

## Profile of Young Energy Workers



“The energy sector is rapidly evolving, and young professionals bring fresh ideas and perspectives to the table. Young professionals are committed, excited, and dedicated to the energy transformation, and an empowered workforce is essential to achieving climate goals and ensuring a sustainable future.”<sup>i</sup>

The future strength of Canada’s energy labour force will greatly depend on the participation of diverse groups, such as youth, racialized groups, Indigenous Peoples, women and immigrants. Historically, many of these groups have been underrepresented or underutilized across various industries in Canada.

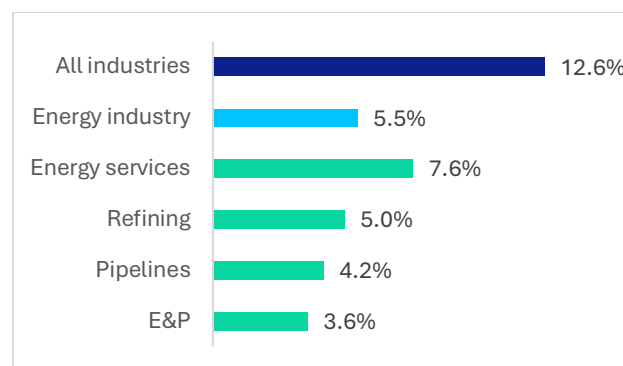
The analysis is based on data from Statistics Canada’s 2021 Census and focuses on the following established energy industry sectors: exploration and production (E&P)<sup>ii</sup>, energy services, pipelines and refining. In 2021, Canada’s energy industry labour force—comprising those working and actively looking for work—totalled 172,600.

### Young workers by industry and sector

Youth under the age of 25 are underrepresented in Canada’s energy industry, and their share of the labour force continues to decline. In 2021, there were approximately 9,500 youth in Canada’s energy industry—representing 5.5% of the energy labour force, compared to 12.6% of the overall Canadian labour force. Indigenous youth (0.7%), immigrant youth (0.5%) and racialized youth (0.3%) represent significantly smaller shares of the energy labour force.

The energy services sector (7.6%) and refining sector (5.0%) have the largest shares of young workers (Figure 1).

**Figure 1: Share of youth (<25 years) labour force by industry and sector, Canada, 2021**

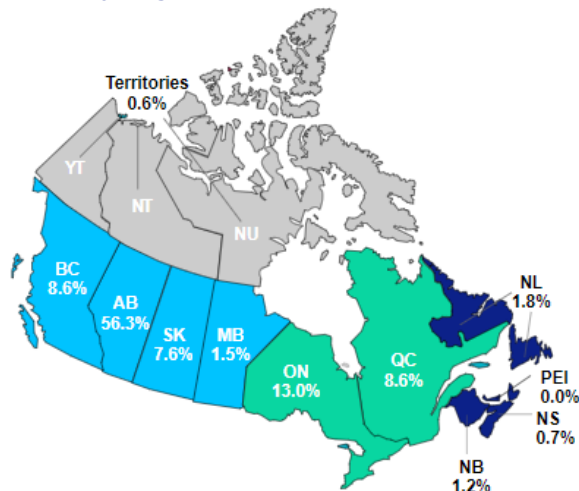


### Young energy workers by region

In 2021, 74% of the youth energy labour force was in Western Canada, 21% in Central Canada, 4% in Atlantic Canada and 1% in the Territories (Figure 2). A significant number of youth are employed in trades, transport, equipment operator and labour occupations within the energy industry (Figure 6), often working in the field or facilities in rural or remote areas.

**National and Regional Labour Market Outlooks to 2035** provide workforce projections and trends for Canada’s established and emerging energy sectors, including the Western, Central and Atlantic regions.

**Figure 2: Youth (<25 years) energy labour force by region, 2021**

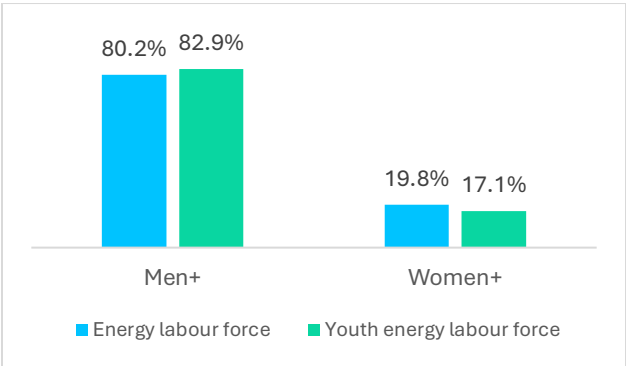


**Young energy workers by gender**

Women’s representation in the energy industry is below that of the broader economy and varies across sectors. Despite making up 48% of the Canadian labour force, women account for just 19.8% of the energy labour force.

Young women represent an even smaller proportion of the youth energy labour force at 17.1% (Figure 3). The share of young women ranges from a low of 11% in energy services to a high of 43% in pipelines.

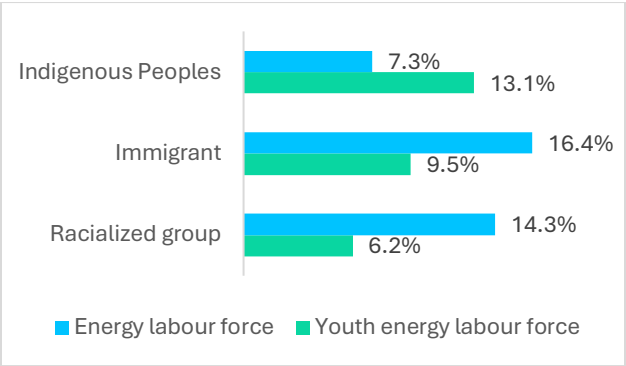
**Figure 3: Canada’s energy industry labour force by gender<sup>iii</sup>, 2021**



**Young energy workers by diversity group**

Youth in the energy industry are more likely to be Indigenous than those in the overall energy industry, but are less likely to be from a racialized group or to have immigrated to Canada.

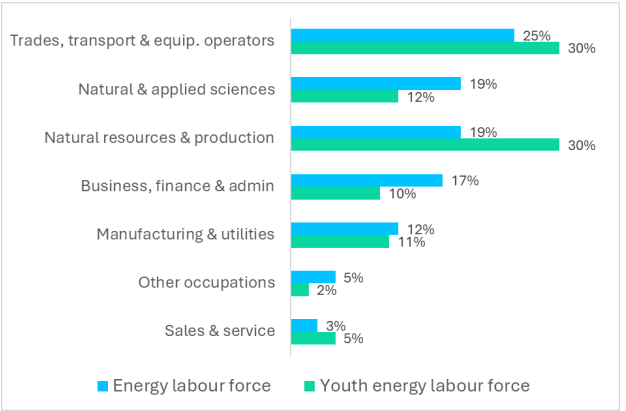
**Figure 4: Canada’s energy industry labour force by diversity group, 2021**



**Young energy workers by occupation**

Youth in Canada’s energy industry tend to work in trades, transport and equipment operator occupations (30%) and natural resources and production occupations (30%) (Figure 5).

**Figure 5: Canada’s energy industry labour force by occupational category, 2021**



Explore **170 career profiles** and **12 career pathways** to understand the various roles, education requirements, working conditions, skills, qualifications, experience and salaries available in Canada’s dynamic energy industry.

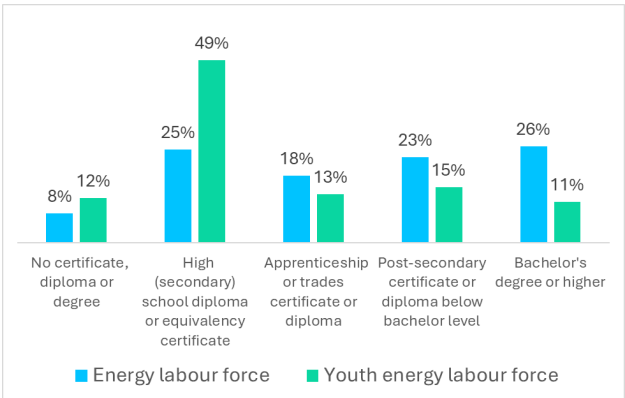
**Figure 6: Top occupations of young workers in Canada's energy industry, 2021**

NOC <sup>iv</sup>	Occupation
85111	Oil and gas drilling and servicing labourers
75110	Construction trades helpers and labourers
93101	Central control and process operators
84101	Oil and gas well drilling and services operators
73400	Heavy equipment operators
73300	Transport truck drivers
83101	Oil and gas well drillers, servicers and testers
92100	Power engineers and power systems operators
72400	Construction millwrights and industrial mechanics
72401	Heavy-duty equipment mechanics

### Young energy workers by educational attainment

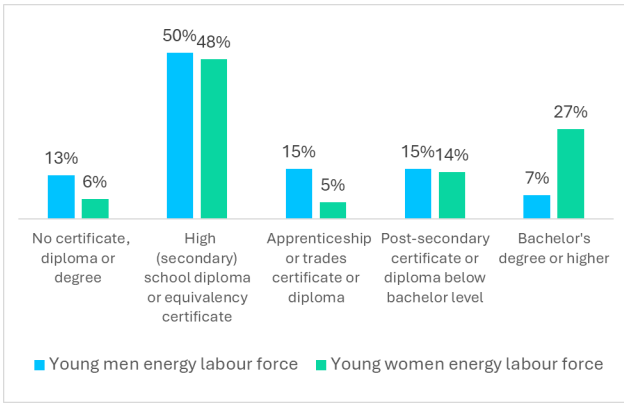
The educational attainment of young energy workers vastly differs from the overall energy industry labour force. As shown in Figures 5 and 6, youth tend to start their careers in occupations that typically require a high school diploma (Figure 7).

**Figure 7: Canada's energy industry labour force by highest level of educational attainment, 2021**



Educational attainment also differs by gender. A greater proportion of young women in energy have a bachelor's degree or higher (27%), while a greater proportion of young men have an apprenticeship or trades certificate or diploma (15%) (Figure 8).

**Figure 8: Canada's youth (<25 years) energy industry labour force by gender and highest level of educational attainment, 2021**



“The first transition that Canadian youth will generally make is graduating from high school, and either transitioning to postsecondary studies or into the labour market. Almost all young Canadians eventually make this transition – in 2021, only 5% of Canadians 25 to 34 did not attain a high school diploma.”<sup>v</sup>

### Endnotes

<sup>i</sup> *Empowering the next generation: Why young professionals are vital to the energy transformation.* (n.d). <https://www.hatch.com/About-Us/Publications/Blogs/2023/04/Empowering-the-next-generation-Why-young-professionals-are-vital-to-the-energy-transformation>

<sup>ii</sup> Includes exploration for crude petroleum and natural gas, production of oil and gas and hydrocarbon liquids and the mining and extraction of oil from oil shale and oil sands.

<sup>iii</sup> Men+ is defined by Statistics Canada as those identifying as men and/or boys, as well as some non-binary persons. Women+ is defined as those identifying as women and/or girls, as well as some non-binary persons.

<sup>iv</sup> The National Occupational Classification (NOC) is Canada's national system for describing occupations. [National Occupational Classification - Canada.ca \(esdc.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/81-595-m/81-595-m2023004-eng.htm)

<sup>v</sup> Government of Canada, Statistics Canada. (2023b, July 28). *From high school, into postsecondary education and on to the labour market.* <https://www150.statcan.gc.ca/n1/pub/81-595-m/81-595-m2023004-eng.htm>