Alabama

ENERGY AND EMPLOYMENT — 2019

Overview

Alabama has a high concentration of energy employment, with 52,224 Traditional Energy workers statewide (representing 1.6 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 9,943 are in Electric Power Generation, 11,039 are in Fuels, and 31,243 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Alabama is 2.7 percent of total state employment (compared to 2.3 percent of national employment). Alabama has an additional 30,821 jobs in Energy Efficiency (1.3 percent of all U.S. Energy Efficiency jobs) and 66,611 jobs in Motor Vehicles (2.6 percent of all U.S. Motor Vehicle jobs).

Figure AL-1.
Employment by Major Energy Technology Application

Overall, Traditional Energy jobs grew by 3.7 percent since the 2018 report, increasing by 1,841 jobs over the period. Energy Efficiency jobs added 872 jobs (2.9 percent) and motor vehicles added 738 jobs (1.1 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 9,943 workers in Alabama, 1.1 percent of the national total and adding 185 jobs over the past year (1.9 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 3,757 jobs (up 1.0 percent), followed by wind at 1,227 jobs (up 5.2 percent).

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

Utilities are the largest industry sector in Electric Power Generation, with 53.9 percent of jobs. Professional and business services are next with 21.4 percent.

**Figure AL-3**
Fuels

Fuels employs 11,039 workers in Alabama, 1.0 percent of the national total, up 8.0 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure AL-4.
Fuels Employment by Detailed Technology Application

Mining and extraction jobs represent 35.5 percent of Fuels jobs in Alabama.

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

Transmission, Distribution, and Storage employs 31,243 workers in Alabama, 2.3 percent of the national total, up 2.8 percent or 838 jobs since the 2018 report.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Alabama, with 38.4 percent of such jobs statewide.

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

The 30,821 Energy Efficiency jobs in Alabama represent 1.3 percent of all U.S. Energy Efficiency jobs, adding 872 jobs (2.9 percent) since last year. The largest number of these employees work in advanced materials and insulation firms, followed by traditional HVAC.

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

Energy Efficiency employment is primarily found in the construction industry.

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

Motor Vehicle employment accounts for 66,611 jobs in Alabama, up 738 jobs over the past year (1.1 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure AL-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Employer Growth

Employers in Alabama are less optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (2.4 percent versus 4.1 percent nationally). Energy Efficiency employers expect to add 2,055 jobs in Energy Efficiency (6.7 percent) and Motor Vehicles employers expect to add 2,059 jobs (3.1 percent) over the next year.

Table AL-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>9.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>1.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>6.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>3.1</td>
<td>2.2</td>
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</tbody>
</table>
Hiring Difficulty

Over the last year, 63.4 percent of energy-related employers in Alabama hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Fuels.

**Table AL-2**

<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>28.6</td>
<td>20.7</td>
</tr>
<tr>
<td>Electric Power Transmission,</td>
<td>9.1</td>
<td>21.9</td>
</tr>
<tr>
<td>Distribution and Storage</td>
<td></td>
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</tr>
<tr>
<td>Energy Efficiency</td>
<td>28.6</td>
<td>21.3</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>37.9</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>--</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Employers in Alabama 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 – $20.36 median hourly wage
2. Management (directors, supervisors, vice presidents) – $38.34 median hourly wage
3. Sales, marketing, or customer service – $32.57 median hourly wage