Iowa

ENERGY AND EMPLOYMENT — 2019

Overview

Iowa has an average concentration of energy employment, with 34,047 Traditional Energy workers statewide (representing 1.0 percent of all U.S. Traditional Energy jobs). Of these Traditional Energy workers, 9,340 are in Electric Power Generation, 11,060 are in Fuels, and 13,647 are in Transmission, Distribution, and Storage. The Traditional Energy sector in Iowa is 2.1 percent of total state employment (compared to 2.3 percent of national employment). Iowa has an additional 20,587 jobs in Energy Efficiency (0.9 percent of all U.S. Energy Efficiency jobs) and 31,661 jobs in Motor Vehicles (1.2 percent of all U.S. Motor Vehicle jobs).

Figure IA-1.
Employment by Major Energy

Overall, Traditional Energy jobs grew by 1.8 percent since the 2018 report, increasing by 617 jobs over the period. Energy Efficiency jobs added 893 jobs (4.5 percent) and motor vehicles added 585 jobs (1.9 percent).
Breakdown by Technology Applications

Electric Power Generation

Electric Power Generation employs 9,340 workers in Iowa, 1.1 percent of the national total and losing 173 jobs over the past year (-1.8 percent). Wind makes up the largest segment of employment related to Electric Power Generation, with 3,934 jobs (down 0.4 percent), followed by traditional fossil fuel generation at 2,352 jobs (down 3.8 percent).

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

Construction is the largest industry sector in Electric Power Generation, with 47.5 percent of jobs. Utilities are next with 31.8 percent.

Figure IA-3.
Fuels

Fuels employs 11,060 workers in Iowa, 1.0 percent of the national total, up 6.3 percent over the past year. Petroleum and other fossil fuels makes up the largest segment of employment related to Fuels.

Figure IA-4.
Fuels Employment by Detailed Technology Application

Wholesale trade jobs represent 49.2 percent of Fuels jobs in Iowa.

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

Transmission, Distribution, and Storage employs 13,647 workers in Iowa, 1.0 percent of the national total, up 1.0 percent or 138 jobs since the 2018 report.

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

Construction is responsible for the largest percentage of Transmission, Distribution, and Storage jobs in Iowa, with 37.1 percent of such jobs statewide.

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

The 20,587 Energy Efficiency jobs in Iowa represent 0.9 percent of all U.S. Energy Efficiency jobs, adding 893 jobs (4.5 percent) since last year. The largest number of these employees work in high efficiency HVAC and renewable heating and cooling firms, followed by ENERGY STAR and efficient lighting.

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

Energy Efficiency employment is primarily found in the construction industry.

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

Motor Vehicle employment accounts for 31,661 jobs in Iowa, up 585 jobs over the past year (1.9 percent). The industry sector that accounts for the largest fraction of Motor Vehicle jobs is manufacturing.

Figure IA-10.
Motor Vehicle Employment by Industry Sector

Workforce Characteristics

Employer Growth

Employers in Iowa 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 1,642 jobs in Energy Efficiency (8.0 percent) and Motor Vehicles employers expect to add 627 jobs (2.0 percent) over the next year.

Table IA-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>8.9</td>
<td>7.1</td>
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<tr>
<td>Electric Power Transmission, Distribution and Storage</td>
<td>--</td>
<td>3.2</td>
</tr>
<tr>
<td>Energy Efficiency</td>
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<td>7.8</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>3.0</td>
</tr>
<tr>
<td>Motor Vehicles</td>
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<td>2.2</td>
</tr>
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</table>
Hiring Difficulty

Over the last year, 58.9 percent of energy-related employers in Iowa hired new employees. These employers reported the greatest overall difficulty in hiring workers for jobs in Energy Efficiency.

Table IA-2

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>38.5</td>
<td>20.7</td>
</tr>
<tr>
<td>Electric Power Transmission, Distribution</td>
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<td>21.9</td>
</tr>
<tr>
<td>Energy Efficiency</td>
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<td>21.3</td>
</tr>
<tr>
<td>Fuels</td>
<td>--</td>
<td>37.9</td>
</tr>
<tr>
<td>Motor Vehicles</td>
<td>38.5</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Employers in Iowa 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. Competition/ small applicant pool

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

1. Technician or mechanical support – $23.01 median hourly wage
2. Electrician/construction laborers – $23.50 median hourly wage
3. Sales, marketing, or customer service – $30.97 median hourly wage