Pennsylvania
ENERGY AND EMPLOYMENT — 2022

Overview

Pennsylvania had 258,202 energy workers statewide in 2021, representing 3.3% of all U.S. energy jobs. Of these energy jobs, 20,506 are in electric power generation; 43,238 in fuels; 46,831 in transmission, distribution, and storage; 67,782 in energy efficiency; and 79,846 in motor vehicles. From 2020 to 2021, energy jobs in the state increased by 8,316 jobs, or 3.3%. The energy sector in Pennsylvania represents 4.6% of total state employment.

Figure PA-1.
Employment by Major Energy Technology Application
Breakdown by Technology Applications

**Electric Power Generation**

The electric power generation sector employed 20,506 workers in Pennsylvania, 2.4% of the national electricity total, and added 802 jobs over the past year (4.1%).

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

Manufacturing work represents the largest industry sector in the electric power generation sector, with 30% of jobs. Utilities is second largest with 26%.

**Figure PA-3.**
**Electric Power Generation Employment by Industry Sector**
Fuels

The fuel sector employed 43,238 workers in Pennsylvania, 4.8% of the national total in fuels. The sector lost 1,342 jobs and decreased 3% in the past year.

Figure PA-4.
Fuels Employment by Detailed Technology Application

Manufacturing jobs represent 38.4% of fuel jobs in Pennsylvania.

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

The transmission, distribution, and storage (TDS) sector employed 46,831 workers in Pennsylvania, 4.8% of the national TDS total. The sector gained 5,726 jobs and increased 13.9% in the past year.

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

Construction work represents the greatest proportion of TDS jobs in Pennsylvania, accounting for 38% of the sector’s jobs statewide.

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

The energy efficiency (EE) sector employed 67,782 workers in Pennsylvania, 3.1% of the national EE total. The EE sector added 2,385 jobs and increased 3.6% in the past year.

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

- Energy Star & Efficient Lighting: 14,197
- Traditional HVAC: 18,746
- High Efficiency & Renewable Heating & Cooling: 15,703
- Advanced Materials and Insulation: 12,664
- Other: 6,471

EE employment is primarily found in the construction industry.

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

- Construction: 37,409
- Manufacturing: 12,850
- Trade: 7,112
- Professional Services: 9,137
- Other Services: 1,273
Motor Vehicles and Component Parts

The motor vehicles and component sector employed 79,846 workers in Pennsylvania, 3.1% of the national total for the sector. Motor vehicles and component parts added 746 jobs and increased 0.9% in the past year. Repair and maintenance work represents the largest proportion of motor vehicle jobs.

Figure PA-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Employer Growth
Employers in Pennsylvania are more optimistic than their peers across the country about energy sector job growth over the next year.

Table PA-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>5.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution, and Storage</td>
<td>4.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>5.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Fuels</td>
<td>5.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>6.0</td>
<td>3.2</td>
</tr>
</tbody>
</table>
Hiring Difficulty

Employers in Pennsylvania reported 56.1% overall hiring difficulty.

Table PA-2
Hiring Difficulty

<table>
<thead>
<tr>
<th>Hiring Difficulty</th>
<th>Very Difficult (percent)</th>
<th>Somewhat Difficult (percent)</th>
<th>Not at All Difficult (percent)</th>
<th>Did Not Hire (percent)</th>
<th>Overall Hiring Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>27.1</td>
<td>28.9</td>
<td>6.6</td>
<td>37.3</td>
<td>56.1</td>
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