Wisconsin

ENERGY AND EMPLOYMENT — 2019

Overview

Wisconsin has a low concentration of energy employment, with 39,177 Traditional Energy workers statewide (representing 1.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 10,636 are in Electric Power Generation, 8,839 are in Fuels, and 19,702 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Wisconsin is 1.3 percent of total state employment (compared to 2.3 percent of national employment). Wisconsin has an additional 63,141 jobs in Energy Efficiency (2.7 percent of all U.S. Energy Efficiency jobs) and 48,907 jobs in Motor Vehicles (1.9 percent of all U.S. Motor Vehicle jobs).

Figure WI-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 3.1 percent since the 2018 report, increasing by 1,165 jobs over the period. Energy Efficiency jobs added 841 jobs (1.4 percent) and motor vehicles added 1,323 jobs (2.8 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 10,636 workers in Wisconsin, 1.2 percent of the national total and adding 127 jobs over the past year (1.2 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 3,820 jobs (up 0.5 percent), followed by traditional fossil fuel generation at 3,513 jobs (down 2.2 percent).

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

Utilities are the largest industry sector in Electric Power Generation, with 40.5 percent of jobs. Construction is next with 29.0 percent.

**Figure WI-3.**
Fuels

Fuels employs 8,839 workers in Wisconsin, 0.8 percent of the national total, up 9.4 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

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

Manufacturing jobs represent 38.9 percent of Fuels jobs in Wisconsin.

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

Transmission, Distribution, and Storage employs 19,702 workers in Wisconsin, 1.4 percent of the national total, up 1.4 percent or 279 jobs since the 2018 report.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Wisconsin, with 31.0 percent of such jobs statewide.

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

The 63,141 Energy Efficiency jobs in Wisconsin represent 2.7 percent of all U.S. Energy Efficiency jobs, adding 841 jobs (1.4 percent) since last year. The largest number of these employees work in ENERGY STAR and efficient lighting firms, followed by advanced materials and insulation.

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

Energy Efficiency employment is primarily found in the construction industry.

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

Motor Vehicle employment accounts for 48,907 jobs in Wisconsin, up 1,323 jobs over the past year (2.8 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure WI-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Employer Growth

Employers in Wisconsin are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (5.7 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 5,127 jobs in Energy Efficiency (8.1 percent) and Motor Vehicles employers expect to add 2,191 jobs (4.5 percent) over the next year.

Table WI-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>8.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>8.1</td>
<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>5.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>4.5</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Hiring Difficulty

Over the last year, 60.9 percent of energy-related employers in Wisconsin hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table WI-2
Hiring Difficulty by Major Technology Application

<table>
<thead>
<tr>
<th>Technology</th>
<th>Very Difficult (%)</th>
<th>Somewhat Difficult (%)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>National</td>
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<tr>
<td>Electric Power Generation</td>
<td>25.0</td>
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<td>Electric Power Transmission,</td>
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<td>21.9</td>
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<td>Distribution and Storage</td>
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<tr>
<td>Energy Efficiency</td>
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<tr>
<td>Fuels</td>
<td>33.3</td>
<td>37.9</td>
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<tr>
<td>Motor Vehicles</td>
<td>33.3</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Employers in Wisconsin 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 – $23.78 median hourly wage
2. Electrician/construction laborers – $22.75 median hourly wage
3. Sales, marketing, or customer service – $33.66 median hourly wage