Save Energy and Money with a Corporate Energy Management Program

Increased productivity, greater efficiency, and cost savings are just a few good reasons to develop and implement a corporate energy management (CEM) program. Addressing energy management at the corporate level can provide you with a competitive advantage in the global marketplace, strengthen your employees' commitment, enhance your corporate identity, and improve your company's environmental performance.

As energy costs continue to rise, industrial plants need effective ways to reduce the amount of energy they consume. A CEM program helps you reduce energy costs now and becomes part of your long-term business strategy.

Energy Management Programs

- Require an integrated, company-wide effort
- Guide business decisions about industrial equipment and establishes procedures that ensure greater energy and process efficiency
- Encourage behaviors that save energy and money

Benefits

- Improve productivity, product quality, and reliability
- Enhance your corporate identity and strengthen employee commitment
- Save money and increase your competitive advantage

Resources

For more information on corporate energy management, to obtain market assessments and technical publications, to download DOE software decision tools, and to learn more about DOE Qualified Specialists and training opportunities, visit the BestPractices Web site, www.eere.energy.gov/industry/bestpractices and see the Corporate and Plant Management sections.

Additionally, you can contact the EERE Information Center at 1-877-EERE-INF (1-877-337-3463), or via the Web at www.eere.energy.gov/informationcenter.

What is an energy management program?

Corporate energy management is an integrated, company-wide effort that involves making business decisions about industrial equipment, establishing procedures that ensure greater energy and process efficiency, and encouraging behaviors that save energy and money. Developing and implementing a sustainable CEM program requires guidance and involvement at the corporate level.

Ancillary Savings and Production Benefits from Energy Efficiency Measures

Operations and Maintenance	Production
Reduced maintenance costs Reduced purchases of ancillary materials Reduced water consumption Lower cooling requirements Reduced labor costs Lower costs of treatment chemicals	Reduced product waste Increased Production Improved product quality Increased production reliability Shorter process/cycle time
Work Environment	**Environment**
Increased worker safety Reduced noise levels Improved workstation air quality	Reduced hazardous waste Reduced dust emissions Reduced waste water output Reduced CO, CO_2, NO_x, SO_x emissions
Other	
Achieved rebate/incentive (one-time) Reduced/eliminated demand charges Reduced/eliminated rental equipment costs Avoided/delayed costs (one-time)	

Corporate energy management offers many non-energy benefits that can help you achieve business goals. (Source: "Ancillary Savings and Production Benefits in the Evaluation of Energy Efficiency Measures," *2005 ACEEE Summer Study on Energy Efficiency in Industry, Proceedings*, www.aceee.org.)

The U.S. Department of Energy's Industrial Technologies Program (ITP) works with energy-intensive industries and fosters CEM programs that can help meet economic, environmental, and community-related goals through greater energy efficiency.

What is involved in a CEM program?

To establish a CEM program, first develop a multiyear business plan that aligns with your company's values. It can include setting energy management goals and accountabilities for optimizing procedures, training staff, and selecting cost-effective projects for maximum savings. Once the plan is endorsed by management, form a corporate energy management team of financial and technical experts to assess plant energy use and uncover opportunities for greater efficiency, waste reduction, and sustainability.

Partnering with ITP Best Practices provides you with a wealth of resources—such as employee training, software assessment tools, market assessment reports, and case studies—that support your CEM efforts. These can help you streamline operations and increase productivity using technologies and practices that have been successfully demonstrated in industry. Use these strategies as part of your plan to remain competitive in a constantly changing global economy, and to help ensure continuing supplies of affordable energy for your industrial needs.

What is the potential for savings?

ITP has helped industry save approximately 2 quadrillion Btu (quads), valued at more than $8 billion. For example, aluminum producer Alcoa's long-term business strategy includes setting goals for energy efficiency. As a part of this strategy, Alcoa has worked with ITP, and has performed plant-wide assessments, conducted employee training, and used software tools and technical resources. Alcoa has identified more than $60 million in savings opportunities company-wide, and has reduced its operating costs by more than $15 million.

What are the key elements of a CEM program?

To help ensure a successful CEM program, consider these elements:

- Develop a plan for reducing energy use. Identify a staff energy management team and points of contact who ensure accountability.
- Have your team conduct or facilitate a systems assessment to calculate baseline energy use, solve operating problems, and identify improvement opportunities.
- Identify strategies with the greatest return on investment, and analyze life-cycle costs during initial system designs or when planning upgrades.
- Factor the non-energy benefits into business decisions, such as enhancing public image, employee commitment, product quality, productivity, and reliability.
- Adopt a financial approach that relates performance and efficiency to financial and other corporate goals.
- Establish a recognition program for energy management achievements, and provide company-wide opportunities for communicating ideas and replicating savings.
- Partner with ITP and be recognized for contributing to significant advances in U.S. competitiveness, energy-efficient technologies, and environmental goals.

Visit the ITP BestPractices Web site for more on opportunities, resources, and practices that can be part of your CEM program. See also the Environmental Protection Agency's Web site at www.energystar.gov or the National Institute of Science and Technology's Manufacturing Extension Partnership at www.mep.nist.gov.

BestPractices is part of the Industrial Technologies Program, and supports DOE's strategy to help the country's most energy-intensive industries improve their competitiveness. BestPractices brings together emerging technologies and energy-management best practices to help companies begin improving energy efficiency, environmental performance, and productivity right now.

BestPractices emphasizes plant systems, where significant efficiency improvements and savings can be achieved. Industry gains easy access to near-term and long-term solutions for improving the performance of process heating, steam, pumps, compressed air, and other motor-driven systems. In addition, the Industrial Assessment Centers provide comprehensive industrial energy evaluations to small- and medium-size manufacturers.

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

For More Information, Contact:

EERE Information Center
1-877-EERE-INF
(1-877-337-3463)
www.eere.energy.gov

Or visit these Web sites:

Industrial Technologies Program (ITP)
www.eere.energy.gov/industry

ITP BestPractices
www.eere.energy.gov/industry/bestpractices

Save Energy Now
www.eere.energy.gov/industry/saveenergynow

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