

2015 Market Trends Survey

AEE Survey of the Energy Industry

**Relevant Trends,
Opportunities,
Projections &
Resources**

PRESENTED BY



Association of Energy Engineers

Policy & Trends Summary

The Association of Energy Engineers® (AEE®), a nonprofit professional society of over 17,000 members, issued a survey to its members to highlight the key issues impacting the energy industry. The results represented are based on more than 2500 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.”*

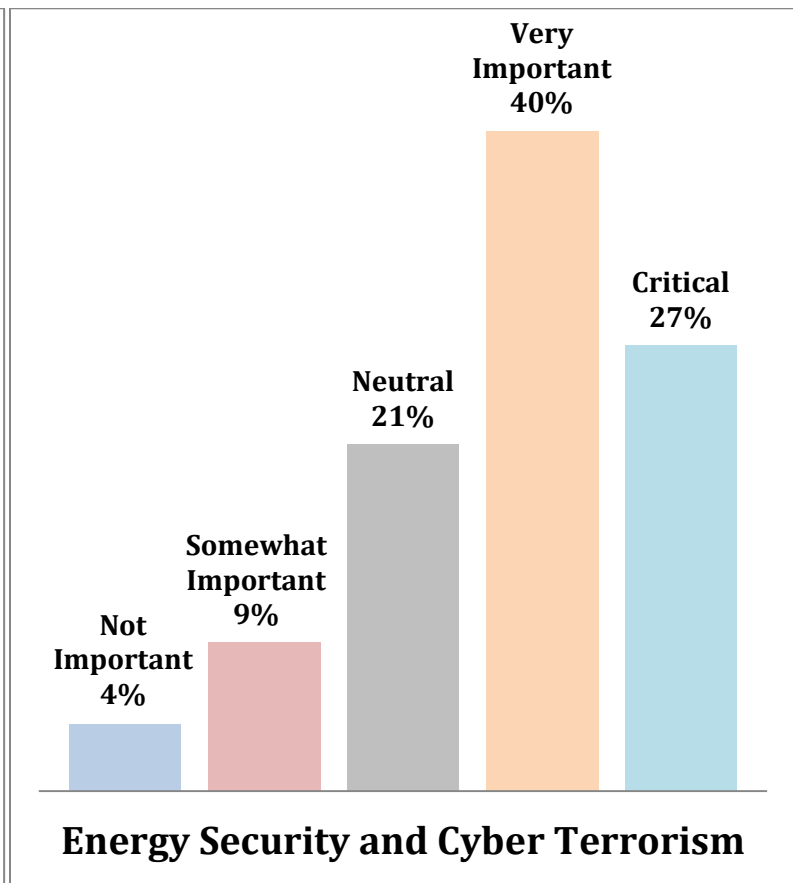
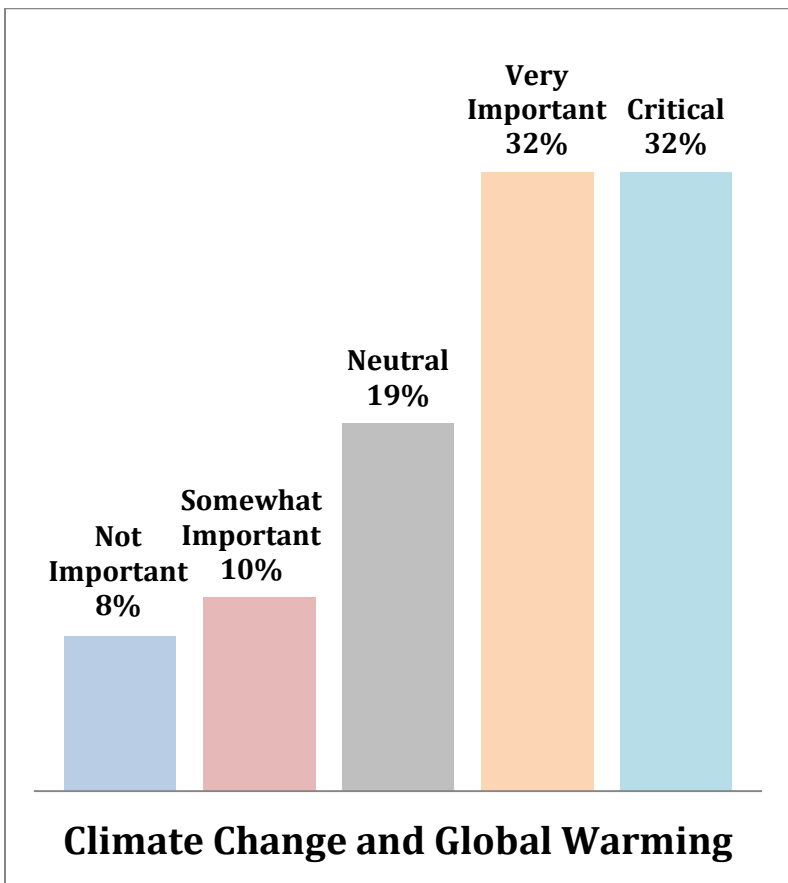
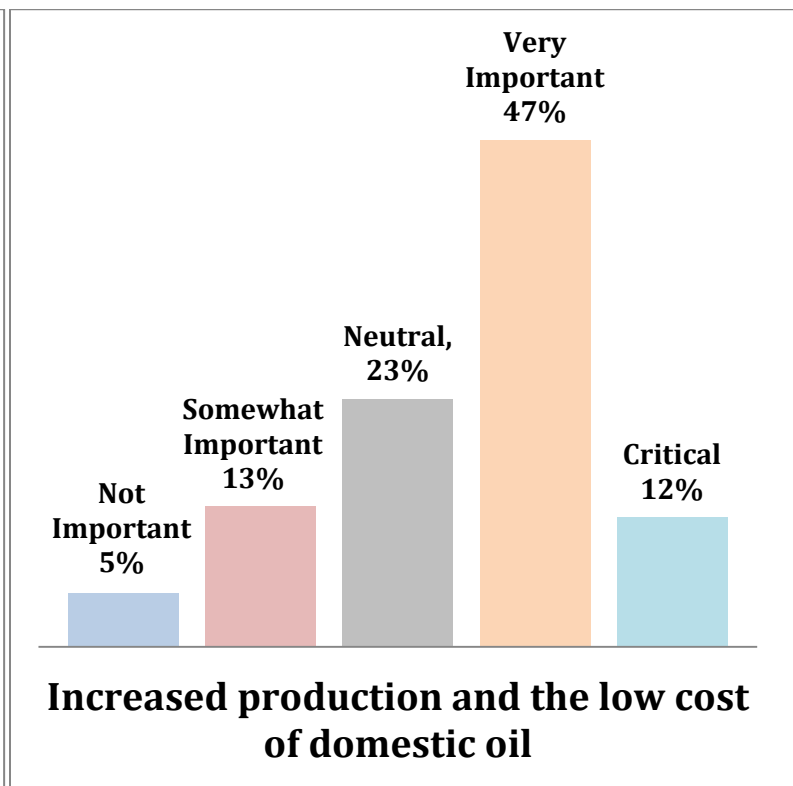
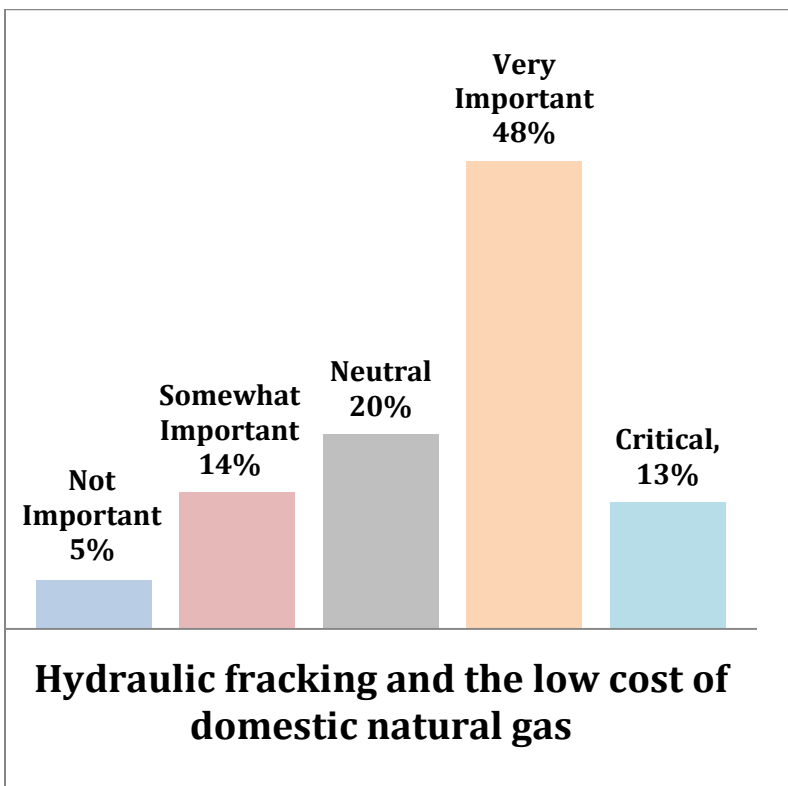
The 2015 Market Trends & Energy Policy Survey conducted by the Association of Energy Engineers® (AEE®) highlights critical issues in the energy industry, including the impacts of climate change and global warming, energy security and cyber terrorism, and the increased production of shale natural gas and oil in the U.S.

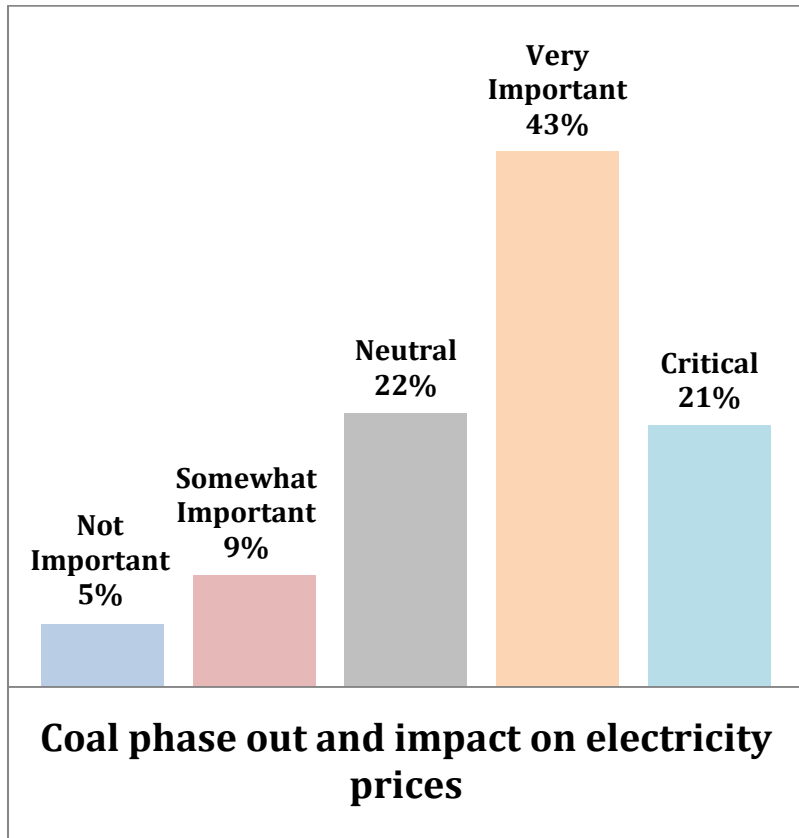
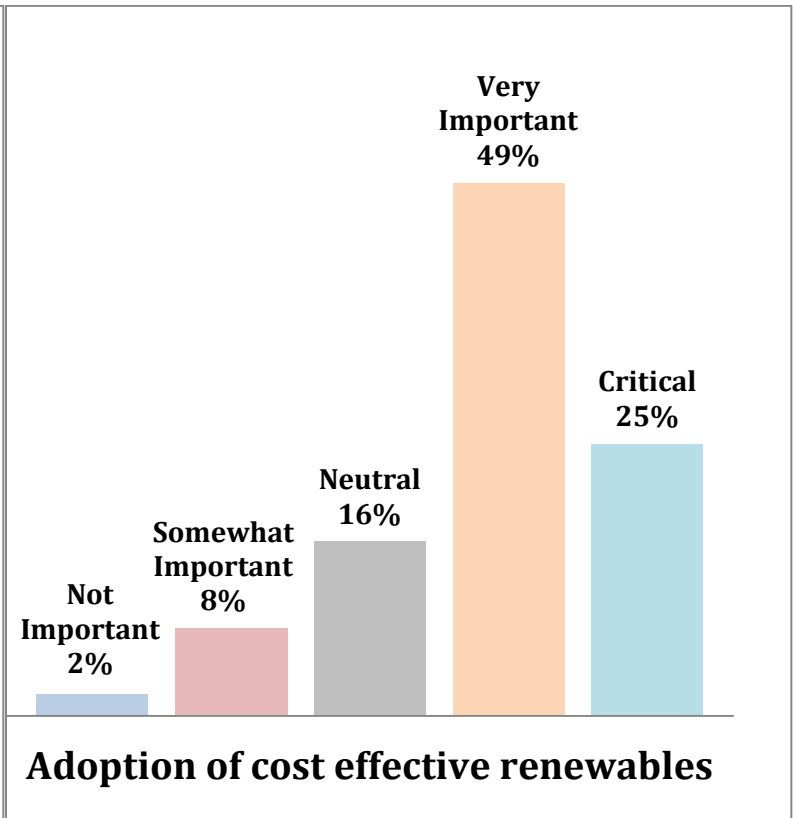
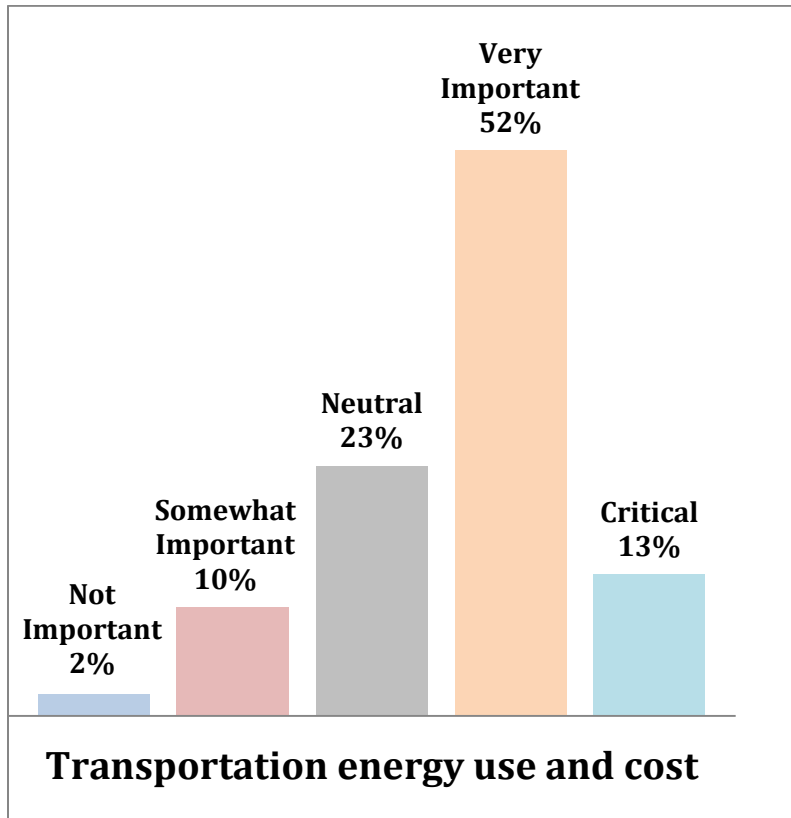
This survey indicates 70% of companies are considering installing renewable technologies at their facilities with 63% most likely to install photovoltaics. 68% agree with President Obama’s strategy of setting stricter carbon emission standards to make it more difficult for new coal-fired power production to take place and 62% support hydraulic fracking in the United States.

Profile of Respondents

- Eighty-five percent (85%) have graduated from a four-year accredited college
- Forty-four percent (44%) have a post-graduate degree from an accredited college
- Sixty-three percent (63%) are Professional Engineers
- Eighty percent (80%) are certified in one or more of the following categories:
 - Certified Energy Manager (CEM®)
 - Energy Manager in Training (EMIT™)
 - Certified Energy Auditor (CEA™)
 - Certified Sustainable Development Professional (CSDP®)
 - Certified Green Building Engineer (GBE®)
 - Business Energy Professional (BEP®)
 - Certified Lighting Efficiency Professional (CLEP™)
 - Certified Power Quality Professional (CPQ®)
 - Certified Building Commissioning Professional (CBCP®)
 - Distributed Generation Certified Professional (DGCP™)
 - Certified Measurement & Verification Professional (CMVP®)
 - Certified Energy Procurement Professional (CEP®)
 - Certified Indoor Air Quality Professional (CIAQP™)
 - Certified GeoExchange Designer (CGD®)
 - Certified Carbon Reduction Manager (CRM®)
 - Certified Building Energy Simulation (BESA™)
 - Certified in the Use of RETScreen® (CRU™)
 - Certified High Performance Building Professional (HPB™)
 - Certified Building Energy & Sustainability Technician (BEST™)
 - Government Operator of High Performance Buildings (GOHP™)
 - Certified Energy Efficiency Practitioner (EEP™)

Respondents indicate the importance of seven of the mega trends shaping the energy industry: hydraulic fracking and the low cost of domestic natural gas, increased production and the low cost of domestic oil, climate change and global warming, energy security and cyber terrorism, transportation energy use and cost, adoption of cost effective renewables, and coal phase out and impact on electricity prices.

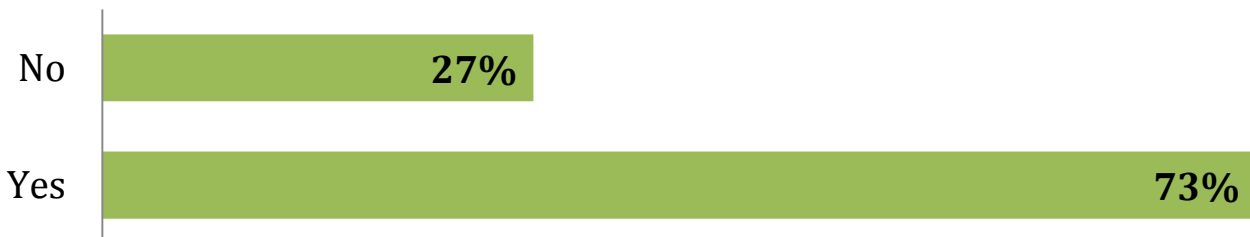




68% agree with President Obama's strategy of setting stricter carbon emission standards to make it more difficult for coal-fired power production to take place

62% support the use of hydraulic fracking to extract natural gas in the United States

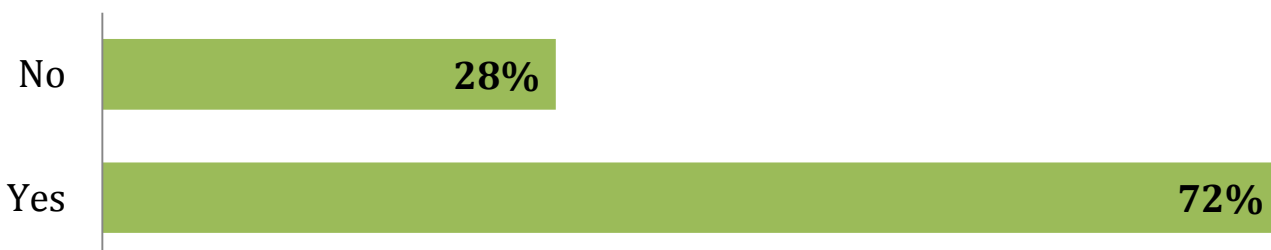
Given the availability of low-cost natural gas in the United States, should utilities use natural gas as a baseload source of power?



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

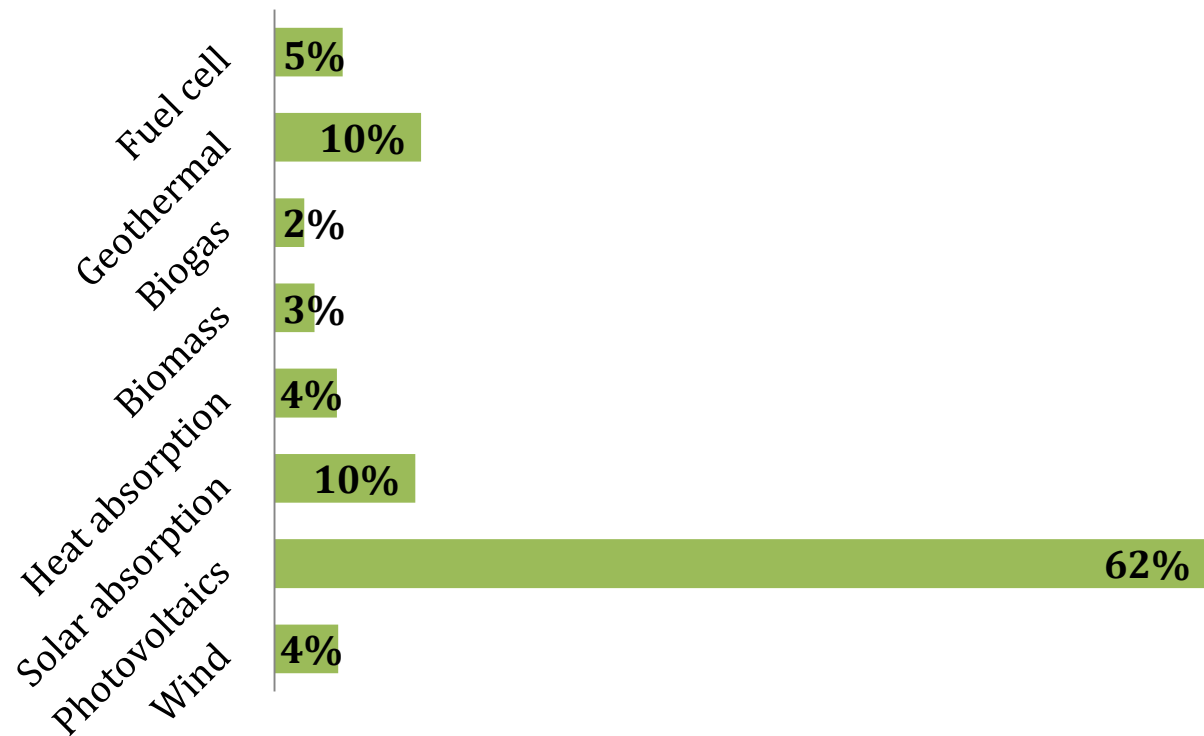


Do you support federal incentives for the continued development of electrical vehicles?

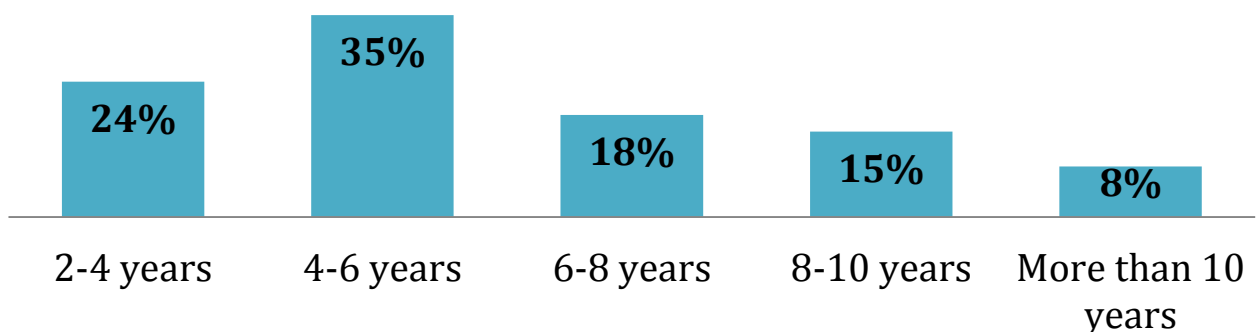


70% indicate their companies have considered installing renewable technologies such as wind, geothermal, or solar at one of their facilities

Members were asked to select which technologies are most likely to be installed at their facilities within the next 3 years



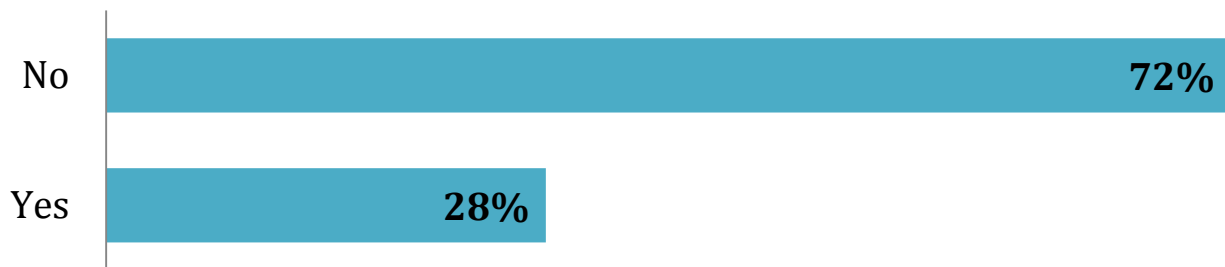
What would be an acceptable payback for your organization with regards to renewable energy on-site?



Have you or your company considered using combined heat and power (CHP) technology as a means of achieving energy savings or providing energy reliability?

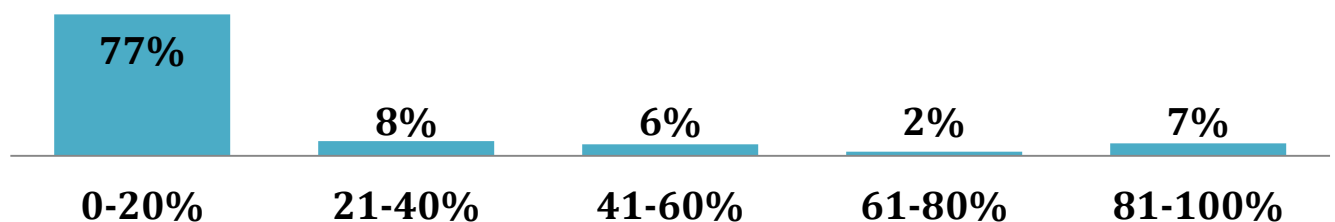


Is your company considering utilizing alternative funding such as PACE, power purchase agreement, or a revolving loan, for example, as a means of funding projects?



80% support performance contracting as a way of financing or implementing energy projects

What percentages of your projects are financed through performance contracting?

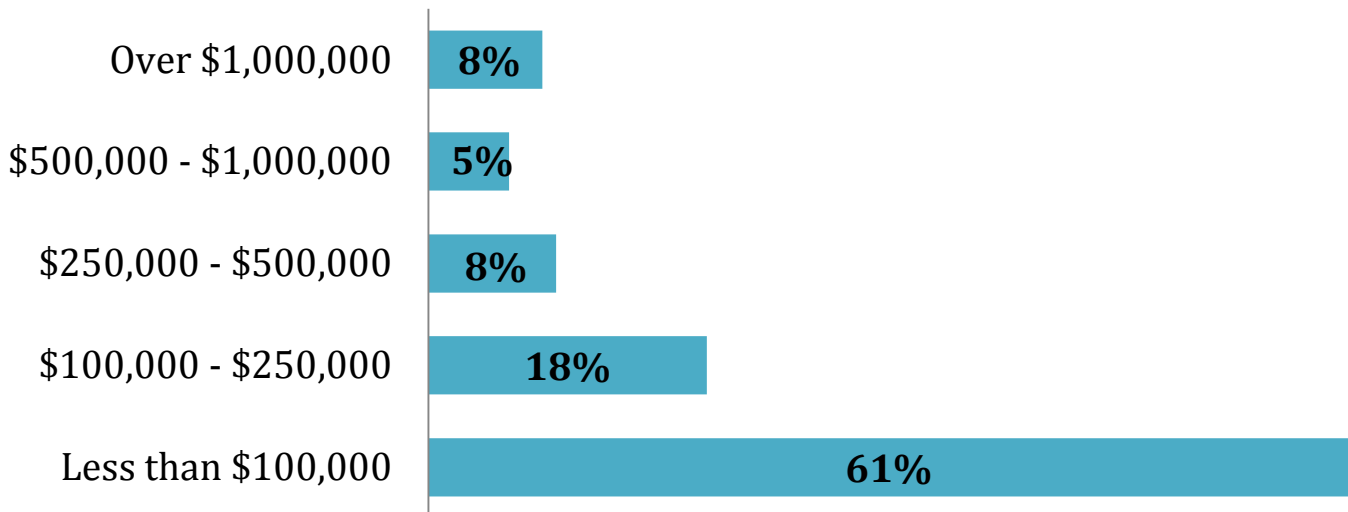


63% of end users have received utility rebate programs to support the implementation of energy conservation or alternative energy within the last five years

If you are an end user, how has the availability of utility rebate programs for energy conservation or alternative projects changed in the last five years?



If you are an end user who has received utility rebates in the last year, what is the estimated amount of rebates?

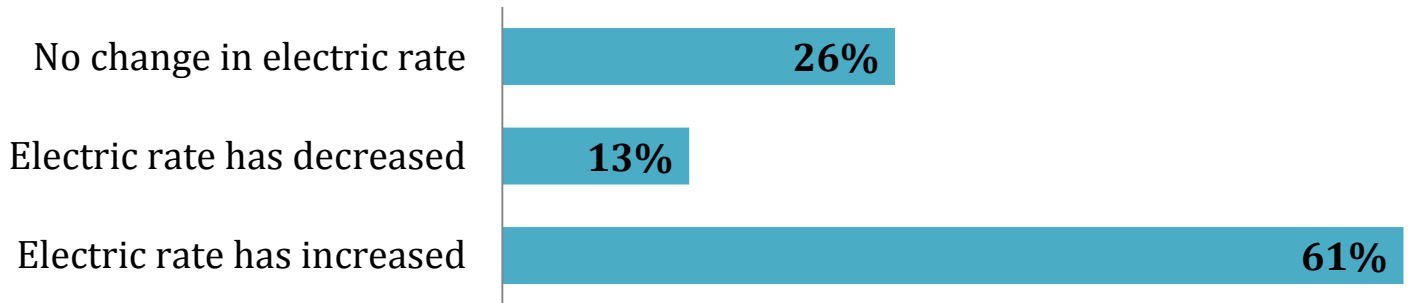


76% indicate their companies are working towards or have established policies concerning sustainability or sustainable development

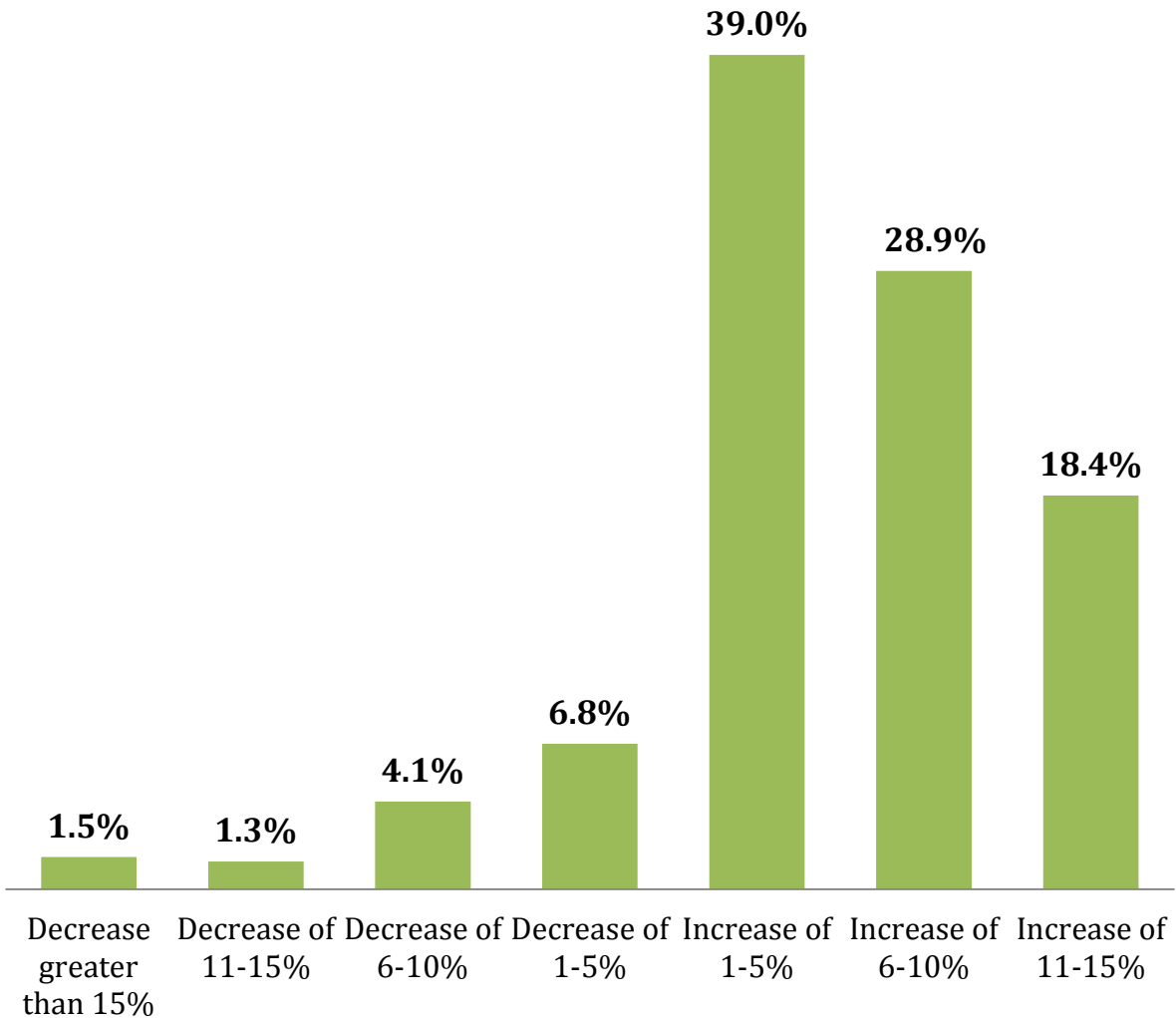
83% of companies or government entities with an established sustainability policy have set goals including, but not limited to:

| | |
|---|-------|
| Safety programs | 47.4% |
| Corporate Social Responsibility (CSR) | 34.7% |
| Renewable energy | 52.9% |
| Alternative energy | 36.1% |
| Energy efficiency | 82.5% |
| Environmental impacts | 50.7% |
| Global warming | 23.0% |
| Carbon management | 32.5% |
| Land management | 13.9% |
| Waste reduction and management planning | 48.9% |
| Reporting of results to public | 24.8% |
| Employee education | 50.0% |
| Outreach | 17.9% |
| Water Efficiency | 47.8% |

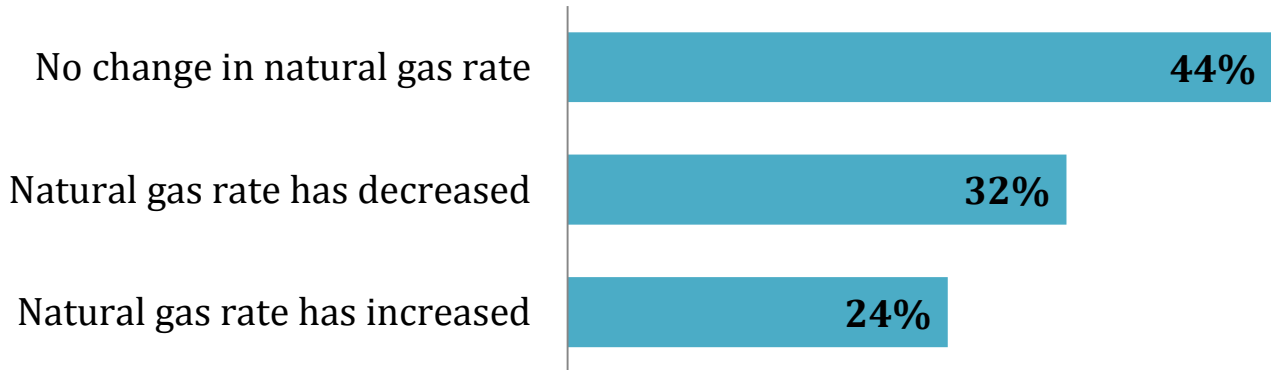
How has your electric rate changed in the past year?



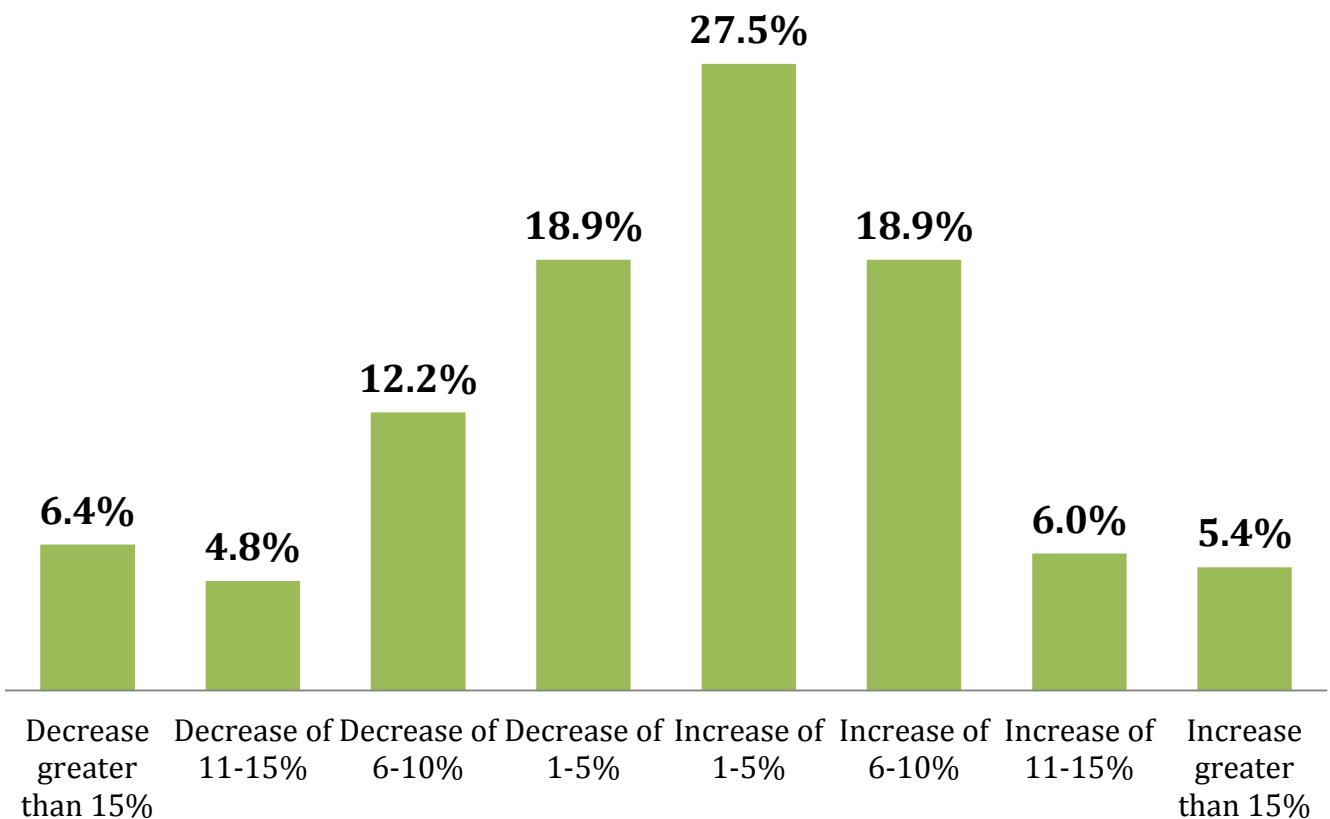
If your electric rate has changed, by how much?



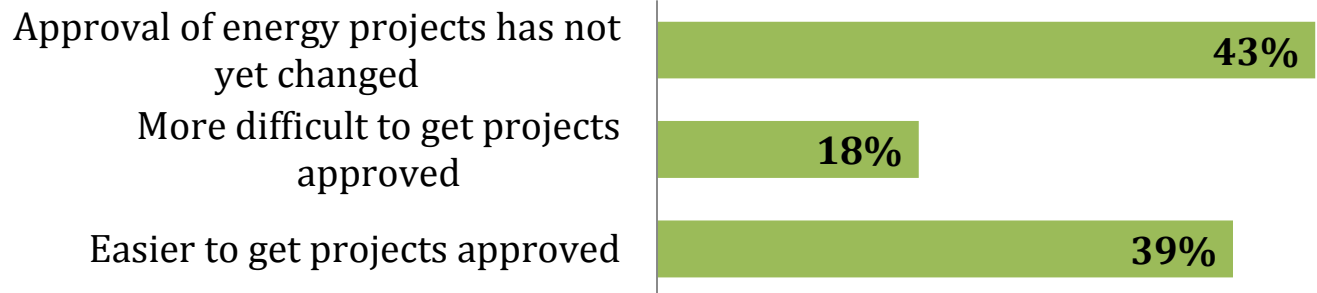
How has your natural gas rate changed in the past year?



If your natural gas rate has changed, by how much?



As a result of the current energy efficiency marketplace, it is:



85% support the benchmarking programs that are beginning to emerge in the U.S.'s largest cities via the "Better Buildings" program.

37% have seen increased business opportunities as a result of the municipal benchmarking ordinances

Copyright 2015 Association of Energy Engineers

Permission granted to reprint portions of this report, provided the following credit/link appears:

Re-printed by Permission of the Association of Energy Engineers (AEE)

www.aeecenter.org

