West Virginia
ENERGY AND EMPLOYMENT — 2019

Overview

West Virginia has a high concentration of energy employment, with 42,413 Traditional Energy workers statewide (representing 1.3 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,855 are in Electric Power Generation, 27,353 are in Fuels, and 11,205 are in Transmission, Distribution, and Storage. The Traditional Energy sector in West Virginia is 6.0 percent of total state employment (compared to 2.3 percent of national employment). West Virginia has an additional 6,844 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 8,948 jobs in Motor Vehicles (0.4 percent of all U.S. Motor Vehicle jobs).

Figure WV-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs declined by 0.6 percent since the 2018 report, decreasing by 236 jobs over the period. Energy Efficiency jobs added 321 jobs (4.9 percent) and motor vehicles added 374 jobs (4.4 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 3,855 workers in West Virginia, 0.4 percent of the national total and losing 106 jobs over the past year (-2.7 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 2,572 jobs (down 4.7 percent), followed by wind at 493 jobs (up 2.1 percent).

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

Utilities are the largest industry sector in Electric Power Generation, with 76.4 percent of jobs. Construction is next with 14.7 percent.

Figure WV-3.
Fuels

Fuels employs 27,353 workers in West Virginia, 2.4 percent of the national total, down 1.7 percent over the past year. Coal makes up the largest segment of employment related to Fuels.

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

Mining and extraction jobs represent 75.9 percent of Fuels jobs in West Virginia.

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

Transmission, Distribution, and Storage employs 11,205 workers in West Virginia, 0.8 percent of the national total, up 3.3 percent or 355 jobs since the 2018 report.

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

Pipeline transport and commodity flows are responsible for the largest percentage of Transmission, Distribution, and Storage jobs in West Virginia, with 44.0 percent of such jobs statewide.

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

The 6,844 Energy Efficiency jobs in West Virginia represent 0.3 percent of all U.S. Energy Efficiency jobs, adding 321 jobs (4.9 percent) since last year. The largest number of these employees work in advanced materials and insulation firms, followed by ENERGY STAR and efficient lighting.

Figure WV-8.
Energy Efficiency Employment by Detailed Technology Application

Energy Efficiency employment is primarily found in the construction industry.

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

Motor Vehicle employment accounts for 8,948 jobs in West Virginia, up 374 jobs over the past year (4.4 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure WV-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Employer Growth

Employers in West Virginia are less optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (0.9 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 134 jobs in Energy Efficiency (2.0 percent) and Motor Vehicles employers expect to add 177 jobs (2.0 percent) over the next year.

Table WV-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>
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<tbody>
<tr>
<td>Electric Power Generation</td>
<td>10.4</td>
<td>7.1</td>
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<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
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<td>3.2</td>
</tr>
<tr>
<td>Energy Efficiency</td>
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<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
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<td>2.2</td>
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</table>
Hiring Difficulty

Over the last year, 53.2 percent of energy-related employers in West Virginia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

Table WV-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>-</td>
<td>20.7</td>
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<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
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<tr>
<td>Energy Efficiency</td>
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<tr>
<td>Fuels</td>
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<td>37.9</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>40.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

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

1. Lack of experience, training, or technical skills
2. Cannot pass employment screening
3. Competition/small applicant pool

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

1. Technician or mechanical support – $15.78 median hourly wage
2. Electrician/construction laborers – $17.53 median hourly wage
3. Sales, marketing, or customer service – $28.33 median hourly wage