Alaska

ENERGY AND EMPLOYMENT — 2019

Overview

Alaska has a high concentration of energy employment, with 21,756 Traditional Energy workers statewide (representing 0.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 1,449 are in Electric Power Generation, 13,997 are in Fuels, and 6,309 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Alaska is 6.5 percent of total state employment (compared to 2.3 percent of national employment). Alaska has an additional 4,617 jobs in Energy Efficiency (0.2 percent of all U.S. Energy Efficiency jobs) and 2,390 jobs in Motor Vehicles (0.1 percent of all U.S. Motor Vehicle jobs).

Figure AK-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 2.2 percent since the 2018 report, increasing by 460 jobs over the period. Energy Efficiency jobs added 119 jobs (2.7 percent) and motor vehicles added 148 jobs (6.6 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 1,449 workers in Alaska, 0.2 percent of the national total and adding 7 jobs over the past year (0.5 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 649 jobs (up 1.2 percent), followed by traditional hydroelectric generation at 441 jobs (down 2.6 percent).

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

Utilities are the largest industry sector in Electric Power Generation, with 51.9 percent of jobs. Construction is next with 27.8 percent.

**Figure AK-3.**
Fuels

Fuels employs 13,997 workers in Alaska, 1.2 percent of the national total, up 2.4 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

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

Mining and extraction jobs represent 73.4 percent of Fuels jobs in Alaska.

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

Transmission, Distribution, and Storage employs 6,309 workers in Alaska, 0.5 percent of the national total, up 2.1 percent or 127 jobs since the 2018 report.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Alaska, with 37.0 percent of such jobs statewide.

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

The 4,617 Energy Efficiency jobs in Alaska represent 0.2 percent of all U.S. Energy Efficiency jobs, adding 119 jobs (2.7 percent) since last year. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by advanced materials and insulation.

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

Energy Efficiency employment is primarily found in the construction industry.

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

Motor Vehicle employment accounts for 2,390 jobs in Alaska, up 148 jobs over the past year (6.6 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is repair and maintenance.

**Figure AK-10.**
Motor Vehicle Employment by Industry Sector

![Motor Vehicle Employment by Industry Sector]

**Workforce Characteristics**

**Employer Growth**

Employers in Alaska are less optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (2.0 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 368 jobs in Energy Efficiency (8.0 percent) and Motor Vehicles employers expect to add 47 jobs (2.0 percent) over the next year.

**Table AK-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>9.8</td>
<td>7.1</td>
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<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>8.0</td>
<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>2.0</td>
<td>2.2</td>
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</tbody>
</table>
Hiring Difficulty

Over the last year, 67.4 percent of energy-related employers in Alaska hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

Table AK-11  
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>
</tr>
<tr>
<td>Electric Power Generation</td>
<td>16.7</td>
<td>20.7</td>
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<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>55.6</td>
<td>21.9</td>
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<td>Energy Efficiency</td>
<td>50.0</td>
<td>21.3</td>
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<tr>
<td>Fuels</td>
<td>--</td>
<td>37.9</td>
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<tr>
<td>Motor Vehicles</td>
<td>25.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

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

1. Lack of experience, training, or technical skills
2. Location
3. Competition/ small applicant pool

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

1. Technician or mechnical support – $19.59 median hourly wage
2. Electrician/construction laborers – $20.18 median hourly wage
3. Engineers/scientists – $39.06 median hourly wage