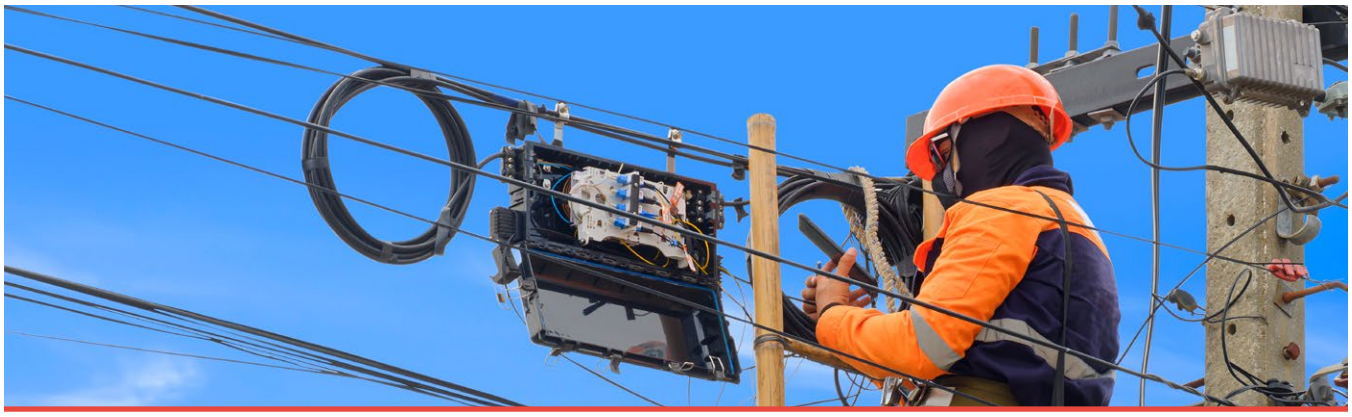
Building B.C.'s clean electricity workforce



British Columbia's clean electricity sector is a foundation of the province's economy and future growth. As industries, buildings and transportation electrify, electricity demand is expected to more than double by 2050, creating opportunities for new energy projects and skilled workers across the province.

- Hydropower supplies 91% of B.C.'s electricity. The province's utilities sector employed 17,900 people in 2024, including in electricity, natural gas and water systems.
- BC Hydro's recent Calls for Power awarded contracts for 14 wind and solar projects, creating up to 3,500 construction jobs. BC Hydro also issued its first call for grid-scale battery storage.
- BC Hydro's $1-billion Power Smart 2.0 plan will support energy efficiency over three years, generating an estimated 3,500 jobs annually across the utility and building sectors.



B.C.'s clean electricity economy includes utility-scale renewable power generation (hydroelectricity, wind, solar, and geothermal), distributed energy resources, and electricity infrastructure.

What kinds of jobs are part of B.C.'s clean electricity economy?

- Power line technicians
- Electrical and power systems engineers
- Operations and project managers
- Construction tradespeople
- Heavy equipment operators
- Procurement managers

Growth opportunity

B.C.'s electricity system will need to increase to support economy-wide electrification.

- In a net-zero scenario, B.C.'s renewable energy sector could employ 27,800 workers by 2050, more than four times as many as in 2023.
- New renewable energy and infrastructure projects can create construction and operations jobs in communities across the province.
- Expanded clean electricity capacity can enable growth in sectors such as transportation, buildings and critical minerals.



Workforce challenge

Capturing the economic benefits of clean electricity growth will depend on having enough skilled workers in the right places at the right time.

- Rural and remote communities may lack the local expertise needed to fill job opportunities, increasing reliance on workers from outside the region.
- Low awareness of the positive aspects of clean electricity careers is contributing to recruitment challenges among young people and women.

What will unlock growth?

Build local workforce capacity

Governments, employers and industry should use major projects to offer expanded training opportunities and support local hiring, particularly in rural and remote communities.

Expand recruitment and career pathways

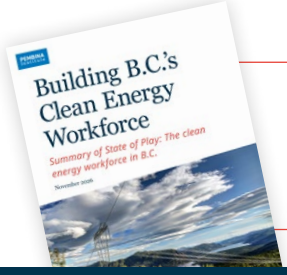
Employers, industry and training providers should promote electricity sector careers and create pathways for workers entering from related industries.

Coordinate workforce planning

Governments, employers, industry and training providers should convene to ensure training programs are aligned with industry needs and projected labour market demand.

Why does this matter for B.C.?

Clean electricity is already an important part of B.C.'s economy and will play an even larger role as the province electrifies. With a strong workforce strategy that includes planning, skills development and training, workers, businesses and communities across B.C. can share in the economic benefit from investments in renewable energy and electricity infrastructure.



Read Summary of *State of Play: The clean energy workforce in B.C.* for economy-wide workforce recommendations: pembina.org/pub/state-of-play-clean-energy-workforce-bc

Building B.C.'s clean buildings workforce



British Columbia's buildings sector is one of the province's largest sources of employment and plays an important role in addressing affordability while reducing emissions through energy-efficient construction and building retrofits. As building standards like B.C.'s Energy Step Code and Zero Carbon Step Code evolve and building heating, cooling and hot water systems electrify, demand for skilled workers will continue to grow.

- Building construction employed 226,700 people in 2024, with an additional 53,700 working in architecture, engineering and related services.
- Buildings account for 14% of B.C.'s greenhouse gas emissions, making energy efficiency and electrification key climate solutions.
- B.C. has committed to making all new homes net-zero energy ready by 2032.



The clean buildings sector encompasses both new construction and building retrofits.

What kinds of jobs are part of B.C.'s clean buildings sector?

- Mechanical engineers and architects
- Tradespeople: electricians, carpenters, refrigeration and air conditioning mechanics
- Emerging roles: building envelope specialists, energy advisors, building automation and control technicians, specialized project managers

Growth opportunity

Meeting B.C.'s housing and climate goals will require a workforce with the skills to build and retrofit the buildings of the future.

- Construction is expected to generate 8% of job openings in B.C. by 2035.
- In a net-zero scenario, B.C.'s clean buildings sector could grow to 78,100 workers by 2050.
- Higher building performance standards and supportive retrofit programs will increase demand for workers with expertise in energy efficiency, building electrification and resilience.



Workforce challenge

B.C. will need more skilled workers equipped with the knowledge and skills to keep pace with demand for new construction and retrofits.

- Labour shortages are already affecting key occupations, including electricians and carpenters.
- Workers will need ongoing opportunities to build new skills as technologies, materials and building standards evolve.
- Recruitment and retention challenges, including barriers facing women and other underrepresented groups, continue to limit workforce growth.

What will unlock growth?

Expand skills development

Governments, employers, industry and training providers should expand training, apprenticeships and upskilling in energy efficiency, retrofits and building electrification, while supporting continuous learning.

Strengthen local workforce capacity

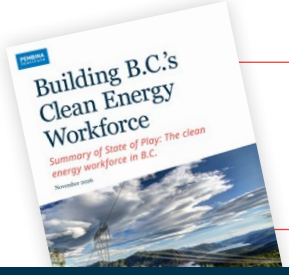
Governments should provide targeted funding to employers, industry and training providers to improve access to training in rural and remote communities.

Improve recruitment and retention

Employers, industry and governments should address barriers to entering and remaining in construction careers and improve job quality across the sector.

Why does this matter for B.C.?

B.C.'s construction workforce is already building the homes and infrastructure the province needs. With a strong workforce strategy that includes planning, skills development and training, workers, businesses and communities across B.C. can benefit from growing demand for energy-efficient, resilient buildings.



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Building B.C.'s clean transportation workforce



Transportation is one of British Columbia's largest industries and will play an important role in the province's clean energy economy. As vehicles electrify and charging infrastructure expands, workers across the transportation sector will need new skills.

- Transportation employed 123,200 people in 2024, with an additional 43,800 working in sales and 25,800 in repair and maintenance.
- B.C.'s zero-emission vehicle sector includes nearly 400 companies, employs more than 8,000 workers, and contributes $920 million to the provincial GDP.
- B.C. has built one of Canada's most extensive public charging networks and plans to triple its size by 2035.



The clean transportation sector includes design, manufacturing, sales, repair and maintenance, and commercial and freight transport.

What kinds of jobs are part of B.C.'s clean transportation sector?

- Electrical and mechanical engineers
- Automotive sales and service workers
- Electricians and EV charger installers
- Transit and commercial vehicle operators
- Fleet managers and vehicle procurement specialists
- Transportation planners

Growth opportunity

Transportation electrification is creating opportunities across B.C.'s transportation workforce and broader clean economy.

- In a net-zero scenario, B.C.'s electric vehicle (EV) sector could grow from 5,100 jobs in 2025 to more than 205,000 by 2050.
- Growing EV adoption will increase demand for workers in charging infrastructure, vehicle maintenance, software and logistics.
- B.C.'s critical minerals and advanced manufacturing capabilities provide opportunities to capture more value across the EV supply chain.



Workforce challenge

B.C. will need workers who have the skills to keep pace with rapidly changing transportation technologies.

- Dealerships and repair shops face emerging gaps in EV-specific skills and expertise.
- Training programs must adapt to evolving vehicle technologies.
- Policy uncertainty makes it harder for employers to plan investments and anticipate future workforce needs.

What will unlock growth?

Provide long-term investment certainty

Governments should support long-term workforce planning through clear, stable policy.

Coordinate workforce planning

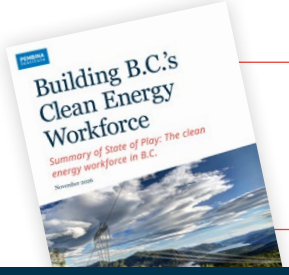
Governments, employers, industry and training providers should convene to ensure training programs are aligned with industry needs and projected labour market demand.

Expand skills development

Employers, industry and training providers should scale up training opportunities that support continuous learning as transportation technologies evolve.

Why does this matter for B.C.?

Transportation electrification can create jobs, attract investment and spur innovation across B.C. With a strong workforce strategy that includes planning, skills development and training, workers, businesses and communities can share in the benefits of this growing sector.



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Building B.C.'s critical minerals workforce



British Columbia's mining sector has an opportunity to supply the minerals needed for batteries, electricity infrastructure and other clean technologies. As global demand for these products grows, the province is well positioned to expand mining, processing and manufacturing.

- Mining, mineral processing, metal manufacturing, and support activities employed 49,400 people in B.C. in 2024.
- Critical minerals projects are a priority for both the provincial and federal governments, with eight mines and one refinery expansion identified for fast-tracking.
- Mining jobs offer competitive wages, with median weekly earnings of around $2,140 compared with $1,210 across all industries.



The critical minerals sector includes mining, processing and metal manufacturing.

What kinds of jobs are part of B.C.'s critical minerals sector?

- Heavy equipment operators
- Transport truck drivers
- Underground production and development miners
- Mining and quarrying supervisors
- Construction millwrights and industrial mechanics

Growth opportunity

Growing global demand for clean technologies creates opportunities to expand B.C.'s critical minerals value chain.

- New mining, processing and manufacturing projects can generate employment across the province and enable B.C. to capture more economic value from its mineral resources.
- BC's mining workforce could grow by 5,400 to more than 12,000 workers over the next decade.
- Critical mineral development can support economic growth in northern, rural and Indigenous communities.



Workforce challenge

B.C. will need more workers with the requisite skills to support critical minerals development.

- Employers face shortages in key occupations, including heavy equipment operators, industrial electricians and geoscientists.
- Mining struggles to attract youth due to concerns about safety, remote work locations and time away from family and community. Women also remain underrepresented.
- Training can be hard to access in communities seeking to benefit from local projects.

What will unlock growth?

Improve access to training

Governments should provide targeted funding to employers, industry and training providers to expand training opportunities for local workers.

Strengthen recruitment

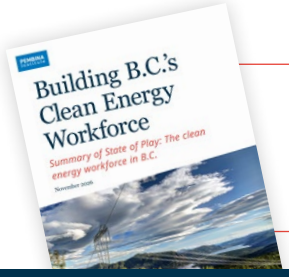
Employers and industry should promote modern mining careers by highlighting the competitive wages and technological advances that have improved safety.

Coordinate workforce planning

Governments should bring together industry, Indigenous communities and training providers to align workforce planning and training with labour market needs.

Why does this matter for B.C.?

Critical minerals represent one of B.C.'s strongest opportunities to grow its resource economy while supporting the global transition to cleaner technologies. With a strong workforce strategy that includes planning, skills development and training, new projects can create lasting economic opportunities for communities across the province.



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Building B.C.'s forestry workforce



Forestry has long been a foundation of British Columbia's economy, supporting workers and communities across the province. As demand grows for lower-carbon building materials, mass timber and other value-added wood products could create new opportunities to diversify the sector and build on existing expertise.

- The forestry sector employed 42,800 people in B.C. in 2024: 14,800 in upstream activities and 28,000 in downstream wood and paper manufacturing.
- In 2025, the forestry sector produced 19.4% of B.C.'s international exports, making it one of the province's largest export sectors.
- B.C. is Canada's leading mass timber jurisdiction, with supportive policies, 22 companies, more than 700 workers and 370 mass timber buildings completed or underway.



The forestry sector includes upstream activities such as logging and downstream wood, paper, and value-added product manufacturing.

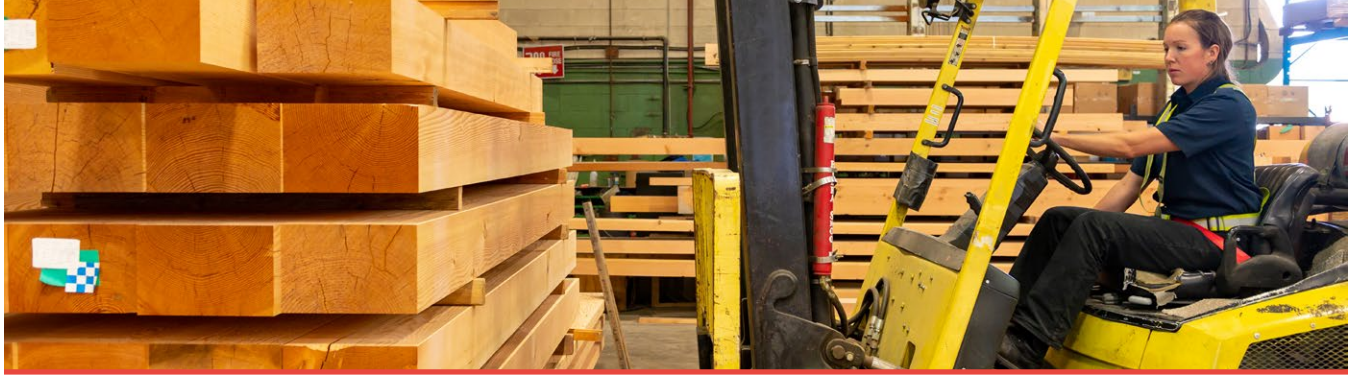
What kinds of jobs are part of B.C.'s forestry sector?

- Logging labourers, machine operators, and fellers
- Forestry technologists and technicians
- Wood and paper processing machine operators
- Supervisors in logging and forest product processing

Growth opportunity

Expanding markets for B.C. wood products can create jobs across the forestry supply chain and help diversify economies in forestry-dependent communities.

- Mass timber development could create an additional 1,880 jobs in technology, upstream forestry, engineering and design, and 2,350 manufacturing jobs by 2035.
- Value-added products, including mass timber, can expand domestic and export markets, while provincial policies that encourage their use can help grow demand for B.C. wood products.



Workforce challenge

Forestry communities are experiencing significant economic challenges as the sector adapts to market pressures and mill closures. In 2014, upstream forestry activities and downstream manufacturing employed 65,200 people, 52% more than in 2024.

- Workers need opportunities to develop new skills for mass timber and other value-added manufacturing.
- Training and experience with new technologies are less accessible to workers in many rural and northern communities.

What will unlock growth?

Expand reskilling opportunities

Governments, employers, industry and training providers should help experienced wood-product manufacturing workers gain the skills needed for higher value-added wood manufacturing.

Support new markets

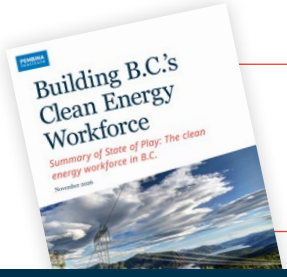
Governments and industry should encourage investment in new markets that create diverse job opportunities in forestry-dependent communities.

Build local workforce capacity

Governments, employers, industry and post-secondary institutions should improve access to training and hands-on learning in rural and northern communities.

Why does this matter for B.C.?

Forestry remains an important part of B.C.'s economy and supports many rural and northern communities. With a strong workforce strategy that includes planning, skills development and training, new markets for wood products can create opportunities for workers while helping communities diversify their economies.



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