BUILDING SKILLS FOR A CLEAN ECONOMY

Guiding Workforce Transitions as Canada Shifts to Net Zero Emissions

2022

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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 Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada

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As Canada's cleantech ecosystem accelerator, Foresight supports the identification and validation of cleantech opportunities and the successful commercialization of solutions. We bring together innovators, industry, investors, government, and academia to address today's most urgent climate issues and support the global transition to a green economy.

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BUILDING SKILLS FOR A CLEAN ECONOMY: KEY TAKEAWAYS

The economic disruption resulting from the Covid-19 pandemic has provided the opportunity to rebuild in a more sustainable way as Canada moves to achieve a cleaner economy, including Net Zero emissions by 2050.

As industries transition to fit into this clean economy, so follows a redistribution of employment and the types of skills needed among the workforce.

The cleantech sector in Canada has seen growth and rising employment demand as more industries look to technology to help reduce their environmental footprint, but as shown in this report, many cleantech companies are experiencing challenges in recruiting workers with the skills needed to support the success of their businesses.

Skills for a Clean Economy sought to identify opportunities and learnings to help workers with transferable skills exit sectors at risk of disruption by the clean economy transition and technological transformation to become gainfully employed in the cleantech sector.

Findings

Roles & Skills In Demand in the Cleantech Workforce

The following skills in were commonly identified as in-demand by representatives of cleantech companies participating in the research:

Information and Communications Technology (ICT) Skills:

- Data Management and Data Analytics
- Programming
- Automation
- Software Development
- Digital Marketing
- Modelling

Non-ICT Skills

- Sales/Business Development
- Marketing
- Communications
- Public Policy
- Trades (notably electricians, HVAC, plumbing)
- Customer Relations/Support

Common Themes

Participating cleantech companies frequently raised the following two points relating to the cleantech workforce:

1. **Having a basic familiarity with climate change and sustainability** principles is important for cleantech employees. This knowledge helps workers to understand the value of clean technologies and align with company values.

2. **Often key skills are not highly specialised to cleantech.** There is a perception that cleantech roles require extensive specialised technical knowledge, when often common skills can be used with a different lens.

Outcomes

The project team received suggestions for key stakeholders to optimise responses to the sector's workforce needs during the clean economy transition.

Education Briefs and Learning Strategy Recommendations

Two education briefs were developed for the creation of upskilling courses for learners from at-risk industries with transferable skills to transition to the cleantech sector. These courses emphasise work-based learning components that allow workers to actively demonstrate their transferable skills and better understand how these existing skills can be utilised in clean economy jobs.

The upskilling course model is based on research findings that suggest many roles within cleantech do not require highly specialised skills, but rather common workforce skills applied in a slightly different way. It is therefore recommended that future workforce development and training programs targeted at the clean economy transition include work-based learning components.

Recommendations

The following recommendations are provided for actors in the field to best contribute to workforce transitions as we shift to a clean economy:

Academia

- Increase emphasis on work-integrated learning elements in curricula
- Capitalise on the growing trend of short upskilling courses and microcredentials to support mid-career transitions
- Encourage a multi-disciplinary approach to learning across faculties

Government

- Provide financial support to further the research and development of training programs to transition workers into clean economy jobs
- Consider initiatives to increase public awareness and understanding of cleantech as a career option
- Support a clearer definition of cleantech and the adoption of related standards

Supporting Organisations

- Develop ecosystem partnerships to act as a bridge between industry, government, Indigenous communities, and academia to establish gaps in workforce development
- Continue research on workforce development gaps

THE WORKFORCE AND THE CLEAN ECONOMIC RECOVERY

The economic disruption resulting from the Covid-19 pandemic has provided the opportunity to rebuild in a more sustainable way. This "clean" economic recovery is a chance to create a fair societal transition as Canada moves to achieve its sustainability goals such as Net Zero emissions by 2050. [1,2]

The move to Net Zero will require a large reduction in emissions from carbon-intensive sectors. The oil and gas and transportation sectors are responsible for more than half of Canada's greenhouse gas (GHG) emissions, followed by buildings, electricity, heavy industry, agriculture, waste, and other sectors. [3] Therefore, reducing emissions will require a fundamental shift in many industries away from fossil fuels and towards innovative technologies and low-carbon energy sources. [1,3] As industries transition to fit into this clean economy, so follows a redistribution of employment and the types of skills needed among the workforce. This presents an enormous opportunity for the Canadian economy and for workers, particularly as many face employment uncertainty from a lingering pandemic. Both Covid-19 and the shift to meet Net Zero targets have resulted in many workers evaluating their future employment paths.

Sectors that are transitioning to utilising clean technologies (cleantech) have large employment and economic potential. A Canada Green Building Council report noted that the green building industry was responsible for almost 300,000 direct jobs in 2014 with projected growth, which is more than the total number of jobs in the oil and gas extraction, forestry, and mining industries in the same year. [4] There is also demonstrated curiosity about future employment in the clean economy among workers. A survey of oil and gas workers from Iron and Earth showed that 69% are interested in moving to employment in the clean economy and 79% believe their skills are transferable with minimal training. [5]

The cleantech sector in Canada has seen growth and rising employment demand as more industries look to technology to help meet emissions reduction targets. [6] Canadian companies accounted for 13 of the Global Cleantech 100 for 2022, ranking only behind the United States in representation and increasing the share from 11 in 2021. [7] The Government of Canada's Innovation and Skills Plan includes investments in clean technology as a priority, indicating that Canada has the talent, government support, and educational framework to solidify its status as a market leader. Therefore, ensuring Canadian workers are adequately skilled to fill in-demand cleantech jobs is critical for the success of the sector and reaching Net Zero goals. However, many cleantech employers are noticing gaps in the development of a strong cleantech talent pipeline. Research indicates that despite the success of the industry to date and future growth potential, Canada is facing challenges when it comes to workforce development. [6]

Cleantech is a novel, fast-growing sector which has likely contributed to workforce development issues. A 2015 report from the Council of Canadian Academies remarks that market volatility created from a fast growing industry, like technology, typically results in labour shortages as the nature of work and required skills changes rapidly. [8] As a relatively new industry prone to market fluctuations, cleantech is a prime example of this phenomenon.

The cleantech workforce also consists of both workers with specific technical knowledge and workers without sector-specific but essential skills, such as those in administrative and financial roles. [6] This has made it difficult to pinpoint the challenges, successes, and opportunities for improvement related to workforce development. Additionally, cleantech as a sector can be perceived as ambiguous as it uniquely integrates with other industries that have separate definitions and spans both private and public sectors.

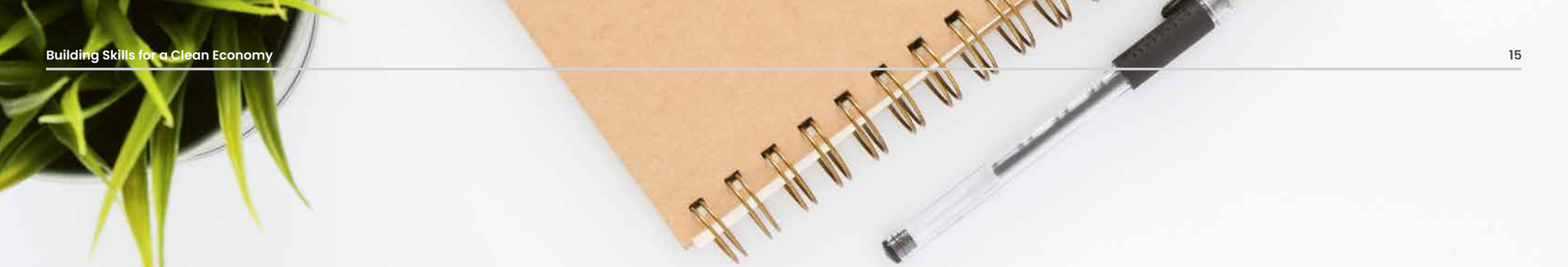
The Skills for a Clean Economy project team saw this as an opportunity to help guide the sector to global competitiveness by supporting both companies and job seekers to connect and succeed together. Many companies in cleantech have experienced skills shortages in the workforce. On the other hand, the workforce is facing employment uncertainty with various economic disruptions.

This presents a key question: is there a way to help transition un- or underemployed workers to in-demand cleantech jobs, ensuring the necessary talent is available to support the sector's growth?

> **"People in the general population don't realize Canada is at the forefront of cleantech development."**
>
> - Research participant

The 2020 report from ECO Canada, Cleantech Defined: A Scoping Study, sought to standardise the meaning of 'cleantech' as a sector as the boundaries have been historically inconsistent:

"Clean technology, also referred to as cleantech, is any technological process, product, or service that... uses less material or energy, generates less waste, and causes less negative environmental impacts than the industry standard." [6]



RESEARCH PROCESS SUMMARY

Objectives

Research

Skills for a Clean Economy was a Canada-wide research initiative conducted by Foresight Cleantech Accelerator Centre, the Delphi Group, ECO Canada, Lighthouse Labs, Riipen and the Vancouver Economic Commission (the project team).

The first phase focused on addressing two key research topics:

1. Recognizing jobs and industries that have been most impacted by job losses due to economic changes as a result of the Covid-19 pandemic and the shift to a clean economy.

2. Identifying the types of roles that are in demand and where there are skills shortages in the cleantech workforce.

Once this information was gathered, a cross-analysis helped the project team address a third research topic:

3. Finding opportunities for upskilling workers from impacted sectors to transition into in-demand roles within cleantech.

Recommendations

To mobilise the knowledge gained in the research phase of Skills for a Clean Economy, the project team produced outcomes intended to:

1. Create education briefs to support the development of training courses to help workers impacted by job losses or job uncertainty upskill and transition into cleantech roles.

2. Share recommendations based on research findings for academia, government, and supporting organisations to help the Canadian workforce find meaningful employment in cleantech during the economic transition.

Ultimately, this knowledge will contribute to ensuring individuals in the workforce are sufficiently skilled to become gainfully employed in the clean economy. This will ensure the talent pipeline for the cleantech sector supports Canada's position as a global industry leader.

Methodology

Research

To explore the key research topics, the project team conducted a literature review, 30 interviews and a survey of cleantech companies across Canada, focus groups with 13 cleantech companies and eight individual job seekers, and final consultation sessions with experts in the cleantech industry.

Recommendations

The second half of Skills for a Clean Economy involved translating the knowledge gathered in the research phase into two education briefs for future upskilling courses and the findings shared in this report.

“People generally **lack the skills** of understanding how to work with data sets.”

- Research participant

KEY RESEARCH FINDINGS

Research Topic 1: Jobs and industries most impacted by job losses

The first research topic investigated what jobs and industries were most impacted by job losses due to the Covid-19 pandemic.

By Sector: The pandemic resulted in extreme disruption to service industries such as tourism and hospitality due to social distancing restrictions and closure of non-essential businesses. [9] Employment in the hospitality sector dropped 56% in May 2020 compared to the first months of the year, and though some recovery occurred, by the end of 2020 employment was still 29% lower than pre-pandemic levels. [10] By September 2021, hospitality and tourism sectors saw an increase in economic activity as Covid-19 restrictions eased. As the pandemic continues, it is uncertain whether this economic increase will continue in service sectors should restrictions again be strongly enforced. [11]

Other industries such as information, culture, recreation, construction, manufacturing, wholesale and retail trade, and transportation and warehousing saw significant employment losses in the first six months of the pandemic. Many of these (i.e., construction and manufacturing) have recovered to over 90% of pre-pandemic employment levels. [9] With the significant collapse in oil prices in 2020 due to the pandemic there were employment losses in the sector, many of which have now rebounded. However, capital expenditures in oil and gas have been decreasing since 2014 due to a number of factors including the rise in demand for clean energy sources. [12] This suggests an uncertain future for the industry.

By Worker: Based on data from 2020, it was found that low wage earners were most impacted by job losses as well as youth aged 15-24 in all wage categories. [13] Recent university graduates account for a large percentage of the youth job losses felt, with unemployment rates almost doubling in the first year of the pandemic. [14] Temporary positions were also hard hit, accounting for 52% of all job losses. [13]

Notes on Job Losses Looking Forward:

It was noted by the project team that many significant economic and employment hardships seen in the first year of the pandemic when this project was proposed have improved by the end of 2021.

As of early December 2021, the national unemployment rate of 5.9% was just off the pre-pandemic levels of 5.7%. [15] However, with the growth of Covid variants and accompanying restrictions, this may change.

The fluctuating employment rates seen over the course of the pandemic have made it difficult to estimate where job losses will be concentrated on a long-term basis. The ongoing impacts of Covid coupled with the predicted instability of long-term employment in sectors such as oil and gas during the clean economy transition make for an uncertain future for the workforce. The project team considered how to address job losses from Covid-19 along with other industries projected to face uncertain employment potential when determining course topics.

Research Topic 2: Roles and Skills in Demand in the Cleantech Workforce

The second research topic explored in-demand skills and perceived workforce shortages among cleantech companies.

To identify the top skills in demand, the project team conducted interviews and a survey of cleantech organisations. The team also noted key trends and common themes heard among companies, which informed the development of recommendations.

Information and Communications Technology (ICT) Skills:

- Data Management and Data Analytics
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- Automation
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Non-ICT Skills

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- Customer Relations/Support

Table 1: Commonly heard skills in demand by participating cleantech companies

Workers with skills in data management and data analytics were most frequently mentioned as in demand during interviews with cleantech companies. Furthermore, many employers noted that workers who have learned these skills in academia struggle to apply them in an industry setting.

For example, technical workers (engineers, technicians, technologists) at cleantech companies who are responsible for data management tasks are able to perform programming operations but lack the knowledge, as one expert noted, of "how to read the data, how to get the hidden message."

Almost 60% of cleantech companies surveyed somewhat or highly agreed that technical workers are lacking adequate data management skills to perform in cleantech roles (Figure 1). When asked a follow-up question on why there seems to be a barrier to adequate training, one-third of respondents attributed this to a lack of understanding of how the skill applies to cleantech (Figure 2). Half of respondents cited it as not commonly taught in postsecondary degree programs.

Do you agree with this statement: In general, engineering and related workers (including engineers, technicians, and technologists) in the Canadian workforce are lacking adequate data management/ analytics skills to perform at an ideal level for cleantech roles.

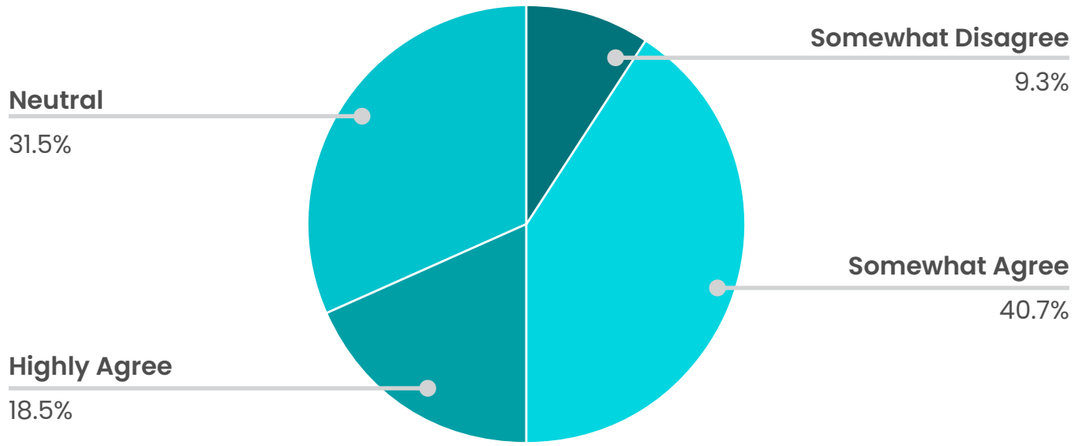


Figure 1: Lacking data management skills for cleantech roles among engineers and technical workers

What are the current obstacles to training that engineering and related workers are facing when it comes to developing adequate data management/analytics skills?

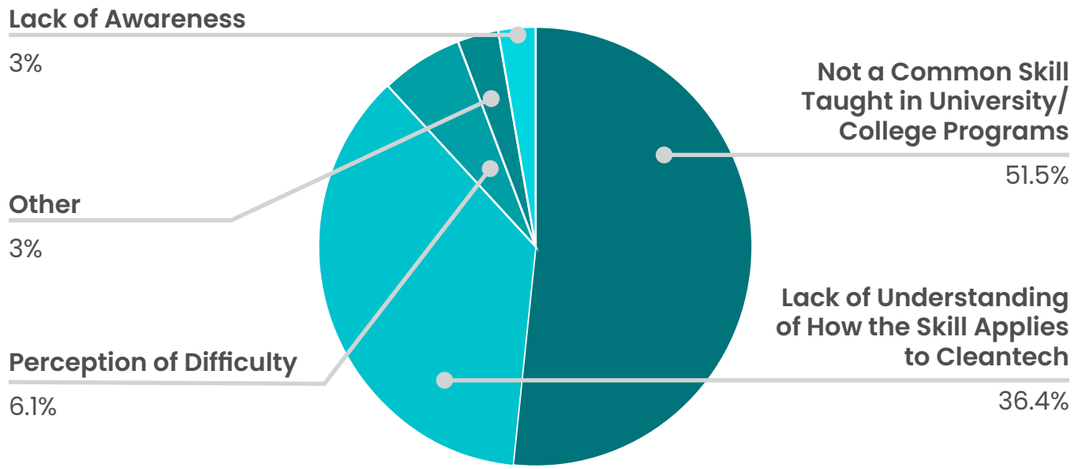


Figure 2: Obstacles to training for data management skills among engineers and technical workers

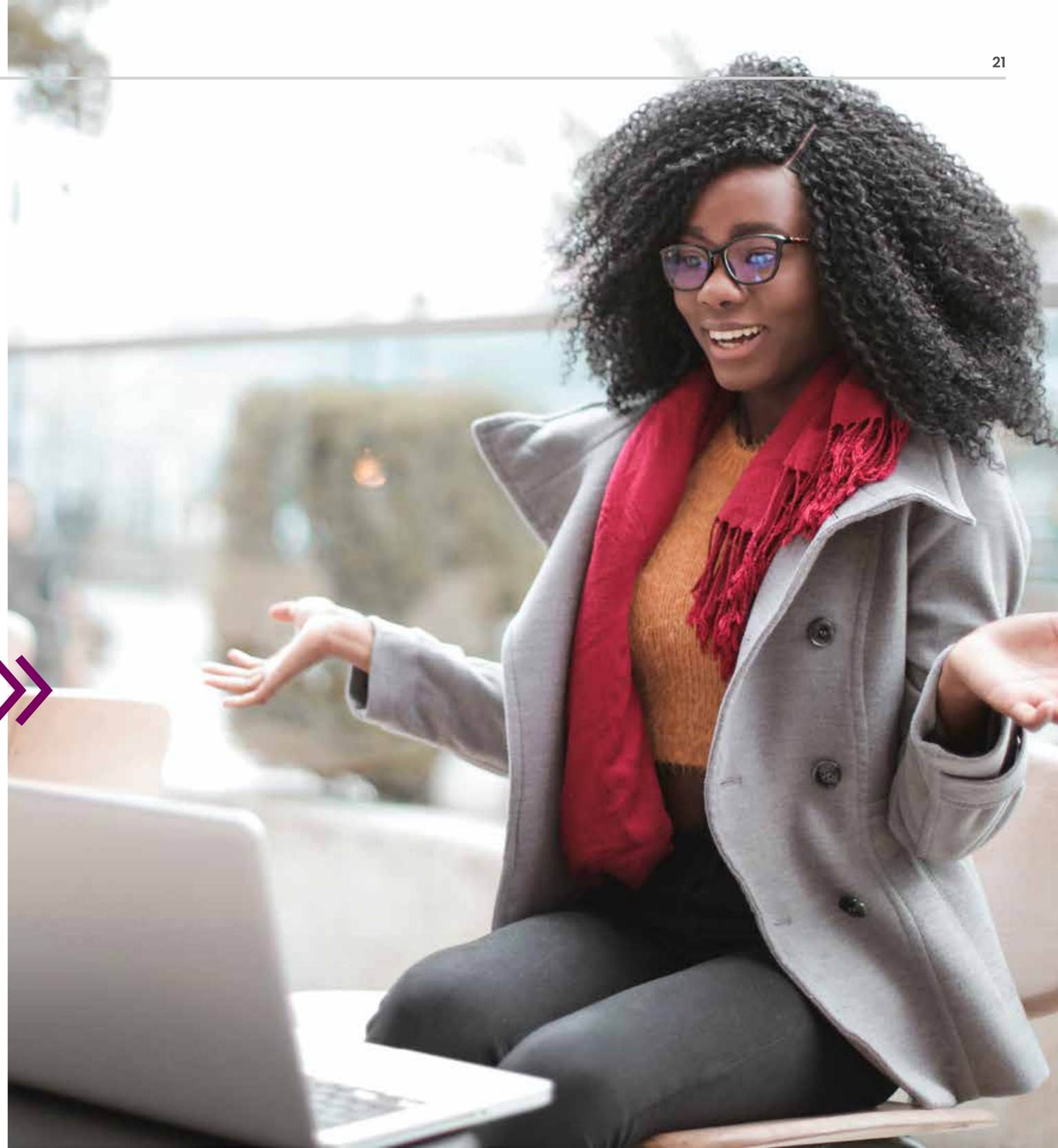
“Sales for cleantech is difficult. You must have technical knowledge but know how to talk to people. It’s challenging to find both.”

- Research participant

When asked about skills not directly related to information and communications technology, many cleantech companies remarked on the importance of employing talented sales professionals in cleantech, but they can often be a challenge to find. Particularly at the start-up level, cleantech sales are driven by workers from a technical background such as engineering but lack training in effective communication and relationship-building skills.

Additionally, since the sector is growing quickly and technologies are being sold into a growing number of industries across Canada and around the world, the audience with which salespeople must communicate is highly diverse. Some clients may be unfamiliar with technology concepts and may not understand the proposed value of a cleaner technology.

Finding the balance in someone who both understands the technology and its value proposition, and can communicate this effectively to a non-technical audience is difficult to find.



Common Themes

Having a basic knowledge of climate change and sustainability principles is important in cleantech employees. This helps workers to understand the value proposition of clean technologies and aligns with company values.

Frequently mentioned when referring to sales roles, it was commonly heard from cleantech companies that all employees should have a basic understanding of climate change and sustainability concepts. Cleantech is a heavily values-influenced industry.

“Everyone would gain if all employees had a structured and disciplined perspective on sustainability rather than newspaper headlines.”

- Research participant

Workers from many departments would benefit from being able to “connect the dots” between their role and why the company exists (i.e., to lessen environmental/emissions impacts). For example, a marketing professional would benefit from knowing the climate policy landscape in the jurisdictions where they are trying to attract business.

The perceived value of their company’s technology - whether that be financial savings, regulatory compliance, or something else - may appeal differently to one region based on prevailing sentiments. Additionally, many interviewees remarked on this knowledge being fundamental to company culture. Most cleantech companies hold climate change and environmental stewardship as a core value, and as a common source of motivation for their employees.

Among cleantech companies surveyed, 77% would find some value in training that puts a ‘cleantech lens’ on common workforce skills, educating workers on how their existing skills may be applied in the cleantech sector (Figure 3).

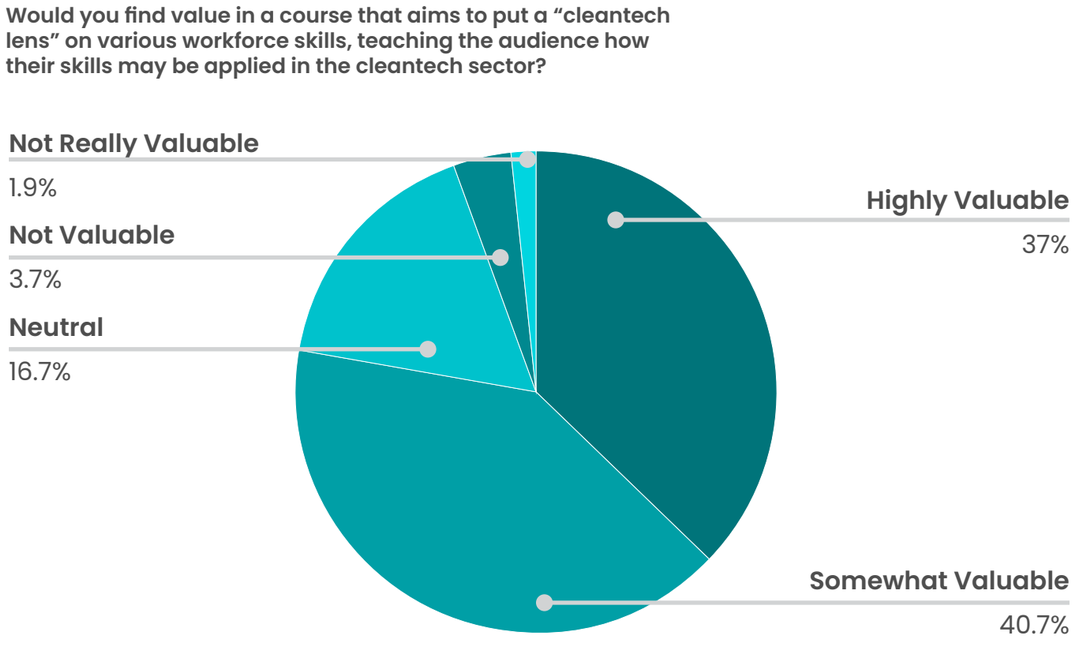


Figure 3: 77% of cleantech companies surveyed would find high or some value in training to show workers how their skills can be applied in the cleantech

Often key skills are not highly specialised to cleantech. There is a perception that cleantech roles require a large technical knowledge, when often common skills can be used with a different lens.

Many interviewees pointed out a sentiment among the general public that cleantech roles are not applicable to most job seekers as they require specialised training. This is true for some technical roles, but there are many more cleantech jobs that require only common workforce skills, with some on-the-job training.

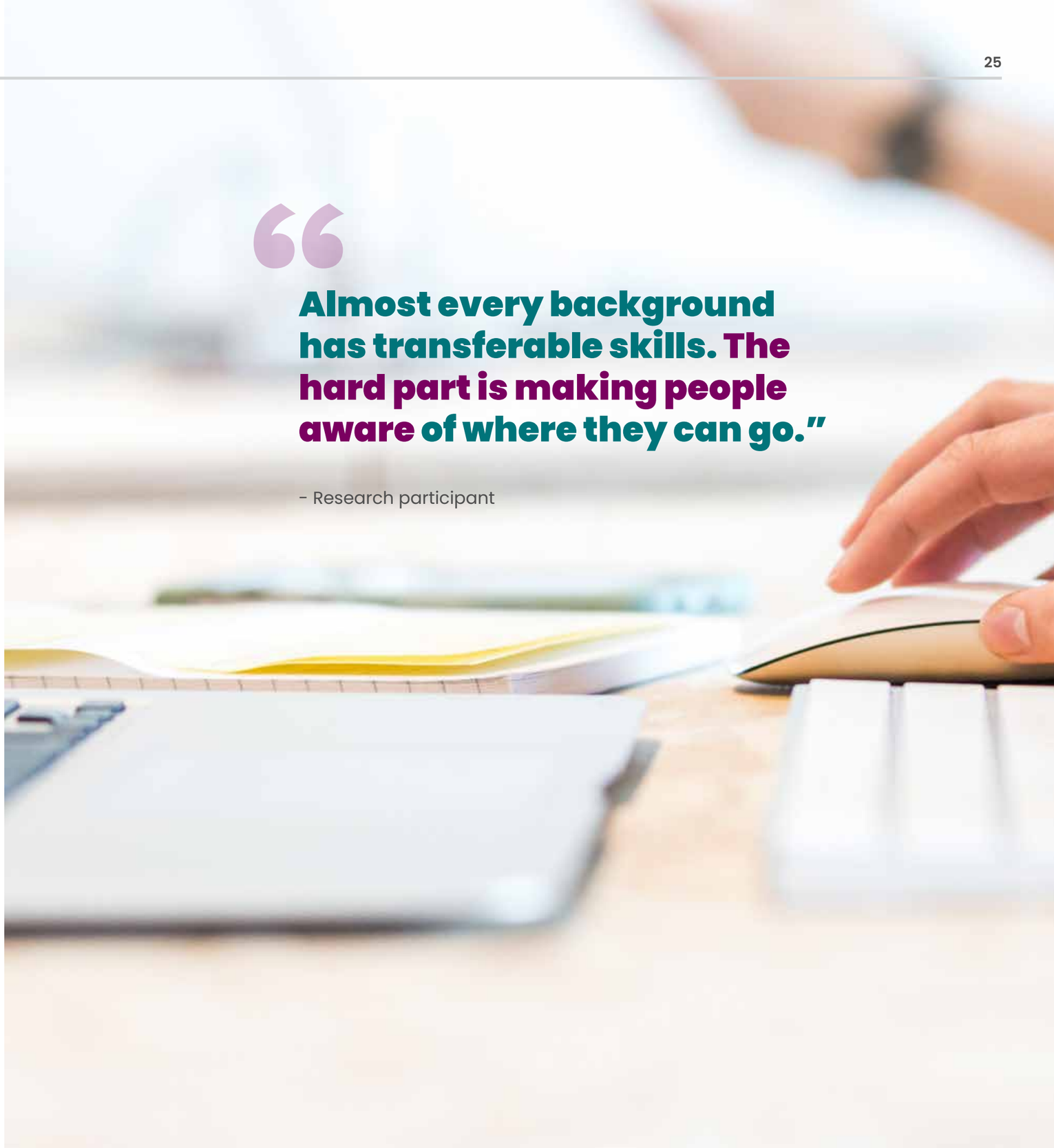
The *Cleantech Defined* report outlines the two types of workers within the cleantech workforce: those who require specific technical knowledge or skills, and workers who perform critical roles but do not need specific sectoral knowledge, such as accountants or administration. [6]

This supports what was heard during the research. Though many workers in Canada would have applicable skills and could be employed in cleantech roles – "with a bit of retooling" as one interviewee remarked – the general public is often unaware of the sector as a potential place of employment.

Research Topic 3: Opportunities for Upskilling and Transitioning Workers into Cleantech

Cross-referencing the sectors most impacted by job losses from the pandemic and clean economy transition with the most in-demand skills within cleantech allowed the project team to extrapolate what potential training programs would create opportunities to transition workers.

In theory, these course topics would have to complement the transferable skills found in the non-cleantech workforce and build learning outcomes that would be attractive to employers in the cleantech industry.



> **"Almost every background has transferable skills. The hard part is making people aware of where they can go."**
>
> - Research participant

OUTCOMES: EDUCATION BRIEFS AND LEARNING STRATEGY RECOMMENDATIONS

The project team developed two education briefs for two upskilling courses. The two courses will be intended for learners from at-risk industries with transferable skills.

We recommend that the proposed courses be developed in both English and French so they can be accessible to job seekers across the country. Course curricula will emphasise work-based learning and will utilise case studies, scenarios, and executive mentorship to teach applied skills. This maximises learners' employment-readiness by providing them with networking opportunities and job experience valuable to potential hiring managers.

It was commonly heard during the research phase that cleantech employers actively seek to hire students that complete internships, co-ops, or work-based learning projects. It is therefore highly recommended for future workforce development and training programs targeted at the clean economy transition to include work-based learning components. This will act as a bridge for the Canadian workforce to transition into clean economy jobs. This concept is based on the research findings that suggest many roles within cleantech do not require highly specialised skills, but rather common workforce skills applied with a different lens.

Work-based learning projects allow workers to actively demonstrate their transferable skills and better understand how these existing skills can be utilised in clean economy jobs. This minimises the employer's perceived hiring risk, and provides clarity to the worker on the opportunities available within these new sectors.

With environmental employment projected to grow by 8% by the end of the decade, **creating over 50,000 new jobs in Canada,** upskilling the workforce to reapply their transferable skills within this sector is a lucrative employment opportunity. [2]

> **"People will go where the jobs are – if they know there is opportunity."**
>
> - Research participant

OUTCOMES: RECOMMENDATIONS

The project team received excellent feedback on a number of subjects from a diverse set of industry stakeholders.

This feedback included suggestions for training programs that did not fit the scope of this project, and ways that key stakeholders could more optimally address workforce development issues during the clean economy transition.

The following recommendations based on the research are provided as suggestions for actors in the field, particularly governments, academia, and supporting organisations.

Recommended Actions for Academia

Increase emphasis on work-integrated learning elements in curricula.

During interviews, many cleantech companies expressed a wish to see new hires walk in the door with a greater level of familiarity of on-the-job skills typically needed at a cleantech company. Stronger 'soft skills' like communication and relationship management, and a more applied understanding of relevant policy are two such examples. Academic institutions can better prepare their students to tackle challenges faced at work in the Canadian cleantech industry through enhanced partnerships to provide work-based learning opportunities to students.

This will increase the visibility of these companies among students and will help produce graduates with firsthand experience in the sector. Several of our interviewees and focus group participants also expressed an interest in hiring student interns after graduation. Therefore, helping students to network within this growing sector can assist in opening professional doors to them.

Capitalise on the growing trend of short upskilling courses and microcredentials to support mid-career transitions.

As with many sectors, employers working in cleantech expressed a strong interest in recruiting mid-career level talent. Given that existing skills are often highly transferable, it is recommended that short upskilling opportunities and microcredentialling be leveraged to facilitate the transition of mid-career professionals who are less likely to enrol in multi-year degree or diploma programs. These courses can be offered through continuing education programs or through external partnerships, and can be designed to cater to workers in at-risk roles and sectors.

Encourage a multi-disciplinary approach to learning across faculties.

Participating cleantech organisations also emphasised the need to blend skillsets and the benefits of being able to apply existing skills in new ways. For example, many employers expressed an interest in having technical workers understand how different engineering disciplines (e.g., mechanical and electrical) work together on a complex project. Other employers noted that it would be beneficial if students of computer science better understood how their skills would be applied in the environmental sector. We recommend that academic institutions work to break down silos across faculties to help students understand how cross-disciplinary learning is a critical skill to apply in the workforce.

Recommended Actions for Government

Provide financial support to further research and development of training programs to transition workers into clean economy jobs.

While there are ongoing efforts to transition oil and gas workers into the cleantech field, particularly those working in the trades, there are abundant opportunities to transition workers of many skills into the cleantech sector. We recommend continued financial support to further explore and develop career transition strategies for in-demand roles within clean economy sectors.

The 2021 federal budget proposed up to $8 billion in support to bolster innovative projects and jobs that reduce GHG emissions. [16] It's critical to ensure the workforce is well informed about access to new jobs and sufficiently trained to fill these jobs.

Consider initiatives to increase public awareness and understanding of cleantech as a career option.

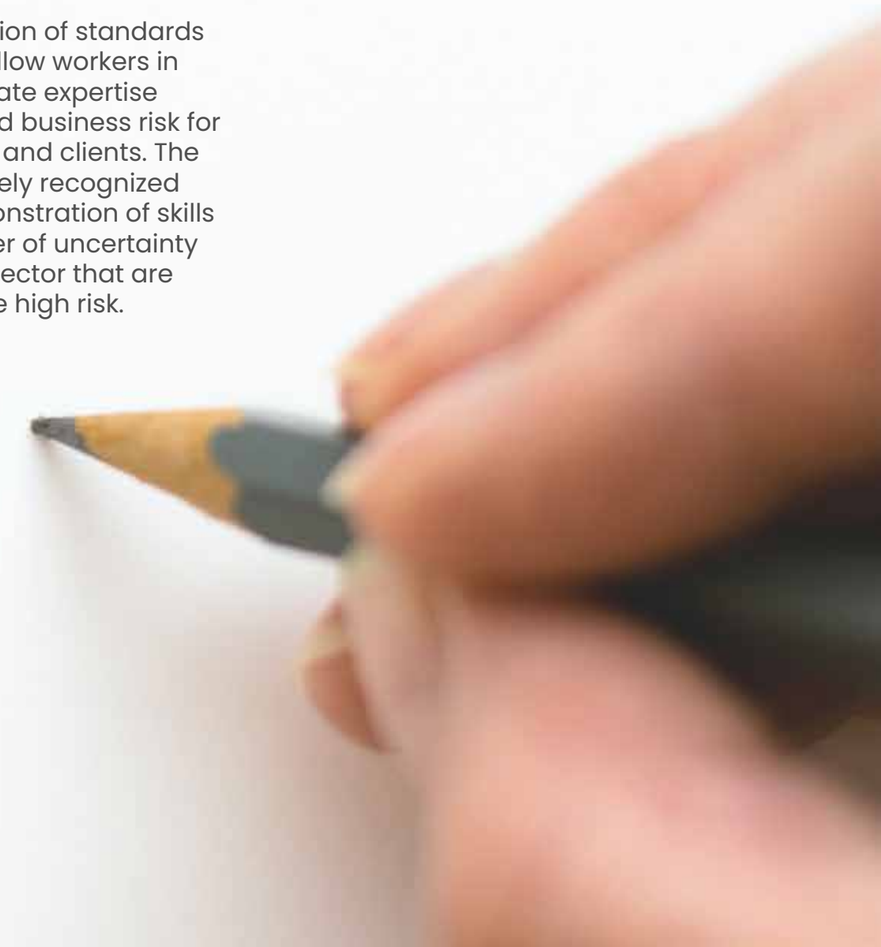
Governments are also encouraged to help raise the profile of this increasingly important opportunity to the public. Lack of public knowledge of the sector was identified as one of the top barriers to recruitment during the interview phase of the research. The public does not have a clear understanding of what cleantech is and is largely unaware of the opportunities for employment offered by the sector. For example, there seems to be a general perception that the industry is involved only in cutting emissions.

While reducing GHGs is an important function of the sector, clean technologies are highly diverse and offer a wide variety of jobs in different areas such as water technology, agricultural technology, and waste management innovation. Awareness raising efforts can be targeted to youth deciding on a career path, as well as mid-career workers with transferable skills.

Support a more clear definition of cleantech and the adoption of related standards.

The adoption of a clear definition of clean technology by governments will help the sector gain more visibility and understanding. Establishing national industry classifications for cleantech sectors and jobs will support the collection of more comprehensive sector-specific data. This will in turn support more labour market research and the identification of strengths and opportunities for development in the Canadian workforce.

Furthermore, the adoption of standards and certification that allow workers in the sector to demonstrate expertise would reduce hiring and business risk for prospective employers and clients. The current absence of widely recognized standards for the demonstration of skills adds an additional layer of uncertainty to activities within the sector that are already perceived to be high risk.



Recommended Actions for Supporting Organisations

Develop ecosystem partnerships to act as a bridge between industry, government, First Nations, and academia to establish gaps in workforce development:

Supporting organisations, such as not-for-profit accelerators, and research institutes, continues to have a role to play in the clean economy transition and in developing the Canadian workforce.

One critical role is to foster increased collaboration within cleantech ecosystems, particularly between industry, government, Indigenous communities, and academia to find ways to better prepare students with necessary practical knowledge for employment.

Supporting organisations can assist by finding where cleantech companies are most frequently seeing skills gaps, connecting with academia to identify ways to integrate more work-based learning elements into curricula, and working with government and Indigenous peoples to identify and address opportunities to increase job growth. Creating a dedicated framework to build collaboration between stakeholders is a necessity to address complicated workforce development issues.

Continue research on workforce development gaps:

Finally, we would like to emphasise the need for continued and timely investigation into and expansion upon the gaps identified through this research. Several in-demand skills that could feasibly be opportunities for upskilling or transitioning the workforce (e.g., trades, leadership, public policy) were identified but were outside the scope of this project.

These opportunities can be investigated further, and more options uncovered. With potential global economic gains from bold climate investments of US$26 trillion and 24 million new jobs projected by 2030, [17] now is the time for Canada to build the tools that will empower its workforce to become part of this critical industry.

BRIDGING THE TRANSITION

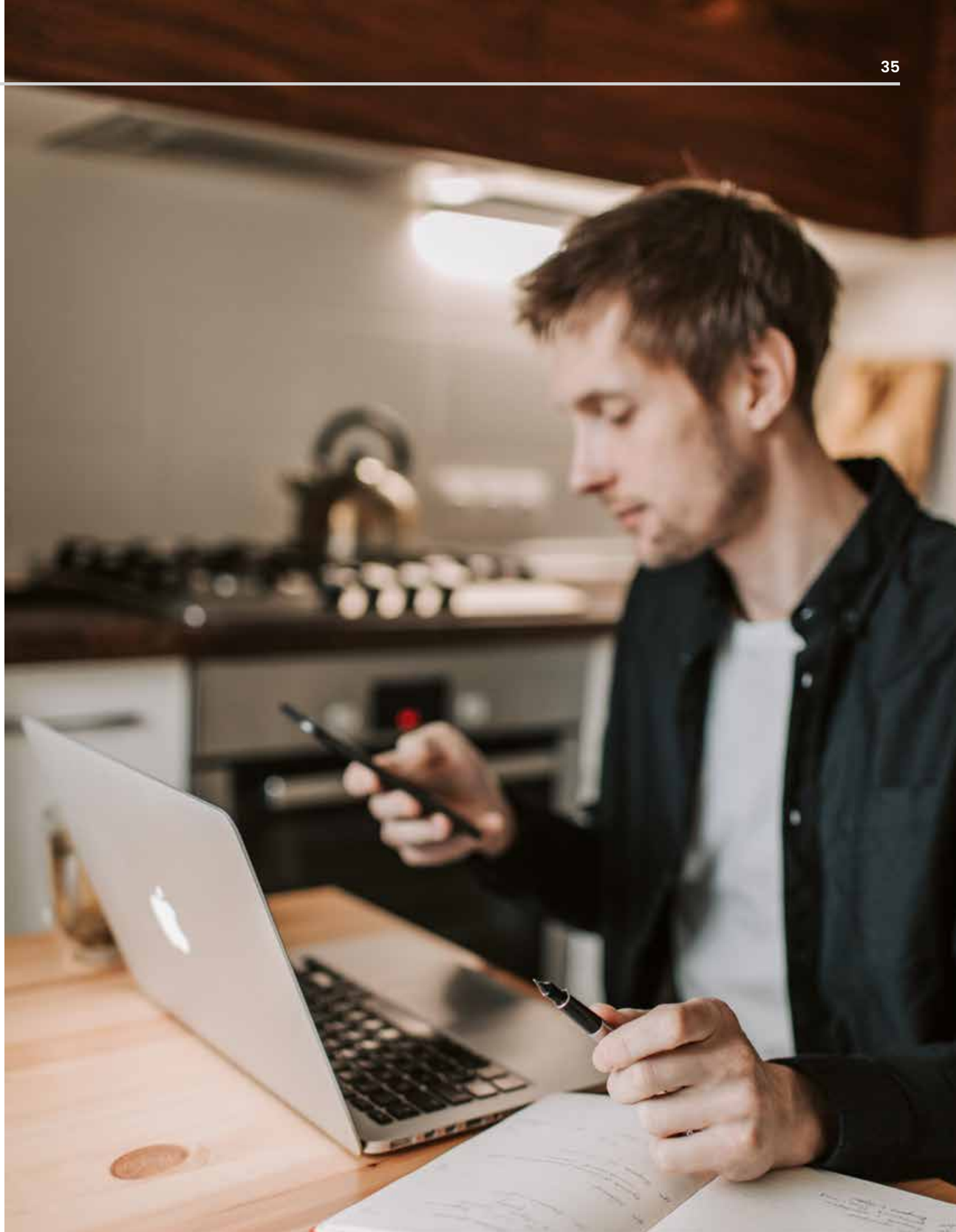
There are lessons to be learned from the experience of working during the Covid-19 pandemic that can be applied in the clean economy transition. Both suggest significant changes to the status quo, and both have created or may create obstacles to employment stability.

The rapid shift to remote work at the start of the pandemic was initially met with doubt. Now, almost two years after lockdowns in Canada began, many companies have permanently adopted either a hybrid or remote work mandate. [18] If there can be any silver linings, one may be found in confirming our ability to adapt to massive change.

An early pandemic article from McKinsey & Company in May 2020 suggested the importance of upskilling the workforce to adapt to this new remote way of life to build resilience in the face of continued economic disruption. [18] Only a few months into the pandemic, it was recognized that there was potential for workers to be left behind as companies shifted to remote work.

If companies wanted to survive this shift, it was important to ensure that the transition worked for all. [18] This also holds true to the clean economy transition. Ensuring the workforce is sufficiently skilled and has the knowledge to find employment in clean sectors will help create economic resiliency and align with the federal goals of a “people-centred just transition” as industries shift to meet Net Zero emissions. [19]

It is imperative to use what we have learned about creating resilience during Covid-19 and apply this to the clean economy transition. We know we *can* adapt to work-based changes, but with this experience, let’s do it better.



CONCLUSION

All skill sets are becoming obsolete.”

The Government of Canada’s 2021 budget outlined supporting clean technological innovation as a way to build a resilient economic recovery. [16]

With continued growth and government support, the clean technology industry presents a large opportunity to create more jobs as we recover from the pandemic and transition to a cleaner economy. It is important at this juncture to consider the workers who can fill those jobs.

It has been noted from previous research that in the Canadian workforce broadly, the required skills for certain jobs often do exist in the labour force - it is the perception of both employers and workers of where skills fit that is lacking. [20] This was supported in Skills for a Clean Economy.

Often the workforce has the transferable skills for cleantech jobs, workers just need to be made aware of these opportunities and learn where and how to apply their skills with a different lens.

Further research on the jobs and sectors facing transformation, decarbonization, or growth is needed as the clean economy transitions ramps up. Investment in bridging programs for transitioning workers is also fundamental to ensure both secure employment rates and thriving clean economy sectors. As one Skills for a Clean Economy participant put it: “All skill sets are becoming obsolete.” There is always learning and upskilling to be done.

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