

# Sector Profile

## Utilities

### Atlantic Region

2023

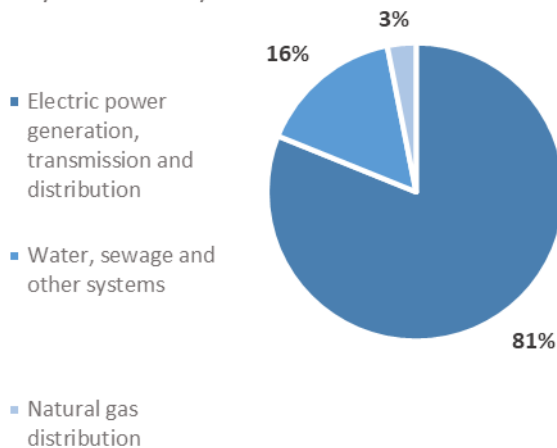


#### HIGHLIGHTS

- The utilities industry is capital intensive and small in terms of employment. The industry is crucial to the health of the economy as power generation, water and sewage systems, and natural gas distribution flows into all industries.
- Those employed in utilities are typically highly educated and nearly two-thirds (62.8%) of the workforce possess a postsecondary certificate or diploma relative to the all-industry average of 38.8%.
- Employment rose steadily from 2015 to 2021 before a slight decrease in 2022. The number of jobs has been high in recent years due to the adoption of new technologies, and increased investments/projects stemming from the availability of tax credits.
- The employment growth rate is expected to be well above the all-industry average in Newfoundland and Labrador, as well as in Prince Edward Island. Meanwhile, growth is expected to be near the all-industry average in New Brunswick and slightly below in Nova Scotia.

#### ABOUT THE INDUSTRY

##### Employment Share by sub-industry



Source: Statistics Canada, Labour Force Survey 2022

##### Composition and Importance of the Sector

The utilities industry is capital intensive and small in terms of employment. The industry is crucial to the health of the economy as power generation, water and sewage systems, and natural gas distribution flows into all industries. The industry is also well regulated in terms of safety and clean energy requirements.

The number of employers is small in the utilities industry with most of them being crown corporations and/or electricity providers. The industry tends to grow steadily as real GDP has grown by an average annual rate of 2.9% over the last 10 years.

Electric power generation, transmission, and distribution makes up the largest share of employment within the industry. Water, sewage and other systems account for the next largest portion of industry employment, while natural gas distribution is the smallest.



## Geographic Distribution of Employment

The utilities industry's share of employment is consistent across Newfoundland and Labrador, Nova Scotia, and New Brunswick. Meanwhile, Prince Edward Island's share is significantly lower than the rest of the Atlantic provinces.

Large investments tend to drive employment as firms need operators and maintenance crews to run their infrastructure. Examples in the region include the Lower Churchill project in Newfoundland and Labrador, and the Point Lepreau Nuclear Generating Station in New Brunswick.

	Employed 2022	Industry Share (%)
Atlantic Canada	10,700	0.9%
Newfoundland and Labrador	2,000	0.9%
Prince Edward Island	200	0.2%
Nova Scotia	4,400	0.9%
New Brunswick	4,100	1.1%

Source: Statistics Canada, Labour Force Survey

## WORKFORCE

### Workforce Characteristics

The majority (79.4%) of the workforce in the utilities industry is male. Workers in this industry also tend to fall within the ages of 25 to 55 years - prime aged workers. This means that youth (ages 15 to 24 years) and seniors (ages 55 years and over) are under-represented. Compared to the average across all industries, there are both fewer young workers (2.5% vs. 13.5%) and fewer senior workers (20.6% vs. 24.0%).

Those employed in utilities are typically highly educated and nearly two-thirds (62.8%) of the workforce possesses a postsecondary certificate or diploma, compared to the all-industry average of 38.8%. Moreover, only 0.8% of workers in the industry had less than a high school education, compared to 8.1% across all industries.

Nearly all the industry workforce is comprised of workers who are not self-employed, at 99.8%. Moreover, 88.3% of the employees have permanent employment. This compares to all-industry averages of 89.5% and 75.3% respectively.

### Main Occupations

Petroleum, gas and chemical processing, and utilities supervisors make up the largest occupational share in the utilities industry. This is followed by power engineers and power systems operators, electrical power line and cable workers, construction millwrights and industrial mechanics, and water and waste treatment plant operators.

The share of employment within the utilities industry for petroleum, gas and chemical processing, and utilities supervisors increased by 4.7 percentage points (p.p.) from 2012 to 2022. Meanwhile, the share of water and waste treatment plant operators decreased by 1.9 p.p. over the same period. Power engineers and power systems operators grew by 1.7 p.p. and the other changes were minimal.

<b>Top 5 largest occupations</b>	Employed 2022	% Share of Industry
Supervisors, petroleum, gas and chemical processing and utilities	975	9.1%
Power engineers and power systems operators	800	7.4%
Electrical power line and cable workers	750	6.9%
Construction millwrights and industrial mechanics	550	5.1%
Water and waste treatment plant operators	425	4.0%

Source: ESDC/Service Canada



## RECENT HISTORY

Employment rose steadily from 2015 to 2021 before a slight decrease in 2022. The number of jobs has been high in recent years due to the amount of activity in the sector including new technologies, tax credits, and various other programs. The goal of a lot of recent government programming is to help transition the region to net-zero emissions.

Hurricane Fiona disrupted the industry in September 2022. Damage to electrical equipment from the winds and fallen trees led to a loss of power for a significant number of people. The post-hurricane cleanup is now largely finished. However, climate change, including dangerous weather events, remain a significant challenge for the industry.

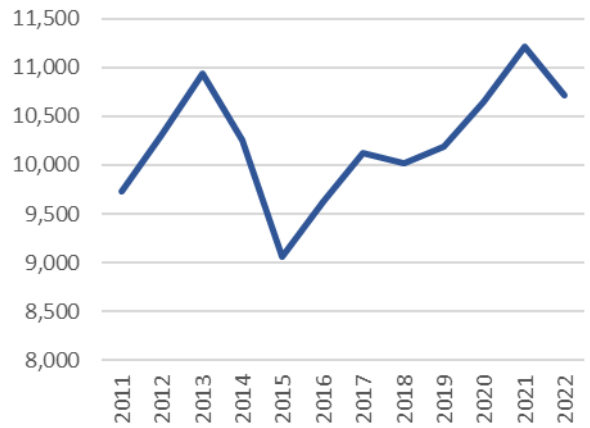
The number of green energy jobs has started to rise in the industry due to significant investment towards renewable energy. This has begun to help the industry attract younger workers who are typically more drawn to green jobs rather than jobs in energy generation based in oil and gas. Challenges with the proposed Atlantic Loop, coupled with the length of time that green energy projects take to complete, has somewhat limited the growth in clean energy employment. There has also been some retraining of fossil fuel workers in the region. However, the amount is currently insignificant.

Labour shortages are starting to become an issue within the utilities industry. Energy efficiency programs aimed at reducing household electricity consumption has helped mitigate this challenge as it reduces the amount of energy needed from the grid. These programs include the Canada Greener Homes Grant, the Oil to Heat Pump Affordability Program, and several home solar programs.

Hydraulic turbines make up by far the largest share of electricity generated in the region. These are mainly located in Newfoundland and Labrador with facilities such as Churchill Falls and Muskrat Falls being major producers. Combustible energy, consisting of both biomass (wood, methane, etc.) and non-renewable fuels (coal, natural gas, etc.), produces a significant amount of energy for the region.

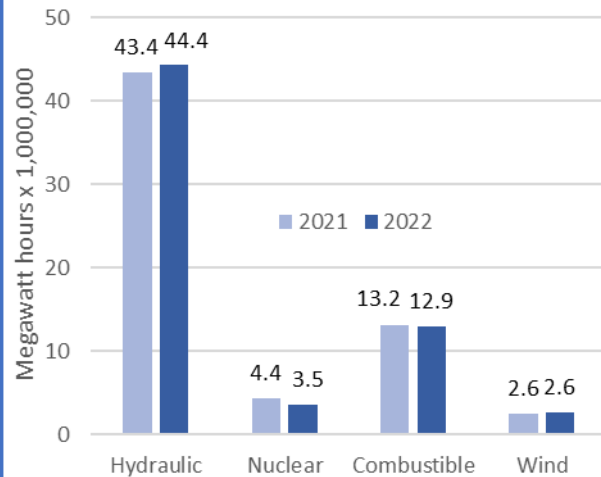
Nuclear power, generated solely in New Brunswick, makes up a smaller proportion of the electricity produced in the Atlantic provinces. Wind makes up a small share of electricity produced while solar energy comprises an insignificant share of energy generated in the region.

**Historical Employment Trend**  
Atlantic Canada



Source: Statistics Canada, Labour Force Survey

**Electricity Generation by Type**  
Atlantic Canada 2021-2022



Source: Monthly Electricity Supply and Disposition Survey



## OUTLOOK

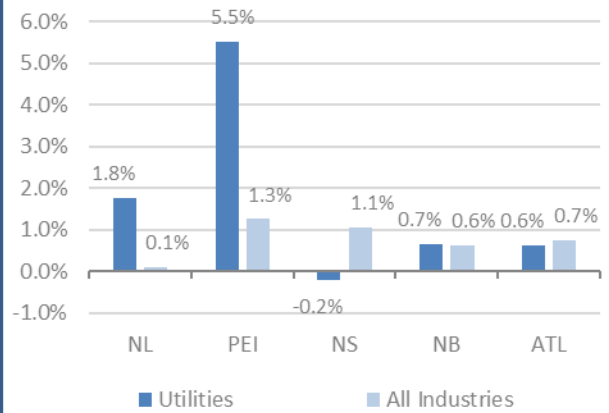
The employment growth rate is expected to be well above the all-industry average in Newfoundland and Labrador (N.L.) and Prince Edward Island (P.E.I.). The gains are largely due to population growth and increased investments in hydraulic, solar, and wind energy in the near-term.

Meanwhile, the utilities employment growth rate is consistent with the all-industry average in New Brunswick (N.B.) and below the average in Nova Scotia (N.S.). The decline in N.S. is related to the decommissioning of coal fired power plants. New Brunswick continues to wait for the refurbishment to begin on the Mactaquac Dam, and on green energy projects to start up.

There have been significant investments in small modular reactors (SMRs), and onshore and offshore wind projects, and many provinces are developing hydrogen plans. However, it will take several more years before there are any results. Likewise, most plans to phase out energy produced from fossil fuels will take many years.

Upcoming major projects in the region include the Bay d'Espoir Penstock Project in N.L.; the Western P.E.I. Transmission Line; the Higgins Mountain Wind Farm Project in N.S.; and SMR projects from Moltex Energy and ARC Clean Energy Canada in N.B.

**Projected Average Annual Employment Growth Rate (%), Atlantic Provinces, 2023-2025**



Source: ESDC/Service Canada

**Note:** In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.

The analysis in this report was finalized as of **September, 2023**.

**Prepared by:** Labour Market Analysis Directorate, Service Canada – Atlantic Region

**For further information,** you may contact us at: [ATL-LMI-IMT-GD@servicecanada.gc.ca](mailto:ATL-LMI-IMT-GD@servicecanada.gc.ca)

© His Majesty the King in Right of Canada, as represented by the Minister of Employment and Social Development Canada, 2023



## APPENDIX

## Real GDP (2022) and Employment (2022) for Atlantic Canada

	Utilities			All Industries		
	Number	Share of		Number	Share of	
		Total	AAGR*		Total	AAGR*
Real GDP (M\$)	\$2,997.5	100.0%	2.9%	\$109,227.1	100.0%	1.0%
Newfoundland and Labrador	\$683.0	22.8%	1.6%	\$30,150.3	27.6%	0.1%
Prince Edward Island	\$91.5	3.1%	2.8%	\$6,542.6	6.0%	2.5%
Nova Scotia	\$809.2	27.0%	1.1%	\$40,011.5	36.6%	1.5%
New Brunswick	\$1,413.8	47.2%	5.1%	\$32,522.7	29.8%	1.1%
Employment (000s)	10.7	100.0%	0.4%	1175.2	100.0%	0.4%
Male	8.5	79.4%	0.8%	596.0	50.7%	0.4%
Female	2.2	20.6%	-1.2%	579.2	49.3%	0.5%
15-24 years old	0.3	2.5%	-3.7%	158.7	13.5%	0.4%
25-54 years old	8.2	76.7%	0.4%	734.4	62.5%	-0.2%
55 years and older	2.2	20.6%	0.7%	282.1	24.0%	2.2%
Worked full-time	10.6	98.8%	0.3%	990.6	84.3%	0.6%
Worked part-time	0.1	1.2%	4.1%	184.6	15.7%	-0.4%
Self-employed	n/a	n/a	n/a	123.2	10.5%	-1.0%
Employees	10.7	99.8%	0.4%	1052.0	89.5%	0.6%
Permanent job	9.5	88.3%	0.5%	884.4	75.3%	1.0%
Temporary job	1.3	11.7%	-0.2%	167.6	14.3%	-1.4%
Less than high school	0.1	0.8%	-17.1%	95.5	8.1%	-3.9%
High school graduate	1.0	9.7%	-0.9%	275.3	23.4%	-0.5%
Postsecondary cert. or diploma	6.7	62.8%	1.0%	456.3	38.8%	0.3%
University degree	2.8	26.5%	1.2%	348.2	29.6%	3.3%
Newfoundland and Labrador	2.0	18.7%	-3.2%	232.5	19.8%	-0.3%
Prince Edward Island	0.2	1.9%	-0.9%	84.3	7.2%	1.5%
Nova Scotia	4.4	41.1%	1.2%	484.9	41.3%	0.6%
New Brunswick	4.1	38.1%	1.8%	373.5	31.8%	0.5%

Source: Statistics Canada, Labour Force Survey - Custom Table; Table 36-10-0402-01

\*Average annual growth rate for last ten years of available data (GDP 2013-22 and Employment 2013-22)

