# Mapping the green jobs transition

Learning bulletin



# Insights & learnings

Canada is set to embark on a process of transitioning to a sustainable green economy. In light of this, the Future Skills Centre (FSC) has pledged to support a number of training and research projects with the aim of equipping workers with the skills and competencies needed to fill the green jobs and industries of tomorrow. Special emphasis is given to those demographics that will be particularly vulnerable to the effects of this change, such as those in impacted industries and regions as well as those in historically disadvantaged communities. The FSC-funded projects featured in this bulletin are organized according to three learning questions:



Examining the impacts of FSC's funded projects and posing these questions may help to lead policymakers in the direction of a just and equitable transitions, one in which Canadians from all walks of life can feel confident in securing stable and rewarding green jobs—while having a definite stake in the broader processes of social, economic and institutional change that this historic moment represents.

# Introduction

The world is on the verge of a major technological and social transition towards a more sustainable green economy. The mounting costs of inaction in the face of a climate crisis will be an increasingly volatile natural environment, and thus there is a newfound urgency with which governments around the world have pledged to act. As part of its obligations to a global green future, Canada has committed <u>to reduce</u> its greenhouse gas emissions "by 40-45% below 2005 levels by 2030". Just as Canada cannot afford to be left behind in this international movement toward a carbon-neutral economy, so too must industries and sectors within our country be proactive in preparing for this transition.

The challenges faced by Canada are significant, as vital export sectors such as manufacturing, mining and oil & gas extraction are both high-value-added and carbon-intensive industries and, as a result, are vulnerable to the disruptive effects of a green transition. In addition, Canada's financial sector is also particularly exposed to carbon-intensive activities compared to peer economies: The country's "big five banks financed 17.5 per cent (or \$559 billion) of the roughly \$3.8 trillion that international banks lent to the oil and gas sector" from 2016 to 2020.

The coming low-carbon economy will look very different from the current status quo: while a complete phasing-out of carbon energy usage is set for the very distant future, the contemplated near-term scenario will see a decreasing share of carbon-emitting activity as a correspondingly larger share of economic output is derived from renewable and/or carbonneutral energy sources. Although such a development would count as a net positive in the fight against climate change, the potential costs at the socio-economic level in terms of directly affected livelihoods could be quite considerable.

<u>Research</u> from RBC Capital Markets projects reveals that 3.1 million jobs amounting to 15% of the Canadian workforce will see disruption within the next decade while the economy undergoes transition toward a carbon-neutral or "Net Zero" future. At the end of this decade, an estimated 235,000 or about 13% of new and emerging jobs will be found in positions where job descriptions are changed significantly by the impact of the green transition. Furthermore, "46% of new jobs in natural resources and agriculture and 40% of new jobs in trades, transport, and equipment require an enhanced [green] skillset."

# Our research on skills and sustainable futures

FSC consortium partners have recently released several reports defining possible pathways towards a transition. They have begun the work of helping define potential implications for workers, and what it will take to equip them with the skills needed to participate in the opportunities that the sustainable transition will generate.

As the Diversity Institute and Smart Prosperity Institute have recently noted, for example, there are **several different pathways to get to a net zero future**, each with their own interim implications for economic activity. Though job creation will be expected to continue and remain robust across multiple scenarios, that growth will likely be unevenly distributed in various sectors and regions. Manufacturing and construction <u>will see higher job numbers</u> than more resource-intensive industries, such as oil and gas and agriculture, which are projected to experience a deceleration in job growth or an overall decline.

There will also be **uneven geographic impacts**, with those provincial and regional workforces that are the most dependent on resource-intensive industries naturally being the most vulnerable to disruption. This scenario means that in the provision of training and social supports, special attention must be given to affected workers, with an eye to equipping them with the skills needed to adapt, either by building on and enhancing existing skills sets or helping them acquire new ones.

In the face of these economic risks and uncertainties, it is promising that generalizable essential skill sets like "critical thinking, problem solving, management, operations monitoring, and quality control" will continue to be vital and necessary elements in the post-transition economy and lower-carbon intensity jobs. Accordingly, skills retraining efforts based on the strategic recycling of these competencies may go a long way toward ensuring continued relevance and employability among affected workforces, who will be the ones to "to adapt processes, technologies, and services" in line with the needs of the new economic paradigm. In general, non-technical, social and cognitive skills will hold outsized importance in the post-transition economy and, when combined with technical skills, can contribute to the development of "green literacy" across diverse sectors and workforces (Atiq, et al., 2022).

Furthermore, <u>research and commentary</u> from the Conference Board of Canada have highlighted some of the processes by which the Canadian labour market could evolve and grow as it approaches the prospect of a green transition. These include:

- 1. increasing demand for occupations that do not require novel skills sets, such as electricians, installers and repair persons involved with energy efficiency and infrastructural upgrades;
- 2. changes to the skills, tasks and credential-requirements involved within existing occupations, leading to new skill demands within industries; and
- 3. technical changes and innovations that lead to the emergence of whole new occupations and skills categories.

To address these overlapping challenges, the Conference Board of Canada suggests collaboration between postsecondary institutions and academia around the shaping of training curricula; bridging programs and on-the-job apprenticeships aimed at the upskilling and adoption of sustainability-related skills and an examination of targeted regional and sectoral training, reinforcing the prescriptions put forward by the Diversity Institute and Smart Prosperity Institute.

Equipped with this evidence from consortium partners, the Future Skills Centre endeavors to help build the resilient, resourceful and adaptive workforce needed to harness both the ecological and economic benefits of a green transition and to support pilot training and research projects that can contribute to realizing this vision.



# The jobs imperative and the just transition

For those workers and trainees on the ground in an at-risk industry, the prospect of such farreaching changes and the expectations placed on them by employers can be daunting. But just as this situation poses risks and vulnerabilities, it may also offer tremendous new opportunities for employment, growth and innovation. Anywhere from 235,000 to 400,000 new positions <u>will be</u> <u>created</u> in sectors and industries that make use of enhanced green skills.

Altogether, these actions must ensure that the goal of a "**just transition**" for Canadian workers, which the federal government has acknowledged as key policy priority, is not just adopted but firmly institutionalized across multiple sectors and industries.

According to <u>federal government documentation</u>, the just transition is a process of change geared toward achieving a low-carbon future, one that encompasses "preparing the workforce to fully participate in the low-carbon economy while minimizing the impacts of labour market transitions; identifying and supporting inclusive economic opportunities for workers in their communities; and putting workers and their communities front and centre in discussions that affect their livelihoods."

<u>Recent surveys</u> of Canadian workers have showed that while <u>support for climate action</u> is strong, many workers are worried about the implications for their employment prospects and quality of work. Among educational institutions, companies and workers themselves, a conversation is already taking place about the kinds of employable skills and competencies that will be needed to survive and thrive amidst this transition. As a result, the policymaking community is interested in: (a) gaining a greater understanding of the precise ways in which the skills composition of the existing labor force will be different from the green economy, and (b) knowing the speed and cost of this expected transition.

These conditions have created the need for maps and mapping tools through which Canadians can better navigate the shift to a green jobs future. Although there is considerable research that attempts to map this future at a macro- or big-picture level (such as the studies cited above), there is also a need for empirical on-the-ground information in the form of individual case studies and concrete instances of organizations engaged in green jobs skills training.

Such information may provide the granular real-world learnings and experiences needed to complete the picture presented by previous research at the macro level. These insights can grant a richer, more textured grasp of what the unfolding transition would entail; they may help inform decisions by both leaders in charge of policy and by workers as they consider the educational and career opportunities open to them in a changing labour market landscape.

In addition to the aforementioned research that is helping inform macro-level policy discussions, the Future Skills Centre is investing in a variety of training and research projects with an emphasis on developing green-ready workforces, or supporting the transitions of workers affected by transition dynamics. These projects are being carried out by partner institutions across the country and are attempting to address the distinct needs of materially vulnerable demographics and communities.

The following FSC-funded projects are organized into three interrelated questions:



Each thematic grouping presents a different facet of the green jobs transition: taken together, they can fill in a broader conceptual map of what the transition will look like at the everyday level of individuals, organizations and society at large and make it easier to proceed with clarity and foresight. Equipped with mapping tools and information, Canadians may be better able to dispel the natural fears and anxieties that now cloud our perception of the coming green jobs future and plan ahead with greater confidence.

#### **Featured projects**

#### Workforce 2030: Rapid Upskilling for Green Building

This project has been testing whether a training program design based on rapid upskilling can successfully transmit low-carbon building skills to workers at risk of displacement—with the goal of maximizing resilient employment.

#### Skills Match – The Energy Fit

The project tested the efficacy of innovative digital tools, such as virtual reality and gaming technology, to help energy sector workers identify their transferable skills and how they can make successful career transitions, as well as the impact they can have on skilled labour shortages in the energy sector.

#### Foresight Cleantech Accelerator Centre's Skills for a Clean Economy

The project aims to identify which skills and competencies will be needed in the clean economy with an eye to developing relevant new training frameworks and curricula.

#### ECO Canada's National Occupational Standards for Blue Economy

By cataloguing the competencies called for by a fast-changing sector like the "Sustainable Blue Economy", this research project focuses on jobs related to ocean resources and aims to help facilitate worker transitions in an environmentally critical industry.

#### Ocean Wise and Ikaarvik's Fisheries for Economic and Sustainable Development Initiative

This project explores how local Indigenous knowledge and concepts of sustainability can contribute to fisheries assessments – in lieu of or alongside Western scientific data – to create an assessment framework that allows sustainable northern small-scale fisheries to benefit from the increased market value and access brought by formal ratings and recognition.

Town of Drayton Valley's and University of Alberta's Zero-Fee Education Initiative

In partnership with the local government, a University of Alberta research team is exploring whether and how providing no-cost education can stimulate the local economy by giving the inhabitants of Drayton Valley a chance to learn and acquire needed skills without having to pay tuition fees or move out of town.



# What we are learning

## 1. How can we support workers in transitions into emerging green jobs opportunities?

How can green jobs training alleviate uncertainty and enhance worker confidence in sustainable transitions? FSC has three projects in its portfolio that can aid and empower workers undergoing such a shift. **Canada Green Building Council Workforce 2030, Skills Match – The Energy Fit** and **Foresight Cleantech Accelerator Centre's Skills for a Clean Economy** are providing workers and trainees with detailed skills roadmaps that will guide them as they navigate the green transition within three affected areas of the economy: these consist of training pilots in the building and energy industries as well as research into the clean economy.



#### Workforce 2030: Rapid Upskilling for Green Building

According to a 2020 report issued by Canada Green Building Council (CAGBC), the country's green building sector could produce up to 1.5 million jobs along with about \$150 billion in GDP growth by the end of this decade if the government prioritized green building and progressive policies. An approach that prioritizes green building <u>could lead to a decline</u> in greenhouse gas (GHG) emissions by 53 megatonnes relative to emissions levels in 2018. With its great job-creating potential, the building industry is at the forefront of the green transition. The success of its workforce in this endeavour could hold lessons for other areas of the economy in adapting to the climate challenge.

To ensure that workers in the building sector can gain the skills necessary to deliver on green, zero-carbon buildings, CAGBC and its partner organizations launched an FSC-funded project called Workforce 2030, the only coalition of its kind whose aim is to support low-carbon workforce development. Since its beginning in 2020, this project has been testing whether a training program design based on rapid upskilling can successfully transmit low-carbon building skills to workers at risk of displacement — with the goal of maximizing resilient employment. Workforce 2030 is geared toward trainees in the building industry who have been impacted by COVID-19 or who come from underrepresented groups, such as women and racial minority youth.

The project was premised on a rapid audit of low-carbon skills and market needs, which was used to inform the program and content design. Coalition partners deliver the program to trainees who will be equipped with the requisite competencies to put them on a path to employability in green building sectors. A total of 31 individuals were trained in last fall's cohort, bringing the total number of trainees to 220 as of March 2022, moving towards a goal of 500 trainees by 2023. As we move toward that goal, coalition partners have been preparing for the training of new cohorts this fall.

**"This project** has been testing whether a training program design based on rapid upskilling can successfully transmit lowcarbon building skills to workers at risk of displacement - with the goal of maximizing resilient employment."

Skills training included real-world building at a live construction site and the conversion of vacant property into affordable housing — through these activities, trainees were taught green building lessons on such topics as airtightness, blower door testing, window installation, insulation and introduction to building science with an environmental lens. The coalition includes Toronto Community Benefits Network, Mohawk College, Labour Education Centre, Building Up, The Daniels Corporation, and BOMA Toronto, who are contributing their unique expertise to shape the green building curriculum and learning experience. An evaluation is planned by project's end date in late March 2023.

#### Energy Safety Canada's Skills Match – The Energy Fit

Canada's energy sector is changing and adapting to advancing technologies and innovation, shifting demographics and work environments, and most notably, new environmental standards related to sustainability and the rising demand for clean energy.

"The project tested the efficacy of innovative digital tools, such as virtual reality and gaming technology, to help workers identify their transferable skills and how they can make successful career transitions, as well as the impact they can have on skilled labour shortages in the energy sector."

According to Simon Fraser University's <u>Clean Energy</u> <u>Canada program</u>, employment in Alberta's clean energy sector is forecast to grow 164% to 71,700 between 2020 and 2030 — the largest projected growth in any Canadian jurisdiction; Saskatchewan jobs are also forecast to double to 21,000 by 2030. The industry is, therefore, in need of skilled workers to fill new and evolving roles with emerging qualifications; at the same time, however, there is a lack of available information as to what precisely these qualifications are and which jobs they are associated with. Additionally, a years-long downturn in the energy sector has endangered employment prospects for existing oil and gas workers – resulting in a need to transition between energy sectors and in some cases, upskill or reskill to keep pace with evolving workforce requirements.

Spearheaded by Energy Safety Canada, the project tested the efficacy of innovative digital tools, such as virtual reality and gaming technology, to help workers identify their transferable skills and how they can make successful career transitions, as well as the impact they can have on skilled labour shortages in the energy sector. The project's new website, CareersinEnergy.ca, was also designed to provide new and mid-career workers with information related to skills transferability and career transitions. Despite the appearance of an industry-wide slowdown, activity is on an upward trend in response to increasing global demand for responsibly produced energy. There are a significant number of work opportunities in energy-related industrial construction as well as in emerging clean and renewable energy sectors, which call for the talents of both experienced energy workers and new applicants. The project's tools and resources can assist workers to understand upskilling and reskilling requirements and accelerate the course of worker transition to the jobs of the future.

The revised website, <u>Careers in Energy</u>, showcases up-to-date information and trends in the energy workforce and features detailed profiles for more than 170 energy occupations, as well as stories of actual career transitions. The "Resources for Career Planning" component of the website allows workers and career seekers to connect with relevant industry groups and career services providers in order to aid their career transition process.

Aside from providing career support tools for energy workers, this project offers a unique "virtual reality" or VR experience which, taken together, allows trainees to: better understand the operations, processes, technologies, nature of work and careers in five different new or expanding fields within the energy sector.

#### Foresight Cleantech Accelerator Centre's <u>Skills for a</u> <u>Clean Economy</u>

Skills for a Clean Economy is a comprehensive FSCsupported sectoral research project carried out by Foresight Canada; **the project looks to identify which skills and competencies will be needed in the clean economy with an eye to developing relevant new training frameworks and curricula**. It sheds light on the segments of Canada's labour force that have been the most vulnerable to impacts stemming from the COVID-19 pandemic. It also studies the skills gap and the demand for upskilling and reskilling needed to staff the occupations of the clean economy.

Integrating feedback from partners in industry and economic development sectors, the project leverages research insights towards new training frameworks for the benefit of out-ofwork or job-seeking individuals. "The project looks to identify which skills and competencies will be needed in the clean economy with an eye to developing relevant new training frameworks and curricula." The research phase included a literature review, interviews with clean technology (cleantech) industry employers, a survey, focus groups with job seekers and cleantech employers, and consultation sessions. Following this phase, the project team utilized insights to inform the design of education briefs for needs-based upskilling courses, and created a detailed report outlining recommendations for skills training in the clean economy. Notably, among participating cleantech companies surveyed, 77% indicated they would find some value in training that puts a 'cleantech lens' on common workforce skills, educating workers on how to apply their existing skills in the cleantech sector.

As with the other projects featured here, the output of Skills for a Clean Economy may contribute towards the development of the right tools, policies, and knowledge base through which workers can achieve a more refined understanding of their skills profiles and repertoires, and map out the course of their career transitions in the context of the larger green transition.

#### Facilitating connections to make change happen

Join our community of practice! This is a space to share your experiences, access curated products, case studies and tools, explore common interests, and network with others who are preparing Canadians for the future of work! Find out how others are working to support sustainable transitions across Canada by joining the community of practice.



## 2. What labour market information is needed to support planning among key stakeholders?

Labour market information or LMI can assist workers as they navigate jobs markets in their respective sectors and industries; it can point them in the direction of in-demand careers and occupations as well as signal where future jobs growth is likely to emerge from within a given sector. As the <u>Conference Board of Canada</u> (p. 19) has noted, the usefulness of labour market information depends on the timeliness and relevance of the available data, since too many LMI tools have provided historical data from the past rather than real-time information.

LMI can shape and influence how organizations make key decisions. Aside from helping individuals find optimal career paths, up-to-date LMI could allow employers to attract workers and entrants into the industry with the right skill sets and cultivate their workforces accordingly; it would better inform government's policy with respect to labour markets and enable training and educational institutions to tailor their offerings in line with labour market trends.

FSC can spotlight one particular project in its portfolio that focuses on assembling and supplying the latest Labour Market Information to at-risk workers and professionals in the ocean-based economy: **EcoCanada's National Occupational Standards for Blue Economy**. This ambitious pilot may help to inform a future labour market information strategy in other sectors facing green transitions, while alleviating the pressure related to skills gaps, labour shortages and the anticipated industry-wide disruptions caused by technological and economic change.

#### ECO Canada's <u>National Occupational Standards for</u> <u>Blue Economy</u>

According to Canada's Department of Fisheries and Oceans (2022), the Canadian ocean-based, or blue, economy is projected to create up to 350,000 jobs in the years ahead. By cataloguing the competencies called for by a fast-changing sector like the "Sustainable Blue Economy", this research project aims to help facilitate worker transitions in an environmentally critical industry. The project will advance the development and recognition of skills across six subsectors; it will encourage workforce development assistance and enable the placement of workers in jobs within high-growth areas of the blue economy. "By cataloguing the competencies called for by a fastchanging sector like the "Sustainable Blue Economy", this research project aims to help facilitate worker transitions in an environmentally critical industry." Technological developments and innovations in such fields as aquaculture, ocean technology, offshore resources, shipping, and marine resources can be expected to play a part in expanding the national blue economy while producing vibrant and ecologically sustainable employment for potentially thousands of Canadian workers and professionals in the industry. ECO Canada will work in collaboration with organizations across the country working in the Blue Economy sector and will aim to harness the strengths of the Atlantic region's ocean-based economy. The project will also work to identify at-risk occupations and shed light on those emerging and in-demand skills and competencies arising from future technological disruptions.

The goals of the project will include: clarifying competency requirements for occupations in the blue economy; establishing industry-wide frameworks for recognition and credentialing; creating a plan for transitioning workforces; outlining how academic training programs can better align with industry requirements; and distilling needed labour market information on changing skills and knowledge demands and mapping out key trends, indicators and projections in the labour market to improve the industry's ability to plan for the future.

ECO Canada is working together with the Conference Board of Canada to develop and establish a common set of National Occupational Standards (NOS) for the Sustainable Blue Economy, the first of its kind in Canada.



## 3. How can we ensure vulnerable communities can benefit from the green transition?

The green jobs transition will impact some communities and individuals more than others. Those that will be particularly vulnerable to change include: First Nations, remote rural communities, regions and localities that are dependent on the oil-and-gas industries, and the occupational groups directly connected to the energy sector as well as all <u>other worker demographics</u> traditionally affected by large-scale economic change, such as Canadians without postsecondary degrees, young workers, older workers, immigrants and new arrivals.

In order for the green jobs future to be socially and economically sustainable across all classes and constituencies, efforts must be made to broaden the benefits of new innovations for these vulnerable Canadians, to insulate them against the detriments of the transition and ultimately give them a full stake in the post-transition future. Fulfilling these objectives will mean pursuing different strategies for different groups: Canada's governments, credentialing institutions and other stakeholders must pursue specialized approaches that are sensitive to the demands of each affected community. This is imperative if the transition is to be a just and inclusive process.

FSC has two pilot projects working on integrating vulnerable communities into the green jobs economy: **Ocean Wise Conservation Association's Feed the North**, which focuses on enhancing the economic prospect of Indigenous fishing in Nunavut, and the **University of Alberta's Zero-Fee Education Pilots**, which seeks to pilot a free education program for an oil patch community in danger of economic displacement. Both demographic groups represented in these projects, namely Indigenous workers and remote rural workers, are being targeted to reap the potential benefits. If successful, these pilots may serve as a model to help inform future projects and policies that tackle issues relating to other vulnerable communities with comparable social and economic circumstances.

#### Ocean Wise and Ikaarvik's Fisheries for Economic and Sustainable Development Initiative

Arctic fisheries are a vital source of sustenance and livelihood for many Northern communities: fishing is central to Inuit culture, provides a critical food source, and allows for an abundance of locally harvested products to sustain the economic dynamism of the North. However, while consumer interest in sustainably harvested, small-scale farmed and harvested foods has increased considerably, few Arctic fishing communities have been able to benefit economically from this trend. As Ocean Wise and Ikaarvik together recognize, this "is a challenge for many small Indigenous fisheries that lack access to Canada's growing market for sustainably farmed and harvested seafood products." **"This project is** asking how local Indigenous knowledge and concepts of sustainability can contribute to fisheries assessments - in lieu of or alongside Western scientific data - to create an assessment framework that allows sustainable northern small-scale fisheries to benefit from the increased market value and access that formal ratings and recognition brings."

Seafood products that are assessed and receive formal recognition as sustainably harvested benefit from greater market access and value. Arctic Indigenous small-scale fisheries generally already operate in environmentally sustainable ways, but their products are rarely formally recognized as sustainably harvested. One key reason is that they usually lack the capacity to harness the scientific data needed for endorsement by national seafood sustainability ratings. However, there is considerable local Indigenous knowledge that has been used effectively for generations to manage these fisheries. This project is asking how local Indigenous knowledge and concepts of sustainability can contribute to fisheries assessments - in lieu of or alongside Western scientific data - to create an assessment framework that allows sustainable northern small-scale fisheries to benefit from the increased market value and access that formal ratings and recognition brings.

The project aims to work with northern Indigenous fishing communities to create a new framework that incorporates Inuit Qaujimajatuqangit (Inuit knowledge, values and practices) alongside scientific data to describe the sustainability of some Arctic char fisheries in the region, which would enhance the efficacy of established seafood ratings systems in making judgements about the overall sustainability of Arctic fisheries.

At the level of skills, this program can be expected to disseminate competencies relating to the use of scientific data among Northern fishing communities and, more importantly, will foster learning and a greater cultural awareness of Indigenous fishing practices among Southern partners; this is in addition to the broader economic benefits that Northern businesses can secure as their products begin to make further inroads into lucrative national markets.

Working alongside Ikaarvik, this project will benefit from working with Inuit youth in the communities. In addition to being uniquely positioned as bridge-spanners between local Indigenous ways of knowing and western science approaches, these youths represent the largest portion of Nunavut's population, and they are keen to preserve fishing as a livelihood and source of cultural identity. <u>Research by Statistics Canada</u> (2022) into the demographic makeup of the country's green workforce, defined as "[jobs] associated with environmental goods and services and those related to the provision of clean technology goods and services" indicates that Indigenous peoples accounted for 6% of the workforce in this sector while representing only 4.9% of the total population. Thus, Indigenous peoples are already a significant demographic factor in Canada's green jobs transition and are well-positioned to lead in advancing its important objectives.

Projects like Fisheries for Economic and Sustainable Development in the North can build on and consolidate this progress and lay the foundations for further green jobs growth within Indigenous communities. In particular, they can demonstrate how Indigenous knowledge systems and practices can compliment and improve existing sustainability standards and offer a model of cross-cultural cooperation between Northern communities and the rest of Canada. An evaluation is planned by project's end date in late March 2023.



#### Town of Drayton Valley's and University of Alberta's Zero-Fee Education Initiative

The citizens of Drayton Valley, Alberta have experienced the booms and bust of the oil-and-gas industry and have had their economic lives upended by unpredictable levels of volatility in the last decade – these years have seen an 80 percent jump in unemployment. The uncertainty caused by the pandemic has only compounded an already dire economic situation.

The Town of Drayton Valley has stepped in with a bold and innovative pilot economic development initiative: offering free education for workers and students in this particularly hard-hit jurisdiction. In partnership with the local government, a University of Alberta research team is exploring whether and how providing no-cost education can stimulate the local economy by giving the inhabitants of Drayton Valley a chance to learn and acquire needed skills without moving out of town. This strategy will also uncover the potential impact of such a policy on insulating small communities from economic shocks – risks that will only become more pronounced as the green transition takes place. It is the only project of its kind in Canada. "In partnership with the local government, a University of Alberta research team is exploring whether and how providing no-cost education can stimulate the local economy by giving the inhabitants of **Drayton Valley a** chance to learn and acquire needed skills without moving out of town."

By radically reducing the cost of education and directly delivering urgently needed opportunities for upskilling and reskilling to the town's workforce, the pilot can bring together the elements needed for economic revitalization. Additionally, the empirical data, insights and eventual outcomes unlocked by the project may be deployed toward the creation of a model for jurisdictions in the oil patch and elsewhere that are similarly affected by declining industries and structural change. The project is in fact moving ahead with exploring the interests of students in neighbouring communities with an eye to Drayton Valley as a regional training hub. Such a model may also contribute to easing anxieties among vulnerable populations concerned about the toll of transitioning to a sustainable, net-zero future.

Over the course of the fall 2021 reporting period, project staff have begun to more closely align their training offerings with regional labour market gaps; they are also furthering their collaboration with local team members and partners to, for instance, lay the groundwork for a meeting of stakeholders from business, industry, and education.

The general trend reported by the lead organization is one of greater integration of the project's efforts with expertise and knowledge rooted in communities. Staff are particularly conscious of the importance of an inclusive economic strategy to a successful energy transition, which they define as "an equitable shift to an economy which minimizes harmful economic, social, and environmental impacts on workers and their communities."

If successful, this project would enhance the resiliency and competitiveness of the labour force in distressed regions as well as help many more communities like Drayton Valley as they prepare to meet both the challenges and opportunities presented by the green jobs transition.



# Conclusion: mapping the future for Canada's post-transition economy

Giving Canadians the opportunity to train, upskill and reskill for coming transitions will be critical. This broad goal is fueling efforts by the Future Skills Centre to support projects and organizations featured in this bulletin, which have each expressed skills training objectives in line with the social, economic and ecological imperatives of the transition. Taken together, they illustrate a representative cross-section of the kind of initiatives, and policies that Canada will need if workers and employers are to succeed in surmounting the challenges and harnessing the opportunities that will arise in the coming years and decades.

The experiences, insights and information generated by these ongoing pilot projects can go far in helping to inform our understanding of how best to navigate the changes wrought by the green jobs transition at the level of individual workers, employers, industry organizations, civil society and governments. The path to a sustainable future will be long, complex and full of unexpected obstacles. However, having the ability to map out that path – by filling in the blanks when it comes to making plans for individual career transitions or projecting broad industry-wide trends and crafting new workforce development policies – will greatly reduce fears over the costs of structural change and reassure Canadian workforces that a secure and welcoming place exists for them in a sustainable economy.

Going forward, the Future Skills Centre is continuing to provide funding and support for its consortium partner, the Smart Prosperity Institute, as it expands its research into potential future scenarios of decarbonization and a green jobs transition. In the context of meeting Canada's 2030 emissions targets, the institute will undertake detailed analysis to determine: what labour needs and skills will be needed to support clean growth and decarbonization initiatives and where they will arise – with an eye to highlighting geographic, sectoral and socio-economic factors. This analysis is expected to have significant implications for identifying the risks and opportunities that decarbonization will bring within a particular regional economic context; and the subsequent recommendations will allow the affected stakeholders and policymakers to better understand how decarbonization will alter skills needs within a given regional or sectoral niche.

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Further analysis and investigation are required to continue identifying the effects of the green transition over the next decade, as more and more sectors and industries begin to consider how to adapt their workforces and reconfigure their activities to address this sustainable transition. The Future Skills Centre is committed to support the efforts of these Canadian organizations through the insights of its innovation projects and to carrying forward the conversation on green jobs for the benefit of all Canadians.





# Canada

The <u>Future Skills Centre</u> (FSC) is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are the Toronto Metropolitan University, Blueprint, and The Conference Board of Canada, and is funded by the <u>Government of Canada's Future Skills program</u>.



#### The Conference Board of Canada Blueprint

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