2016 Energy Efficiency Jobs Report

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Introduction

The Association of Energy Engineers, a nonprofit global professional society of over 18,000 members, issued a survey to determine the need for energy efficiency jobs, energy industry potential, and salary data. The results are based on more than 2200 responses and 148 countries represented. AEE was founded in 1977 and its mission is "to promote the scientific and educational interests of those engaged in the energy industry and to foster action for Sustainable Development."

Driving energy efficiency is a common effort globally to reduce energy intensity and energy demand. Advanced energy is a \$1.4 trillion global industry and energy efficiency alone represents a \$100 billion global market.

Former U.S. Secretary of Energy, Dr. Ernest Moniz addressed attendees at the 2016 World Energy Engineering Congress and stated there are 1.9 million energy efficiency jobs in the United States, the fastest growing job industry that is expected to grow by another quarter million jobs in one year. In the U.S. Department of Energy's Energy & Employment Report, 6.4 million Americans now work in the Traditional Energy and Energy Efficiency Industries.

The International Renewable Energy Agency reported in the 2016 Renewable Energy Jobs Report that China, Brazil, India, Japan, Germany, and the United States to have the highest number of renewable energy jobs available with solar as the leading renewable sector. The European Union is projected to have 2.5 million green jobs by 2030 with goals to reduce energy consumption and CO2 emissions in the building sector. Jordan, home of one of AEE's most active chapters, is working to hit an ambitious target to create over 66,000 new jobs each year over the next decade, resulting in 2.5 million jobs over the next 10 years.

The energy efficiency, renewable and sustainability markets will continue to gain significant traction and growth in 2017 as more organizations embrace energy efficiency and strive to achieve energy reduction and energy savings goals.

The results represented in this report are based on more than 2200 responses with 148 countries represented. The map below details the diverse locations where energy related work is performed.



Afghanistan
Albania
Algeria
Antigua and
Barbuda
Armenia
Australia
Austria
Bangladesh
Barbados
Belgium
Botswana
Brazil
Canada
Chile

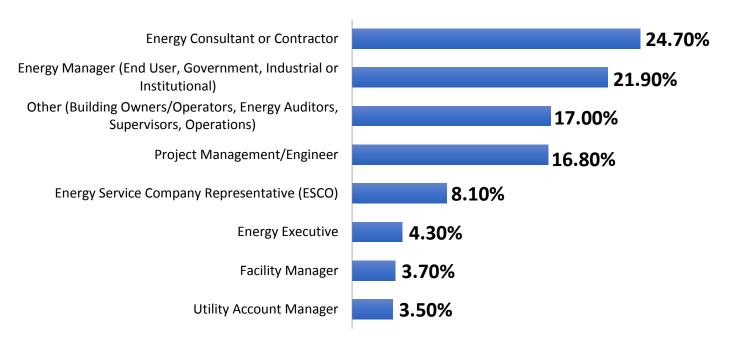
China Colombia Costa Rica Dominican Republic Ecuador Egypt France Georgia Germany Ghana Greece Guatemala Hungary India Ireland Israel

Italy Jamaica Japan Iordan Kazakhstan Kenya Kiribati Kuwait Lebanon Malaysia Mexico Namibia Netherlands New Zealand Niger Nigeria Pakistan

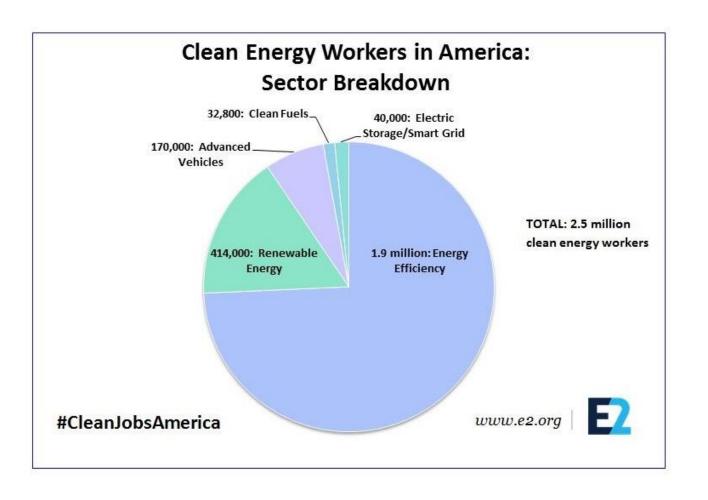
Panama Philippines **Portugal** Oatar Republic of Korea Republic of Moldova Romania **Russian Federation** Saudi Arabia Servia Slovakia South Africa Spain Switzerland **Tajikistan**

Thailand Trinidad and Tobago Tunisia Turkey Ukraine United Arab **United States Emirates** United Kingdom of Great Britain and Northern Ireland Uruguay Venezuela Vietnam Zimbabwe

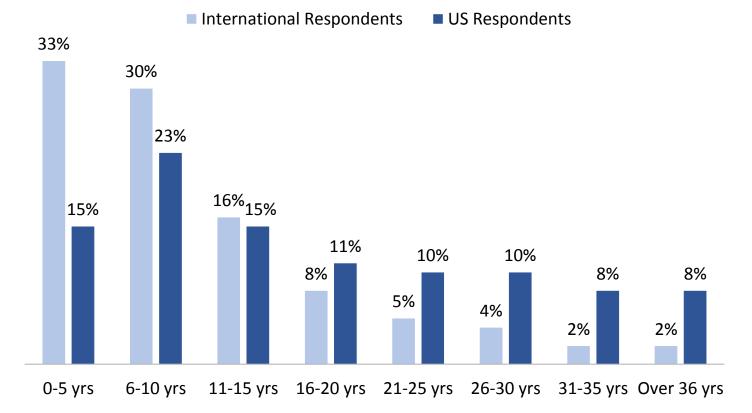
Role in your organization



In March 2016, E2 released <u>Clean Jobs America</u>, a comprehensive clean energy jobs analysis showing that 2.5 million Americans work in the clean energy sector. The report, based on U.S. Bureau of Labor Statistics data and a survey of tens of thousands of businesses across the country found that clean energy is a massive sector. Here's a closer look at the clean energy industries employing more than 2.5 million Americans:

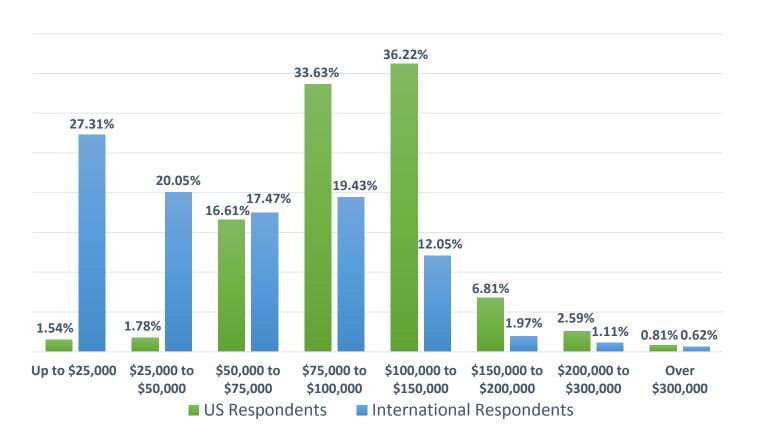


Years of energy efficiency experience



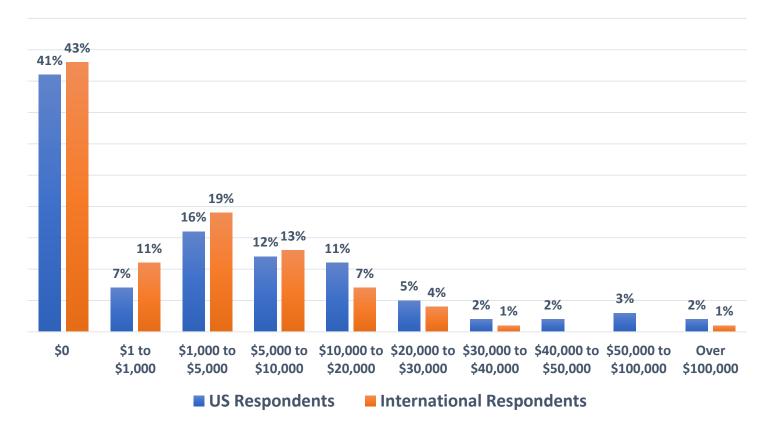
Base salary in 2016

US Respondents Average Salary - \$107,064 International Respondents Average Salary - \$63,632



Bonus received in 2015

US Respondents Average Bonus - \$9,707
International Respondents Average Bonus - \$5,477



86% of respondents hold a 4-year college degree
47% of respondents have a post-graduate degree
40% of respondents are Registered Professional
Engineers

Workforce Shortage Predictions

70% of International respondents believe there is a shortage of energy efficiency professionals while 61% of US respondents believe this to be true.

21% of US respondents
plan to retire within the
next 5 years while only
.08% of International
respondents plan to retire
within the next 5 years

42% of US respondents
plan to retire within the
next 10 years while 21%
of International
respondents plan to retire
within the next 10 years

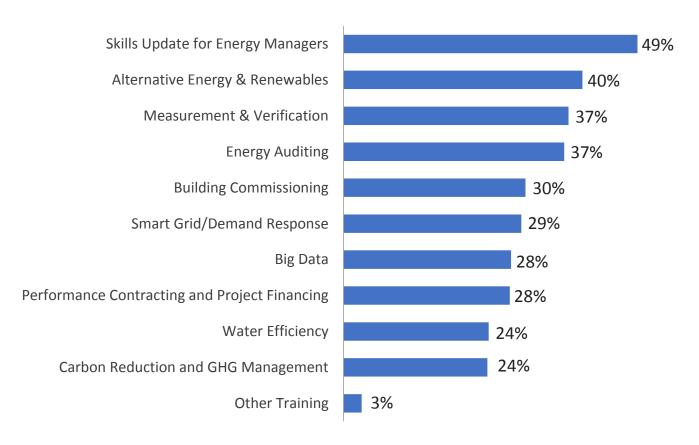
52% of companies plan to hire energy professionals in the next 12 months

79% of respondents hold a valid
AEE Certification

10% of respondents are in the process of obtaining a valid AEE Certification

78% of respondents feel the need for additional training.

Additional training required



The Association of Energy Engineers offered a variety of training and certification programs geared towards energy management, energy services and commissioning, power & gas, building and electrical systems, and sustainable development.



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