

# WORK NW ALBERTA

GRANDE PRAIRIE-GREENVIEW CORRIDOR

## RENEWABLE ENERGY AND CLEAN TECH SECTOR PROFILE





If you are organizing a talent attraction campaign, presentation or hiring event, we've got some assets to help you.

Email us at **[info@worknwalberta.ca](mailto:info@worknwalberta.ca)** for information on accessing our photo and video library, research findings and market data. We're here to help.



# WORK NW ALBERTA

## GRANDE PRAIRIE-GREENVIEW CORRIDOR

Work Northwest Alberta - representing the Grande Prairie Greenview corridor - is poised for unprecedented growth and opportunity. By 2031 our region will need over 4,000+ skilled employees across key sectors such as Energy, Healthcare, Agriculture, Education, Logistics, and Transportation (Lightcast Analyst) to support and expand our thriving economy. Recognized as a northern economic powerhouse, our area serves a trade market of 300,000 and plays a vital role in contributing to both national and international markets.

The sector profile project was led by Work NW Alberta, a collaborative effort between the City of Grande Prairie, County of Grande Prairie, Municipal District of Greenview, Grande Prairie & District Chamber of Commerce, and Northwestern Polytechnic.

We would like to thank everyone who contributed their feedback, ideas and expertise to the study.

Please note that every effort has been made to use the most current data available. The following sources of information are used in this profile:

- Manifold Data Mining Inc. 2023/2024
- Lightcast Analyst, Datarun 2024.3
- IBIS World 2024 Industry Profiles



County of  
Grande Prairie No. 1  
Alberta, Canada



Municipal District of  
**GREENVIEW**

NORTHWESTERN  
POLYTECHNIC 

Chamber of  
Commerce   
GRANDE PRAIRIE & DISTRICT

# INTRODUCTION

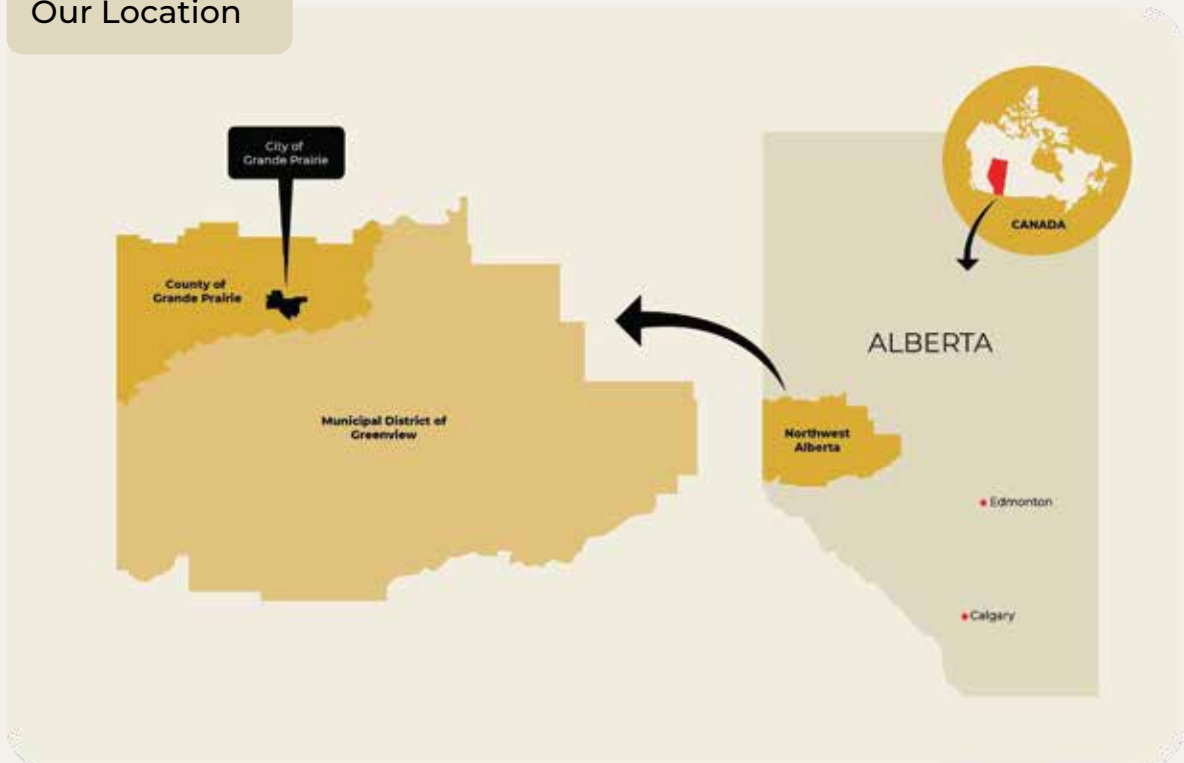
This profile offers comprehensive information about the renewable energy and clean tech industries in the Northwest Alberta Region. It serves as a valuable resource, providing detailed data on business size, sector outlook, and cluster assets within the region.

This sector profile focuses on the Region consisting of the City of Grande Prairie, County of Grande Prairie, Municipal District (MD) of Greenview, Town of Beaverlodge, Town of Sexsmith, Town of Wembley, Town of Fox Creek, Town of Valleyview, Greenview Co-ops and Enterprises, Sturgeon Lake Cree Nation, and Horse Lake First Nation. Any references to "Region" within this document refer to the custom region above.

The Region spans nearly 40,000 square kilometres and acts as a gateway and resource hub for northwestern Alberta. Its largest centre, the City of Grande Prairie, is located approximately 450 kilometres northwest of Edmonton. With a strong postsecondary institution, new hospital, skilled labour force, and significant business supports, opportunities abound within the Region.

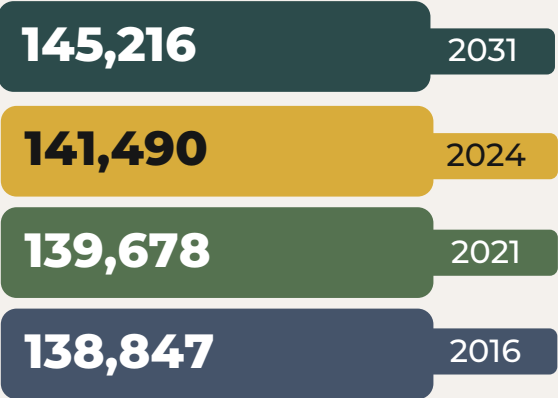
The renewable energy and clean tech industry employed 9,758 individuals in 2024 across 1,952 business in the Region. Employment is expected to increase by 534 jobs or 5% by 2031. The majority of the Region's businesses within this sector are small enterprises as 72% of businesses with employees, employ fewer than four individuals.

## Our Location



# REGIONAL DEMOGRAPHIC BREAKDOWN

## POPULATION OF REGION, 2024



Source: Lightcast Analyst, Datarun 2024.3

Approximately 60% of the Region's population resides in the City of Grande Prairie.

The Region's population accounted for 80% of the total population in Census Division 18 and Census Division 19. The population in both Census Divisions is projected to increase 2% by 2031.



## AGE OF POPULATION, 2024

Region	Alberta
Prime working age (25 to 54 years)	Prime working age (25 to 54 years)
43%	43%
Young seniors and elderly (55 and over)	Young seniors and elderly (55 and over)
25%	27%

Source: Lightcast Analyst, Datarun 2024.3

## HIGHEST EDUCATIONAL ATTAINMENT FOR REGION RESIDENTS, AGED 15 AND OVER, 2024

Total residents aged 15 and over	92,913
High school diploma or equivalent	33%
No certificate, diploma or degree	20%
College or non-university certificate	18%
University certificate, degree at bachelor level or above	14%

Source: Manifold Data Mining, 2024

**60%**

of the Region's working  
age population is within  
the City of Grande Prairie

LABOUR FORCE STATUS FOR REGION RESIDENTS ,  
2024

Labour Force Status	Region
Total population, Residents aged 15 and over	92,913
In the labour force	68,406
Employed	63,970
Unemployed	4,436
Not in the labour force	24,507

Source: Manifold Data Mining, 2024

TOP 5 FIELDS OF STUDY FOR REGION  
RESIDENTS, AGED 15 AND OVER, 2024

**13,666**

Architecture, Engineering,  
and Related Technologies



**8,233**

Business, Management,  
and Public Administration



**6,852**

Health and Related Fields



**3,264**

Education



**3,170**

Personal, Protective and  
Transportation Services



Source: Manifold Data Mining, 2024

AVERAGE LABOUR FORCE PARTICIPATION RATES, 2024

PARTICIPATION RATE

**74%**

EMPLOYMENT RATE

**69%**

UNEMPLOYMENT RATE

**6%**

Source: Manifold Data Mining, 2024

# ABOUT THE SECTOR

Renewable energy and clean technologies has been identified as a target sector within the Region. Subsectors within this field consist of power generators; engineering construction; sewage and utility systems; and power transmission equipment manufacturing. As demand for sustainable energy generation and eco-friendly technologies rise, demand for outputs from the renewable energy sector will correspondingly rise. As such, the importance of this sector for the Region will continue to grow.

## REGION SPECIFIC

The renewable energy and clean tech sector has a higher concentration within the Region when compared to the rest of Alberta. This sections is also projected to grow over the next 5 years. The largest subsectors for this industry is support activities for mining, oil and gas extraction (678 businesses). The majority of the Region's businesses within this sector with known employment totals are small enterprises, with 72% reporting employing 1-4 people.

### RENEWABLE ENERGY AND CLEAN TECH BUSINESSES, 2024

Industries	Businesses
Support activities for mining, and oil and gas extraction	678
Management, scientific and technical consulting services	524
Utility system construction	217
Architectural, engineering and related services	208
Other professional, scientific and technical services	178
Electronic and precision equipment repair and maintenance	62
Waste treatment and disposal	34
Other heavy and civil engineering construction	18
Remediation and other waste management services	13
Electric power generation, transmission and distribution	8
Water, sewage and other systems	8
Other electrical equipment and component manufacturing	3
Electrical equipment manufacturing	1
<b>TOTAL</b>	<b>1,952</b>

Source: Lightcast Analyst, Datarun 2024.3



# REGION SPECIFIC (Cont.)

Renewable energy and clean tech businesses in the Region employed 9,758 people in 2024, an increase of 744 positions since 2021. From 2024 to 2031 this sector is poised to see a further growth of 534 net new positions to a total of 10,292 positions in the Region. The largest percentage growth is projected for offices of remediation and other waste management services, with a projected 28% increase in total jobs.

RENEWABLE ENERGY AND CLEAN TECH EMPLOYED AND SELF-EMPLOYED POSITIONS, 2021, 2024 AND 2031

Subsector	2021 Positions	2024 Positions	2031 Positions	Change 24'-31'	% Change
Support activities for mining, and oil and gas extraction	4,965	6,247	7,076	829	13%
Electric power generation, transmission and distribution	219	242	253	11	5%
Water, sewage and other systems	25	51	60	9	18%
Utility system construction	1,632	1,226	1,015	-211	-17%
Other heavy and civil engineering construction	77	91	106	15	16%
Architectural, engineering and related services	1,034	820	655	-165	-20%
Management, scientific and technical consulting services	354	320	288	-32	-10%
Other professional, scientific and technical services	227	243	268	25	10%
Waste treatment and disposal	183	167	182	15	9%
Remediation and other waste management services	165	232	297	65	28%
Electronic and precision equipment repair and maintenance	132	119	93	-26	-22%
TOTAL	9,013	9,758	10,293	535	5%

Source: Lightcast Analyst, Datarun 2024.3

Note: Job totals per subsector may not add up to total number of positions within the broader sector due to methodological rounding





Many of the top positions within this sector are directly related to trades and equipment operation, underscoring the critical importance of these occupations. The table below showcases the top occupations based on total staffing patterns within the Region. The associated wages are listed for each occupation, regardless of the specific sector of employment.

RENEWABLE ENERGY AND CLEAN TECH AVERAGE WAGES (REGARDLESS OF SECTOR OF WORK) PER OCCUPATION, 2023

Occupations	Average Wages
Oil and gas well drillers, servicers, testers and related workers	\$77,126.40
Contractors and supervisors, oil and gas drilling and services	\$109,179.20
Oil and gas drilling, servicing and related labourers	\$60,552.59
Oil and gas well drilling and related workers and services operators	\$70,067.95
Heavy equipment operators	\$68,411.20
Underground production and development miners	\$75,844.29
Transport truck drivers	\$69,742.40
Heavy-duty equipment mechanics	\$88,649.60

Source: Lightcast Analyst, Datarun 2024.3

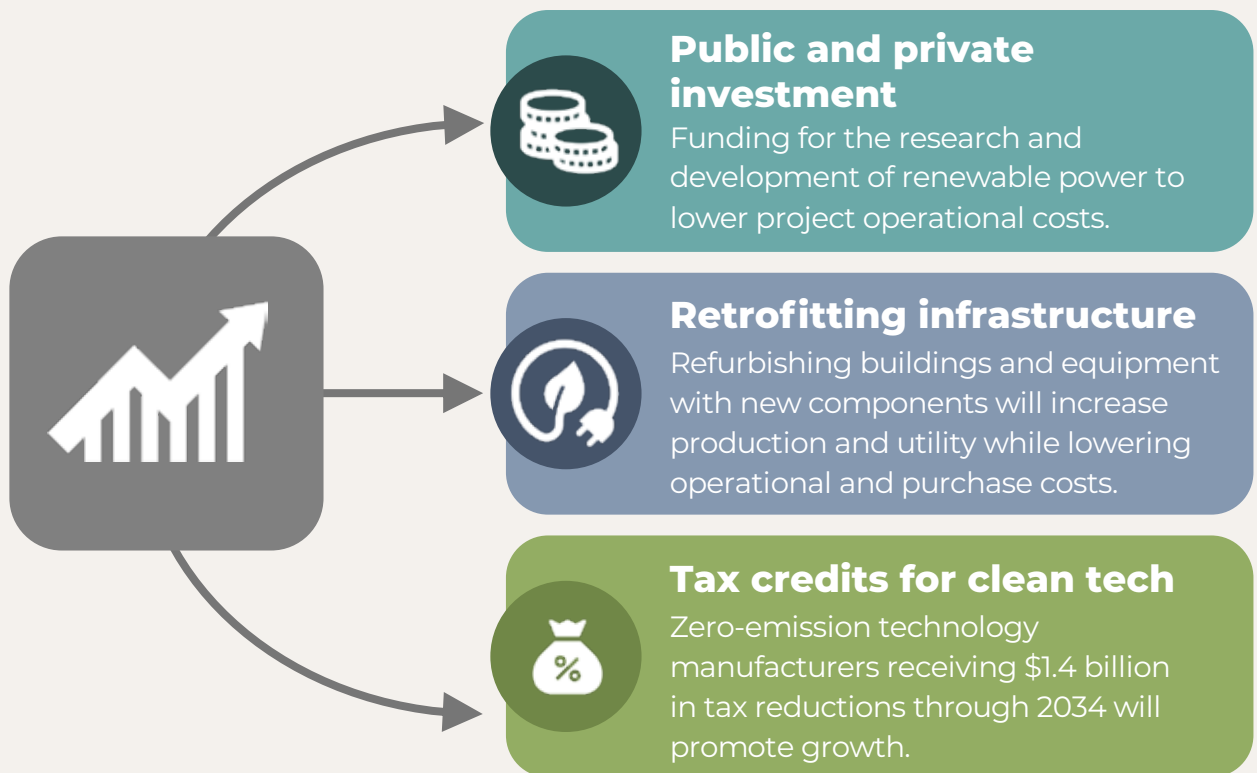
# SECTOR DATA

## FUTURE OUTLOOK OF THE SECTOR

According to Canada Energy Future 2023 (latest data available), total electricity demand will expand in the coming years. Higher demand, along with a forecast increase in the price of electricity, will serve as the basis for growth. The extension of investment and production tax credits will lead to more renewable power projects as it offsets high construction costs. Investment tax credits and the Smart Renewables and Electrification Pathways Program will look to prop up investment into clean energy in provinces like Alberta and Saskatchewan that still heavily rely on non-renewable energy.

## KEY DRIVERS OF DEMAND

Factors determining national demand for the renewable energy and clean tech can be broken into three categories.



# KEY SUPPLIERS TO THE SECTOR

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## Upstream manufacturers

(Including metal pipe and tub, wire and cable, engine and turbine, wind turbine and transmission line)



## Natural goods producers

(E.g., coal mining; oil, drilling and gas, extraction; and petroleum refining)

Source: IBISWorld, 2024

# KEY BUYERS TO THE SECTOR

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## Electric power transmission



## Construction and Canadian Consumers

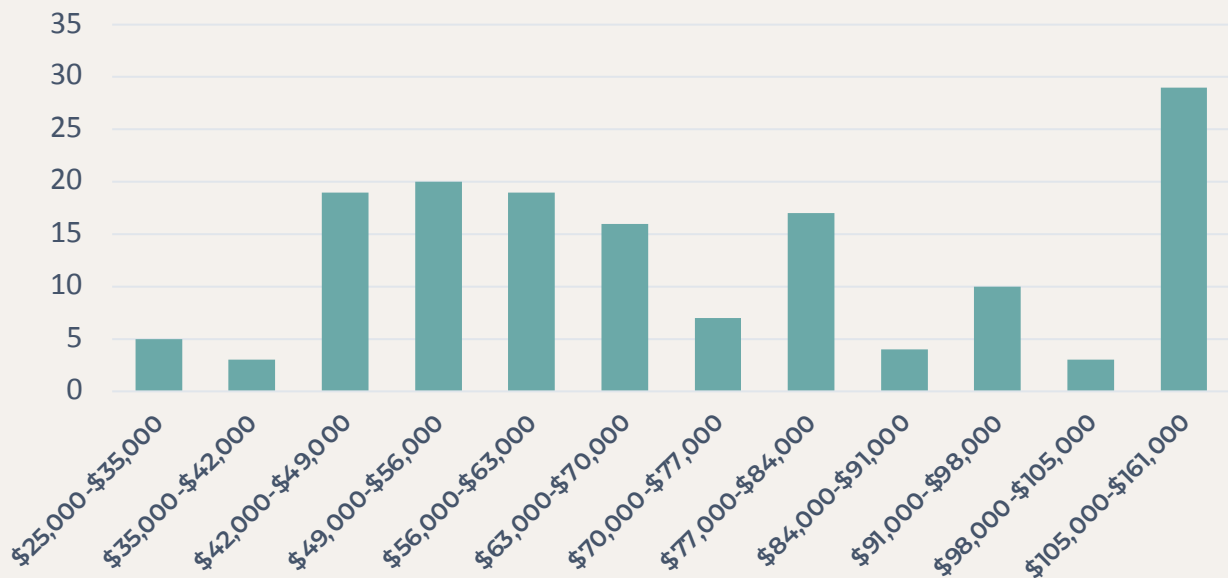
Source: IBISWorld, 2024

# JOB POSTING DATA

Between January and December 2024, the Region saw 769 unique job postings within the renewable energy and clean tech sector. Of the jobs posted during this period, 152 had advertised salaries. Those postings had a median advertised salary of \$68,000, with 28% offering a salary above \$91,000.

The top subsectors by number of job postings in the renewable energy and clean tech are support activities for mining; management, scientific, and technical consulting services; and architectural, engineering, and related services.

JOB POSTINGS BY SALARY, JANUARY – DECEMBER 2024, REGION



Source: Lightcast Analyst, Datarun 2024.3

TOP OCCUPATIONS BY NUMBER OF JOB POSTINGS, JANUARY – DECEMBER 2024



Source: Lightcast Analyst, Datarun 2024.3



# COMMUNITY ASSETS SUPPORTING THE SECTOR/CLUSTER

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**Northwestern Polytechnic (NWP)** offers a variety of educational options and has developed local partnerships to provide programming that rapidly and effectively meets the needs of their learners and the broader community. [nwpolytech.ca](http://nwpolytech.ca)

**Grande Prairie Regional Innovation Network** serves innovators, entrepreneurs and companies in Northwestern Alberta with resources, knowledge and connections to launch innovations in connection with the broader Alberta innovation ecosystem. [gprin.ca](http://gprin.ca)

**Community Futures Grande Prairie and Region** offers businesses support from first steps through to growth stages. This includes information on how to start a business, developing business plans, financing loans, marketing and feasibility studies. [grandeprairie.albertacf.com](http://grandeprairie.albertacf.com)

**ATB Entrepreneur Centre** supports businesses through business-to-business networking, connections and workshops. [atbentrepreneurcentre.com](http://atbentrepreneurcentre.com)

**Women Building Futures** offers programs and support services to help unemployed and underemployed women explore and connect to careers that pay above a living wage. Employment training programs provide the introductory skills to begin a new career in areas where women have historically been underrepresented. [womenbuildingfutures.ca](http://womenbuildingfutures.ca)

For information on other Community and Training Assets, please contact the project partners.

## REGIONAL SPOTLIGHT

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Within the Region, geothermal energy has been identified as an emerging opportunity. Both the Leduc Formation and Granite Wash Formation have been assessed as viable for commercial development. Given the Government of Alberta's emphasis on clean and renewable energy as a significant opportunity to diversify Alberta's and the Region's energy sector, these formations present unique development prospects moving forward.

Additionally, the Region is strategically situated above two prolific natural gas formations – the Montney and the Duvernay – offering substantial opportunities for value-added processing in the petrochemical industry.

The Region is already attracting multi-billion dollar investments in energy production and clean energy projects. Planning for three major projects is currently underway in the MD of Greenview and the County of Grande Prairie. These world-class projects are expected to support more than 9,000 construction jobs locally and across the province, as well as over 650 operational jobs within the Region.

# TRAINING ASSETS AND INSTITUTIONS THAT SUPPORT THE SECTOR/CLUSTER

## TRAINING ASSETS SPECIFIC TO REGION



NWP has a wide array of renewable energy and clean technology-related degrees, diplomas and certificate programs. Students can deepen skills and knowledge through Power Engineering, Computing Science, Computer Systems Technology, and Business Administration offerings. An additional 60 seats will be added to the power engineering programs by 2026 at NWP through an \$11.3 million upgrade from the Province of Alberta.

Sector related Skilled Trades and Apprenticeships provide hands-on Heavy Equipment Technician and Instrumentation and Control Technician experience while NWP's Collaborative University Transfer programs enhance Science and Engineering expertise.



**University  
Transfer**  
(Science and  
engineering)



**Computing  
Science and  
Computer  
Systems  
Technology**



**Power  
Engineering**

## TRAINING ASSETS SPECIFIC TO REGION (CONT.)

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**The Rupertsland Institute** supports the well-being of Métis in Alberta through job matching, training partnerships with NWP, access to technology and internet, online counselling tools, information on local services, employers and careers, and self-employment workshops.

[rupertsland.org](http://rupertsland.org)

**Montney Riverstone Tribal Council** is the service provider for the **Indigenous Skills Employment and Training (ISET) Program** in the Montney Riverstone Tribal Council area. ISET is designed to help members improve their skills and find employment through training and skills development. The program helps the community members find employment and polish employment skills. Funded through Service Canada, it gives members the skills required to find employment and fill job gaps.

[montneyriverstone.ca](http://montneyriverstone.ca)

**CAREERS: The Next Generation** is an industry led non-profit organization that brings together industry, schools, governments, and communities to guide youth into successful career paths. Youth get the opportunity to test drive in-demand occupations in skilled trades, forestry, information and communications technology, agriculture and healthcare. Companies benefit by attracting local talent and bringing youthful energy to their industry. [careersnextgen.ca](http://careersnextgen.ca)

**Northern Lakes College (NLC)** provides a supported distance learning environment with two locations in the Region. Programs include Resource Technology, Sustainable Energy Certificate and Diploma (through Lakeland College), Apprenticeship Trades, Pre-Employment Trades, and Business and Administrative Studies. Continuing Education and Corporate Training offers Forest Stewardship, Asset Management Professional, and Maintenance Management Professional. [northernlakescollege.ca](http://northernlakescollege.ca)

For information on other Community and Training Assets, please contact the project partners.

# Data Disclaimer

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- The data has been rounded to the sum of all subcategories to minimize discrepancies caused by margin of error.
- The information presented in this report may not precisely match the data collected or developed by each individual community.
- To maintain privacy due to small population samples, data for some communities have been suppressed by Statistics Canada and economic modeling tools. These instances are represented with "<10".
- Occupational wages and median advertised salaries for the sector are two distinct values. Occupational wages reflect the average wage by occupation based on the latest available data (2023). In contrast, the median advertised salary represents the median value of job postings in the sector that included compensation data for the period between January and December 2024.





# WORK NW ALBERTA

GRANDE PRAIRIE-GREENVIEW CORRIDOR

**MAKE A GREAT LIVING.  
LIVE A GREAT LIFE.**

**CONNECT WITH US TO HELP  
IDENTIFY, RECRUIT AND GROW  
YOUR TALENT POOL.**



[info@worknwalberta.ca](mailto:info@worknwalberta.ca)



[www.worknwalberta.ca](http://www.worknwalberta.ca)



# RENEWABLE ENERGY AND CLEAN TECH SECTOR PROFILE

## WORK NW ALBERTA



### Northwest Alberta (2024 Profile Summary)

**Overview:** This sector profile outlines the current state and future outlook of the renewable energy and clean technology sector in the Grande Prairie–Greenview region of Northwest Alberta. The region covers nearly 40,000 km<sup>2</sup> and serves as a trade hub for 300,000 people. It includes the City and County of Grande Prairie, MD of Greenview, and several other municipalities and First Nations.

#### KEY FACTS



**Sector Employment (2024):**  
9,758 individuals



**Projected Employment (2031):**  
10,291 (▲5% or 534 jobs)



**Total Businesses:**  
1,952 (72% employ fewer than 4 people)

#### ECONOMIC HIGHLIGHTS

- Sector has higher concentration in the region compared to Alberta overall.
- Strong post-secondary support from Northwestern Polytechnic.
- Substantial investment in clean energy projects under development.

#### WAGES (2023 AVERAGES)

**\$77,126**

Oil and gas drillers



**\$109,179**

Supervisors, drilling



**\$88,650**

Heavy-duty equipment mechanics



**\$69,742**

Truck drivers



#### MAJOR SUB-SECTORS:



678  
Businesses  
Support activities  
for mining and  
oil/gas



Technical  
consulting and  
engineering  
services



Utility system  
construction  
and power  
generation

#### CHALLENGES & OPPORTUNITIES

Some sub-sectors (e.g., utility construction) expected to decline, others (e.g., remediation) to grow

High projected demand due to infrastructure retrofits and clean tech investment

Geothermal and petrochemical sectors represent significant emerging opportunities

#### COMMUNITY & TRAINING ASSETS



##### Institutions:

Northwestern Polytechnic,  
Northern Lakes College



##### Programs:

Power Engineering,  
Computer Systems,  
Skilled Trades



##### Support Networks:

GPRIN, Community Futures,  
Women Building Futures, CAREERS

#### SPECIAL FEATURE

Geothermal energy and value-added natural gas development are driving large-scale projects that will support over 9,000 construction and 650 long-term operational jobs.

Scan for an  
Audio Overview!

