.
- Stronger collaboration between the range of stakeholders in the job-transition pathway (schools, post-secondary institutions, employers, labour, workforce intermediaries) could leverage the capacity and strengths of each player. Evolving existing publicly-supported infrastructure for delivering career guidance and employment services to strengthen connections with employers and other actors so that there is greater alignment between economic development objectives and the skills and workforce required to achieve them could lead to a more efficient and effective labour market and better productivity.
- Innovation is needed to integrate approaches that can respond to more rapidly evolving skills needs. Properly designed, delivered, validated and certified, microcredentials can provide targeted, industry-specific training that enhances employability and career advancement. For graduates preparing to enter the world of work, work-integrated learning (WIL) helps people entering the labour market to apply not only knowledge and technical skills but also soft skills and employability skills; effective outreach by post-secondary institutions to employers can help ensure that co-ops, internships, work placements and other experiential learning opportunities align with local employers' needs and equip students with transferable skills in short supply in the labour market.
- Opportunities exist for innovation in career guidance, employment services and reskilling/upskilling. This is particularly true for groups facing systemic barriers, as well as older workers and people with lower levels of educational attainment. These groups that are more likely to be in precarious employment and are typically less supported to make labour market transitions. We know that interventions with these groups are more effective when wraparound services are available that address the range of individual needs. The challenge often (as well as the potential opportunity for innovation) is in making integrated approaches like these sustainable over the longer-term. Too often, approaches with strong results do not survive the pilot project stage, despite the strong evidence that wraparound supports tailored to individual needs produce stronger training and employment outcomes.
- We see significant opportunities for innovation in basic skill delivery. Again, certain groups of people may also cope with hidden gaps related to literacy and numeracy, including second-language literacy for newcomers. Covering digital literacy and skills gaps is becoming increasingly important, and mid-career workers require targeted support to build or upgrade these skills. For some learners, dedicated support and programming is needed to cover these gaps. But for many, particularly those who have little time to train because of work, family or other competing demands, embedding learning in other types of training can maximize the results of time people invest in work-related learning.

- Innovation in career guidance in Canada is increasingly focused on proactive approaches, designed to reach people at-risk of job transitions before an employment crisis. Efforts are also underway to create new professional certification and training programs for career development professionals. The career development practice itself is also undergoing technology-driven transformation as professionals and organizations explore the potential of AI to transform how practitioners work; strengthening the digital skills of practitioners may then be just as important as it is for clients. And at the systems level, there is a need for innovative policy making to make available broad or universal access to career development services to allow workers in Canada to find pathways to jobs in a labour market with rapidly evolving skills requirements.
- Finally, no discussion about pathways to jobs would be complete without talking about how to build better pathways to the skilled trades so that they are accessible to everyone. This remains a persistent challenge in Canada and becomes ever more critical as shortages of skilled tradespeople become more acute. The current housing crisis and projected demand for such occupations needed to make the shift to a net-zero economy will only put more pressure on the supply of skilled tradespeople. Canada has long struggled to create better pathways to the trades for women, newcomers, Indigenous people and other traditionally excluded groups. As shortages grow only more acute, innovation is needed to attract people to the trades and drive completion of certification.

## What will FSC support and focus on?

FSC has funded numerous initiatives addressing the areas mentioned above, and we continue to support many different types of organizations interested in seizing opportunities for innovation. With Consortium partners like Blueprint and the Diversity Institute, we support not only innovation but the rigorous testing and evaluation of reskilling/upskilling programs. We are also working closely with provincial governments to reimagine employment and careers services.

Our goal remains to test approaches that support individuals entering, transitioning, and advancing in the labour market. This includes addressing gaps in career guidance, labour market information, and training delivery to ensure individuals are equipped with the necessary competencies for immediate employment and long-term career progression.

We are building upon our broad portfolio of research and innovation projects to more finely tune the questions and issues we will focus on going forward. Our next phase of work will focus on answering Strategic Questions related to the key problems and opportunities identified above. Interventions to respond to these questions will be rigorously evaluated in order to share evidence and insights broadly.

1. **What are the key ingredients to helping individuals successfully transition to new employment opportunities or keep up with the evolving skills requirements of their jobs?** What are the roles of various stakeholders, including employers, educational institutions, career development practitioners, and government agencies, and what are the attributes and mechanisms needed that will ensure their collaboration is maximized?

- 2. What interventions are most effective in smoothing job transitions for people currently out of the labour market or those in precarious employment? What interventions are the most effective in addressing the diverse needs of workers who have been out of the labour market for varying lengths of time?** What is the role of upskilling/reskilling training, microcredentials, and/or technology-enabled learning? How can financial barriers to accessing services or training be relieved, particularly for women transitioning to or re-engaging with the workforce? Which wrap around supports are most effective, and in which combination(s)?
- 3. What approaches are the most effective at equipping new labour market entrants with the skills that are most in demand by employers?** How can work-integrated learning be improved or optimized to ensure learners develop the non-technical skills needed to transition successfully into employment? What new approaches are needed to overcome the long-standing barriers to entry into the skilled trades for people from groups that face systemic barriers?
- 4. How can LMI support successful career transitions?** What approaches offer the best prospects of generating LMI that is sufficiently granular and as close to real-time as possible to inform decision-making in a rapidly evolving labour market? What needs to be improved or changed in the way that LMI is shared with labour market decision makers (workers, employers, education institutions, delivery agencies, government) and what support do they need to use this information more effectively? Can LMI demonstrably improve these actors' decisions related to reskilling and career planning?
- 5. How can the career development ecosystem improve services to Canadians?** How can the quality of career services for underrepresented and unemployed populations be improved? What types of resources are necessary to enhance career development services and how can these resources be allocated effectively to meet the diverse needs of Canadians? How can we demonstrate that such interventions are having a positive and meaningful impact on the employment outcomes of Canadians? What role do new technologies, including Artificial Intelligence, play in optimizing the delivery of career services?





# Tech & Automation

Preparing workers and employers for a more digital and connected world of work

## What is the issue?

*Technological advances and automation, including AI, are increasingly impacting the skills development ecosystem. These innovations are leading to cutting-edge techniques and approaches in terms of how we understand skills in demand and how we deliver skills training. New tools, including those driven by AI, have become commonplace in work and society. However, technological adoption is also creating a high degree of uncertainty in terms of how it will affect jobs (and their skills composition) and how these changes will unfold across sectors and regions.*

Given the level of unpredictability and disruption related to technology, skills development and training systems must evolve to respond to rapidly evolving skill requirements related to technological change. Our workforce development systems must ensure that individuals and firms are able to adapt and thrive in the face of technological change. Digital skills are important across all sectors and occupations and at all levels of qualification. Improving access to support for developing digital literacy is particularly important in ensuring that individuals from groups that are systematically excluded from education and training opportunities, and who may be particularly vulnerable to technology-driven displacement, are not left behind.

Accelerating the integration of automation and digitization technologies is critical to addressing the long-term slowing of productivity growth in Canada. Workers with the right skills are needed to facilitate the integration of technology and delivering those skills quickly and flexibly is becoming more important to keep pace with change. At the same time, workers at risk of displacement due to technological change also require optimized supports to ensure that their skills remain current or that they can transition to other jobs or industries with suitable employment prospects.

## Who does this impact?

The impact of technology and automation on skills development will vary across individuals, regions and sectors. Individuals employed in middle-skill jobs or jobs with lower education credential requirements are likely to be most impacted, but the skill composition of all jobs is likely to change. Many equity-seeking groups, especially those with low digital literacy, are confronted by additional barriers that will make it difficult to take advantage of the opportunities presented by technology; structural factors, such as a lack of resources to strike a better balance between work and care responsibilities can further distance them from learning opportunities.

The impact on various regions and sectors in Canada will also differ significantly. Some regions, e.g., certain rural and remote areas, currently face barriers to accessing and developing digital infrastructure. The issue is particularly acute for Indigenous communities that face high costs integrating into the digital infrastructure grid because of their location, and lack of capacity due to resource constraints.

Similarly, sectors such as manufacturing will see dramatic shifts in the skill composition of their workforce as automation and labour-saving technologies become more widespread throughout the sector. Companies, particularly small and medium-sized enterprises (SMEs), will need to find better upskilling solutions to keep their workforce skills up to date and ready to integrate productivity-enhancing technology while simultaneously overcoming the usual barriers that are a deterrent to investing in training. Other sectors that are already further along in technology deployment like ICT or Finance, may struggle to find and keep talent.

## What are the challenges?

As technology rapidly progresses, firms across various sectors are integrating new tools and systems that significantly affect the job landscape, creating new roles that require advanced technical skills and altering the skill composition of existing roles. The risk of being displaced is high for workers who have digital literacy gaps or need to continuously refresh their digital skills, and it is also a problem for employers whose best option is to upgrade the skills of existing workers rather than compete for those skills in an already tight labour market. Such disruptions call for a constant realignment of skills and a proactive approach to workforce development. The challenge for workers and employers is to get ahead of these changes and take advantage of the opportunities that technological adoption offers.

Actors in the skills ecosystem also need to keep up with technological change and its impact on how training and education are delivered. Digital tools, often driven by artificial intelligence (AI), are increasingly used to deliver training programs, provide career advice, and match workers with job opportunities, transforming traditional methods of workforce support. Online training platforms and virtual career counseling, for example, can make resources more accessible and flexible, catering to diverse learner needs and preferences. However, these advancements also introduce challenges, such as ensuring equitable access to technology and addressing the digital divide that may leave some individuals behind. Several FSC-supported projects have highlighted the limitations of technology as a singular workforce development solution in certain circumstances and have emphasized the ongoing role of in-person support in helping workers navigate increasingly complex career pathways.

## Policy takeaways

As technology evolves, it will transform nearly every job and industry, leading to significant disruptions but also offer substantial opportunities across various regions and sectors. To leverage these opportunities, address this widespread disruption and support those affected by job displacement, proactive measures will be essential. There is a pressing need for evidence-backed solutions that effectively reskill and upskill workers, particularly in sectors most vulnerable to automation and technological change. Additionally, efforts should emphasize inclusion and ethical use of technology, and this includes public support to ensure that there is equitable access to digital literacy support.

## What are the opportunities for innovation?

Against this backdrop, a number of knowledge gaps are emerging within the skills development ecosystem. These gaps highlight the disparity between the evolving demands of the job market and the current state of workforce training and education system. Addressing these gaps is crucial to ensuring that individuals are equipped with the relevant skills to thrive in a technology-driven world. Opportunities for innovative solutions include:

- **Labour market information:** There is a lack of evidence on the potential impacts of new technologies on work and the specific digital and non-digital skills that will be needed to adapt to these changes.
- **Career pathways:** In order to develop more responsive career pathways, individuals will need to understand skills needs and add more support to transition from technology-displaced roles. At the same time, career development practitioners will need more support on the best inclusive and effective practices for working with displaced populations.
- **Sectoral approaches:** Challenges and opportunities in responding to changes may differ across sectors. Sector-based actors representing or liaising with employers, workers and the education system are perhaps best positioned to interpret how technological change is affecting skills requirements in their sector, and what are the priorities for addressing these.
- **Scaling and learning:** Given the proliferation of digital tools in workforce development there is a lack of evidence as to the effectiveness and value added by technological deployment within the skills ecosystem. Much of the value and effectiveness of a given technology has been assumed or implied, rather than rigorously comparing it with alternatives. As the role of technology in skills development intensifies, there should be an increased emphasis on lessons learned to inform scaling efforts.

Importantly, a few key lessons have emerged across the Future Skills Centre (FSC) portfolio of projects that present opportunities for further innovation and testing. First, we need to incorporate a comprehensive blend of skills alongside digital skills, including basic literacy, to enhance employment outcomes among the most vulnerable. Second, technology deployment should prioritize users, with their needs guiding the selection and design of technology, rather than allowing technology to dictate user requirements. Additionally, integrating new technologies within existing systems is crucial to prevent redundancies and ensure seamless functionality. Third, there is a need to boost capacity among employment service providers and career development professionals to maximize the benefits that digital tools offer.

## What will FSC support and focus on?

We believe that a more nuanced understanding is needed of the implications of technology and how to maximize the opportunities it offers. This includes examining the manner in which it can be deployed to improve the functioning of the skills development ecosystem and how to best serve the needs of people most at-risk of being displaced as a result of technological advancement. We have already funded several projects looking at the impact that AI will have on the skills composition of jobs, and how it may impact existing inequities. We have also tested interventions that help workers develop AI-related skills to remain up to date with changing job requirements. And we have supported pilot projects that use AI tools to improve the quality of training delivery and employment services.

Based on a review of research, input from experts across Canada and the results of the innovations we have supported directly, we believe that future work should address three strategic questions. Tackling these questions will provide the answers that are most needed to mitigate the negative effects of technological change for workers, and ensure that everyone is in a position to take advantage of the work-enhancing improvements that technology may bring.

**What types of skills-related or other initiatives and policies are needed to take advantage of the opportunities that technology offers, while mitigating the risks associated with technological adoption?** What specific skills development policies should be implemented to prepare the workforce for technological advancements? What strategies can be employed to mitigate the potential job displacement caused by automation and other technologies? What support mechanisms are needed to encourage SMEs to invest in technologies and digital skills?

**What lessons can be harnessed to inform the scaling of technology-oriented tools within the skills development ecosystem?** What works, for whom and under what circumstances? What specific technologies and tools have shown the most promise in enhancing job training and placement services? What kinds of problems is technology well-suited to address, and what kinds of problems are a tool or new technology unlikely to resolve? How can in-person support and the specific needs and characteristics of various user groups be incorporated into the design and implementation of technology-oriented tools?

**How can we ensure that technological deployment and adoption are equity-enhancing?** What strategies can be implemented to ensure that equity-seeking groups benefit from technological advancements rather than being disproportionately affected? How can we assess the impact of technology on different demographic groups to identify and address any unintended consequences? What adjustments are needed to ensure technology tools are effective across diverse geographic regions and socio-economic backgrounds?



# SME Adaptability

Engaging Canadian employers, especially SMEs, in meaningful skills development

## What is the Issue?

*Small and medium-sized enterprises (SMEs)<sup>1</sup> make up the vast majority of companies in the Canadian economy. They account for most private sector employment and contribute about half of Canadian GDP annually. They shape our economy in many important ways, but they also tend to have lower productivity levels, in part because they tend to be slower adopters of technology than large firms. Canadian companies as a whole have typically tended to underinvest (compared to peer countries across the OECD) in training their employees –a trend that may have worsened since the COVID-19 pandemic. Even so, SMEs face unique challenges to investing in developing their workers' skills.*

The reasons for this are by now familiar to people who work in the skills ecosystem, even if decisive solutions have not yet crystallized. Firm size affects capacity in myriad ways: the sophistication or formality of management (including human resources) systems; ability to take advantage of economies of scale; access to capital; ability to engage in long-term planning, and; ability to absorb opportunity costs, such as when workers have to be taken away from production or service delivery to train.

These factors limit how well SMEs can meet their skills needs. SMEs often lack human resources (HR) management systems and practices that allow them to better understand their own skills needs and assess these during recruitment. They often have to make difficult choices between investing in training and other business investments that meet shorter-term or more immediate needs. Once they've identified their needs, management may still lack experience finding the right training solutions, adopting digital learning solutions, and identifying relevant labour market information. This in turn may make SMEs more vulnerable than larger

<sup>1</sup> Following [Statistics Canada](#), we define small enterprises as enterprises with between 1 and 99 paid employees, and medium sized enterprises between 100 and 499.

companies to skills mismatches. In the absence of mechanisms that pool the unmet training demand of several companies, allowing them to take advantage of economies of scale, the per-worker cost of training is often higher for SMEs. Taking workers off their jobs to send them to train can be more difficult for SMEs, and in a similar way, it can be more difficult for them to withstand the negative consequences of a trained worker who leaves the firm.

These constraints on time and cost also affect workers employed in SMEs. In addition to potentially leaving them with an unmet need for training, certain workers suffer other disproportionate impacts. A lack of information and HR management know-how can also be a barrier to creating workplaces that are welcoming to women, newcomers, Indigenous and racialized workers, LGBTQ2S+ workers, neurodivergent workers and workers with disabilities. Lacking access to information and support can make it difficult for even the most well-intentioned of SME employers to recruit a more diverse workforce and ensure all workers have access to learning and career development opportunities.

## What are the knowledge and data gaps?

Public data sources in Canada tend to define a company as “small” if it has fewer than 100 employees and “medium” if it has between 100 and 499 employees. “SME” as a category stakes out a very heterogeneous family of companies with very different levels of resources and capacity, to say nothing of the other characteristics that distinguish them from one another, such as economic sector, the region in which they operate, whether they are rurally or remotely located, etc.

Few analyses of skills and SMEs in Canada can drill down into these differences and provide a nuanced view of how different types of SMEs make decisions about skills investment. This may be partly due to a lack of high-quality, current data about SMEs in Canada that can inform analyses of how they behave and make decisions about skills development and HR management. Many larger surveys that track employer investment in training (from which SME datasets could be drawn) have been discontinued or are fielded as one-offs. Sector groups and industry associations collect data on the companies in their sector, but Canada lacks in-depth data that can provide a more comprehensive view that could guide decision-making about how to address SME barriers to investing in skills.

## What are the linkages to broader public policy?

SMEs are supported through various federal agencies, programs and incentives that support innovation, technological capacity building and financing. There are few SME-targeted supports for skills and workforce development at the federal level aside from sector-focused programs. SMEs, naturally, can and do participate in federal and provincial support programs initiatives open to all private sector employers irrespective of business size, but given the very specific nature of SME limitations and needs, there may be a service provision gap with respect to support for skills development in these companies. At the provincial and territorial level, it is harder to unpack the range of policies and programs available to SMEs, but here again, few programs are specifically targeted to SMEs even though many may provide some support to address the barriers they typically face. Sector-based funding programs are available in some provinces, while in Quebec, the Commission des partenaires du marché du travail (CPMT) coordinates funding for numerous programs which also address SME needs.

Where it exists, support to SMEs on skills development and hiring is not coordinated with other investments that support SME development. There are, for example, few productivity-focused programs that support SME investment in technology upgrading that are tied to complementary programs or incentives that support skills training. Where programs and incentives for SME skills development do exist, they tend to be addressed to the broad population of SMEs rather than providing targeted support to SMEs sharing key characteristics (e.g.,

SMEs with high growth potential, export-oriented SMEs). Overall, with the exception of some programs at the sectoral level, public spending to support skills development in SMEs appears to address general needs rather than seeking a more targeted approach.

The Canadian economy may be heading into a volatile period which may translate into labour market turbulence that compounds existing problems stemming from persistent and acute skills shortages across many sectors and occupations and low levels of employer investment in training. The companies that will thrive in the transition to a net-zero economy, increased global trade competition and accelerating technological disruptions will be the ones that can adapt effectively and quickly to these changing conditions. Adaptation involves Integrating productivity-enhancing technology and optimizing workforce skills through more effective recruitment and support for work-related learning.

## What are the opportunities for innovation?

The solutions with the best chance of driving greater SME investment in reskilling, upskilling and employee development are the ones that can meet SMEs' short-term skills needs and lower the time and cost barriers identified above.

There are innovative and evidence-based approaches that can help SMEs become more adaptable by investing in skills. This can include the implementation of approaches, systems and tools that can assist employers to better assess and recognize the skills and experience of employees as an alternative to credentials-based hiring. Microcredentials, work-integrated learning, and skills-based hiring, are all potentially effective tools that also help SMEs to better assess skills.

Some approaches solve the “time” problem by making training delivery more flexible. Learning management platforms, offering a mix of synchronous and asynchronous learning content, can be deployed to allow employers and workers to schedule learning to better suit schedules. Other approaches try to address the time problem by shortening the amount of time it takes to learn work-related skills. Short and modularized training content (again, facilitated by digital platforms) has been shown to be effective at meeting SME upskilling and reskilling needs, and can be made even more powerful by adding assessment tools (including AI-based tools) that can zero in on knowledge or skills gaps and tailor training to those gaps. Generally speaking, the more a training solution can be customized to an SME's needs, the more likely it is to identify critical upskilling/reskilling gaps and provide effective training in less time; such solutions are generally more costly than off the shelf solutions.

There are several approaches to working with employers to lower the cost barrier to training. Many of these focus on lowering up-front reskilling/upskilling costs to allow SMEs to purchase training, or to use performance-based approaches to underwrite training costs initially. While these approaches seek over the longer term to incentivize changes in employer behaviour in favour of greater investment in training, the models can be challenging to scale up or to sustain investment long enough for the SME employer to take over the investment.

Other approaches innovate on lowering the “cost” (or opportunity cost) barrier SMEs face by pooling employer demand for staff training and development. Intermediation models, like the *mutuelles de formation* in Quebec, represent one model for aggregating and directing training purchasing power for SMEs. This particular model has not scaled up significantly in the couple of decades it has existed in Canada, even when such intermediaries are focused on sectors or specific regions. Nevertheless the idea of an intermediary that can aggregate and coordinate employer demand for training, and potentially provide other cost-effective business services to SMEs, has many possible variants that may be worth testing in a SME-weighted economy like Canada's.

## What will FSC support and focus on?

FSC funding has supported innovation pilot projects that were either directly targeted at SMEs, where SMEs were the majority of participating employers, or where the critical “cost and time” barriers that SMEs face were addressed. FSC and its consortium partners like the Diversity Institute led the development of innovative skills training offerings targeted at SMEs. FSC initiatives have also supported the growth of future SMEs by funding entrepreneurship development initiatives for Indigenous people, the Black community and other equity-seeking groups.

Looking ahead, we will continue to support partners interested in scaling up projects that address the key challenges involving SMEs and skills development described above, and we will support the testing of new ideas and research to help better understand the environment in which SMEs operate and how they make decisions about investing in skills. We will also encourage our partners to develop evaluation approaches that yield data and insight that allow us to drill down beneath the “SME” label to get more granular insights about how variations in SME firm size and capacity may influence behaviour with respect to skills development.

Based on our work to date, FSC is eager to direct resources towards initiatives that answer the following strategic questions:

1. **How can approaches that effectively address SME barriers to investing in training and adopting better HR management practices be scaled up to become sustainable or self-sustaining?**
2. **What approaches or tools are best suited to helping SME employers assess and recognize skills in the labour market, and under what conditions can their use either reduce or even eliminate skills mismatches?**
3. **How do Canadian SMEs make decisions regarding investing in skills and HR development, and what behaviours or systems are associated with high levels of SME investment in training, use of high-performance HR practices, etc.?**
4. **Under what conditions do digital platforms for training, recruitment, and skills assessment and recognition lower SME cost and time barriers to investing in training and development?**
5. **What employer-led intermediation models are the most effective in aggregating and coordinating employer demand for upskilling and reskilling support?**



# Inclusive Economy

Driving labour market inclusion for underrepresented groups with an emphasis on Black youth, newcomers, and Indigenous & Northern communities

## Overview

*Canada is undergoing rapid structural change because of forces such as the transition to a net-zero economy, the increasing pace of technological change (including artificial intelligence) and shifting patterns of global trade. While these changes may affect all Canadians, people from equity-seeking groups are disproportionately impacted by rapidly changing economic conditions and are disproportionately excluded from employment opportunities in high-growth sectors. Breaking this pattern depends, in part, on developing more effective skills-based approaches that lower the barriers to opportunity.*

People from equity-seeking groups face systemic barriers to participating in the labour market and in education due to both overt and systemic discrimination, including racism. As a result, they are overrepresented in precarious, low-wage and lower-skilled employment due to pre-existing inequalities stemming from different forms of discrimination. It is difficult, in a brief issues summary, to provide an overview that does justice to the many complex and intersecting forces that make discrimination and systemics barriers to education and employment such an enduring problem for many groups in Canada, including women, Indigenous peoples, Black and racialized peoples, newcomers, LGBTQ2S+ people, youth, people with disabilities, and other groups facing exclusion. As this Focus Area is intended as information for partners applying to Future Skills Centre (FSC) funding proposals, partners should be aware of the research evidence that addresses how discrimination and systemic exclusion affect these different groups in Canada, as well as individuals for whom these identities intersect.

This brief focuses instead on what we have learned about developing skills-based interventions that address the needs and realities of people from equity-seeking groups across Canada. It is intended as a guide to what the FSC and some of its partners consider areas of opportunity or high need that should be addressed in future interventions.

## What is the Issue?

FSC's approach to working on the Inclusive Economy Focus Area is based on several key observations about factors that frequently compromise the efficacy of skills-based interventions addressing the needs of equity-seeking groups and that therefore need to be considered in program design. These include:

- Complexity of factors driving unequal labour market and education outcomes for people from equity-seeking groups, including mental health and wellness issues stemming from systemic discrimination, legacy of colonialism, and physical and psychological trauma.
- Skills-based programs that fail to integrate the necessary wraparound services needed to ensure that participants from underserved or marginalized groups can achieve equitable labour market outcomes compared to the overall population.
- Top-down skills-based programs that fail to integrate the knowledge and insights of the communities being served by programs and because they fail to yield agency to communities in defining, designing and overseeing programs.
- Limited capacity of community organizations serving underrepresented populations due to a lack of funding, or discontinuity of funding sources.
- Insufficient resources invested in systems to assess and recognize international qualifications and barriers to employment due to a lack of work experience in Canada.
- Critical skills gaps in many areas but a significant risk of falling behind for some groups because of issues with digital literacy and skills, driven in part by the digital divide, limiting access for some communities to the internet.
- Well-intentioned employers, particularly SMEs, lacking capacity and information to take steps towards creating inclusive workplaces, assessing skills and qualifications, and adopting equitable hiring practices
- Despite considerable progress, there is a growing backlash against attempts to mainstream equity, diversity, inclusion and Reconciliation (EDI&R) in workplaces.
- Labour market information that does not provide sufficient detail about specific populations at the level of disaggregation required to inform programming and provides even less data to understand labour market and training or education outcomes for people with intersecting identities.

## What will FSC support and focus on?

Our work connected to the issues raised in this brief has reached many communities, involved a very diverse group of implementing partners, and covered many research topics and types of interventions. With the FSC's support, our partners have led:

- Research on the lives of different populations at work, including experiences with discrimination at work and in the education system and tools to advance EDI&R in the workplace
- Skills-based interventions aimed at supporting diverse groups in their transition to employment, including projects that took context- and culture-responsive approaches to developing Indigenous, Black and newcomer entrepreneurship
- Projects that highlighted user-centred or participatory approaches that involved the communities served by projects in defining program objectives, implementation and other aspects.
- Demand-side projects that addressed the root causes of discrimination and systemic barriers to education, training and employment, including projects that focused on employers' attitudes and practices in the workplace and approaches to advancing inclusion and diversity.
- Projects testing out many different configurations of wraparound services to address the needs of individuals from diverse populations and with intersecting identities.

We are proud of the work that we have supported in our Northern and Indigenous peoples portfolio, which fosters Northern-led ideas and innovations to build systems infrastructure for lasting impact on skills development in Canada's North. Through these projects, we have not only tried to advance work in the areas described above, but also to change the way that we, as a Southern, non-Indigenous organization, work with Indigenous-led organizations; through these partnerships we are learning how to support work that recognizes the diversity of Indigenous peoples and communities, making way for initiatives that are genuinely designed and led by Indigenous people, and that respects and integrates Indigenous value and knowledge systems. We will continue to fund Inclusive Economy innovation projects and research that address the situation of the many diverse groups that face systemic barriers to education, training and employment in Canada. To bring focus to our investments and knowledge mobilization initiatives, we will target a part of our future investments and knowledge mobilization to three groups that research and consultations with experts have identified require special attention: Indigenous and Northern peoples and communities, Black youth and newcomers to Canada.

Below, we include the strategic questions that will direct FSC's work on the Inclusive Economy Focus Area, including its partnership investments. Based on our review of evidence, input from experts knowledgeable about equity-seeking groups and insights from the projects we funded, we believe that answering these strategic questions puts Canada on the road to creating an inclusive economy.

FSC will continue to support work that advances EDI&R for people from all equity-deserving groups.

## **General Questions**

- What are the most effective approaches for integrating wraparound services in skills-based programs for equity-seeking groups, and how do these approaches overcome the barriers (e.g., funding) that typically compromise the effectiveness of such programs?
- How can skill-based programs best accommodate the need to involve communities served by such programs in co-designing programs and participating actively in their implementation and evaluation? What are the most significant barriers that need to be overcome in ensuring the full participation of communities served by such programs?
- What approaches are most effective in educating and engaging employers in adopting more equitable hiring practices and integrating diversity, inclusion and Reconciliation in the workplace?

## **Black Youth**

- What works, for whom and in what context to improve labour market outcomes for Black youth?
- What works, for whom and in what context to address anti-Black racism in workplaces and skills and training organizations?
- How do we mobilize knowledge about what works to improve labour market outcomes for Black youth and to address anti-Black racism in workplaces and skills and training organizations?

## **Newcomers**

- How can we incentivize and support more employers to change their HR practices to recognize newcomer skills and support their growth? How might we reduce the time and cost needed to meaningfully engage employers?
- What aspects of Canadian work experience are key drivers for newcomer outcomes? What are the most effective ways to support newcomers to learn the transferable soft skills or employability skills that are in high-demand in Canadian workplaces?
- What are the key barriers preventing newcomer women from participating more fully in the labour force? What approaches would help overcome these barriers?
- How can we increase awareness of newcomer support services?
- How can we enable service providers to adopt more evidence-based practices?

## **Northern & Indigenous peoples**

- In emerging and evolving sectors across the North, what new forms of skills development can equip Indigenous community members to take advantage of regional and local economic opportunities that align with their visions of livelihood?
- What role can Northern and Indigenous anchor institutions play in providing new forms of systems infrastructure to support skills development for Northern and Indigenous communities?
- How can Indigenous-led skills development approaches meet the needs of Northern and Indigenous SMEs and entrepreneurs who feel isolated and excluded from existing education systems, business support services, and financial institutions?
- How does distance-based learning in Northern, rural and remote environments support Indigenous and non-Indigenous northerners to access training and skills development without having to leave their communities?



# Sustainable Jobs

## Advancing skills development and transition planning for a decarbonized economy

### What is the issue?

The transition to a decarbonized, net-zero economy will have significant and varied impacts across Canada. Most discussion about these impacts has focused on the technology and energy systems needed to transition from fossil fuels, expand renewable energy, and emissions targets. The predominant view on the impacts on labour has been generalized concern about declining job opportunities in carbon-dependent sectors.

It is almost certain that significant job losses will be found in certain industries, however there is reason to believe that this will be more than offset by new opportunities in emerging sectors. Research by the Future Skills Centre, Diversity Institute and the Smart Prosperity Institute established the first forecasts of skills and labour demands in various pathways to achieving net zero targets – across a range of scenarios, net job gains are seen in every single one. While jobs are almost certain to increase, the skill sets required for these jobs will change and require extensive skill development in the coming years. Specifically, we expect increased demand for specialized technical jobs in areas such as solar and wind energy generation. Making buildings and houses energy efficient – and building the infrastructure for new technologies – will almost certainly increase demand for construction trades. New jobs and job requirements will evolve in response to increased demand in many areas including conservation and nature-based solutions, carbon capture and storage and a host of other cleantech industries. We also expect that expanding the electrical grid infrastructure will drive increased demand for STEM-related occupations, including engineers, technicians and skilled tradespeople, as well as construction labour to build that infrastructure.

While some genuinely new green jobs are starting to appear, the biggest changes we will see in the skills landscape will be existing occupations incorporating green skills into their overall skills profiles. Workers in traditional occupations – such as electricians – will increasingly need to incorporate green skills into their work. Education systems will increasingly be expected to equip students with in-demand green skills as they transition to the labour market.

## Who does this impact?

The impacts of the net-zero transition will be different from region to region. As economic activity shifts between or within sectors some communities will see negative impacts, particularly those where local employment is highly dependent on a single industry. In the absence of actions to address these shocks, unemployment, loss of income, and out-migration are a risk to these communities and regions.

Elsewhere, the net-zero transition will drive economic growth and job opportunities. With the right policies and local workforce development approaches, that growth can be inclusive of traditionally underrepresented marginalized groups. Even here, the potential growth in demand for skilled labour risks outpacing labour supply and causing or aggravating persistent skills shortages in some regions. These pressures may affect other local businesses struggling to compete for skilled workers, and net-zero related economic growth may also put pressure on municipal infrastructure and services that may be difficult for governments to keep up with. We also know that individuals facing systemic barriers to learning and employment, including historically underrepresented communities, tend to suffer the negative effects of economic downturns disproportionately. Skills-based efforts to manage the net-zero transition need to heed this reality if they are to produce equity in access and equality of outcomes for all.

Finally, Reconciliation with Indigenous peoples deserves particular attention as we transition to a net-zero economy. As the caretakers of the land, our approach to projects in electrical infrastructure, critical minerals and more broadly in skills development must be inclusive and recognize the centrality of sovereign Indigenous nations. We must find better ways of working with Indigenous peoples and communities on issues related to skills and workforce development.

## What are the challenges?

Developing skills and workforce development strategies that address the net-zero transition proactively can be difficult if that transition drives volatile and unpredictable changes in labour market supply and demand. Uncertainty about the decarbonization pathway on which public policy will set us, and uncertainty about how demand for clean energy and green technology will evolve make it hard to predict where Canada should be directing investments in skills. Other significant disruptions to labour markets, such as the emergence and increasing integration of AI in the workplace, also compound the challenge of forward-looking labour market planning.

There are also underlying coordination challenges that may make it difficult for skills development systems to respond to the net-zero transition. Whereas coordinated industrial policy, including workforce skills planning, is making a resurgence in the U.S. through the Inflation Reduction Act, in Canada this kind of closer integration and coordination of labour market actors has not been in place alongside public investments.

## What are the linkages to broader public policy?

Government regulation, investment and fiscal measures will set the framework for how Canada shifts to a decarbonized economy. The federal government is already driving major incentives through programs and tax credits related to clean energy and driving cleantech. Housing strategy is aligning with net-zero goals. Clean Electricity regulations will look different across various provinces and territories based on their current energy mix. Among the provinces who are leading on these issues, B.C. and cities like Edmonton and Calgary are implementing construction and retrofitting-related policy and programs. And the recently introduced federal Sustainable Jobs Action Plan is the first significant federal policy measure to address workforce skills development for a green economy; its investments are only beginning to roll out.

## What are the opportunities for innovation?

FSC-supported research and innovation pilots have identified a range of skills-based approaches that can help support workers, employers, and communities facing the net zero transition:

**Workers.** Any measure that helps workers transition more smoothly between occupations or sectors could play some role in helping them to thrive, whether sectors take a downturn or start growing rapidly. Workforce adjustment policies and programs, access to upskilling/reskilling, income support, better labour market information, pathways into the skilled trades, and career guidance services are all potential facilitators of smoother labour market transitions. Services such as these, sharpened through an Equity, Diversity, Inclusion and Reconciliation (EDI&R) lens may support workers from underrepresented groups, who tend to shoulder a disproportionate burden of the negative effects of economic downturns, and are often excluded when skills demand is strong.

**Employers.** Targeted support to businesses, especially SMEs, may be necessary to help them understand approaches to and implications of the skills shift needed in the net-zero transition. This could entail how climate-related, energy management and sustainability training is developed and delivered for workplaces, as well as labour market information (LMI) systems and information sharing that can help employers to better understand how the labour market is evolving.

**Communities:** Whether they are faced with the potential disappearance of jobs and income because of declining industries, or potential growth of green industries, communities and regions need place-based approaches that coordinate and focus critical actors, including local government, employers, unions, schools and post-secondaries, employment services delivery organizations and community-based groups, on designing workforce development strategies that respond to the local impacts of the transition to a net-zero economy.. Supporting credible local and regional leaders who can convene and sustain dialogue – and drive action – among these actors is crucial.

## What will FSC support and focus on?

Based on our work to date, we believe the following questions are most targeted and strategic for future investments in this area. The knowledge and solutions generated through these questions will contribute to Canada's successful net-zero transition to the benefit of all peoples and communities.

**What approaches and resources are effective at helping communities and regions to proactively transition to low carbon activities?** How can labour market and skills development strategies be developed in line with local economic development strategies that aim to address the positive and negative social and economic impacts of decarbonization? What models for ensuring collaboration among key local actors are effective at delivering solutions that can be implemented locally/regionally in coordination with actors in the skills ecosystem?

**How could likely decarbonization pathways in Canada affect demand for and supply of skilled tradespeople?** What pressure do they put on existing labour and skills supply problems related to the skilled trades? What actions can be taken to support existing efforts to ensure that Canada has the skilled trades workforce it needs to accomplish the net-zero transition while also meeting other demand for skilled trades (i.e. housing)?

**What measures are most effective in ensuring that affected workers, Indigenous People and other underrepresented communities have significant and meaningful agency (and leadership) in planning for the net-zero transition?** How can we ensure that they have fair access to benefits, opportunities and protection related to the transition? What needs to change in skills development systems to ensure that they share in the benefits and can contribute to this goal?

**What skills-related measures are most effective at optimizing the transition of workers from declining to growing sectors or occupations?** What is the best way to scale up approaches to reducing the time needed to retrain workers? What are the roles of upskilling/reskilling, wraparound supports, career guidance, and LMI in this process and how do key delivery actors have to change to bring about optimal delivery? What skills development strategies are the most effective in optimizing people's labour market mobility under conditions of uncertainty, unpredictability and/or volatility in the labour market?