Alabama

ENERGY AND EMPLOYMENT — 2020

Overview

Alabama has an average concentration of energy employment, with 52,366 Traditional Energy workers statewide (representing 1.5 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 10,334 are in Electric Power Generation, 11,486 are in Fuels, and 30,546 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Alabama is 2.6 percent of total state employment (compared to 2.3 percent of national employment). Alabama has an additional 31,546 jobs in Energy Efficiency (1.3 percent of all U.S. Energy Efficiency jobs) and 65,462 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 0.3 percent since the 2019 report, increasing by 142 jobs over the period. Energy Efficiency jobs added 725 jobs (2.4 percent) and motor vehicles lost 1,150 jobs (-1.7 percent).
Breakdown by Technology Applications

ELECTRIC POWER GENERATION

Electric Power Generation employs 10,334 workers in Alabama, 1.2 percent of the national total and adding 391 jobs over the past year (3.9 percent). Traditional fossil fuel generation makes up the largest segment of employment related to Electric Power Generation, with 3,730 jobs (down -0.7 percent), followed by wind at 1,283 jobs (up 4.6 percent).

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

Utilities are the largest industry sector in Electric Power Generation, with 57.0 percent of jobs. Professional and business services are next with 19.9 percent.

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

Fuels employs 11,486 workers in Alabama, 1.0 percent of the national total, up 4.1 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 35.9 percent of Fuels jobs in Alabama.

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

Transmission, Distribution, and Storage employs 30,546 workers in Alabama, 2.2 percent of the national total, down 2.2 percent or 697 jobs since the 2018 report.

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

![Bar chart showing employment by detailed technology](chart1)

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Alabama, with 40.4 percent of such jobs statewide.

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

![Bar chart showing employment by industry sector](chart2)
ENERGY EFFICIENCY

The 31,546 Energy Efficiency jobs in Alabama represent 1.3 percent of all U.S. Energy Efficiency jobs, adding 725 jobs (2.4 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 65,462 jobs in Alabama, down 1,150 jobs over the past year (-1.7 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 similarly optimistic to their peers across the country in regards to their job growth over the next year in Traditional Energy (3.2 percent versus 3.2 percent nationally). Energy Efficiency employers expect to add 1,645 jobs in Energy Efficiency (5.2 percent) and Motor Vehicles employers expect to add 1,716 jobs (2.6 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>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Power Generation</td>
<td>9.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>0.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>5.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Fuels</td>
<td>3.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>2.6</td>
<td>3.1</td>
</tr>
</tbody>
</table>
HIRING DIFFICULTY

Over the last year, 40.0 percent of energy-related employers in Alabama hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Electric Power Generation.

Table AL-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>22.5</td>
<td>68.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>25.0</td>
<td>64.7</td>
<td>10.3</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>39.1</td>
<td>47.7</td>
<td>13.2</td>
</tr>
<tr>
<td>Fuels</td>
<td>24.2</td>
<td>43.2</td>
<td>32.6</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>29.1</td>
<td>48.1</td>
<td>22.8</td>
</tr>
</tbody>
</table>

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

1. Competition/ small applicant pool
2. Cannot provide competitive wages
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 — $21.99 median hourly wage
2. Installation workers — $24.35 median hourly wage
3. Operations or business development — $41.08 median hourly wage