

Canada's Energy-Fuelled Gender Gap

Pay disparity in the energy sector and opportunities
for equity in the clean energy economy

Trinity LaBarre-Song and Kendall Anderson
March 2024



Canada's Energy-Fuelled Gender Gap

Pay disparity in the energy sector and opportunities
for equity in the clean energy economy

Trinity LaBarre-Song and Kendall Anderson

March 2024

©2024 The Pembina Institute

All rights reserved. Permission is granted to reproduce all or part of this publication for non-commercial purposes, as long as you cite the source.

Recommended citation: Trinity LaBarre-Song and Kendall Anderson. *Canada's Energy-Fuelled Gender Gap: Pay disparity in the energy sector and opportunities for equity in the clean energy economy*. The Pembina Institute, 2024.

The Pembina Institute
#802, 322 – 11 Avenue SW
Calgary, AB T2R 0C5
Phone: 403-269-3344
www.pembina.org

About the Pembina Institute

The Pembina Institute is a national non-partisan think tank that advocates for strong, effective policies to support Canada’s clean energy transition. We employ multi-faceted and highly collaborative approaches to change. Producing credible, evidence-based research and analysis, we consult directly with organizations to design and implement clean energy solutions, and convene diverse sets of stakeholders to identify and move toward common solutions.

pembina.org



twitter.com/pembina



www.linkedin.com/company/pembina-institute

Donate to the Pembina Institute

Together, we can lead Canada's transition to clean energy. Your gift to the Pembina Institute directly supports environmental education and innovative research that advances understanding and action on critical energy and environmental issues.

pembina.org/donate

Acknowledgements

The Pembina Institute acknowledges that the work we steward and those we serve span across many Nations. We respectfully acknowledge the space our organization is headquartered in as the traditional and ancestral territories of the Blackfoot Confederacy, comprised of the bands Siksika, Piikani, and Kainai, the Îyârhe Nakoda Nations, including the bands of Goodstoney, Chiniki, and Bearspaw, and the Tsuut’ina Dené. These Lands are also home to the Métis Nation of Alberta — Region 3 whose Peoples have deep relationships with the Land.

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

This report was built upon the findings from the Pembina Institute’s prior reports: *Equitable Net Zero* and *Women in Alberta’s Energy Transition*. We would like to acknowledge the work of the authors of those reports: Calyssa Burke, Sarah Winstanley, Jaymes MacKinnon, Laura Hughes, Genevieve Dorion and Emma Severson-Baker.

In addition, we acknowledge those who contributed to and provided their expert review for this report: Alicia Bjarnason, CCWESTT; Heather Campbell; and many others

Contents

- 1. Introduction 1
 - 1.1 The transition demands equity 1
 - 1.2 What is a gender gap? 3
 - 1.3 Why does gender equity matter?..... 5
- 2. The gender representation gap 7
 - 2.1 Representation in Canada’s energy workforce 7
 - 2.2 Alberta’s role to play 8
 - 2.3 Gender representation in leadership positions 9
 - 2.4 Gender representation on boards of directors..... 10
- 3. The gender pay gap..... 12
 - 3.1 Pay inequity 12
 - 3.2 Pay inequity in energy 13
- 4. Addressing the gender gaps 15
 - 4.1 Barriers to equity in energy 15
 - 4.2 Solving gender gaps in the energy sector 16
- 5. Conclusion..... 17

List of Tables

- Table 1. Women in leadership and administrative roles, by selected industry..... 10

List of Figures

- Figure 1. Average hourly gender wage ratio by province 4
- Figure 2. Women in sectors of the conventional energy industry in Canada..... 7
- Figure 3. Women in sectors of the conventional energy industry in Alberta 9
- Figure 4. Average annual employment income in Alberta, by industry 14

1. Introduction

1.1 The transition demands equity

A young woman has just graduated high school and is about to follow her passion for science, math, and problem solving by studying engineering in university. When she starts her program, she quickly notices that she is one of a few women in her classes. Throughout her four years of study, she navigates daily sexist remarks, a lack of opportunities for internships, and an absence of community with her classmates. After graduation, she begins her first job as a mechanical engineer at an oil and gas company. On her first day, her new supervisor asks when she plans on having kids. She hasn't received her first annual salary survey from her engineering regulatory body yet so she's unaware that her first year of work is also probably the last one in her career for which she will be compensated equally to her male engineering classmates. Each year forward from this one, she'll likely receive less in overall compensation than her male peers. From the moment she started her engineering career path, she faced daily barriers that made her feel that she did not belong and was inherently less worthy due to her gender.

This young woman and her journey reflect the lived experience of the women who participated in interviews and roundtables in support of the Pembina Institute's research and convening on gender equity in the energy sector.¹ This report details the hard numbers that validate this experience, showing the size and source of gender-based gaps in pay and opportunity. Systemic changes to energy systems provide industry, governments, employers, and workers with that “moment in time” that enables major change not just for the energy system, but for the workforce that builds and operates it.

In 2024, global energy trends have begun to shift. The International Energy Agency (IEA) is predicting a decline in demand for oil and gas by the end of this decade. Pathways to a new energy future are being built, with investments in renewables and other clean energy sources. Workers in the energy sector and natural resources sector will be involved in every step of this transition. Recent Pembina Institute research

¹ Pembina Institute “Women in the Energy Transition.” <https://www.pembina.org/women-in-energy-transition>

estimates that Canada will offer two million clean energy jobs by 2050.² This change is taking place as many provinces face skilled labour shortages. Canada must plan to develop a workforce to fill the hundreds of thousands of new jobs that will arrive with a decarbonized economy.

For Canada to meet the upcoming labour demand, government and industry alike must make an investment in a sustainable, equitable workforce that offers good, well-paying jobs. Developing this workforce will require looking beyond the workers that have traditionally filled these roles and ways to include historically under-represented groups, including women, racialized people and newcomers.

Historically, the energy sector has had characteristics that have resulted in more male-dominated workplaces. The cultural nature of many energy industry workplaces and sites have been designed for and promoted masculine gender norms. For example, it has relied on remote and shift work, which does not always allow the flexible time needed for caregiving responsibilities, and it is dominated by occupations, such as engineering and the trades, where women have been traditionally under-represented.

Defining the energy industries

The energy sector in this report includes workers from oil and gas extraction and their support activities; coal and other metal ore mining and their support activities; petroleum and coal product manufacturing; pipeline transportation of crude oil and natural gas; natural gas distribution; utility system construction; electrical power generation, transmission and distribution (including hydro, nuclear, solar, wind, coal); as well as architectural, engineering and related services, which are required to build the infrastructure.³

We thank staff from Statistics Canada for their support in selecting the appropriate North American Industry Classification System (NAICS) to use in this report. We also thank them for noting the challenge of measuring gender differences in small—but rapidly growing—industries such as renewables and other cleantech.

² Megan Gordon and Alex Callahan, *Sustainable Jobs Blueprint: Putting workers and communities at the centre of Canada's net-zero energy economy* (Pembina Institute, 2023).

<https://www.pembina.org/pub/sustainable-jobs-blueprint-part-ii>

³ Statistics Canada, "North American Industry Classification System (NAICS) Canada 2017 Version 3.0." <https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1181553>

While it was our aim to set a baseline for understanding how gender was represented in the burgeoning clean energy sector, the sample sizes are not yet large enough.

Systemic changes to the energy sector have the potential to allow women and other under-represented groups to take up clean energy opportunities, solving a labour shortage problem for employers and, as the reader will see, reducing the gender pay gap nationally. Indeed, advancing gender equity in the energy sector can be both a solution to problems in the energy sector and a co-benefit of transitioning to a clean energy economy.

1.2 What is a gender gap?

For this report, the term “gender gap” refers to two intersecting issues: firstly, the difference between the number of men and women represented in employment, and secondly, the difference in pay between the two genders. These gaps are the result of systemic inequities and gender biases that often begin long before a woman enters post-secondary education and continue throughout her career.

The gender gap is further compounded when a woman or gender-diverse individual holds other marginalized identities. These include, but are not limited to, race/ethnicity, ability/disability status, age, socioeconomic status, Indigeneity, religion, education, citizenship, family status and sexual orientation. For example, an Indigenous woman is more likely to experience employment barriers, such as racism or violence, in comparison to a peer colleague who is a non-Indigenous woman.

Canada’s gender gap is not a new issue. Research organizations, such as the IEA and the OECD, have identified the need for Canadian governments and industries to address its gender gap. According to the OECD, Canada has the second-worst gender pay gap compared to peer G7 countries — the United Kingdom, United States, Germany, France and Italy all scored above Canada.⁴ In 2022, women’s gross hourly earnings were 17.1% less than their male counterparts in Canada.⁵ Across Canada’s provinces and territories, Alberta has the lowest gender wage ratio (Figure 1). This ratio is the proportion per dollar that women earn in comparison to men.

⁴ OECD, Gender wage gap (indicator) (2023). doi: [10.1787/7cee77aa-en](https://doi.org/10.1787/7cee77aa-en) (accessed on March 4, 2024).

⁵ OECD, Gender wage gap (indicator).

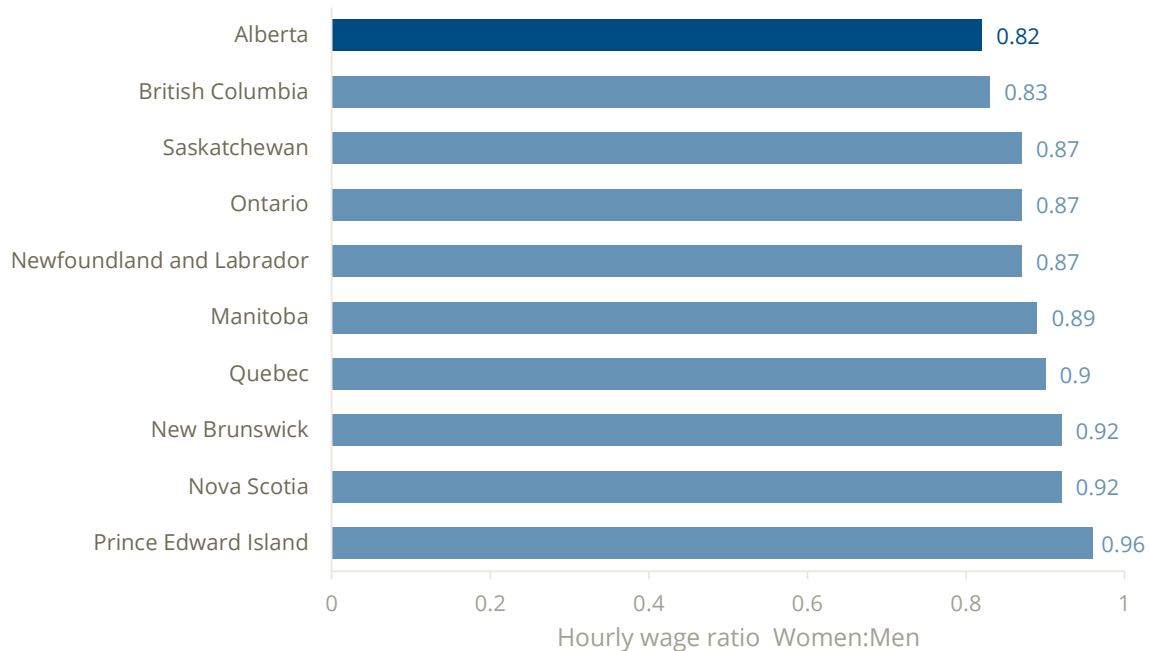


Figure 1. Average hourly gender wage ratio by province

Data source: Statistics Canada⁶

Under-representation in the energy sector starts early in the career pipeline. Women and gender-diverse individuals are under-represented and under-retained in the post-secondary education programs that often lead to careers in energy, such as sciences, technology, engineering and math (STEM), where only a third of graduates identify as women. Engineers Canada noted that only 23.5% of newly graduated engineers in Alberta in 2020 were women.⁷ The result is that, worldwide, the IEA finds the gender representation gap in the energy sector is twice as large as in the non-energy sector.⁸

An energy transition to net-zero emissions — and the required workforce investments — offers opportunities to assess current weak points and find ways to strengthen the labour force through equitable policy change.

⁶ Statistics Canada, “Table 14-10-0417-01: Employee wages by occupation, annual,” (2024). <https://www150.statcan.gc.ca/t1/tbl1/en/cv!recreate.action?pid=1410041701&selectedNodeIds=2D6,5D3,6D1&checkedLevels=0D1,0D2,2D1,3D1&refPeriods=20220101,20220101&dimensionLayouts=layout3,layout2,layout2,layout2,layout2,layout2&vectorDisplay=false>

⁷ Engineers Canada, “30 by 30,” (2021) <https://engineerscanada.ca/diversity/women-in-engineering/30-by-30>

⁸ IEA, “Understanding gender gaps in wages, employment and career trajectories in the energy sector,” August 19, 2022. <https://www.iea.org/articles/understanding-gender-gaps-in-wages-employment-and-career-trajectories-in-the-energy-sector>

Gender diversity and intersectionality

Canadians are increasingly embracing a diversity of gender identities, with more than 100,000 transgender and non-binary persons self-identifying in the 2021 Census of Population.⁹

The term gender diversity is used in this report to be inclusive of all marginalized gender identities, including women, non-binary, two-spirit, and femme-identifying people.

While the research in this report is based on a binary gender system, when it comes to solutions a broader spectrum of gender expression should be embraced.

The term intersectionality, coined by Kimberlé Crenshaw, refers to the fact that a person can experience multiple layers of discrimination based on their identities, such as race, physical ability, sex, class, and sexual orientation¹⁰.

1.3 Why does gender equity matter?

Low representation in key workforces, combined with lower incomes, leave women vulnerable to decisions made without their input, continued gender discrimination and gender-based violence.

Although many investments as well as political and cultural efforts have been made to enhance diversity equity, and inclusion in workplaces, gender-based discrimination (such as pay inequity) continues to prevail and increases the risk of harm to women and their families. Gender discrimination is widely regarded to be a root cause of violence against women, often presenting itself as sexual harassment at work, domestic violence, or emotional abuse in public spaces.¹¹

Many employment sectors have workplace cultures that prevent women from feeling they will be able to find safe, sustainable and equitable employment. Policy Wise for

⁹ Statistics Canada, “Canada’s Transgender and Non-Binary Population: Data Visualization Tool.” <https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2022021-eng.htm>

¹⁰ Kimberlé Crenshaw, “Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics,” *University of Chicago Legal Forum* (1989), Article 8. <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>

¹¹ Centre of Excellence for Women’s Health, *Preventing violence against women and girls in the workplace* (2023). <https://static1.squarespace.com/static/5d77e56c1fc5e024160affa9/t/65c302af704119015769b42b/1707279024851/Final-Workplace-Context-Summary.pdf>

Children and Families notes, “Women have diverse career goals and do not feel that all workplaces, particularly in trades and energy, are safe and compatible with their needs.”¹²

Investments and policy should be directed towards the development of safe, accessible and equitable jobs for women, gender diverse people and other individuals who have been historically excluded from economic prosperity. For a full examination of the barriers to gender equity in the energy sector, please see the Pembina Institute’s report *Women in Alberta’s Energy Transition*.¹³ For deep a dive into how to improve gender equity, please see *Equitable Net-Zero*.¹⁴

¹² PolicyWise for Children & Families, *Closing the Gender Gap in Alberta Employment: Advocacy Brief (2023)*. <https://policywise.com/wp-content/uploads/2023/05/Closing-the-Gendar-Gap-in-Alberta-Employment-Advocacy-Brief-2.pdf>

¹³ Genevieve Doiron, Emma Severson-Baker, Laura Hughes, *Women in Alberta's Energy Transition: A review of barriers to participation and leadership* (Pembina Institute, 2021). <https://www.pembina.org/pub/women-albertas-energy-transitiono>

¹⁴ Calyssa Burke, Sarah Winstanley, Jaymes MacKinnon, Laura Hughes, *Equitable Net-Zero: Recommendations for advancing gender equity in Alberta’s energy transition* (Pembina Institute, 2022). <https://www.pembina.org/pub/equitable-net-zero>

2. The gender representation gap

2.1 Representation in Canada's energy workforce

Women represent 50.9% of the population and 47.5% of the Canadian workforce. Yet among energy workers, they make up 14% to 32% (Figure 2) of the national energy workforce by subsector —about 25% of the workforce overall. In a nation with a demonstrated interest in diversity and equity, representation in key sectors should aim to be similar to the representation of a specific group within a population. Figure 2 shows the representation of women in various sectors of the conventional energy industry in Canada. (Figure 3 shows the same information for Alberta.)

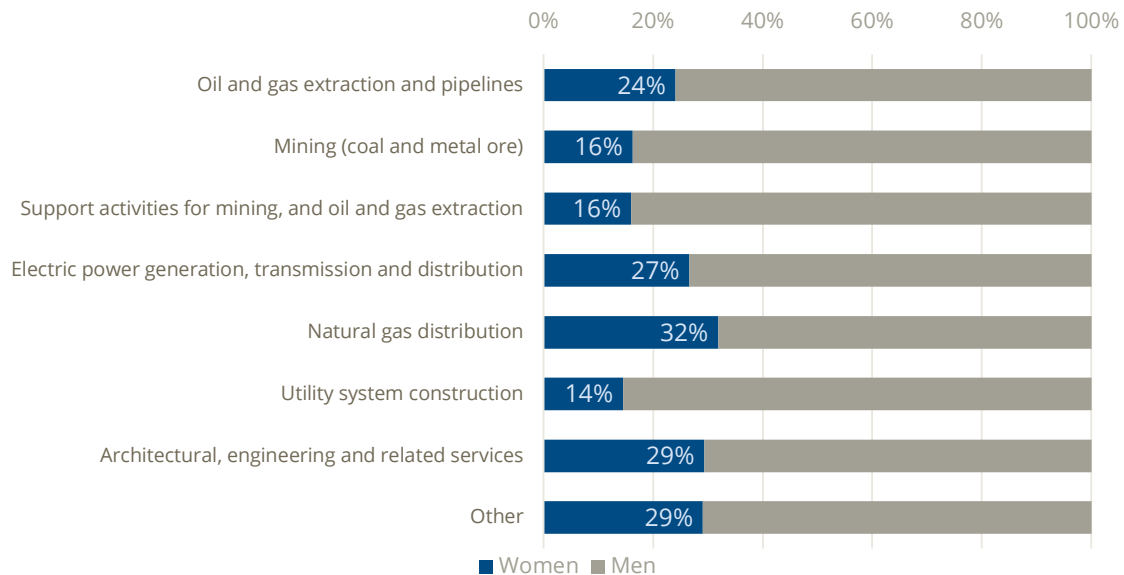


Figure 2. Women in sectors of the conventional energy industry in Canada

Data source: Statistics Canada¹⁵

The conventional energy sector is not alone in its need to improve equal gender representation and reduce the gender pay gap. The renewables sector is too nascent to be reported on by Statistics Canada, but recent research from the United States shows

¹⁵ Statistics Canada, "Table 98-10-0448-01 Industry groups by class of worker including job permanency, labour force status, age and gender," [Canada] (2022).
<https://www150.statcan.gc.ca/t1/tbl1/en/cv!recreate.action?pid=9810044801&selectedNodeIds=5D1,6D20,6D26,6D30,6D31,6D86,6D136,6D141,6D159,6D253,6D254&checkedLevels=0D1,1D1,2D1,3D1,3D2,5D1,6D1&refPeriods=20210101,20210101&dimensionLayouts=layout2,layout2,layout2,layout2,layout2,layout3,layout2,layout2&vectorDisplay=false>

that women are even more disproportionately under-represented in solar and wind, holding fewer than one-third of jobs in the burgeoning industry.¹⁶ However, reports from IRENA suggest that worldwide women are actually represented at higher levels (32%) in renewables than in traditional energy (22%)¹⁷; there may be lessons North America can learn from the rest of the world. **The first step in Canada is to begin to report data on intersectional gender identity in the renewable energy sector.**

2.2 Alberta's role to play

Alberta has the largest proportion of women employed in energy-related industries compared to other provinces and territories. This includes oil and gas extraction and pipeline transportation of crude oil and natural gas work. However, this large proportion is still disproportionately under-represented. Women still make up only 26% of all employees in oil and gas, 31% of electricity and 16% of mining as noted in Figure 3, which shows the representation of women in various sectors of the conventional energy industry in Alberta.

Although under-represented, Alberta women in energy provide a crucial opportunity for equitable change. The good news is that improving representation and pay equity for women in Alberta's energy sector will directly affect Canada's gender gap, due to the high concentration in the province. This information highlights the timely need to focus investments, research and equitable policy within Alberta's energy sector to build a fair, clean energy future for all Canadians.

¹⁶ Maria Virginia Olano, "Chart: Women hold less than a third of jobs in wind and solar power," *Canary Media*, September 9, 2022. <https://www.canarymedia.com/articles/workforce-diversity/chart-women-hold-less-than-a-third-of-jobs-in-wind-and-solar-power>

¹⁷ IRENA, *Renewable energy: A Gender perspective* (2019). https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Jan/IRENA_Gender_perspective_2019.pdf?rev=bed1c40882e54e4da21002e3e1939e3d

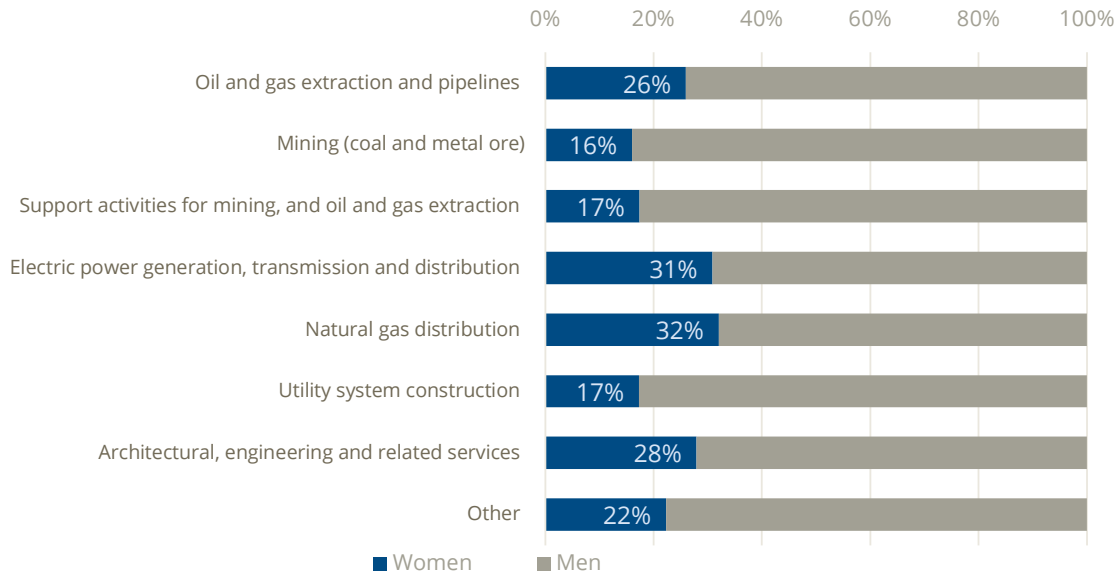


Figure 3. Women in sectors of the conventional energy industry in Alberta

Data source: Statistics Canada¹⁸

2.3 Gender representation in leadership positions

Not only are women under-represented generally in the energy sector, but when it comes to representation at the leadership level, that number declines even further. Table 1 illustrates the proportion of leadership roles held by women in various sectors as well as more administrative roles.

Generally, women are over-represented in administrative positions, which are lower paying, rather than high-paying STEM or leadership jobs. Table 1 also shows that women in the energy sector often have business and supportive roles compared to men, who occupy all types of positions.

¹⁸ Statistics Canada, “Table 98-10-0448-01 Industry groups by class of worker including job permanency, labour force status, age and gender,” [Alberta] (2022).

Table 1. Women in leadership and administrative roles, by selected industry

Industry	Percentage of roles held by women	
	Leadership	Business, finance and administration
Mining, quarrying, and oil and gas extraction	13%	65%
Utilities	26%	63%
Construction	12%	76%
Transportation and warehousing	19%	57%
Professional, scientific and technical services	26%	65%

Data source: Statistics Canada¹⁹

To develop this table, the Occupation of “Legislative and senior management occupations” was used for the Leadership column. There are efforts in individual workplaces to promote gender equality, but there is more work to be done. Investments and cultural shifts to normalize equality, such as diversity equity, and inclusion (DEI) programs, have not resulted in significant growth in women’s leadership over time.²⁰

2.4 Gender representation on boards of directors

When it comes to boards of directors, much like in employed leadership positions, the numbers for women on boards in energy are significantly lower than for men—ranging from 15.1% in oil and gas to 25.3%.²¹

Indeed, the proportion of women in executive-level leadership positions is even lower for women with intersecting identities. A study from Mount Royal University and DirectHer notes, “federal data indicates racialized people hold 4%-6.8% of board seats,

¹⁹ Statistics Canada, “Table 98-10-0456-01 Place of work status by industry sectors, occupation broad category and gender.” <https://doi.org/10.25318/9810045601-eng>

²⁰ Statistics Canada, “Table 33-10-0501-01 Representation of women and men on boards of directors and in officer positions, by firm attributes.” <https://doi.org/10.25318/3310050101-eng>

²¹ “Representation of women on boards of directors and in officer positions, 2020,” Table 2. <https://www150.statcan.gc.ca/n1/daily-quotidien/230529/cg-b002-eng.htm>

persons with disabilities hold 0.3%-0.5% of boards seats and Indigenous peoples hold 0.3%-0.5% of board seats.”²²

The proportion of women employed in lower-paying roles within a company or industry tends to be much higher than those in higher-paying roles, such as executives. This divide not only perpetuates a wage gap, but also reinstates the bias that women are not able to achieve in the same ways as men in their careers. Continued research and reporting requirements from all kinds of organizations and corporations is needed to fully understand and improve the representation of diverse identities in industry.

²² Rachael Pettigrew, Chantel Cabaj and Quinn Pelland, *2022 Industry Report, Pathways to Board Work for Women and Gender Diverse People: Understanding Experiences and Barriers* (Mount Royal University, DirectHer, 2022).
https://static1.squarespace.com/static/5d6feb40e1e8320001fabb9d/t/6340486d4f03fd0d53815563/1665157230013/DirectHer_Industry+Report+2022_Final_7Oct2022.pdf

3. The gender pay gap

3.1 Pay inequity

A method of evaluating pay inequity is the gender pay ratio, which is the proportion of one dollar that women earn compared to one dollar earned by men while working the same job. Across all levels of employment and industry, women, on average, earn around \$0.89 CAD for every dollar men earn.^{23,24} The Canadian Women’s Foundation notes that this number is even lower for racialized women, who, on average, make 59% of white men’s earnings.²⁵

Women and gender-diverse people also have less access to capital, which inhibits their ability to make the same choices as men across their lifetime. As entrepreneurs, pay disparity limits women’s access to substantial, low-interest business loans, and as a result, makes them more risk-averse than male small-medium enterprise owners.²⁶ To support this, the IEA notes that women are much less likely to be listed as inventors on patent applications associated with the energy sector.²⁷ Although data suggests that the share of female investors of energy-related patents is on the rise,²⁸ the unequal participation of women recognized for their contribution to energy product development is an indicator of missed opportunities and innovation that women and gender-diverse individuals can offer.

As Canada adopts emerging technologies, this issue will prevent women and gender-diverse people from claiming the opportunities to own and run clean energy businesses.

²³ Ontario Pay Equity Office, “The gender pay gap: it’s more than you think,” (2023).

<https://payequity.gov.on.ca/the-gender-wage-gap-its-more-than-you-think/>

²⁴ WomanACT, “Equal pay day in Canada,” (2022). <https://womanact.ca/equal-pay-day-in-canada/>

²⁵ Canadian Women’s Foundation, “The Facts about the Gender Pay Gap,” (March 15, 2022).

<https://canadianwomen.org/the-facts/the-gender-pay-gap/>

²⁶ Lyming Huang and Patrice Rivard, “Financing of women-owned small and medium-sized enterprises in Canada,” (Innovation, Science and Economic Development Canada, 2021). <https://ised-isde.canada.ca/site/sme-research-statistics/en/research-reports/financing-women-owned-small-and-medium-sized-enterprises-canada#Toc144>

²⁷ IEA, “Gender and Energy Data Explorer,” (2023). <https://www.iea.org/data-and-statistics/data-tools/gender-and-energy-data-explorer?Topic=Innovation&Indicator=Share+of+female+inventors+%28inventor+country+of+residence%29>

²⁸ IEA, “Gender and Energy Data Explorer.”

This pay inequity also affects women’s ability to retire with dignity: women retire with smaller pensions than men due to the compounded impacts of the gender wage gap.²⁹

3.2 Pay inequity in energy

Energy-related occupations have an average gender pay ratio that is even less than the national average and are some of the largest drivers of the national wage gap. An average gender pay ratio includes annual wages, salaries and commission. In 2021 these energy-related occupations saw an average pay ratio of:³⁰

- Natural resources, agriculture and related occupations (e.g. oil and gas): 0.47
- Occupations in manufacturing and utilities: 0.67
- Trades, transport and equipment operators and related occupations: 0.69
- Natural and applied sciences and related occupations (e.g. engineering): 0.81

In addition to observing occupation, the salary differences in energy-related industries illustrate the pay gap differences between genders and the intersectional disparities for those with Indigenous identity. Figure 4 illustrates just how vast the pay gap is between genders, even in industries that most equitably represent women.

²⁹ Ontario Pay Equity Office, “Gender pension gap,” (2023). <https://payequity.gov.on.ca/gender-pension-gap/>

³⁰ Statistics Canada, “Table 14-10-0324-01 Average and median gender pay ratio in annual wages, salaries and commissions.” <https://doi.org/10.25318/1410032401-eng>

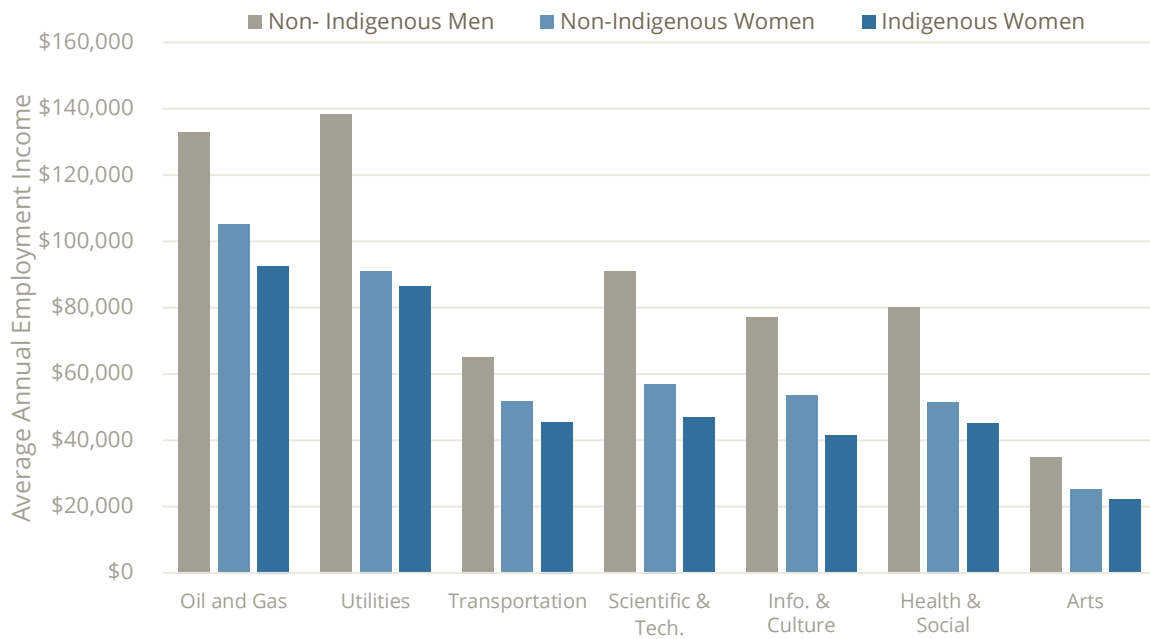


Figure 4. Average annual employment income in Alberta, by industry

Data source: Statistics Canada³¹

Many factors contribute to the severity of the pay gap between men, women and women with intersectional identities. Representation in high-paying jobs, such as leadership roles, is a significant aspect of this. Women also experience more societal pressure to take on more caregiving responsibility, ultimately affecting their career advancement and longevity.³² Addressing the barriers that women have to equal opportunity in the workplace could see the decline of such stark gender gaps not just in energy, but across all employment sectors.

³¹ Statistics Canada, “Table 98-10-0588-01: Employment income statistics by industry sectors, Indigenous identity, highest level of education, work activity during the reference year, age and gender.” <https://doi.org/10.25318/9810058801-eng>

³² Claudia Goldin, “Journey across a century of women”, *National Bureau of Economic Research*, October 19, 2020, <https://www.nber.org/reporter/2020number3/journey-across-century-women>

4. Addressing the gender gaps

4.1 Barriers to equity in energy

The Pembina Institute’s 2021 report *Women in Alberta’s Energy Transition* identified three barriers to women’s success in the energy sector. Firstly, there is a lack of access to opportunity. Women are enrolled at lower rates in the STEM programs that lead to energy jobs and are less likely to be directed towards energy jobs in their school or social life. Secondly, there is a lack of access to “good” jobs, including those that allow them to balance work and caregiving responsibilities and still allow them to advance on a leadership track. Thirdly, they often face a toxic industry culture. Well-documented workplace experiences of men and women have found the energy sector to be a hypermasculine culture with high rates of harassment, violence and sexual violence, especially in remote energy sites.³³ This was highlighted by the National Inquiry on Missing and Murdered Indigenous Women and Girls, which noted that extractive industries and remote work contribute to domestic and workplace-related violence as well as violence towards Indigenous women.³⁴

Women often face barriers in the workplace that men may never consider. Due to societal gender roles and the frequency of workplace gender-based violence, women are less safe at work³⁵ and are predominantly expected to take on most of the caregiving and household responsibilities in comparison to male partners — women perform around 60% of the total hours of unpaid household work.³⁶

The gender gap perpetuates the gender division of labour and results in women taking on disproportionately lower-paying roles and industries. Additionally, this enforces cultural perceptions of gender, further enhancing the under-representation, under-

³³ *Women in Alberta’s Energy Transition*.

³⁴ National Inquiry into Missing and Murdered Indigenous Women and Girls, *Reclaiming Power and Place: The Final Report* (2019). https://www.mmiwg-ffada.ca/wpcontent/uploads/2019/06/Final_Report_Vol_1a-1.pdf

³⁵ Barry Bottino, “Do women feel safe at work?” *Safety and Health*, February 20, 2022. <https://www.safetyandhealthmagazine.com/articles/22260-do-women-feel-safe-at-work>

³⁶ Jeannine N. Bailliu and Danny Leung, *Measuring the value of women’s contribution to the Canadian economy: New insights based on recent work* (Statistics Canada, 2023). <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2023002/article/00001-eng.htm>

retention and under-recognition of women in STEM and trades careers — many of which are found in the energy sector.³⁷

4.2 Solving gender gaps in the energy sector

Solutions to advance the development of a sustainable energy workforce must be holistic and will require the work of many individuals and groups. Inclusive workplace policies, leadership buy-in, industrial accountability and government investment are all needed to ensure that all Canadian workers (present or future) can access well-paying, safe and equitable jobs in a decarbonized economy.

In *Equitable Net-Zero*, the Pembina authors put forward more than 50 recommendations, which were collected into four overall categories:

- Improve access to net-zero related training, certification and education for women
- Create flexible and safe workplaces
- Support intersectional gender-diverse leadership
- Collect disaggregated data on gender (by ethnicity, leadership level etc.), to support data transparency and ethical data use.

Access to specific, disaggregated data is important for understanding the intersectional impacts of the gender gap. Communities that are especially affected are Indigenous women and two-spirited people, LGBTQIA+ people, Black and racialized people and people with disabilities. Metrics for equitable hiring should not just focus on the number of represented individuals, but also representation in leadership positions, fair wages, clear streams for career development and a proven ability to retain workers representing diverse identities and backgrounds.

These recommendations were informed by leaders in gender equity and energy in the *Putting People Equity and Inclusion at the Centre of Climate Action* report, which suggests that safety is a precursor to inclusion at work — until workplaces are more psychologically safe and welcoming to diverse people, real inclusion is not attainable.³⁸

³⁷ Alicia Bjarnason, Bitá Nikoukar, Heather Barnes, *On-ramping guide for employers: A planning resource guide for STEM companies* (AWSN, 2018). https://www.awsn.org/sites/default/files/on-ramping_guide_for_employers_2019.pdf

³⁸ Trinity Song and Kendall Anderson, *Putting people, equity and inclusion at the centre of climate action: Pembina Institute Thought Leaders' Forum* (Pembina Institute, 2023). <https://www.pembina.org/pub/putting-people-equity-and-inclusion-centre-climate-action>

5. Conclusion

Women make up about a quarter of energy sector workers, far below the proportion of women employed across Canada's other sectors. The under-representation of women in high-paying sectors, such as energy, fuel the country's gender pay gap.

The challenge of addressing the gender representation gap through an equitable energy transition is that it is far from simple. Systemic forces such as gender-based violence and gender roles permeate society and extend far beyond employment. Increasing the number of women or gender-diverse individuals in the energy sector is not a means to solving the long-standing socio-economic disparities that affect real lives, families and communities, but it is a good place to act now.

The past year showed some signs of progress. Ontario and B.C. both put forward legislation that could make a meaningful change. British Columbia passed the Pay Transparency Act,³⁹ which will measure and improve awareness around pay equity, while the Working for Workers Act in Ontario aims to improve women's access to trades jobs and workplace conditions, such as mandatory women-only washrooms and properly fitting personal protection equipment.⁴⁰

It is in the best interest of both the energy sector and the Canadian economy as a whole to unlock and retain the talent potential of women and gender-diverse workers in the transition to a clean energy future. Policy development to ensure an equitable energy transition in Canada, but Alberta especially, is needed.

Alberta faces a pivotal moment with the potential to change both the conventional and renewable energy sector for the better; safe, inclusive, and good jobs benefit everyone, not just women and gender-diverse individuals. The industrial challenge of achieving net-zero commitments provides a timely opportunity to implement this knowledge early on and prevent the gender gap from worsening. An equitable net-zero economy is necessary and gender equity is a critical variable to achieve an economically prosperous and climate-conscious future. Research and knowledge on the intersectional impacts of identity-based discrimination, along with disaggregated data, are a critical part of creating lasting, evidence-based change.

³⁹ Government of British Columbia, "Pay Transparency laws in B.C.," (2023).
<https://www2.gov.bc.ca/gov/content/gender-equity/pay-transparency-laws-in-bc>

⁴⁰ Government of Ontario, "Backgrounder: Working for Workers Act, 2023."
<https://news.ontario.ca/en/backgrounder/1002846/working-for-workers-act-2023>