Washington
ENERGY AND EMPLOYMENT — 2020

Overview

Washington has a low concentration of energy employment, with 55,919 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 14,958 are in Electric Power Generation, 9,778 are in Fuels, and 31,183 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Washington is 1.6 percent of total state employment (compared to 2.3 percent of national employment). Washington has an additional 64,930 jobs in Energy Efficiency (2.7 percent of all U.S. Energy Efficiency jobs) and 34,342 jobs in Motor Vehicles (1.3 percent of all U.S. Motor Vehicle jobs).

**Figure WA-1.**
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 0.1 percent since the 2019 report, increasing by 80 jobs over the period. Energy Efficiency jobs added 1,053 jobs (1.6 percent) and motor vehicles added 634 jobs (1.9 percent).
Breakdown by Technology Applications

**ELECTRIC POWER GENERATION**

Electric Power Generation employs 14,958 workers in Washington, 1.7 percent of the national total and adding 140 jobs over the past year (0.9 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 5,081 jobs (down -0.6 percent), followed by wind at 3,310 jobs (up 1.2 percent).

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

Construction is the largest industry sector in Electric Power Generation, with 38.4 percent of jobs. Professional and business services are next with 23.8 percent.

**Figure WA-3.**
**Electric Power Generation by Industry Sector**
FUELS

Fuels employs 9,778 workers in Washington, 0.9 percent of the national total, up 4.5 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure WA-4.  
Fuels Employment by Detailed Technology Application

Manufacturing jobs represent 36.7 percent of Fuels jobs in Washington.

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

Transmission, Distribution, and Storage employs 31,183 workers in Washington, 2.3 percent of the national total, down 1.5 percent or 482 jobs since the 2018 report.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Washington, with 43.8 percent of such jobs statewide.

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

The 64,930 Energy Efficiency jobs in Washington represent 2.7 percent of all U.S. Energy Efficiency jobs, adding 1,053 jobs (1.6 percent) since last year. The largest number of these employees work in (traditional HVAC firms, followed by ENERGY STAR and efficient lighting.

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

Energy Efficiency employment is primarily found in the construction industry.

**Figure WA-9.**
**Energy Efficiency Employment by Industry Sector**

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>42,807</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3,590</td>
</tr>
<tr>
<td>Trade</td>
<td>3,829</td>
</tr>
<tr>
<td>Professional Services</td>
<td>13,510</td>
</tr>
<tr>
<td>Other Services</td>
<td>1,194</td>
</tr>
</tbody>
</table>
MOTOR VEHICLES

Motor Vehicle employment accounts for 34,342 jobs in Washington, up 634 jobs over the past year (1.9 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

Figure WA-10.
Motor Vehicle Employment by Industry Sector

![Bar chart showing Motor Vehicle Employment by Industry Sector]

Workforce Characteristics

EMPLOYER GROWTH

Employers in Washington are more optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (3.9 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 2,839 jobs in Energy Efficiency (4.4 percent) and Motor Vehicles employers expect to add 1,525 jobs (4.4 percent) over the next year.

Table WA-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>7.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>2.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>4.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Fuels</td>
<td>3.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>4.4</td>
<td>3.1</td>
</tr>
</tbody>
</table>
HIRING DIFFICULTY

Over the last year, 47.8 percent of energy-related employers in Washington hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table WA-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>22.9</td>
<td>66.4</td>
<td>10.7</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>20.6</td>
<td>58.7</td>
<td>20.7</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>37.1</td>
<td>39.7</td>
<td>23.2</td>
</tr>
<tr>
<td>Fuels</td>
<td>27.1</td>
<td>40.7</td>
<td>32.2</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>47.1</td>
<td>41.7</td>
<td>11.2</td>
</tr>
</tbody>
</table>

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

1. Competition/ small applicant pool
2. Lack of experience, training, or technical skills
3. Insufficient qualifications (certifications or education)

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

1. Electrician/construction workers — $28.59 median hourly wage
2. Sales, marketing, or customer service — $35.35 median hourly wage
3. Technician or mechanical support — $24.32 median hourly wage