Washington
ENERGY AND EMPLOYMENT — 2019

Overview

Washington has a low concentration of energy employment, with 55,839 Traditional Energy workers statewide (representing 1.7 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 14,818 are in Electric Power Generation, 9,356 are in Fuels, and 31,665 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 63,877 jobs in Energy Efficiency (2.7 percent of all U.S. Energy Efficiency jobs) and 33,708 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 2.4 percent since the 2018 report, increasing by 1,307 jobs over the period. Energy Efficiency jobs added 1,358 jobs (2.2 percent) and motor vehicles added 1,470 jobs (4.6 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 14,818 workers in Washington, 1.7 percent of the national total and adding 55 jobs over the past year (0.4 percent). Solar makes up the largest segment of employment related to Electric Power Generation, with 5,113 jobs (down 2.5 percent), followed by wind at 3,270 jobs (up 1.3 percent).

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

Construction is the largest industry sector in Electric Power Generation, with 40.3 percent of jobs. Professional and business services are next with 24.9 percent.

Figure WA-3.
Fuels

Fuels employs 9,356 workers in Washington, 0.8 percent of the national total, up 19.4 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 36.6 percent of Fuels jobs in Washington.

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

Transmission, Distribution, and Storage employs 31,665 workers in Washington, 2.3 percent of the national total, down 0.8 percent or 265 jobs since the 2018 report.

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

![Bar chart showing employment by detailed technology in Washington](chart.png)

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Washington, with 44.4 percent of such jobs statewide.

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

![Bar chart showing employment by industry sector in Washington](chart2.png)
Energy Efficiency

The 63,877 Energy Efficiency jobs in Washington represent 2.7 percent of all U.S. Energy Efficiency jobs, adding 1,358 jobs (2.2 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
Motor Vehicles

Motor Vehicle employment accounts for 33,708 jobs in Washington, up 1,470 jobs over the past year (4.6 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

Workforce Characteristics

Employer Growth

Employers in Washington are similarly optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (3.9 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 3,343 jobs in Energy Efficiency (5.2 percent) and Motor Vehicles employers expect to add 667 jobs (2.0 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>3.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Electric Power Transmission,</td>
<td>4.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Distribution and Storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>5.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>3.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>2.0</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Hiring Difficulty

Over the last year, 59.5 percent of energy-related employers in Washington hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Motor Vehicles.

**Table WA-2**

Hiring Difficulty by Major Technology Application

<table>
<thead>
<tr>
<th>Technology</th>
<th>Very Difficult (%)</th>
<th>Somewhat Difficult (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>National</td>
</tr>
<tr>
<td>Electric Power Generation</td>
<td>11.1</td>
<td>20.7</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>16.7</td>
<td>21.9</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>41.7</td>
<td>21.3</td>
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<tr>
<td>Fuels</td>
<td>25.0</td>
<td>37.9</td>
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<tr>
<td>Motor Vehicles</td>
<td>60.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Employers in Washington 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. Insufficient qualifications (certifications or education)

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

1. Technician or mechanical support – $18.37 median hourly wage
2. Electrician/construction laborers – $19.58 median hourly wage
3. Sales, marketing, or customer service – $38.47 median hourly wage