Vermont

ENERGY AND EMPLOYMENT — 2020

Overview

Vermont has an average concentration of energy employment, with 7,950 Traditional Energy workers statewide (representing 0.2 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 2,821 are in Electric Power Generation, 2,554 are in Fuels, and 2,575 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Vermont is 2.5 percent of total state employment (compared to 2.3 percent of national employment). Vermont has an additional 11,032 jobs in Energy Efficiency (0.5 percent of all U.S. Energy Efficiency jobs) and 3,673 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure VT-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 9.1 percent since the 2019 report, increasing by 665 jobs over the period. Energy Efficiency jobs remained flat, losing 3 jobs (0.0 percent) and motor vehicles lost 28 jobs (-0.8 percent).
Breakdown by Technology Applications

**ELECTRIC POWER GENERATION**

Electric Power Generation employs 2,821 workers in Vermont, 0.3 percent of the national total and adding 18 jobs over the past year (0.6 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 1,971 jobs (down -1.0 percent), followed by wind at 360 jobs (up 1.7 percent).

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

Construction is the largest industry sector in Electric Power Generation, with 25.5 percent of jobs. Professional and business services are next with 20.5 percent.
**FUELS**

Fuels employs 2,554 workers in Vermont, 0.2 percent of the national total, down -0.8 percent over the past year. Woody biomass makes up the largest segment of employment related to Fuels.

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

Wholesale trade jobs represent 52.4 percent of Fuels jobs in Vermont.
Figure VT-5.
Fuels Employment by Industry Sector

- Agriculture and Forestry: 529
- Mining & Extraction: 5
- Construction: 0
- Manufacturing: 470
- Trade: 1,339
- Professional Services: 202
- Other Services: 8
TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 2,575 workers in Vermont, 0.2 percent of the national total, up 34.9 percent or 667 jobs since the 2018 report.

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

Utilities are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Vermont, with 47.5 percent of such jobs statewide.

Figure VT-7.
Transmission, Distribution and Storage Employment by Industry Sector
ENERGY EFFICIENCY

The 11,032 Energy Efficiency jobs in Vermont represent 0.5 percent of all U.S. Energy Efficiency jobs, adding 3 jobs (0.0 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 VT-8.**
Energy Efficiency Employment by Detailed Technology Application

Energy Efficiency employment is primarily found in the construction industry.

**Figure VT-9.**
Energy Efficiency Employment by Industry Sector
MOTOR VEHICLES

Motor Vehicle employment accounts for 3,673 jobs in Vermont, down 28 jobs over the past year (-0.8 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure VT-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

EMployer Growth

Employers in Vermont are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (5.5 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 532 jobs in Energy Efficiency (4.8 percent) and Motor Vehicles employers expect to add 106 jobs (2.9 percent) over the next year.

Table VT-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>8.3</td>
<td>4.8</td>
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<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>1.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>4.8</td>
<td>3.0</td>
</tr>
<tr>
<td>Fuels</td>
<td>6.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>2.9</td>
<td>3.1</td>
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</table>
HIRING DIFFICULTY

Over the last year, 42.0 percent of energy-related employers in Vermont hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table VT-2
Hiring Difficulty by Major Technology Application.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Very Difficult (percent)</th>
<th>Somewhat Difficult (percent)</th>
<th>Not at All Difficult (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Power Generation</td>
<td>23.7</td>
<td>61.4</td>
<td>14.8</td>
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<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>22.8</td>
<td>55.1</td>
<td>22.1</td>
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<tr>
<td>Energy Efficiency</td>
<td>34.4</td>
<td>39.3</td>
<td>26.4</td>
</tr>
<tr>
<td>Fuels</td>
<td>27.7</td>
<td>35.9</td>
<td>36.4</td>
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<tr>
<td>Motor Vehicles</td>
<td>47.3</td>
<td>37.4</td>
<td>15.2</td>
</tr>
</tbody>
</table>

Employers in Vermont 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 qualifications (certifications or education)

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

1. Installation workers — $27.33 median hourly wage
2. Engineers/scientists — $41.07 median hourly wage
3. Technician or mechanical support — $23.84 median hourly wage