

Central Canada's Energy Workforce

Regional Labour Market Outlook
to 2035

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Canada

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Key Insights



Central Canada's role in global energy security

Geopolitical conflict has highlighted the fragility of the global energy supply and elevated energy security as a priority. Central Canada's role in global energy security is less about extracting energy resources and more about enabling, manufacturing, financing and innovating Canadian infrastructure that allows secure and affordable energy to reach international markets.



Central Canada fuels North America's economy while responding to the emissions challenge

Central Canada plays a vital role in supplying fuel to North America's economy, even as momentum builds to produce low-carbon fuel. Central Canada's energy industry is advancing sustainable practices and investing in low-carbon energy sources such as biomass-based fuels and low-carbon hydrogen to achieve emissions-reduction goals.



Workforce impacts beyond industry activity

Industry is producing more with fewer workers. Productivity gains have been realized by technology adoption and consolidation across the industry. An increasingly complex business, regulatory and geopolitical environment is shaping evolving skill requirements.





An integrated energy system

Central Canada's energy industry is increasingly integrated, along with its workforce. Foundational technologies, equipment, skills and expertise are being adapted and applied in innovative ways to support the development of low-carbon energy sources. As a result, many of the qualifications required in emerging energy sectors already exist within the established energy workforce.



Monitoring leading indicators of industry activity

As Central Canada explores low-carbon solutions and supports a potential generational shift in its global energy role, Careers in Energy (CIE), along with industry collaborators, continues to monitor policy, regulatory and investment conditions that influence energy production and workforce needs.

A single scenario for Central Canada's energy workforce outlook

To provide a timely update on significant changes in Canada's energy landscape since 2024, CIE evaluated a single scenario to project potential workforce requirements through 2035. This streamlined approach delivers an up-to-date labour market outlook to inform near- and medium-term workforce planning. This outlook establishes a benchmark for Central Canada's energy labour market and identifies key indicators to monitor that may signal significant shifts in future workforce needs.



Current Measures

Based on investment and development leading to energy production most likely to occur based on announced plans, policies and programs as of **March 2026**.



By the numbers

Direct employment



7,800

people are **directly** employed by Central Canada's energy industry



6 integrated Canadian energy sectors are included in this outlook:

conventional exploration and production (E&P), energy services, pipelines, petroleum refining, low-carbon hydrogen and biomass-based fuels



81 occupations

are included in Careers in Energy's (CIE) labour market modelling system



-360

potential **direct** jobs are projected to be lost between 2026 and 2035



2,170

energy workers are **eligible to retire** over the forecast period



1,810

net hiring requirements projected over the forecast period, if Central Canada's energy industry fills all job openings created by industry activity and retirements



2.2x

higher average total compensation in the energy industry compared to the Canadian average

Indirect employment



101,600

indirect jobs across Central Canada are sustained annually to support industry's operations supply chain



5,400

jobs are created across the economy for every \$1 billion spent on developing and constructing energy infrastructure projects



Central Canada's Role in Global Energy Security



Central Canada's role in providing global energy security lies in producing low-carbon fuel, strengthening supply chains and advancing emerging energy sectors and technologies.

While Central Canada is not a large-scale producer of oil or natural gas, it is a strategically important producer of refined petroleum products and supplier of transportation fuels to eastern Canada and the US. The region represents approximately 42% of Canada's total refining capacity.^{1,2}

For the purposes of this report, Central Canada's energy industry includes Ontario (ON) and Quebec (QC).

Central Canada's energy industry directly employs approximately **7,800** people, or **4%** of the country's total energy workforce. In 2025, an additional 18,000 residents of Central Canada were estimated to be directly employed in the oil and gas sector outside the region.³ Rotational work arrangements in the oil sands and energy services sectors offer these energy workers opportunities to remain residents of Central Canada while working quality jobs in other energy-producing parts of the country.

The importance of Central Canada's workforce in sustaining the energy industry's operational supply chain is highlighted by the estimated **101,600 indirect jobs** in the region. These jobs are found across the finance, insurance and real estate and manufacturing sectors.

In addition, for every \$1 billion invested in developing and constructing energy infrastructure projects, an additional 5,400 jobs are generated across the broader Canadian economy.⁴

Building on Central Canada's energy strengths

Central Canada's employment outlook is shaped by its regional strengths, including petroleum refining, pipeline transportation, its role as a natural gas storage and marketing hub, and the ongoing development of decarbonization pathways such as biomass-based fuels and low-carbon hydrogen.

Biofuels turn Canadian crops into economic growth, supporting farm families and rural economies, strengthening national energy security by diversifying Canada's fuel supply, all while reducing greenhouse gas emissions.⁵ – Fred Ghatala, President, Advanced Biofuels Canada



Central Canada's supply chain critical to providing energy security

Geopolitical conflict has highlighted the fragility of the global energy supply and elevated energy security as a priority. Canada is increasingly seen as a reliable global supplier of diverse energy sources. Central Canada's role in global energy security is less about extracting energy resources and more about enabling, manufacturing, financing and innovating the systems that allow secure and affordable energy to reach international markets.

Steel is foundational to the established and emerging energy economy—even more so as Canada looks to expand its energy infrastructure. The trade dispute with the US has demonstrated that access to essential industrial inputs, such as steel, cannot always be taken for granted. This has prompted renewed discussion about the importance of maintaining domestic production capabilities to support strategically important industries.

In Canada, we know energy connects us. Tenaris steel pipes, manufactured in Ontario and delivered through our Rig Direct® service network to oil and gas operators across the country, enables Canadian energy sovereignty. With this more than \$300 million CAD investment, on top of more than \$350 million CAD invested since 2020, we illustrate Tenaris's steadfast commitment to Canadian manufacturing. Today's milestone builds on this momentum to expand Canada's domestic supply chain for Oil Country Tubular Goods (OCTG) and line pipe.⁶

– Martin Castro, President, Tenaris in Canada



Monitoring leading indicators of industry activity

Canada is on the verge of major growth opportunities. This outlook establishes a baseline for workforce requirements across Central Canada's established and emerging energy sectors.

Amid significant uncertainty in the global energy system, CIE, in collaboration with industry partners, continues to monitor factors shaping Canada's energy production and workforce needs. Potential regulatory and policy changes, the implementation of the Alberta–federal Memorandum of Understanding, major project approvals, and individual company plans to expand transportation infrastructure for export markets and for production from emerging energy sectors could significantly affect Canada's energy workforce needs. The advancement of major energy infrastructure projects would also significantly impact indirect energy jobs in Central Canada.

At the same time, the rapid growth of AI is driving demand for data centres, and potentially one of the largest infrastructure buildouts in Canada's digital economy. Data centres drive massive energy demand, and Canada has the potential to meet that need through access to low-carbon hydroelectricity, nuclear and abundant, affordable, cleaner-burning natural gas-generated power.

Labour market modelling system

This report provides an overview of the energy workforce projections for Central Canada from 2026 to 2035, driven by investment in the region's established and emerging energy sectors.

CIE undertook a significant expansion of its labour market modelling system in advance of producing its 2024 national and regional labour market outlooks. To accurately reflect changes in Canada's energy system, the model was expanded beyond the established oil and gas industry (conventional E&P, oil sands, energy services, pipelines and petroleum refining), to include emerging energy sectors and technologies—LNG, low-carbon hydrogen, biomass-based fuels and CCS.

An integrated energy system

A key insight from the model expansion work was the extent of integration between the established and emerging sectors. These sectors work interdependently to provide low-carbon energy solutions, which contribute to a more robust and dynamic job market in Canada (Figure 1).

Occupational scope

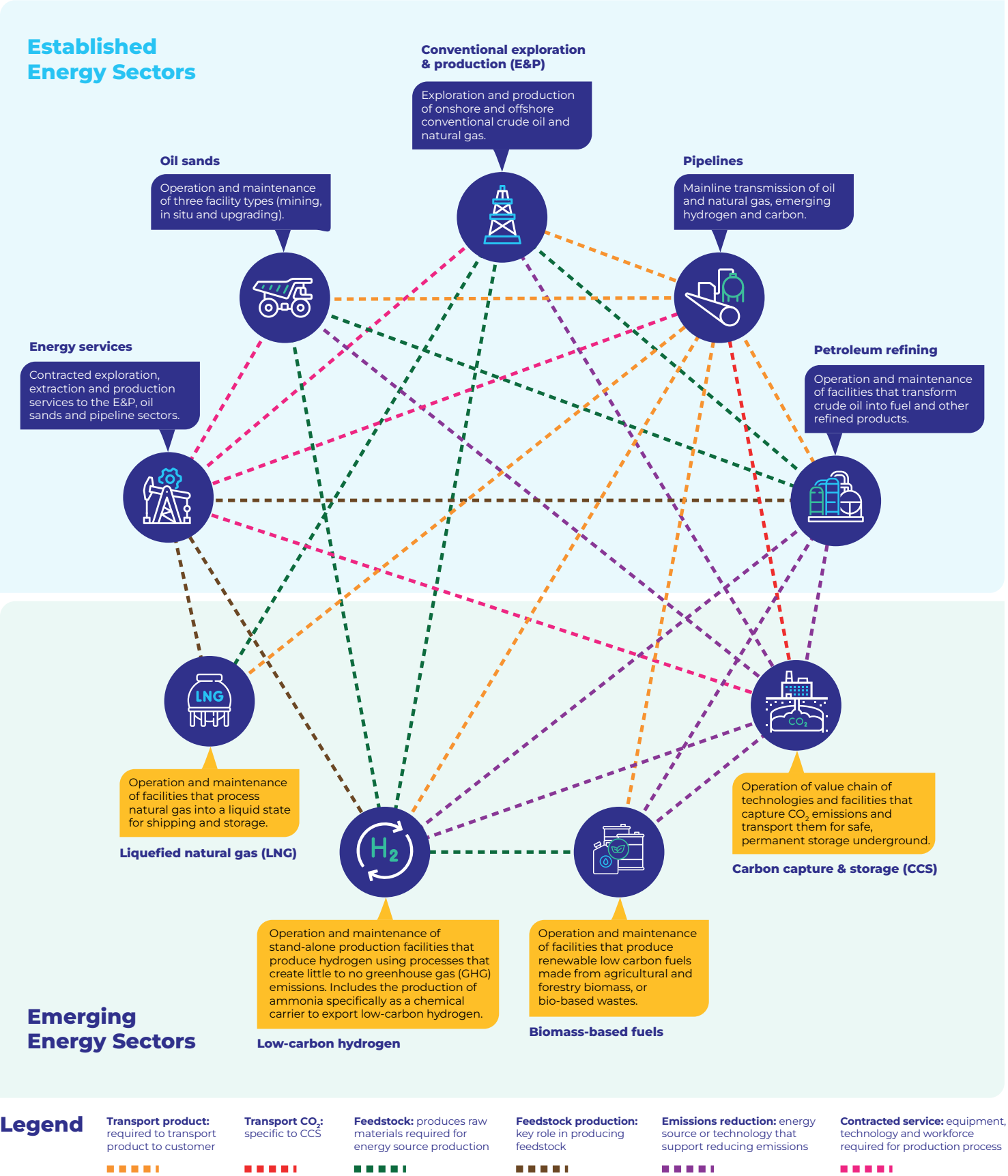
CIE's labour market modelling system covers 81 occupations, as defined by the National Occupational Classification (NOC)⁷ system. Workforce projections focus on individuals directly employed by companies⁸ involved in the forecasted production, operations and maintenance activities of in-scope sectors.⁹

National and other regional reports available

This report complements the *National Labour Market Outlook to 2035* and regional reports; Western Canada and Atlantic Canada.



Figure 1: Sector scope of Careers in Energy’s labour market modelling system



Outlook Scenario: Current Measures



To provide a timely update on significant changes in Central Canada's energy landscape since 2024, **CIE evaluated a single scenario to project potential workforce requirements through 2035.**

This streamlined approach delivers an up-to-date labour market outlook to inform near- and medium-term workforce planning. This outlook establishes a benchmark for Central Canada's energy labour market, while also identifying key indicators to monitor that could signal significant shifts in future workforce needs.

- The **Current Measures** scenario is based on investment and development leading to energy production most likely to occur based on announced

plans, policies and programs as of **March 2026** (Figure 2).

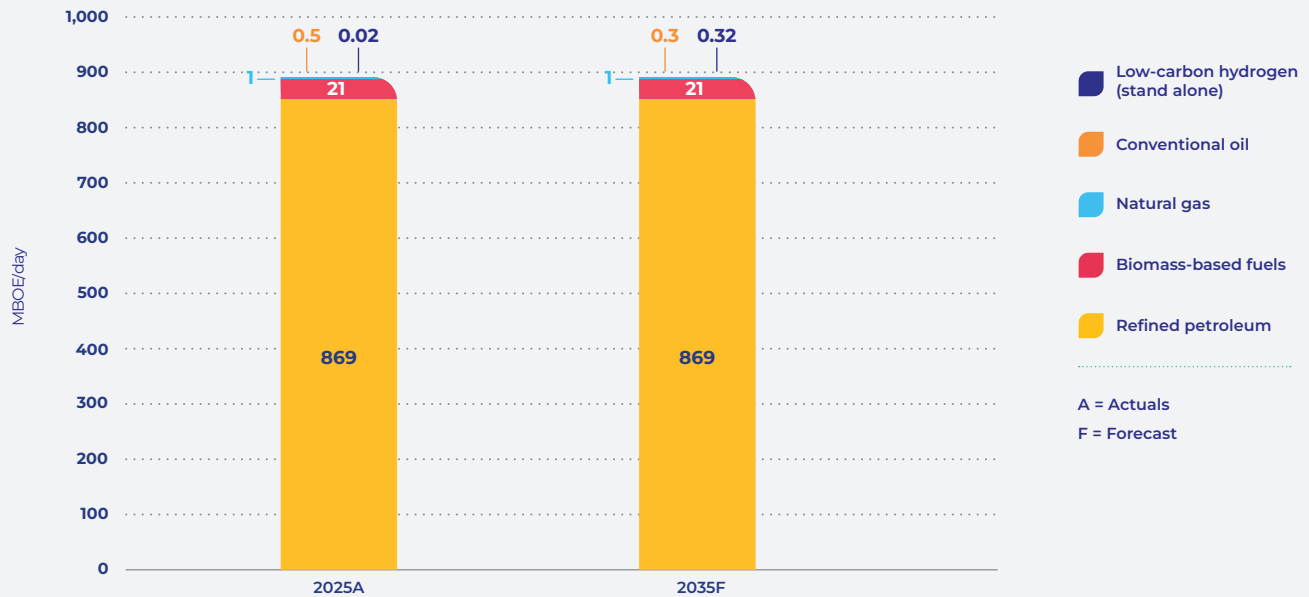
Scenario assumptions report available

Find detailed information on CIE's scenario approach and underlying assumptions online at [CareersinEnergy.ca](https://careersinenergy.ca)



Figure 2: Central Canada's production by energy sector, Current Measures, 2025 and 2035

In thousands of barrels of oil equivalent per day (MBOE/day)



Central Canada scenario assumptions

Production forecasts for conventional oil and natural gas

Central Canada is not a major producer of oil and natural gas. Under the Current Measures scenario, oil production is projected to decrease over the forecast period, while natural gas production remains stable.

Major natural gas trading hub located in Ontario

While not a significant producer of natural gas, Ontario is home to one of North America's major natural gas trading hubs and pricing benchmarks, the Enbridge Gas Dawn Hub. Dawn has about 30% of Canada's underground natural gas storage capacity. Conventional and renewable natural gas from multiple supply pipelines is injected into depleted reservoirs during periods of lower demand and withdrawn during winter, when heating demand peaks. It improves price stability and affordability and reduces exposure to short-term supply disruptions.¹¹

Refining Canada's petroleum remains stable as the sector transforms

Production of refined petroleum products in Central Canada is forecast to remain stable until 2035. The region is home to seven of Canada's 15 refineries—five in Ontario, two in Quebec—accounting for 42% of the country's petroleum refining capacity.¹²

Rather than investing in production increases, refining companies are focused on reducing emissions by upgrading equipment, improving waste heat recovery and reuse, and deploying CCS. They are also focused on meeting the requirements of the Clean Fuel Regulations by co-processing with biomass-based feedstocks to produce a lower-carbon fuel. Co-processing does not require building new stand alone biofuel plants. Instead, it leverages existing refinery equipment to integrate renewable feedstocks and reduce the carbon intensity

of fuels like gasoline, diesel and jet fuel. Two of Central Canada's oil refineries have already incorporated co-processing into their operations, and the others are working on it.¹³ The addition of co-processing to petroleum refining increases the complexity of feedstock supply chains and the need to ensure material compatibility.

In order to get the carbon intensity down, you need to blend higher percentages of (renewable) fuel to do that. The upgrades to add co-processing units at already-functioning refineries take less time and capital than building them from the ground up.¹⁴

– David Schick, Vice President Western Canada, Innovation and Regulatory Affairs, Canadian Fuels Association



Photo courtesy of Enbridge. Dufferin Organics Processing Facility in Toronto, Ontario.



Biomass-based fuel production impacted by US regulations

Stand alone biomass-based fuel production facilities—particularly ethanol plants—are more prevalent in Central Canada than co-processing at regional refineries. However, stand alone facilities face significant challenges competing within the broader North American market.

The sector is highly integrated with the US and has experienced substantial disruption stemming from US policy changes, most notably the Inflation Reduction Act's Section 45Z Clean Fuel Production Credit. This incentive has strengthened the competitiveness of US-based biofuel production, placing Canadian producers at a disadvantage in shared markets. At the same time, the policy has not affected the competitiveness of domestic agricultural feedstocks, thereby intensifying competition for key inputs and putting additional pressure on Canadian producers.

Under the Current Measures scenario, biomass-based fuel production in Central Canada is projected to remain largely flat through 2035. CIE will continue to monitor the impact of upcoming amendments to the Clean Fuel Regulations, particularly their effectiveness in improving domestic competitiveness and driving future sector growth, including any potential increase in workforce demand.

There's a significant opportunity for provinces. Especially provinces that have renewable diesel production in them, or have recent canola crush capacity in them, to look at expanding the minimum volume requirements to ensure that there's a market for those fuels that isn't at risk by foreign trade, distortion and turbulence.¹⁵ – Fred Ghatala, President, Advanced Biofuels Canada

Low-carbon hydrogen potential leverages abundant low-carbon electricity

In 2026, Central Canada's low-carbon hydrogen sector remains relatively small. Ontario and Quebec both aim to move from demonstration projects to commercialization, leveraging their abundant low-carbon electricity supply and focusing on domestic industrial and transportation energy needs. In the Current Measures scenario, low-carbon hydrogen production increases slightly by .01 MTPA (.3 MBOE/day).

Building on low-carbon hydrogen successes

Ontario is home to North America's first hydrogen blending project. Enbridge Gas has blended low-carbon hydrogen into its natural gas distribution network since January 2022. The operation stores surplus electricity generated from the Markham Power-to-Gas facility as pure hydrogen and blends it with natural gas to create a lower-carbon energy source without impacting costs, reliability or safety.¹⁶ **In Quebec, Air Liquide has incorporated a 20 MW proton exchange membrane (PEM) electrolyzer into its industrial gases production plant at Bécancour. Operating since 2021, it is Canada's largest electrolysis facility.**¹⁷

Workforce impacts beyond industry activity

A range of forces shape how many energy workers are needed and the skills they require.

Technology and equipment advances are improving labour productivity

A wide variety of technologies and advanced equipment are deployed across the energy industry. The breadth and depth of deployment depend on several factors,



including company size, asset diversity and complexity and organizational maturity.

The automation of workflows and the increased use of AI and machine learning (ML) enable companies to centralize certain operations—not only in Canada, but also globally.

Company consultations indicate that sentiment is a regulating factor in the pace and integration of AI and automation. Safety is key, and a longer-term view of the potential impact on the ability to attract workers and sustain social licence to operate is also a consideration.

CIE's labour market model can be adjusted for sector-level productivity. The workforce and occupational

impacts of AI, automation and robotics were specifically explored during industry consultations, as were improvements in equipment and materials.

Complexity of the business environment driving skills and knowledge requirements

Geopolitics, energy addition, regulatory and policy frameworks, and stakeholder and Indigenous engagement are key drivers for relevant skills and knowledge. Although there are few occupations dedicated to strategy and shaping the industry's future, their significance is substantial.



Photo courtesy of Enbridge. Dawn Hub natural gas storage and trading hub near Sarnia, Ontario.



Central Canada Labour Market Outlook to 2035

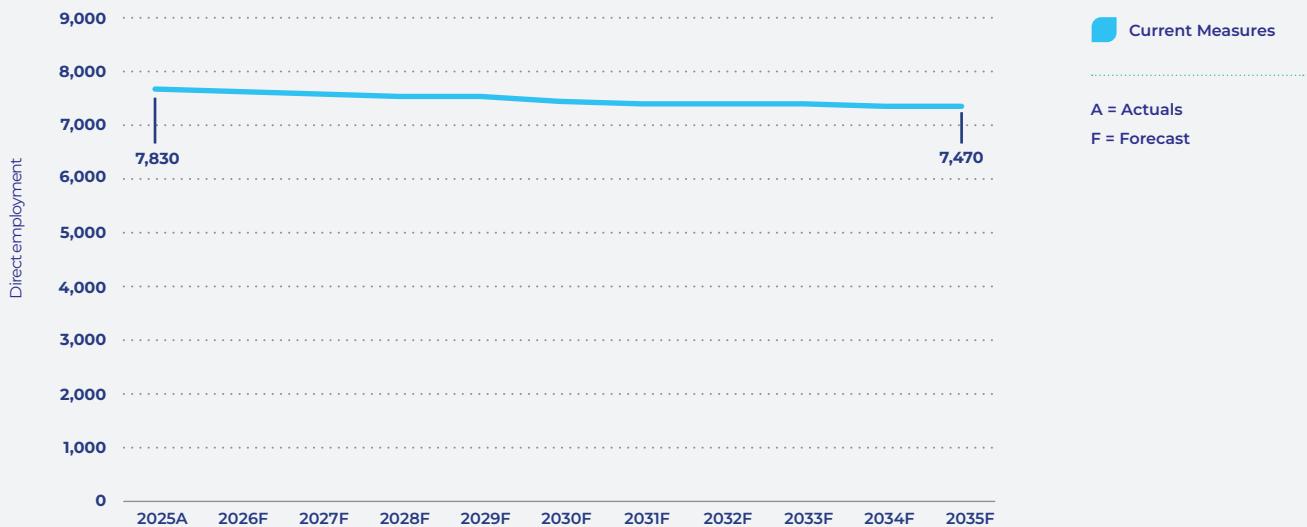


Central Canada's energy industry workforce is projected to **remain relatively stable** between 2026 and 2035.

In 2025, the baseline year for this outlook, in-scope sectors accounted for 7,830 direct jobs across Central Canada. Under the Current Measures scenario, employment is projected to remain relatively stable,

with a modest decline of approximately 360 jobs, based on current industry investment and activity assumptions. (Figure 3).

Figure 3: Central Canada direct employment by year, 2025-2035



Central Canada's established energy workforce is projected to contract slightly, while employment in

emerging energy sectors remains relatively stable. (Table 1).

Table 1: Central Canada direct employment and change in employment by sector, 2025 and 2035

	Sector	Employment in 2025A	Estimated employment in 2035F	Change in employment (% change)
	TOTAL	7,830	7,470	-360 (-5%)
Established energy sectors	Conventional E&P	50	20	-30 (-60%)
	Energy services	80	30	-50 (-63%)
	Pipelines	2,150	1,870	-280 (-13%)
	Petroleum refining	4,550	4,550	minimal*
	Sub total	6,830	6,470	-360
Emerging energy sectors	Biomass-based fuels	990	990	minimal*
	Low-carbon hydrogen	10	10	minimal*
	Sub total	1,000	1,000	minimal*

* Direct employment is projected to remain flat. Numbers may not add up due to rounding



Photo courtesy of Enbridge. Dawn Hub natural gas storage and trading hub near Sarnia, Ontario.

Energy jobs are quality jobs

Energy employment in Canada aligns strongly with Statistics Canada's *Quality of Employment framework*, which assesses several dimensions including income and benefits, employment stability, working conditions and skills and training.¹⁸ Across these indicators, energy jobs consistently outperform the Canadian average. The industry is characterized by a high share of full-time, permanent employment and a strong concentration of skilled trades, technologists, engineers and professional occupations, supported by ongoing training and certification. As a result, energy workers are more likely to receive employer-provided medical and dental benefits, paid vacation leave and paid sick leave than workers in part-time or temporary jobs.

While some energy work can involve non-standard schedules or remote work arrangements, these are offset by significantly higher compensation and sustained demand for specialized skills. In 2024, average total compensation in Canada's established energy sectors¹⁹ reached \$171,100—more than double (2.2×) the Canadian average of \$78,100²⁰—reinforcing energy's role as a source of high-quality, well-compensated employment.

Across Central Canada, average total compensation levels remain elevated, with Ontario at \$230,000 and Quebec at \$205,600, reflecting the strong earnings potential of specialized energy-related work.



Net Hiring Requirements



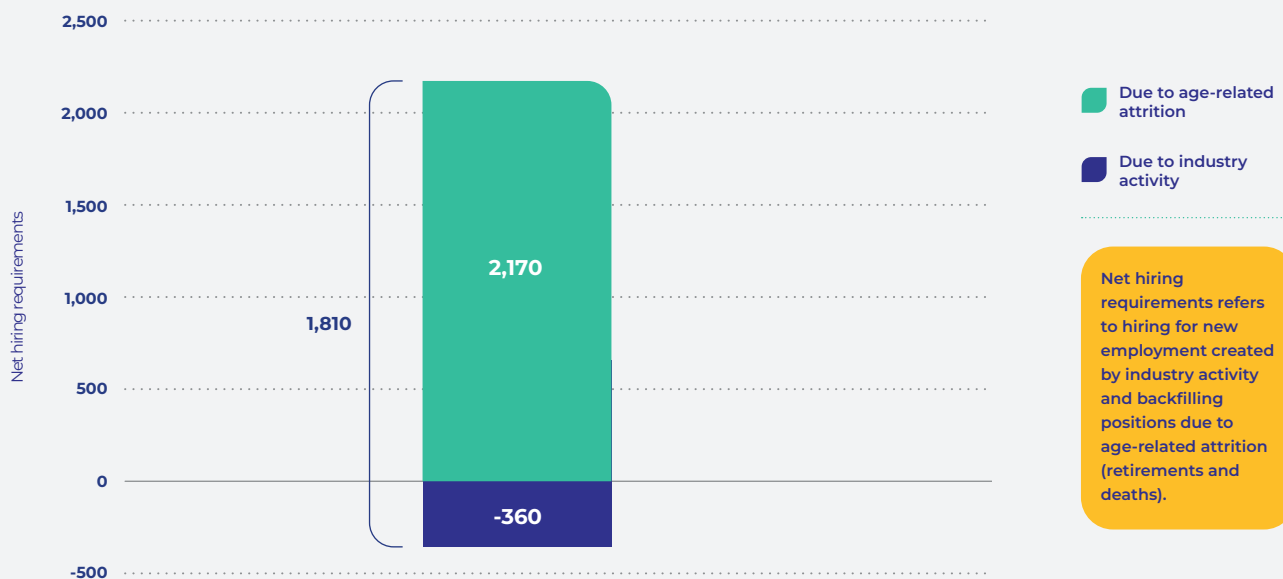
Based on annual age-related attrition rates, approximately **2,170 energy workers are eligible to retire** by 2035, helping offset potential job losses in the industry.

Age-related attrition drives hiring in Central Canada

Job vacancies due to age-related attrition significantly outpace those generated by industry activity in the region and are projected to be the key driver of hiring across Central Canada's energy industry.

If Central Canada's energy industry replaces all job openings created by age-related attrition, net hiring requirements will total over 1,800 jobs over the forecast period. (Figure 4).

Figure 4: Central Canada net hiring requirements forecast, 2026-2035



Near-term risk of an aging workforce in some sectors and occupational groups

The number of job vacancies that could be created within the pipelines, petroleum refining and biomass-based

fuels sectors by energy workers eligible for retirement is substantial. (Table 2)

Table 2: Central Canada’s net hiring requirements (NHR) by sector, 2026-2035				
	Sector	Industry activity	Age-related attrition	NHR
	TOTAL	-360	2,170	1,810
Established energy sectors	Conventional E&P	-30	10	-20
	Energy services	-50	20	-30
	Pipelines	-280	630	350
	Petroleum refining	minimal*	1,260	1,260
	Sub total	-360	1,920	1,560
Emerging energy sectors	Biomass-based fuels	minimal*	250	250
	Low-carbon hydrogen	minimal*	minimal*	minimal*
	Sub total	minimal*	250	250

Numbers may not add up due to rounding

*Direct employment is projected to remain flat.



Photo courtesy of Enbridge. Power-to-Gas Facility and hydrogen blending facility in Markham, Ontario

Table 3 lists the impact of age-related attrition and potential net hiring requirements on Central Canada's energy occupational groups. Several companies report that energy workers are staying in the industry beyond retirement eligibility. Some companies express greater concern about the loss of mid-career talent, with a portion of individuals leaving not only their roles but, in some cases, the industry.

Organizations report taking a strategic approach to workforce planning for vacancies created by retirements, carefully evaluating whether the role should be refilled, redesigned to better align with evolving operational needs, or eliminated.

Occupational groups projected to experience the greatest net hiring requirements include:

- **Facility operations occupations** are responsible for operating complex facilities, using state-of-the-art processing technologies and transportation

infrastructure across established and emerging energy sectors. Specific occupations include:

- o Manufacturing and utilities managers
- o Facility operation and maintenance managers
- o Petroleum, gas and chemical processing and utilities supervisors
- o Central control, process and plant operators
- o Utilities equipment operators and controllers
- o Processing, manufacturing and utilities labourers

- **Trades occupations** ensure all energy-producing facilities and pipelines operate efficiently and safely. Specific occupations include:

- o Plumbers, pipefitters and gas fitters
- o Construction millwrights and industrial mechanics
- o Industrial electricians
- o Industrial instrumentation technicians and mechanics

Table 3: Central Canada's net hiring requirements (NHR) by occupational group, 2026-2035

Sector	Industry activity	Age-related attrition	NHR
TOTAL**	-360	2,170	1,810
Facility operations	-60	610	550
Trades	-40	280	240
Technical sales, procurement, supply chain and logistics	-30	230	200
Engineers	-40	210	170
Business and operations support	-30	130	100
Technicians and technologists	-20	100	80
Transportation and heavy equipment operators	-10	70	60
Information technology	-20	80	60
Energy drilling, servicing and field operations	-20	50	30
Geoscientists	minimal*	minimal*	minimal*

Numbers may not add up due to rounding.

* Net hiring requirements projected to be few.

** Total includes net hiring requirements in "other occupations".



- **Technical sales and procurement occupations** are needed to diversify customers for Central Canada's low-carbon energy sources and develop new supply chains to produce biomass-based fuels and low-carbon hydrogen. Specific occupations include:
 - o Technical sales
 - o Materials handlers
 - o Supply chain logistics, tracking and scheduling coordination occupations
- **Transport truck drivers** move goods and materials across the Central region, supporting production in established and emerging energy sectors.
- **Engineers** continue to play a vital role in designing and delivering sustainable energy production, as well as in implementing emissions-reduction initiatives. Specific occupations include:
 - o Engineering managers
 - o Chemical engineers
 - o Mechanical engineers

CIE's consultation with industry indicates that energy companies are implementing technology, equipment and process improvements to help mitigate risks associated with an aging workforce, in addition to realizing operational efficiency and driving down costs. It is also important to consider situations where hiring talent is the only viable response to age-related attrition:

- **When technology, including AI and automation, cannot be scaled fast or safely enough.** Deploying technology and shifting equipment fleets are expensive and time-consuming. In these cases, scaling usage is likely to be slow and phased, rather than a widescale ramp-up.
- **When complexity outpaces standardization.** Technology works best in repeatable, controlled environments. When operations are less predictable, such as in emerging energy sectors, more specialized oversight is likely required.
- **When human judgment remains critical.** Certain roles involve troubleshooting, safety-critical decision-making and establishing and maintaining relationships with partners, including Indigenous partners. In these cases, technology can augment the work but not replace the context and accountability needed for success.
- **When replacing workers with technology does not garner social acceptance.**

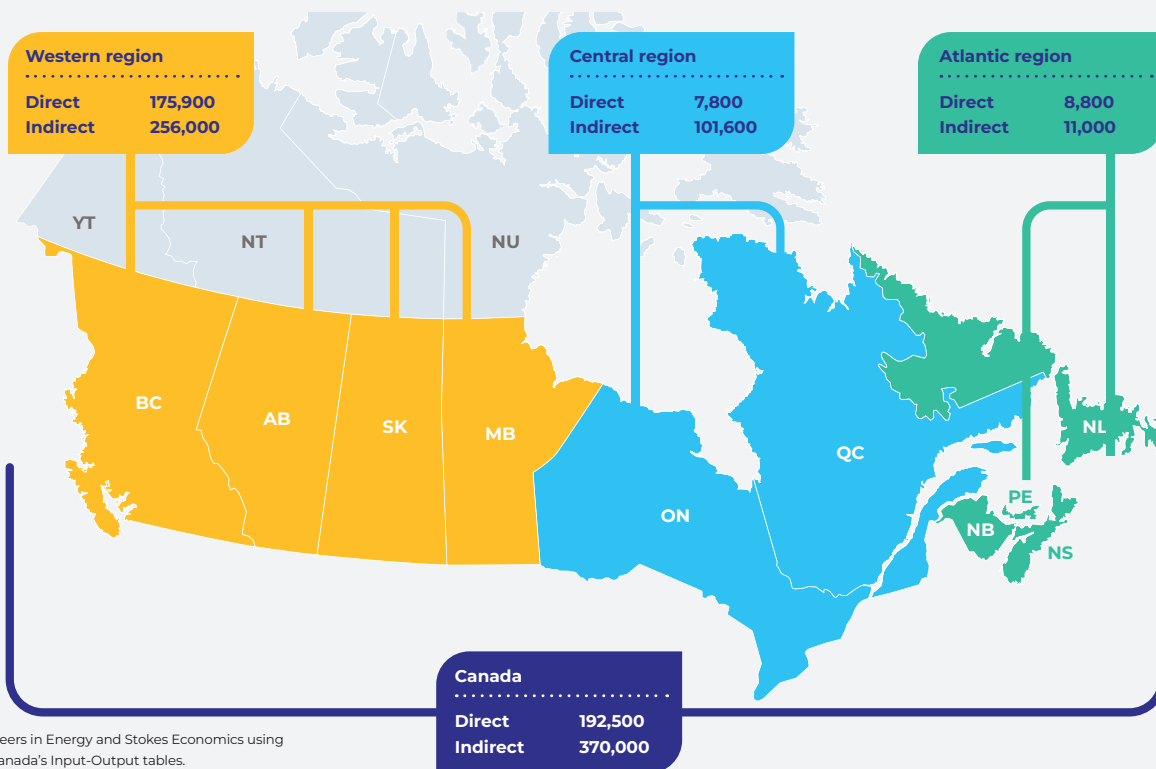


Indirect Employment



In addition to the jobs directly hired for production, operations and maintenance of CIE's in-scope energy sectors, **over 100,000 jobs are generated across the Central Canadian economy** in sectors that provide goods and services to the industry's operations supply chain and capital projects.

Figure 5: Direct employment and estimate of indirect jobs supported by established energy sector operational spending in 2025



These opportunities, referred to as the energy industry's indirect jobs, are significant in numbers. In 2025, an estimated 101,600 indirect jobs were generated in Central Canada from operational spending by the established energy sectors. These jobs are in sectors that provide a broad range of goods and services required to sustain ongoing operations in conventional E&P, oil sands, energy services, pipelines and refining. If the energy industry expands, the number of indirect jobs required to sustain operations is also expected to increase.

This estimate does not include induced jobs, which are generated by workers' spending of income earned in direct and indirect jobs. For example, when energy workers spend their earnings on groceries, housing, restaurants, transportation or entertainment, that spending supports additional jobs across those sectors.

Energy-related construction drives jobs

An additional **5,400 engineering, manufacturing, construction and support services jobs** are created for every **\$1 billion invested in developing and constructing energy infrastructure projects.**²¹ These jobs are generated over the multi-year time frame required to plan, construct and commission new

energy infrastructure. Sectors that see the greatest employment benefit from the energy industry's capital project spending include:

- > Oil and gas engineering construction
- > Legal, accounting and architectural, engineering and related services
- > Wholesale trade
- > Machinery and fabricated metal manufacturing

Oil sands spending bolsters the Canadian economy
Canada's oilsands sector will reach a massive milestone sometime in the fourth quarter of 2024: \$1 trillion in cumulative spending injected into the Canadian economy. Billions in goods and services have been procured from Indigenous businesses, and tens of billions from the manufacturing sector in central Canada. Far from just an Alberta success story, the oilsands are a quintessentially Canadian sector. More than 2,300 companies outside of Alberta have had direct business with the oilsands, including over 1,300 in Ontario and almost 600 in Quebec.²²



Labour Supply and Demand Analysis



Labour and skills shortages are projected for Canada's energy industry as early as 2027.

Canada's immigration policy has shifted noticeably over the past few years, from rapid expansion after the COVID-19 pandemic to a more controlled approach. Starting in 2025, targets were scaled back in response to rising inflation, higher housing costs and high unemployment, particularly among youth, and are expected to be managed more tightly in the medium term. Given that immigration was a key source of growth in the national labour market, the extent of this policy shift is likely to become clearer in the coming years.²³

From the Canadian energy industry's perspective, factors that improved labour productivity in 2025, specifically consolidation due to M&As, meant there was a qualified talent pool readily available in the labour market.

A full labour supply and demand analysis can be found in the *National Labour Market Outlook to 2035* online at [CareersinEnergy.ca](https://careersinenergy.ca)



Photo courtesy of Enbridge. StormFisher renewable natural gas facility near London, Ontario



Conclusion and Call to Action



Looking ahead to 2035, Central Canada will remain a significant producer of refined petroleum products and leverage its experience to expand its low-carbon fuels production, as demand grows to meet industry compliance requirements and customers' desire for lower-emissions fuel alternatives.

The region's importance as Canada's centre for the financial, insurance, and manufacturing industries will not only support over 100,000 indirect jobs annually but also play a vital role in addressing the increased interest in the country's enhanced role as an international supplier of reliable energy. This underscores the need to attract and retain talent to fill job vacancies caused by age-related attrition in the energy sector and in the sectors that support it.

Research consistently shows that talent migrates toward organizations and sectors that offer **purpose, mobility, learning, quality work and inclusion**. To attract and retain talent, Canada's energy industry needs to continue focusing on:

- > **A strong, credible sense of purpose:** Purpose is now a primary driver of attraction and retention, particularly among younger workers and highly skilled professionals. Energy employers must continue to link roles, not just corporate messaging, to emissions reduction, affordability and energy security outcomes in a way that employees can see and feel in their day-to-day work.
- > **Clear career mobility:** Workers are more likely to stay when they see multiple future pathways, even

if they don't remain in one role or sub-sector. The industry must continue investing in cross-sector mobility, role transparency and progression clarity to keep workers engaged in the energy industry, rather than losing them to adjacent industries.

- > **Ongoing upskilling aligned with digital and systems transformation:** Retention risk increases when workers feel their skills are becoming obsolete. Attraction alone is insufficient; energy employers must continue prioritizing supported upskilling and reskilling pathways, especially for mid-career workers.
- > **Job quality, working conditions and flexibility:** Job quality—including stability, safety and community connection—is a key determinant of workforce retention. The energy industry must continue improving work design, not just wages, particularly in field-based, remote and project-driven roles.
- > **Diversity, equity, inclusion and Indigenous participation:** Addressing barriers to equitable inclusion of diverse talent pools, including Indigenous talent, is a structural solution to workforce shortages. Inclusive hiring, regional training partnerships and Indigenous-led workforce development improve both attraction and long-term retention.

This *Regional Labour Market Outlook to 2035* is one of a number of tools and resources developed by CIE to build a roadmap for a robust energy industry in the decades to come.



Careers in Energy: Providing Value



Value across the energy workforce ecosystem

Navigating the complexity of Canada's evolving energy industry requires reliable data, clear insights and accessible career guidance. CIE brings clarity by connecting people and organizations to trusted labour market intelligence, practical tools and resources that support informed workforce planning and confident career decisions, across the energy ecosystem.



Key tools and supports:

- > National and regional labour market outlooks, projecting hiring demand, replacement needs, retirements and demographic trends
- > Complimentary employer support services, providing valuable information specific to an organization's unique needs
- > Career profiles, detailing role requirements, skills, wages and work environments
- > Interactive career pathways, helping individuals understand the knowledge, education, skills and attributes required at each stage of a career
- > Transferable skills insights, showing how experience can apply across established and evolving energy sectors or roles
- > Recruitment and retention toolkits, offering information and guidance on workforce recruitment, retention and best practices
- > Interactive data dashboards, allowing users to customize data insights on current employment trends, job posting trends, workforce demographics and labour market outlooks
- > Diversity, equity and inclusion webinars and resources, supported by a panel of energy leaders and experts on important topics that impact the industry and its workers
- > Workforce attraction and industry promotion, playing a sector-wide attraction role promoting energy careers to youth and students, career switchers and underrepresented groups at various events across the country
- > Shareable content, including energy worker stories, labour market visuals and career explainers
- > Virtual reality experiences, enabling users to explore the diverse work environments and worksites across various energy sectors





Value to employers and industry

Attracting, retaining and planning for talent

CIE provides employers and industry with evidence based workforce insights and tools to attract, retain, and plan for talent in a changing energy landscape.

- Support workforce planning and decision making
- Improve recruitment and retention practices
- Provide insight into real-time labour demand
- Strengthen talent pipeline development
- Support diversity, equity and inclusion efforts
- Enhance workforce attraction efforts
- Increase engagement and awareness of energy careers
- Leverage innovative technology for attraction and education
- Align education and training with industry needs

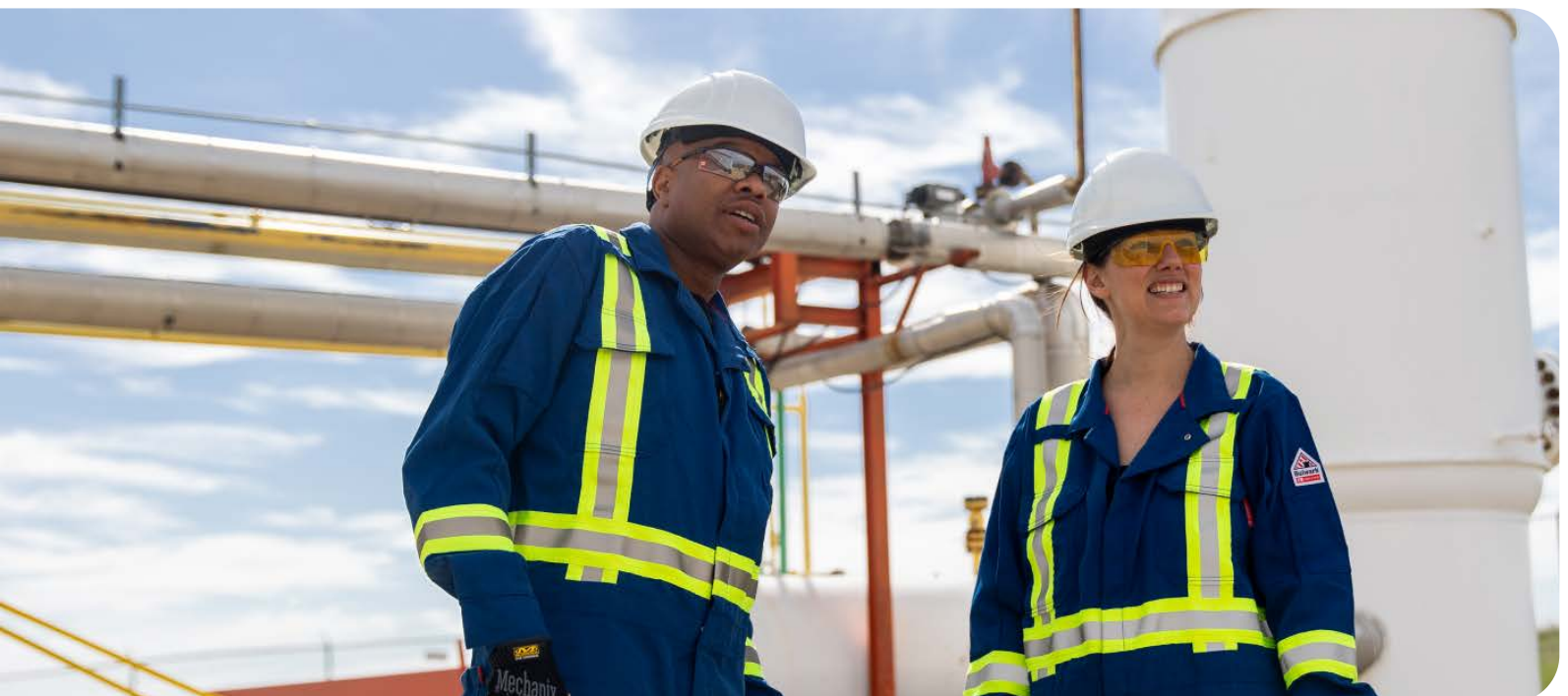


Value to job seekers and career practitioners

Career clarity, confidence and mobility

CIE supports career clarity, confidence, and mobility by translating labour market data into practical guidance for job seekers and career practitioners.

- Clarify career options in established and emerging energy sectors
- Support informed career decisions
- Make labour market data accessible to individuals
- Enable career planning and progression
- Highlight transferable skills
- Support employment advising and coaching
- Improve job readiness and career confidence
- Increase awareness of opportunities beyond job postings
- Engage and inspire through storytelling
- Support inclusive career navigation
- Equip career practitioners with trusted resources





Value to educational and training institutions

Aligning education supply with industry demand

CIE supports educators and training institutions with labour market insights that align programs with industry demand and improve learner employability.

- > Inform program and curriculum design
- > Align training with industry demand
- > Support future focused planning
- > Improve student and learner outcomes
- > Enable stackable and modular learning
- > Support career guidance and advising within institutions
- > Enhance learner engagement and career awareness
- > Incorporate real-world industry context



Value to governments and policymakers

Evidence-based workforce and economic policy

CIE supports governments and policymakers with credible, industry validated workforce intelligence to inform evidence based policy, planning and funding decisions.

- > Enable evidence-based workforce policy
- > Assess workforce impacts of policy and investment choices
- > Support funding and program decisions
- > Identify regional and sector-specific workforce pressures
- > Align workforce development with economic strategy
- > Improve policy relevance and effectiveness
- > Support collaboration across systems
- > Increase transparency and confidence in analysis



Value to the energy system as a whole

Integration, credibility and long-term resilience

CIE's unique contribution is its system-level perspective.

- > **Connecting** employers, workers, educators and governments using a shared evidence base
- > **Reframing** Canada's energy workforce as integrated and adaptable, not fragmented
- > **Enhancing** public understanding of energy careers and their societal value
- > **Strengthening** Canada's competitiveness by improving workforce alignment



**To access all the tools and resources
CIE has to offer, visit [CareersinEnergy.ca](https://careersinenergy.ca).**



Endnotes

- ¹ Canada Energy Regulator, *Ontario*, last modified March 26, 2026, <https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/province-territory-energy-profiles/ontario.htm>
- ² Canada Energy Regulator, *Quebec*, last modified March 26, 2026, <https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/province-territory-energy-profiles/quebec.htm>
- ³ 2025 estimate. The number of rotational workers residing in Central Canada and working in other energy-producing regions estimated using Statistics Canada's 2025 Labour Force Survey annual data and CIE's projected employment in Central Canada in 2025.
- ⁴ Careers in Energy and Stokes Economics using Statistics Canada's Input-Output tables.
- ⁵ Advanced Biofuels Canada. (2025). *Canadian biofuels reach major milestones despite challenging year for producers: Biofuels in Canada 2025 report*. <https://advancedbiofuels.ca/biofuels-in-canada-2025/>
- ⁶ Invest Ontario. (2026, May 22). *Invest Ontario welcomes Tenaris's expansion in Sault Ste. Marie to strengthen Ontario's steel and energy supply chains*. <https://www.investontario.ca/press-release/invest-ontario-welcomes-tenariss-expansion-sault-ste-marie-strengthen-ontarios-steel-and-energy-supply-chains>
- ⁷ Statistics Canada uses the National Occupational Classification (NOC) system to identify and categorize jobs (occupations) based on the training, education, experience and responsibilities they require. Statistics Canada. (2023, September 14). Introduction to the National Occupational Classification (NOC) 2021 version 1.0. Statistics Canada. <https://www.statcan.gc.ca/en/subjects/standard/noc/2021/introductionV1#a1>
- ⁸ Investment in the in-scope sectors will generate further indirect employment opportunities across other industries such as engineering, finance and insurance, fabrication, accommodation and transportation. Analysis of indirect employment associated with the in-scope sectors can be found on pages 23 and 24.
- ⁹ Construction workforce is not included in this forecast, although it is recognized expanding Canada's energy system will require significant new infrastructure. Construction workforce is a critical component to seeing necessary builds being completed on-time and on-budget. Workforce projections for Canada's construction workforce can be found at BuildForce: <https://www.buildforce.ca/en>
- ¹⁰ CIE's labour market model takes capital and operational expenditures into account for the conventional exploration and production, oil sands and energy services sectors. Further details can be found in the methodology report. <https://careersinenergy.ca/outlook/>
- ¹¹ Enbridge Gas. (2026, April 8). *Planning for growth: How Enbridge Gas helps Ottawa build reliably and affordably*. Ottawa Business Journal. <https://obj.ca/planning-for-growth-how-enbridge-gas-helps-ottawa-build-reliably-and-affordably/>
- ¹² Oil Sands Magazine. (2026, June 9). *Canadian refineries*. <https://www.oilsandsmagazine.com/projects/canadian-refineries>
- ¹³ Canadian Fuels Association. (2026). *Co-processing*. <https://www.canadianfuels.ca/industry-facts/low-carbon-fuels/co-processing/>



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- ¹⁴ EnergyNow. (2026, June 8). *The fastest growing market for Canada's canola is energy*. <https://energynow.ca/2026/06/the-fastest-growing-market-for-canadas-canola-is-energy/>
- ¹⁵ Snook, A. (2026, January 22). *The state of Canadian renewable liquid fuels*. Canadian Biomass Magazine. <https://www.canadianbiomassmagazine.ca/the-state-of-canadian-renewable-liquid-fuels/>
- ¹⁶ Enbridge Inc. (2022, January). *Clean hydrogen enters the Markham energy mix*. <https://www.enbridge.com/stories/2022/january/hydrogen-blending-project-enbridge-gas-cummins-operational-markham-ontario>
- ¹⁷ Air Liquide. (2021, January 28). *Air Liquide operates the world's largest PEM electrolyzer fueled by renewable energies sources in Canada*. <https://www.airliquide.com/stories/hydrogen/air-liquide-operates-worlds-largest-pem-electrolyzer-fueled-renewable-energies-sources-canada>
- ¹⁸ Statistics Canada. (2022, May 30). *Quality of employment in Canada*. Government of Canada. <https://www150.statcan.gc.ca/n1/pub/14-28-0001/142800012020001-eng.htm>; United Nations Economic Commission for Europe. (2015, October). *Handbook on measuring quality of employment: A statistical framework*. United Nations. <https://unece.org/statistics/publications/handbook-measuring-quality-employment>
- ¹⁹ E&P, energy services, petroleum refining and pipelines.
- ²⁰ Statistics Canada. Table 36-10-0489-01 Labour statistics consistent with the System of National Accounts (SNA), by job category and industry.
- ²¹ Careers in Energy and Stokes Economics using Statistics Canada's Input-Output tables
- ²² Exner-Pirot, Heather and Bryan Remillard. (November 2024). <https://macdonaldlaurier.ca/one-trillion-reasons-why-oilsands-benefit-canadas-economy-heather-exner-pirot-and-bryan-remillard-in-the-edmonton-journal/>. Macdonald Laurier Institute. Macdonald Laurier Institute.
- ²³ Banerjee, R., Alboim, N., Triandafyllidou, A., & Mathurin, G. (2025, June 24). *Canada's long-standing openness to immigration comes under pressure*. Migration Policy Institute. <https://www.migrationpolicy.org/article/canada-immigration-policy-inflection-point>



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Careers in Energy (CIE), a division of Energy Safety Canada, is Canada's trusted source of labour market intelligence, workforce trends and career resources for the energy industry. CIE supports employers, job seekers, career practitioners, educators and policymakers by providing evidence-based forecasts, insights and practical tools that inform workforce planning and career decision making.

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