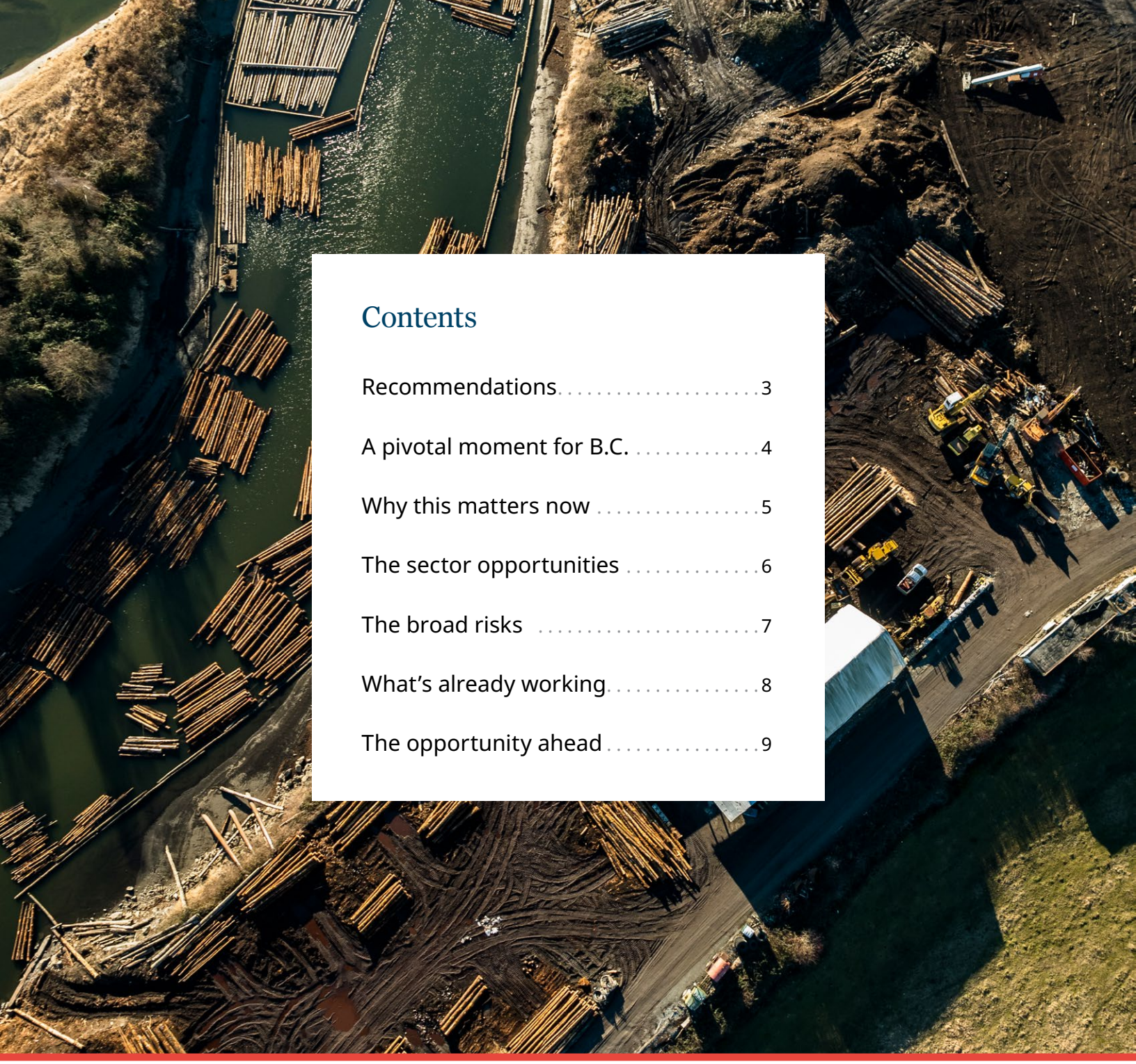
PEMBINA Institute

Building B.C.'s Clean Energy Workforce

Summary of State of Play: The clean energy workforce in B.C.

November 2026





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ZERO EMISSIONS INNOVATION CENTRE

The Pembina Institute wishes to thank the
Zero Emissions Innovation Centre for their generous support.

The Pembina Institute recognizes and affirms these unceded ancestral territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations. We respectfully acknowledge the presence of many diverse First Nations, Inuit, and Métis Peoples on these lands.

These acknowledgements are part of the start of a journey of several generations. We share them in the spirit of truth, justice and reconciliation, and to contribute to a more equitable and inclusive future for all.



Recommendations

British Columbia's clean energy transition presents a generational economic opportunity, but only if governments, industry, and post-secondary institutions act now to build the workforce it needs.

Governments should create the conditions for industry and educators to meet growing workforce demand by

- aligning workforce development programs across jurisdictions and directing funding toward emerging clean growth industries
- requiring companies receiving public funding to deliver benefits for workers and local communities
- expanding training capacity through targeted funding, particularly in rural areas
- maintaining stable, long-term climate policies that give employers and training institutions certainty to invest and plan

They should also convene industry and training institutions to ensure that training pipelines serve local communities and labour market needs.

Employers and industry should take a proactive role in workforce development by

- investing in the ongoing worker training and upskilling, particularly around emerging technologies and evolving skills needs
- expanding recruitment and careers development opportunities to build a diverse and inclusive workforce
- engaging local and Indigenous communities early in project planning to ensure they benefit from major projects

They should also collaborate with government and post-secondary institutions to develop and share labour market data that informs workforce planning.

Post-secondary institutions should adapt training programs to meet evolving industry and workforce needs by

- collaborating with industry and labour to ensure training reflects sectoral and worker needs
- updating curricula and equipment to keep pace with advancing technologies and changing skills requirements
- expanding access to training opportunities for rural learners

Government and industry must provide the funding and partnerships needed to support these efforts.

A labour market plan without stable climate policy will lack the certainty needed to drive labour demand in rapidly growing clean industries, and climate ambition without a labour market plan will slow the transition. To fully realize the benefits of a clean energy economy requires coordinated action across all three groups, starting today.

A pivotal moment for B.C.

B.C.'s growing clean economy — driven by increasing investments in clean electricity, buildings, transportation, critical minerals, and forestry — could add 317,700 jobs to the province's clean energy workforce by 2050. However, B.C. currently lacks the integrated, sector- and region-specific workforce planning required to meet this demand. With persistent skilled trades shortages, constrained training capacity, and evolving climate policies, employment growth risks being stymied.

Across B.C., new investment in clean electricity, critical minerals, and forestry is beginning to reshape local economies. Transmission lines, mines, wind and solar projects, and mass timber facilities are moving from planning to construction throughout the province.

Whether these projects create lasting jobs and prosperity for local communities depends heavily on decisions being made right now, including by governments at every level. Drawing on our report *State of Play: The clean energy workforce in B.C.*, this piece summarizes the clean economy opportunity unfolding in B.C., the workforce risks that could undermine it, and the actions decision-makers can take to ensure that communities capture the benefits.



Why this matters now

The policy landscape that shapes local clean energy investment is currently shifting or uncertain:

- **Provincial climate policy is backsliding.** CleanBC, the province's climate plan launched in 2018, aimed to cut total provincial emissions 40% below 2007 levels by 2030. B.C. is presently projected to achieve only a 15% reduction. An independent review of CleanBC produced recommendations to improve its effectiveness, but implementation timelines remain uncertain. Importantly, workforce-related commitments, such as a "CleanBC Labour Readiness Plan," have not yet materialized.
- **Provincial industrial strategy is advancing**. B.C.'s Look West economic strategy prioritizes fast-tracking major projects, including 18 priority projects that could create up to 8,000 jobs in clean energy and critical minerals. The $40-million Look West Workforce Readiness Initiative (launched June 2026) aims to build training pathways for trades, focusing on rural and remote areas, major project workforce needs, priority sectors, and Indigenous and other equity-deserving groups.
- **Federal sustainable jobs policy remains unclear.** The 2024 Canadian Sustainable Jobs Act commits Canada to supporting workers through the shift to net-zero, including through five-year national action plans. The first plan (2026–2030) largely compiles existing federal programs, with neither new funding nor clear timelines.
- **Federal industrial strategy is taking shape.** The federal government has established a Major Projects Office to help advance projects in the national interest, alongside workforce initiatives such as Team Canada Strong and the Workforce Alliances. New strategies for key growth sectors, including electricity, also acknowledge workforce needs, though offer few new initiatives beyond existing programming. With many of these measures still being rolled out, their impact remains to be seen.

This patchwork of changing provincial and federal policy makes workforce planning increasingly urgent. Investment is moving ahead and workforce planning needs to keep pace. Without targeted workforce policy, B.C. risks delays to major projects and missed opportunities for workers and local communities.



The sector opportunities

B.C.'s clean economy is being driven by five key sectors, each with distinct regional footprints and workforce demands:

- **Clean electricity:** Projects to expand transmission and generation will create significant construction trades and permanent operational jobs. These include the federally fast-tracked North Coast Transmission Line, B.C. Hydro's recent procurement of new wind and solar projects, and the 100% Indigenous-owned Tu Deh-Kah Geothermal project in Fort Nelson.
- **Clean buildings:** Provincial efficiency standards (the BC Energy Step Code) and retrofit programs (CleanBC Better Homes and Better Buildings, BC Retrofit Accelerator) are accelerating green construction, driving demand for skilled workers across the province.
- **Clean transportation:** B.C.'s Electric Highway and expanding electric vehicle adoption are scaling up charging infrastructure and maintenance needs, creating new opportunities for electricians, technicians and other skilled workers across the province.
- **Critical minerals:** The mineral-rich "Golden Triangle" in the province's northwest anchors major projects like the Red Chris mine expansion, which is under consideration for fast-tracking, creating opportunities to grow local employment in a sector that offers some of the highest wages in the province.
- **Forestry:** Amid declines in traditional forestry, investments from the BC Manufacturing Jobs Fund into mass timber and value-added wood processing are creating new low-carbon manufacturing jobs.



Explore the sector fact sheets

Companion fact sheets have been developed that provide a deeper look at workforce needs, key occupations, and challenges for each of the five priority sectors.
pembina.org/pub/state-of-play-clean-energy-workforce-bc

The broad risks

Labour shortages

Projects may be delayed, cancelled, or unable to deliver their expected economic benefits without enough skilled workers to build and operate them. B.C. already faces one of the highest job vacancy rates in the country. The pressure is most acute in the trades that these projects depend on, and the situation is worsening:

- **Skilled trades shortages are growing.** Trades vacancies in B.C. have grown 47% over the past decade, from 10,640 to 15,620, and the province will need to fill another 186,000 trades openings between 2024 and 2034 — 17% of all job openings.
- **Retirements are compounding the gap.** Workers over 55 represent 20.3% of B.C.'s labour force. As experienced tradespeople retire, the loss of institutional knowledge normally passed from journeyperson to apprentice risks creating an "experience vacuum."
- **Immigration changes are tightening the labour supply.** Federal caps on the Temporary Foreign Worker Program and international student permits are reducing available workers in critical occupations, including construction trades and transport truck drivers.
- **Training capacity has not kept pace.** Post-secondary institutions have faced declining public funding, and the federal caps on international students have reduced a major revenue source, leading to program cuts and layoffs, just as demand for training is rising.
- **Rural and northern communities face the steepest barriers.** Northern institutions have far less enrolment capacity per capita than those in the south, and many workers must travel or relocate — often at their own expense — to access specialized training, even as major projects in their own backyard need local workers.

Uneven benefits

Without enough local workers, projects risk relying on outside labour — and without deliberate planning, the benefits that do materialize will not be shared evenly. Major construction jobs often go to non-local workers when host communities lack a trained workforce, limiting lasting local benefits from infrastructure, mining, and generation projects.

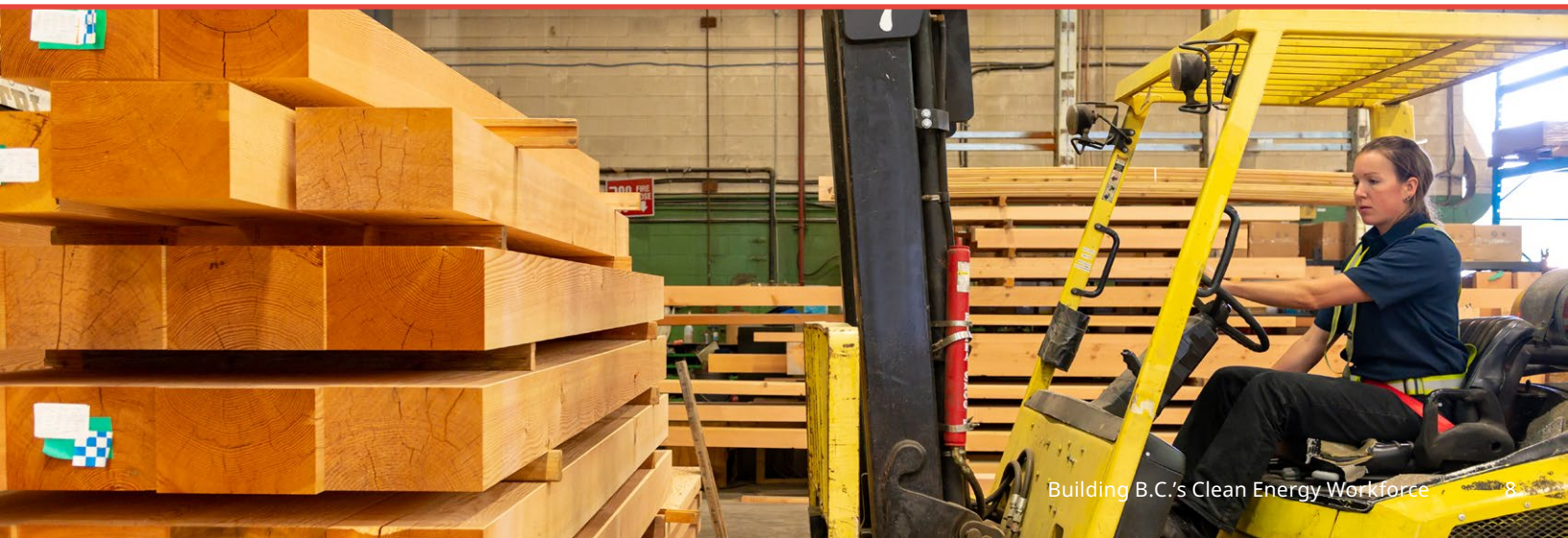
Indigenous workers and women are especially likely to be excluded from sharing equally in the benefits of this workforce growth. Indigenous people make up 5.9% of B.C.'s population — and far more in the north — yet are underrepresented in higher-paying leadership roles, even in sectors like mining where they are otherwise well represented. Women make up less than 20% of workers in sectors such as clean power, green building, and clean transportation and face pay gaps, lower apprenticeship completion, and workplace harassment.



What's already working

A number of existing programs offer practical, adaptable models that governments at all levels and their partners can draw on.

- **Local and equity hiring can be built into project agreements:** The provincially run B.C. Infrastructure Benefits model deploys unionized workers to major infrastructure projects, with targets for local, Indigenous and women workers. The program has achieved twice the provincial construction average for Indigenous workers and 1.5 times the average for women workers, offering a model that municipalities can point to when negotiating community benefits on local projects.
- **Community benefits agreements can be negotiated directly with proponents:** At the Site C dam, BC Hydro invested $1.5 million in local skills and training, demonstrating how project-level investment can support local workers. It also offered another useful lesson: local-hire commitments need clear accountability, not just intention, as organized labour indicated that local apprenticeship commitments were not fully met.
- **Targeted training grants can respond to local labour market needs:** The StrongerBC Future Skills Grant funds short-term training in sectors that the B.C. Labour Market Outlook identifies as facing high demand or skills shortages — including mining as a priority area for 2026 and 2027 — helping residents quickly gain in-demand credentials.
- **Diversification funding can protect jobs during industry transitions:** The BC Manufacturing Jobs Fund has funded mass timber and value-added wood projects that create and protect jobs in forestry-dependent communities, offering an example of economic diversification tied to workforce retention.
- **Upskilling programs can be tied to industrial policy:** The province's expansion of the EV charging network has been accompanied by Go Electric Training programs, with over 800 Red Seal electricians and auto technicians combined trained in charger installation and EV maintenance, respectively. In-person training under this model has largely been concentrated in the south and central B.C. and would be worth extending to more communities in the north, which have many charger installations.
- **Other jurisdictions show what's possible for rural and Indigenous training:** Ontario's Contact North serves over 50,000 online learners a year in rural and remote communities, and the Cree-led Apatisiiwin Skills Development program delivers culturally tailored training and employment services in Eeyou Istchee, northern Quebec.

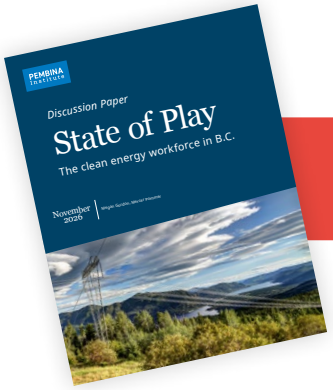


The opportunity ahead

B.C. has the resources and projects to advance the clean energy transition, creating sustainable jobs and economic growth for communities across the province. What it needs now is the workforce to build and maintain it — and that requires coordinated action by governments, employers, and post-secondary institutions.

- Governments must provide policy certainty and funding to scale training capacity.
- Industry must take a proactive lead in internal training, hiring practices, and equity commitments.
- Post-secondary institutions must rapidly adapt their training pipelines to meet the evolving demands of the clean economy.

The decisions made in the years ahead — about local hiring, training partnerships, and community benefits — will determine whether communities across B.C., particularly in the north, become genuine partners and beneficiaries in B.C.'s clean energy future.



Discussion paper, summary report and fact sheets available at:
pembina.org/pub/state-of-play-clean-energy-workforce-bc





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