Energy Efficiency Jobs in America

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Agenda

• E4TheFuture background
• Energy jobs
• Energy industry growth
• Energy efficiency jobs
• Faces of EE initiative
Who we are

• Bringing clean, efficient energy home for every American
• E4 means energy, economy, equity and environment
• E4TheFuture has a past: U.S. energy efficiency services leader Conservation Services Group (CSG), for 31 years
What is an energy job?

Power creation jobs in 2016
1.9 million

- Natural gas: 398,235
- Coal: 160,119
- Solar: 373,807
- Oil: 515,518
- Bioenergy: 130,577
- Wind: 101,738
- Nuclear: 76,771
- Hydroelectric: 65,554

Fossil fuels (includes some fossil fuels) vs. Renewable and low emission technologies

E4 THE FUTURE
Energy Efficiency Jobs

Power creation and energy efficiency jobs in 2016:

- Fossil fuels & renewables: 1.9 million
  - Natural gas: 398,235
  - Coal: 160,119
  - Oil: 515,518
  - Other: 130,077
- Renewable and low-emission technologies:
  - Solar: 373,807
  - Bioenergy: 76,771
  - Wind: 101,738
  - Nuclear: 65,554
- Energy efficiency: 2.2 million
  - Energy efficiency (includes full-time and part-time jobs): 2,200,000

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U.S. Revenue by Industry, 2016

- Beer: $105 B
- Pharmaceutical Manufacturing: $200 B
- Advanced Energy: $200 B
- Consumer Electronics: $285 B

Source: Navigant research for Advanced Energy Economy
Advanced Energy Industry Market Growth

Source: Navigant research for Advanced Energy Economy
U.S. Energy Efficiency Job Growth

Sources:
FY 2015 data = Energy Efficiency Jobs in America, Dec. 2016 (Environmental Entrepreneurs and E4TheFuture);
Electric Energy Efficiency Potential

Figure 9. Number of power plant equivalents avoided by energy efficiency since 1990, and potential through 2030. Estimates are based on power plants with an output of 500 MW.21

Historical savings from energy efficiency policies

Potential savings from increased energy efficiency policies

Source: ACEEE, 2016
Range of Jobs

[Image of a truck with text: Apgar Oil & Energy HVAC Division]

[Image of a thermostat with the text: current powered by GE]

[Image of a logo: Schneider Electric]

[Image of a company name: E4 The Future]

[Image of the text: ENERGY SAVVY]
Energy Efficiency Jobs in America

A comprehensive analysis of energy efficiency employment across all 50 states.

Energy Efficiency Firm Size Distribution

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Firm size distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>51.3%</td>
</tr>
<tr>
<td>6-10</td>
<td>19.8%</td>
</tr>
<tr>
<td>11-24</td>
<td>12.7%</td>
</tr>
<tr>
<td>25-49</td>
<td>6.9%</td>
</tr>
<tr>
<td>50-99</td>
<td>2.6%</td>
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<tr>
<td>100-249</td>
<td>1.6%</td>
</tr>
<tr>
<td>250-499</td>
<td>0.4%</td>
</tr>
<tr>
<td>500 or more</td>
<td>0.1%</td>
</tr>
<tr>
<td>None</td>
<td>1.2%</td>
</tr>
<tr>
<td>DK/NA</td>
<td>3.4%</td>
</tr>
</tbody>
</table>
State Fact Sheets

Partly a reflection of its sweltering summers and cool winters, about 66,000 Georgians work in energy efficiency related businesses. The state’s energy efficiency economy has a fairly even split amongst sub-technologies, with traditional HVAC, advanced materials and insulation, and high efficiency HVAC collectively accounting for the majority of activity.

Installation and wholesale trade represents the majority of firm activity, with installation firms accounting for 41 percent of the total, followed by trade at 28 percent. These are mostly small to medium-sized firms—50 percent report fewer than six permanent employees and 23 percent report between 11 and 99 permanent workers. Energy efficiency work is sufficient to provide total revenue for about 45 percent of firms, and half to most for a 55 percent of establishments.
Top 10 States for Energy Efficiency Jobs

1. California
2. Florida
3. Illinois
4. Massachusetts
5. Ohio
6. Texas
7. New York
8. Georgia
9. Virginia
10. Pennsylvania

#CleanJobsAmerica
Faces of EE Initiative

• Real Jobs, Real People
• Better tell the story of EE jobs
• Develop & share graphics, collateral, memes
Example Memes

The most expensive thing [most people] own is their house - they deserve to get the most out of it.
Jeaneen Zappa, Conservation Consultants Inc., Glenshaw, PA

I serve as a quality control inspector / supervisor in home weatherization.
Eddie Cooper, Community Action Partnership of the Greater Dayton Area, Dayton, OH
Using the E2/E4 Jobs Report

- Faces of EE complements report
- Ready to capitalize on state opportunities

E4TheFuture.org/Faces-of-EE

@FacesOfEE
Questions?

Thank you!

For more information, please contact:

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