ACEEE Fact Sheet
American Council for an Energy-Efficient Economy

Strengthening Industrial Energy Management

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ACEEE proposes a set of new programs in the Advanced Manufacturing Office of the U.S. Department of Energy (DOE) to encourage and assist small, medium, and large industrial plants to better manage their energy use, reduce their energy costs and emissions, and increase their competitiveness.

ENERGY MANAGEMENT REDUCES INDUSTRIAL ENERGY USE AND EMISSIONS

- Industry accounts for more than 25% of U.S. energy use and greenhouse gas (GHG) emissions. Reducing this energy use through proven, cost-effective energy management techniques will improve the competitiveness of firms, helping maintain well-paying jobs in manufacturing.
- In order to reach long-term GHG reduction goals, it is vital that industrial emissions decline significantly. Energy management can deliver near- and longer-term reductions with low capital cost and can provide a host of energy and nonenergy benefits.
- This package builds on a variety of proposals being developed by House and Senate offices.

HIRE MORE ENERGY MANAGERS

- Energy managers are typically engineers or technicians who lead efforts within their companies to understand and reduce energy use.
- Many large companies hired energy managers in the 1990s and 2000s as energy prices rose. These employees typically reduce energy costs by significantly more than what it costs to employ them.
- The proposed program would support employing energy managers at more plants by paying up to 50% of an energy manager's annual salary (up to a cap) for up to 3 years. The energy manager would need to commit to initiating or growing a strategic energy management program.

PROVIDE ENERGY ASSESSMENTS AND ASSISTANCE WITH IMPLEMENTING THE RESULTING RECOMMENDATIONS

- Energy efficiency efforts typically start with facility energy assessments (energy audits) to identify the most-promising opportunities to save energy and reduce emissions at the lowest cost.
- Industrial Assessment Centers (IACs) constitute a long-running and successful university-based program that provides assessments to small industrial firms (fewer than 500 employees) and in the process provides practical training to the next generation of energy engineers. We would expand the program, as proposed by Senators Portman and Shaheen (S. 2137 in the 116th Congress).
- Flex-Tech is a successful, long-running program in New York State that co-funds project assessments using a network of experts and works with banks to help finance implementation of the identified measures. The program particularly targets medium-sized firms. Representative Paul Tonko (NY) is developing a proposal to provide grants to state energy offices across the country to implement similar programs.

- Save Energy Now was a successful DOE program that conducted assessments for very large firms as part of the U.S. response to a natural gas crisis in the 2000s. The program served 680 firms and achieved savings of about $500 million. We propose renewing the program, targeting the 3,000 largest plants in the United States, with a focus on both energy and GHG reductions.
- To assist with implementation of assessment recommendations, DOE would provide technical assistance as well as grants (30% for small firms and 10% for large firms; for medium firms, financing assistance is part of Flex-Tech).

IMPLEMENT STRATEGIC ENERGY MANAGEMENT

- Strategic energy management (SEM) is a system of monitoring and reducing energy use based on well-established principles of operations management and the Plan-Do-Check-Act process of continual improvement.
- Plants that use SEM have been shown to reduce their energy use by about 15% after 5 years of implementation.
- In the United States, more than 30 utilities and states offer local programs to encourage and assist SEM. SEM is even more widely used in other countries, such as Germany.
- We propose that DOE provide more education and technical assistance to grow SEM efforts in the United States.
- The program would include grants of up to $100,000 per firm, based on the size and depth of the SEM effort, to assist with establishing SEM programs.

TOTAL COST

- Authorizations for the entire package total about $400 million for the first year and $2 billion for 5 years.

Contact Alexander Ratner at aratner@aceee.org for more information about this proposal.