

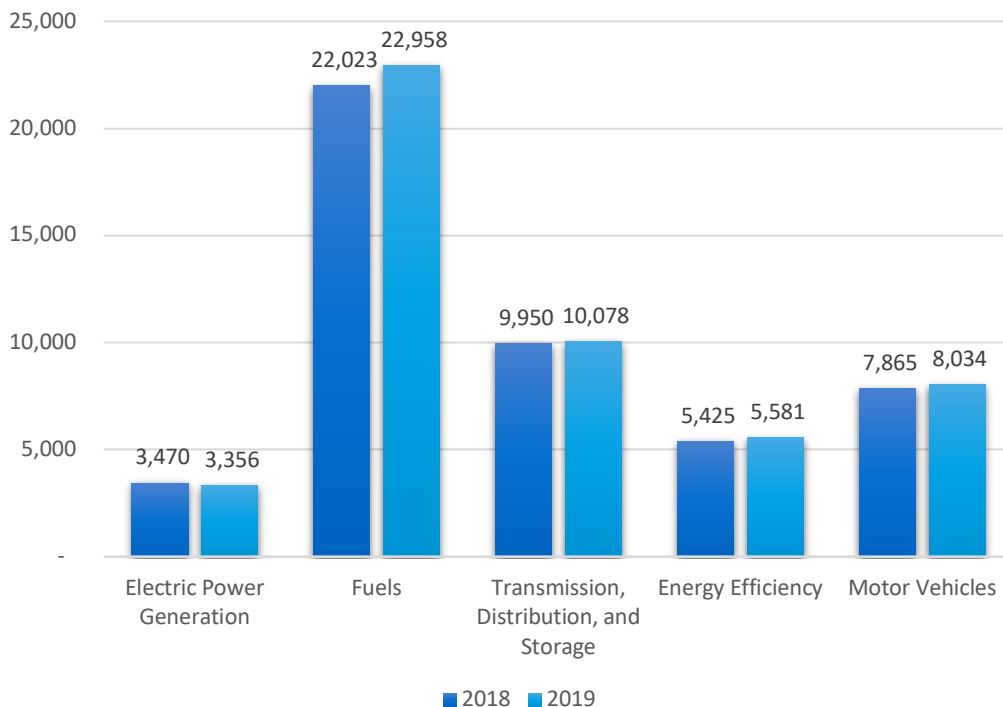
North Dakota

ENERGY AND EMPLOYMENT — 2020

Overview

North Dakota has a high concentration of energy employment, with 36,392 Traditional Energy workers statewide (representing 1.1 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,356 are in Electric Power Generation, 22,958 are in Fuels, and 10,078 are in Transmission, Distribution, and Storage. The Traditional Energy sector in North Dakota is 8.4 percent of total state employment (compared to 2.3 percent of national employment). North Dakota has an additional 5,581 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 8,034 jobs in Motor Vehicles (0.3 percent of all U.S. Motor Vehicle jobs).

Figure ND-1.
Employment by Major Energy Technology Application



Overall, Traditional Energy jobs grew by 2.7 percent since the 2019 report, increasing by 949 jobs over the period. Energy Efficiency jobs added 157 jobs (2.9 percent) and motor vehicles added 169 jobs (2.1 percent).

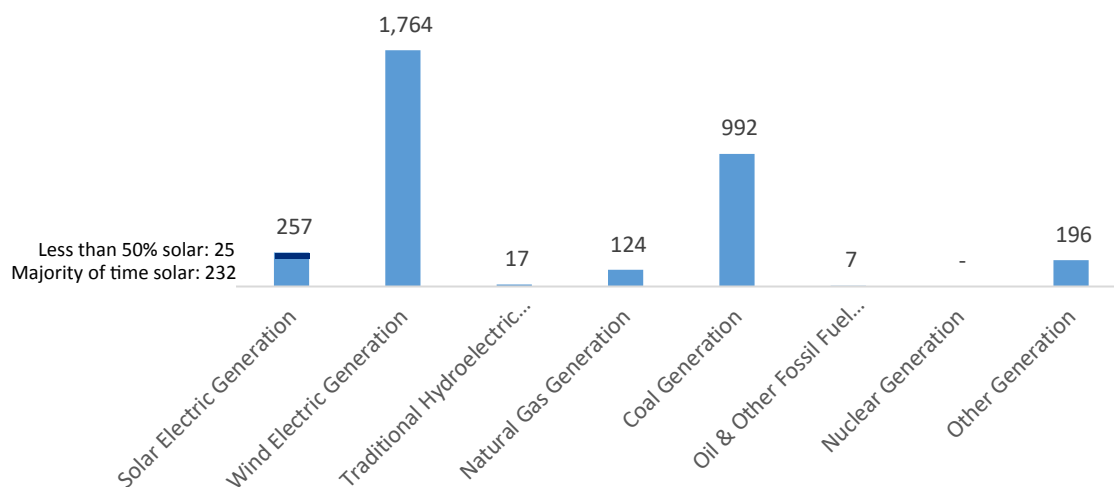
Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 3,356 workers in North Dakota, 0.4 percent of the national total and losing 115 jobs over the past year (-3.3 percent). Wind makes up the largest segment of employment related to Electric Power Generation, with 1,764 jobs (down -0.7 percent), followed by traditional fossil fuel generation at 1,122 jobs (down -8.1 percent).

Figure ND-2.

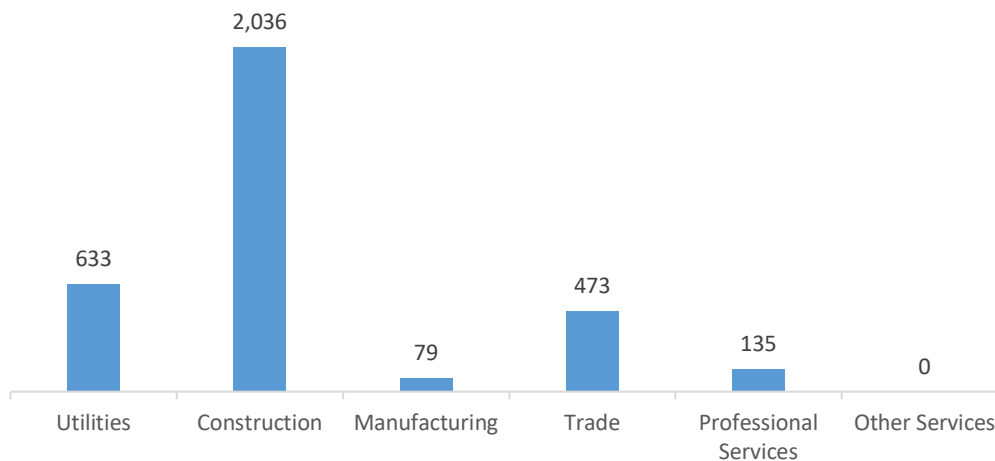
Electric Power Generation Employment by Detailed Technology Application



Construction is the largest industry sector in Electric Power Generation, with 60.7 percent of jobs. Utilities are next with 18.9 percent.

Figure ND-3.

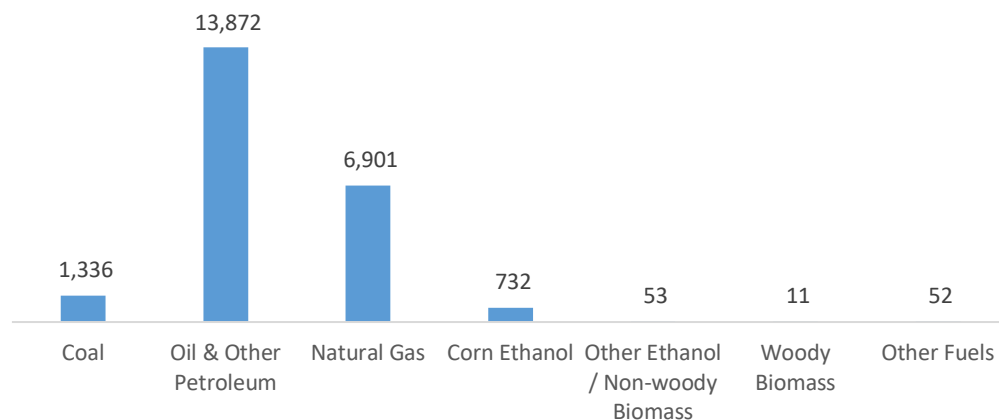
Electric Power Generation by Industry Sector



FUELS

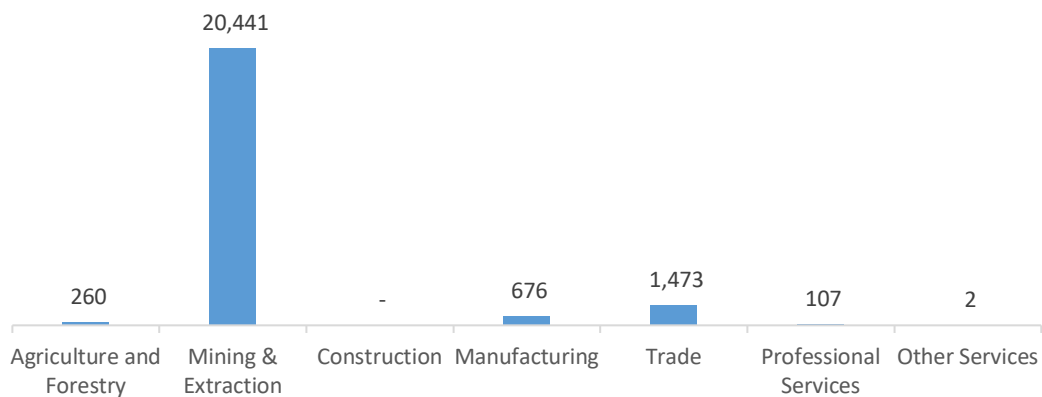
Fuels employs 22,958 workers in North Dakota, 2.0 percent of the national total, up 4.2 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure ND-4.
Fuels Employment by Detailed Technology Application



Mining and extraction jobs represent 89.0 percent of Fuels jobs in North Dakota.

Figure ND-5.
Fuels Employment by Industry Sector

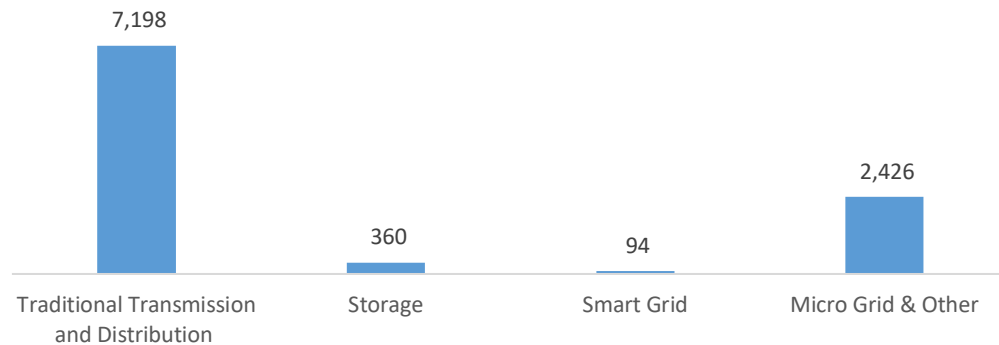


TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 10,078 workers in North Dakota, 0.7 percent of the national total, up 1.3 percent or 128 jobs since the 2018 report.

Figure ND-6.

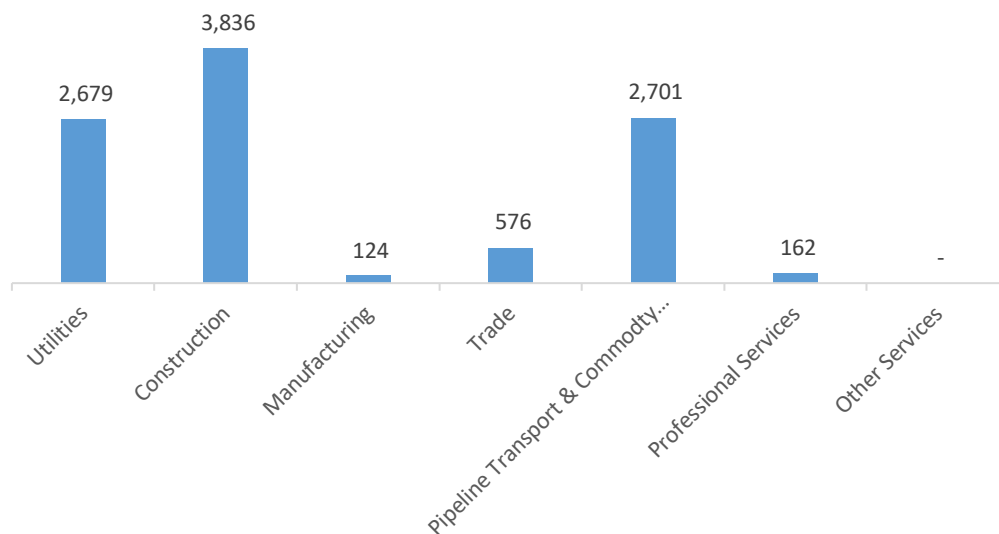
Transmission, Distribution and Storage Employment by Detailed Technology



Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in North Dakota, with 38.1 percent of such jobs statewide.

Figure ND-7.

Transmission, Distribution and Storage Employment by Industry Sector

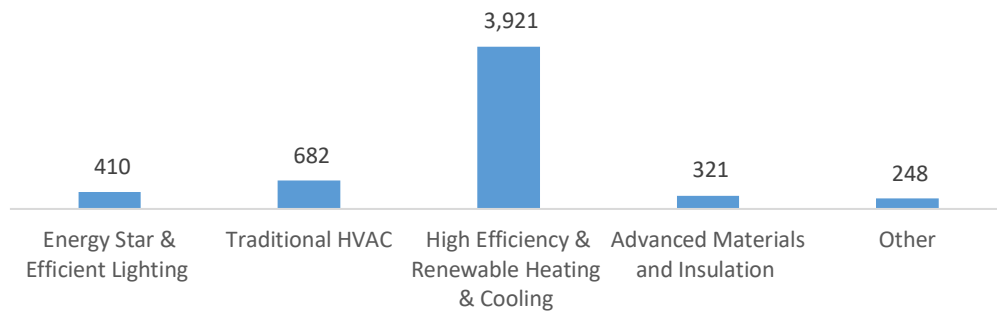


ENERGY EFFICIENCY

The 5,581 Energy Efficiency jobs in North Dakota represent 0.2 percent of all U.S. Energy Efficiency jobs, adding 157 jobs (2.9 percent) since last year. The largest number of these employees work in (high efficiency HVAC and renewable heating and cooling firms, followed by traditional HVAC.

Figure ND-8.

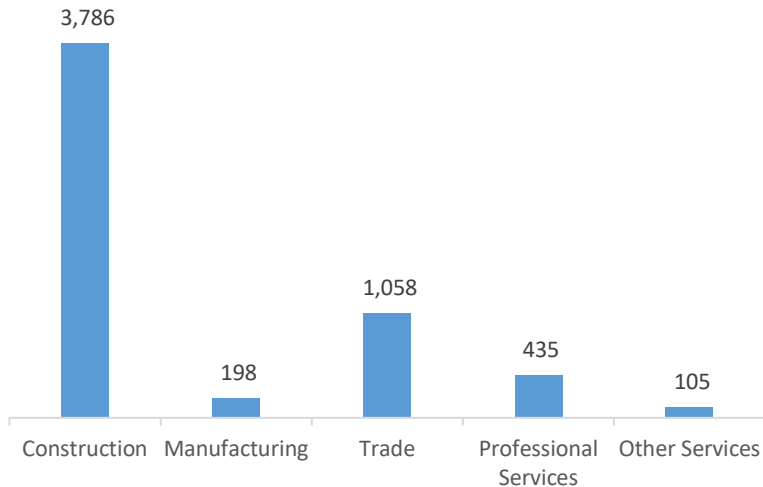
Energy Efficiency Employment by Detailed Technology Application



Energy Efficiency employment is primarily found in the construction industry.

Figure ND-9.

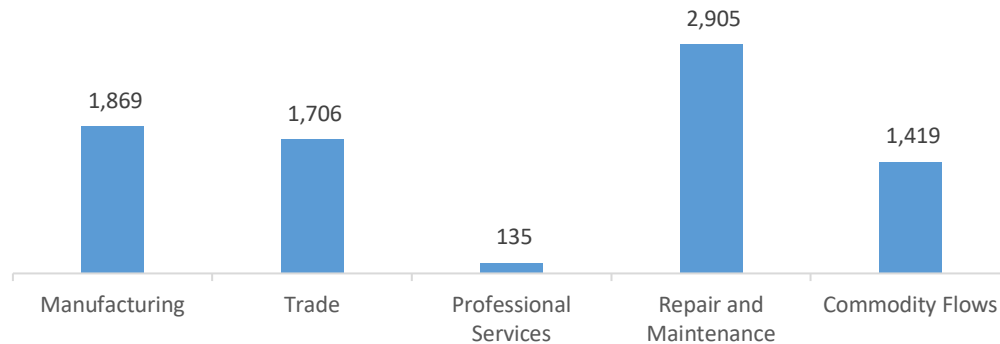
Energy Efficiency Employment by Industry Sector



MOTOR VEHICLES

Motor Vehicle employment accounts for 8,034 jobs in North Dakota, up 169 jobs over the past year (2.1 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure ND-10.
Motor Vehicle Employment by Industry Sector



Workforce Characteristics

EMPLOYER GROWTH

Employers in North Dakota are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (4.6 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 194 jobs in Energy Efficiency (3.5 percent) and Motor Vehicles employers expect to add 388 jobs (4.8 percent) over the next year.

Table ND-1
Projected Growth by Major Technology Application.

Technology	State Projected Growth Next 12 Months (percent)	U.S. Projected Growth Next 12 Months (percent)
Electric Power Generation	10.3	4.8
Electric Power Transmission, Distribution, and Storage	1.0	3.5
Energy Efficiency	3.5	3.0
Fuels	5.3	1.7
Motor Vehicles	4.8	3.1

HIRING DIFFICULTY

Over the last year, 33.3 percent of energy-related employers in North Dakota hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

Table ND-2
Hiring Difficulty by Major Technology Application.

Technology	Very Difficult (percent)	Somewhat Difficult (percent)	Not at All Difficult (percent)
Electric Power Generation	39.0	48.8	12.2
Electric Power Transmission, Distribution, and Storage	39.0	48.8	12.2
Energy Efficiency	32.2	50.0	17.8
Fuels	28.6	39.9	31.5
Motor Vehicles	46.7	42.3	11.0

Employers in North Dakota gave the following as the top three reasons for their reported difficulty:

1. Lack of experience, training, or technical skills
2. Competition/ small applicant pool
3. Insufficient non-technical skills (work ethic, dependability, critical thinking)

Employers reported the following as the three most difficult occupations to hire for:

1. Technician or mechanical support — \$21.52 median hourly wage
2. Sales, marketing, or customer service — \$33.71 median hourly wage
3. Installation workers — \$25.92 median hourly wage