

Federal Energy Management Program

Industrial Facilities Initiative

Fact Sheet

The U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP) facilitates the Federal Government's implementation of sound, cost-effective energy management and investment practices to enhance the nation's energy security and environmental stewardship.

The objective of FEMP's Industrial Facilities Initiative (IFI) is to help Federal agencies improve the energy efficiency of their facilities and achieve goals set by Executive Order (E.O.) 13423. The order applies to standard, laboratory and industrial facilities, and requires agencies to reduce energy usage by 30 percent by 2015 relative to a 2003 baseline.

Through a partnership with BestPractices under the DOE Industrial Technologies Program (ITP), IFI offers expert services, support, and resources to Federal industrial facilities:

- Energy, water, and productivity assessments
- Outreach
- Training
- Assistance with implementing efficiency improvements and private-sector financing

Assessments

Comprehensive plant-wide assessments are conducted at industrial facilities during a multi-day site visit. IFI documents the assessment, providing a detailed report that includes an analysis of utility (energy, water, and waste) history and rate structure; maps of energy, waste, and production flows; recommendations for saving energy, reducing waste, and enhancing productivity (including engineering calculations and payback estimates); and other information.

System-specific assessments of steam, compressed air, process heat, and pumping systems are provided by BestPractices assessment teams. These assessments are conducted during multi-day site visits. Assessed facilities receive detailed reports covering the status of the targeted systems and recommendations for saving energy and reducing operation and maintenance costs.

IFI assessment teams consist of professional engineering consultants (BestPractices Qualified Specialists) and/or Industrial Assessment Center (IAC) teams of engineering faculty and students. Often the BestPractices and IAC teams work on assessments together, and IAC teams often include a BestPractices Qualified Specialist for one or more systems (e.g., steam).

If you are interested in an industrial energy assessment at your facility, please contact Melissa Madgett, IFI technical lead, at 865-576-3373 or madgettmg@ornl.gov.

Outreach

Federal customers can gain access to the same resources that the Industrial Technology Program's BestPractices activities provide to the private-sector. Software tools and industrial publications can be viewed and downloaded from the ITP BestPractices Web site at <http://www1.eere.energy.gov/industry/bestpractices/resources.html>

Technical publications pertaining to industrial facilities are available in technical fact sheets, handbooks, and self-assessment manuals covering topics such as steam system efficiency, fundamentals of compressed air systems, and motor systems management.

Software tools are also available and free to download to help evaluate industrial system operations and maximize energy efficiency. Software tools include the following:

- Steam Systems Tool Suite
- Compressed Air Systems
- Process Heating
- Pump Systems
- Fan Systems
- Motor System Management
- Chilled Water Systems
- Industrial Plant Energy Profiler (*Quick Plant Energy Profile*)

Databases are available that allow users to review results of plant assessments and find a variety of additional tools. For example, the IAC database contains results of more than 14,000 assessments, including baseline consumption data and energy and cost savings by recommended measure.

FEMP resources help Federal agencies find smart solutions to today's energy and water management challenges. These resources are available online at <http://www1.eere.energy.gov/femp/information/index.html> and include:

- Publications listed by topic
- Analytical and reference tools for calculating energy and water consumption
- Conferences and meetings to learn more about using energy efficiency and renewable energy to meet Federal requirements
- Glossary of commonly used terminology associated with energy management in the Federal sector

Training

IFI provides training to Federal industrial facilities on energy-efficient practices and strategies and BestPractices tools. Training sessions can be held at the Federal facility site or via webcast.

Please visit the FEMP calendar for news of tool introduction webinars and other workshops:
<http://www1.eere.energy.gov/femp/news/events.html>

Assistance with Implementing Efficiency Projects

To help Federal industrial facilities realize potential savings identified through energy assessments, IFI helps identify the best routes and support services needed for implementing recommended energy efficiency measures.

Federal industrial facilities can also use other FEMP resources such as project facilitation for financed energy projects, design review, technology feasibility studies, and project management assistance. More information can be found at <http://www1.eere.energy.gov/femp/services/index.html>

Contacts

For information or assistance with any aspect of the FEMP Industrial Facilities Program, contact your FEMP representative or the IFI technical lead.

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Additional Information on the Industrial Facilities Initiative can be found at http://www1.eere.energy.gov/femp/program/industrial_facilities.html