# Market Trends Survey 2013: Energy Industry

AEE Survey of the



# Relevant Trends, Opportunities, **Projections and Resources**

Presented by



#### Part I: Policy and Trends Summary

The 2013 Market Trends & Energy Policy Survey conducted by the Association of Energy Engineers (AEE) yielded some very interesting findings regarding the opinions of some of the energy industry's best and brightest with regard to US energy policy. 83% of the respondents surveyed believe that climate change is happening, and 74% of those individuals believe that climate change is a manmade phenomenon. Some of the respondents' more popular methods of fighting climate change included pursuing renewable energy technologies, adopting new home energy efficiency standards and increasing automobile fuel economy standards. Over 85% of respondents believe the federal government should take action to combat the negative effects of climate change and 64% supported government incentives for the continued development of electric vehicles. These are just a few highlights from the survey, please read the full report for more detail.

The Association of Energy Engineers (AEE), a nonprofit professional society of over 16,000 members, issued a survey to determine the need for Energy Management Jobs, Energy Industry Potential, and Salary Data. The results represented are based on 2,967 responses and are outlined in this report. 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."

#### **Profile of Respondents**

- Eighty-five percent (85%) have graduated from a four-year accredited college.
- Forty-two percent (42%) have a post-graduate degree from an accredited college.
- Thirty-four percent (34%) are registered Professional Engineers (P.E.s) or Architects.
- Seventy-nine percent (79%) hold an AEE certification

## Part II - Market Trends Survey Results

Do you believe that climate change is happening?	
Answer Options	Response Percent
Yes No	83.4% 16.6%

Do you believe that climate change is a manmade phenomenon?	
Answer Options	Response Percent
Yes No	73.9% 26.1%
Do you believe that the federal government should take action to combat the negative effects of climate change?	

Answer Options	Response Percent
Yes	85.5%
No	14.5%

What measures to combat climate change do you support?	
Answer Options	Response Percent
Restrict emissions from coal-burning power plants Adopt new energy efficiency standards for home Increase automobile fuel economy standards Pursue further development of renewable energy Reduce reliance on carbon-based energy sources	69.3% 76.5% 76.5% 82.8% 76.2%

Given the relatively new availability of low-cost natural gas in the United States, should utilities use natural gas as a baseload source of power?

Answer Options	Response Percent
Yes	75.3%
No	24.7%

Given the relatively new availability of low-cost natural gas in the United States, should the federal government incentivize the development of natural gas-powered vehicles?

Answer Options	Response Percent
Yes	54.7%
No	45.3%

Do you support federal incentives for the continued development of electric vehicles?

Answer Options	Response Percent
Yes	63.9%
No	36.1%

Do you think the President should approve the construction of the Keystone Pipeline?

Answer Options	Response Percent
Yes	72.1%
No	27.9%

Lawmakers are currently discussing making cuts to Department of Energy funding in order to reduce the US government's budget deficit. Do you feel that funding for the Department of Energy should:

Answer Options	Response Percent
Increase	36.2%
Decrease	25.2%
Stay the same	38.6%

Lawmakers are currently discussing making cuts to the Environmental Protection Agency's funding in order to reduce the US government's budget deficit. Do you feel that funding for the Environmental Protection Agency should:

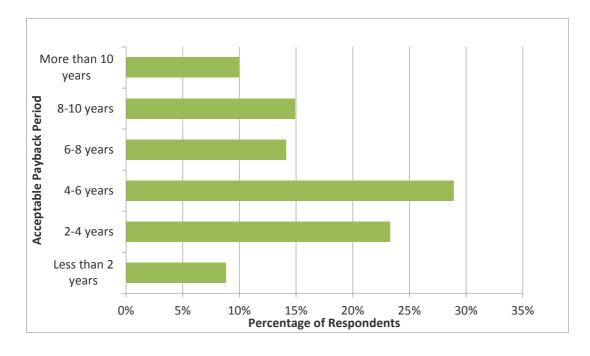
Answer Options	Response Percent
Increase	30.4%
Decrease	33.0%
Stay the same	36.6%

Has your company considered the installation of renewable technologies such as wind or solar at one of your facilities?

Answer Options	Response Percent
Yes	66.8%
No	33.2%

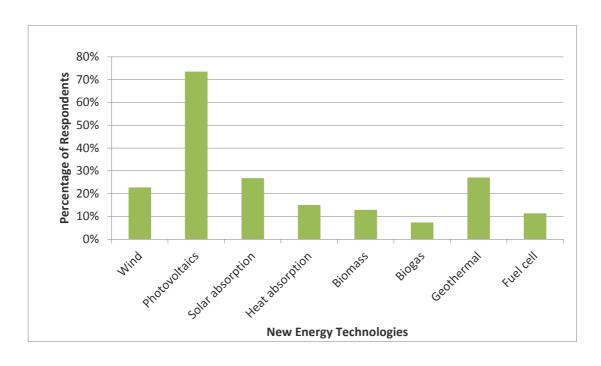
What would be an acceptable payback for your organization with regard to renewable energy on-site?

Answer Options	Response Percent
Less than 2 years	8.8%
2-4 years	23.3%
4-6 years	28.9%
6-8 years	14.1%
8-10 years	14.9%
More than 10 years	10.0%



Please indicate which technologies are most likely to be installed at your facilities within the next 3 years (mark all that apply)

Answer Options	Response Percent
Wind	22.7%
Photovoltaics	73.5%
Solar absorption	26.8%
Heat absorption	15.0%
Biomass	12.9%
Biogas	7.4%
Geothermal	27.1%
Fuel cell	11.4%



Are you an end user?	
Answer Options	Response Percent
Yes	50.2%
No	49.8%

How has the availability of utility rebate programs for energy conservation or alternative projects changed in the last five years?

Answer Options	Response Percent
More available	52.4%
Less available	21.9%
No change in program availability	25.7%

Have you received utility rebate programs to support the implementation of energy conservation or alternative energy projects in the last five years?

Answer Options	Response Percent
Yes	63.5%
No	36.5%

### What is the estimated amount of rebates that you have received in the last year?

Answer Options	Response Percent
Less than \$100,000	66.6%
\$100,000 to \$250,000	14.7%
\$250,000 to \$500,000	7.8%
\$500,000 - \$1,000,000	4.6%
Over \$1,000,000	6.3%

Does your company or governmental entity have an established policy concerning sustainability or sustainable development?

Answer Options	Response Percent
Yes	57.5%
No	27.8%
In development	14.7%

Does your company or governmental entity identify a set of established goals associated with this policy of sustainability or sustainable development?

Answer Options	Response Percent
Yes	81.1%
No	18.9%

Mark any components that are included in your company or governmental entity's policy of sustainability or sustainable development:

Answer Options	Response Percent
Safety programs	61.5%
Corporate Social Responsibility (CSR)	53.7%
Renewable energy	58.4%
Alternative energy	41.3%
Energy efficiency	91.7%
Environmental impacts	63.2%
Global warming	22.9%
Carbon management	43.4%
Land management	22.9%
Waste reduction and management planning	66.1%
Reporting of results to public	38.5%
Employee education	67.3%
Outreach	34.0%

How much money has your company saved as a result of its sustainability or energy efficiency programs since their inception?

Answer Options	Response Percent
\$0 to \$250,000	46.2%
\$250,000 to \$500,000	12.3%
\$500,000 to \$1,000,000	9.9%
\$1,000,000 to \$2,000,000	7.0%
\$2,000,000 to \$5,000,000	6.8%
Over \$5,000,000	17.9%

As a result of current or pending deregulation, it is:	
Answer Options	Response Percent
Easier to get energy projects approved  More difficult to get energy projects approved  Approval of energy projects has not changed	17.9% 21.6% 60.4%

How has your electric rate changed in the past year?	
Answer Options	Response Percent
Electric rate has increased	64.1%
Electric rate has decreased	15.2%
No change in electric rate	20.7%

#### If your electric rate rate has changed, by how much has it changed? **Answer Options** Response Percent Increase of 1-5% 42.4% Increase of 6-10% 26.5% Increase of 11-15% 7.1% 7.5% Increase greater than 15% Decrease of 1-5% 9.3% Decrease of 6-10% 4.2% Decrease of 11-15% 1.5% Decrease greater than 15% 1.5%

How has your natural gas rate changed in the past year?	
Answer Options	Response Percent
Natural gas rate has increased	20.1%
Natural gas rate has decreased	48.1%
No change in natural gas rate	31.8%

If your natural gas rate has changed, by how much has it changed?		
Answer Options	Response Percent	
Increase of 1-5%	28.0%	
Increase of 6-10%	16.0%	
Increase of 11-15%	5.0%	
Increase greater than 15%	3.4%	
Decrease of 1-5%	19.2%	
Decrease of 6-10%	14.0%	
Decrease of 11-15%	4.7%	
Decrease greater than 15%	9.7%	

## Part III - AEE Education Programs

Earning an AEE certification credential has helped or will help my career?	
Answer Options	Response Percent
Yes	86.9%
No	13.1%

Since you received your AEE certification, are you receiving higher visibility?	
Answer Options	Response Percent
Yes No	59.5% 40.5%

Since you have received your AEE certification, are you in a better position for advancement?	
Answer Options	Response Percent
Yes No	63.4% 36.6%

Earning an AEE certification has benefited or will benefit my firm?	
Answer Options	Response Percent
Yes	87.0%
No	13.0%

Earning an AEE certification has given my firm a competitive edge in respect for requests for proposals?

Answer Options	Response Percent
Yes	59.0%
No	41.0%

## **Part IV: Training Opportunities**

The Association of Energy Engineers offers a variety of professional training and re-training programs, including:

- Training seminars, conferences, and industry networking (energy, sustainability, energy auditing, power, green facilities, certification programs)
  - o <a href="http://www.aeecenter.org/realtime">http://www.aeecenter.org/realtime</a> (Online training seminars)
  - o https://www.aeecenter.org/seminars/calendar.htm (Live seminar training)
  - o <a href="http://www.aeecenter.org/shows">http://www.aeecenter.org/shows</a> (energy industry events)

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