West Virginia

ENERGY AND EMPLOYMENT — 2020

Overview

West Virginia has a high concentration of energy employment, with 49,540 Traditional Energy workers statewide (representing 1.4 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 3,707 are in Electric Power Generation, 27,343 are in Fuels, and 18,489 are in Transmission, Distribution, and Storage. The Traditional Energy sector in West Virginia is 7.1 percent of total state employment (compared to 2.3 percent of national employment). West Virginia has an additional 7,144 jobs in Energy Efficiency (0.3 percent of all U.S. Energy Efficiency jobs) and 8,968 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 grew by 16.8 percent since the 2019 report, increasing by 7,127 jobs over the period. Energy Efficiency jobs added 300 jobs (4.4 percent) and motor vehicles added 20 jobs (0.2 percent).
Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 3,707 workers in West Virginia, 0.4 percent of the national total and losing 148 jobs over the past year (-3.8 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 2,368 jobs (down -8.0 percent), followed by wind at 502 jobs (up 1.9 percent).

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

Construction is the largest industry sector in Electric Power Generation, with 39.3 percent of jobs. Utilities are next with 36.7 percent.

Figure WV-3.
Electric Power Generation by Industry Sector
FUELS

Fuels employs 27,343 workers in West Virginia, 2.4 percent of the national total, down -0.0 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 75.7 percent of Fuels jobs in West Virginia.

Figure WV-5.
Fuels Employment by Industry Sector
TRANSMISSION, DISTRIBUTION AND STORAGE

Transmission, Distribution, and Storage employs 18,489 workers in West Virginia, 1.3 percent of the national total, up 65.0 percent or 7,285 jobs since the 2018 report.

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

![Bar chart showing 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 55.0 percent of such jobs statewide.

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

![Bar chart showing employment by industry sector.]

Utilities: 2,248
Construction: 10,163
Manufacturing: 320
Trade: 1,639
Pipeline Transport & Commodity: 4,090
Professional Services: 29
Other Services: -
ENERGY EFFICIENCY

The 7,144 Energy Efficiency jobs in West Virginia represent 0.3 percent of all U.S. Energy Efficiency jobs, adding 300 jobs (4.4 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 8,968 jobs in West Virginia, up 20 jobs over the past year (0.2 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 more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (4.3 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 207 jobs in Energy Efficiency (2.9 percent) and Motor Vehicles employers expect to add 803 jobs (8.9 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>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Power Generation</td>
<td>3.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Fuels</td>
<td>4.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>8.9</td>
<td>3.1</td>
</tr>
</tbody>
</table>
HIRING DIFFICULTY

Over the last year, 50.0 percent of energy-related employers in West Virginia hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

**Table WV-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>28.2</td>
<td>62.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>28.2</td>
<td>62.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>39.4</td>
<td>45.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Fuels</td>
<td>30.8</td>
<td>39.9</td>
<td>29.3</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>38.1</td>
<td>48.9</td>
<td>13.1</td>
</tr>
</tbody>
</table>

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

1. Insufficient qualifications (certifications or education)
2. Cannot pass employment screening
3. Lack of experience, training, or technical skills

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

1. Technician or mechanical support — $20.28 median hourly wage
2. Installation workers — $20.65 median hourly wage
3. Electrician/construction workers — $22.79 median hourly wage