Minnesota

ENERGY AND EMPLOYMENT — 2019

Overview

Minnesota has a low concentration of energy employment, with 47,083 Traditional Energy workers statewide (representing 1.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 12,930 are in Electric Power Generation, 10,810 are in Fuels, and 23,343 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Minnesota is 1.6 percent of total state employment (compared to 2.3 percent of national employment). Minnesota has an additional 46,191 jobs in Energy Efficiency (2.0 percent of all U.S. Energy Efficiency jobs) and 33,352 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

Figure MN-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 3.8 percent since the 2018 report, increasing by 1,736 jobs over the period. Energy Efficiency jobs added 1,332 jobs (3.0 percent) and motor vehicles added 746 jobs (2.3 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 12,930 workers in Minnesota, 1.5 percent of the national total and adding 440 jobs over the past year (3.5 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 4,917 jobs (up 9.4 percent), followed by traditional fossil fuel generation at 2,311 jobs (up 0.1 percent).

Figure MN-2.
Electric Power Generation Employment by Detailed Technology Application

Construction is the largest industry sector in Electric Power Generation, with 44.8 percent of jobs. Utilities are next with 38.0 percent.

Figure MN-3.
Fuels

Fuels employs 10,810 workers in Minnesota, 1.0 percent of the national total, up 11.9 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

**Figure MN-4.**
Fuels Employment by Detailed Technology Application

Wholesale trade jobs represent 40.7 percent of Fuels jobs in Minnesota.

**Figure MN-5.**
Fuels Employment by Industry Sector
Transmission, Distribution and Storage

Transmission, Distribution, and Storage employs 23,343 workers in Minnesota, 1.7 percent of the national total, up 0.6 percent or 143 jobs since the 2018 report.

Figure MN-6.
Transmission, Distribution and Storage Employment by Detailed Technology

Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Minnesota, with 40.5 percent of such jobs statewide.

Figure MN-7.
Transmission, Distribution and Storage Employment by Industry Sector
Energy Efficiency

The 46,191 Energy Efficiency jobs in Minnesota represent 2.0 percent of all U.S. Energy Efficiency jobs, adding 1,332 jobs (3.0 percent) since last year. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting.

**Figure MN-8.**
Energy Efficiency Employment by Detailed Technology Application

Energy Efficiency employment is primarily found in the construction industry.

**Figure MN-9.**
Energy Efficiency Employment by Industry Sector
Motor Vehicles

Motor Vehicle employment accounts for 33,352 jobs in Minnesota, up 746 jobs over the past year (2.3 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure MN-10.
Motor Vehicle Employment by Industry Sector

\[ \begin{array}{c|c|c|c|c}
\text{Industry Sector} & \text{State Projected Growth} & \text{U.S. Projected Growth} \\
\hline
\text{Manufacturing} & 5,553 & 8,370 & 16,083 & 1,276 \\
\text{Trade} & 8,370 & 2,070 & & \\
\text{Professional Services} & 2,070 & 2,070 & & \\
\text{Repair and Maintenance} & & & 16,083 & \\
\text{Commodity Flows} & & & 1,276 & \\
\end{array} \]

Workforce Characteristics

Employer Growth

Employers in Minnesota are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (5.3 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 3,647 jobs in Energy Efficiency (7.9 percent) and Motor Vehicles employers expect to add 1,062 jobs (3.2 percent) over the next year.

Table MN-1.
Projected Growth by Major Technology Application

<table>
<thead>
<tr>
<th>Technology</th>
<th>State Projected Growth Next 12 Months (percent)</th>
<th>U.S. Projected Growth Next 12 Months (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Power Generation</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Electric Power Transmission,</td>
<td>5.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Distribution and Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>7.9</td>
<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>3.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>3.2</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Hiring Difficulty

Over the last year, 51.6 percent of energy-related employers in Minnesota hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

Table MN-2
Hiring Difficulty by Major Technology Application

<table>
<thead>
<tr>
<th>Technology</th>
<th>Very Difficult (%)</th>
<th>Somewhat Difficult (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>National</td>
</tr>
<tr>
<td>Electric Power Generation</td>
<td>40.0</td>
<td>20.7</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>33.3</td>
<td>21.9</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>47.1</td>
<td>21.3</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>37.9</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>22.2</td>
<td>30.0</td>
</tr>
</tbody>
</table>

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

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

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

1. Technician or mechanical support – $24.51 median hourly wage
2. Electrician/construction laborers – $25.47 median hourly wage
3. Management (directors, supervisors, vice presidents) – $38.56 median hourly wage