

## Industrial Facilities Program

### FEMP Focuses on Federal Industrial Facilities

Industrial facilities in the federal sector can now take advantage of the services and assistance that FEMP has until now offered primarily for standard buildings and facilities. FEMP is addressing the special needs of these facilities through the Industrial Facilities Program. FEMP's objective is to provide expertise and support to help federal agencies achieve the energy efficiency goals set by Executive Order (EO) 13123.

### New Goals and Definitions in EO 13123

EO 13123 requires industrial, laboratory, research, and other energy-intensive facilities to reduce their energy usage by 20% (relative to 1990) by 2005 and 25% by 2010. The order defines an industrial facility as "any fixed equipment, building, or complex for production, manufacturing, or other processes that uses large amounts of capital equipment in connection with, or as part of, any process or system, and within which the majority of energy use is not devoted to the heating, cooling, lighting, ventilation, or to service the water heating energy load requirements of the facility." Many of these energy-intensive facilities were exempt from previous efficiency goals; however, the current executive order has tightened the exemption criteria. Exempt facilities are now limited to parking garages, federal ships, vehicles and airplanes that consume "cold iron energy," buildings entering or leaving the inventory or undergoing major renovation, and process-sensitive or process-intensive facilities.

FEMP has established three options for agencies with industrial facilities to choose from to measure and report their energy performance (for FEMP's annual report to Congress): (1) Btu's per production unit; (2) Btu's per performance unit; or (3) Btu's per gross square foot.

### Comprehensive Approach for Industrial Facilities

Through its collaboration with DOE's Office of Industrial Technologies (OIT), FEMP's Industrial Facilities Program is making OIT's widely recognized technical expertise available to federal facilities. FEMP offers plantwide assessments of energy, waste, and productivity, plus energy analyses for targeted systems. The combination of plantwide and system-specific assessments affords a comprehensive view of industrial facilities' energy efficiency.

The Industrial Facilities Program provides a single point of contact for access to OIT's resources and well-established FEMP services that meet the needs of industrial customers. Through the Industrial Facilities Program, federal industrial customers have access to:

- energy, waste, and productivity assessments
- energy analysis of steam, compressed air, and pumping systems
- technical assistance
- technical publications

- software
- implementation assistance
- assistance with financing through energy savings performance contracts (ESPCs) and utility energy service contracts (UESCs)

### Plantwide Assessments

Through OIT's Industrial Assessment Center (IAC) Program, FEMP offers plantwide energy, waste, and productivity audits to federal industrial clients. Each industrial client receives a report detailing the results of a comprehensive single or multi-day site visit. The report includes a utility (energy, water, and waste) history and rate analysis; maps of energy, waste, and production flows; and recommendations (including engineering calculations and payback estimates) for saving energy, reducing waste, and enhancing productivity. Customers also receive follow-up consultations about the site visit from their FEMP team.

### System-Specific Assessments

FEMP offers targeted assessments of steam, compressed air, pumping, and motor systems using OIT's Best Practices assessment teams. FEMP customers receive detailed reports covering the status of the targeted systems and recommendations for saving energy and reducing O&M costs.

### Publications and Software

Through FEMP, federal customers can gain access to the same training and resources that OIT's Best Practices Program provides to its private-sector customers, as well as to FEMP's informational resources.

- Software and database packages available on OIT's Best Practices web site (<http://www.oit.doe.gov/bestpractices>) are valuable tools for evaluating industrial system operations and maximizing their energy efficiency. The IAC database contains the results of over 9,000 assessments, including baseline consumption data and energy and cost savings by recommended measure.
- Technical publications pertaining to industrial facilities are available on OIT's web site (<http://www.oit.doe.gov/bestpractices>). Technical fact sheets, handbooks, and self-assessment manuals cover topics including steam system efficiency, fundamentals of compressed air systems, and motor systems management.
- Technical and implementation tools are also available on the FEMP web site. These materials cover topics such as choosing financing vehicles for federal energy projects, guidance on procuring low-energy design and consulting services, case studies from federal efficiency projects, and software tools such as the Building Life-Cycle Cost Program (BLCC).



## Program Overview

U.S. Department of Energy

Office of Energy Efficiency and Renewable Energy



### Implementation Assistance

Industrial customers can use FEMP technical assistance or FEMP's assistance with using ESPCs or UESCs to implement their efficiency projects. The Industrial Facilities Program Team can help identify the best route for implementing recommended cost-saving measures. Follow-up and consultation help the industrial client make best use of the energy assessments in realizing cost savings.

### Industrial Facilities Program Team

FEMP's organization and deployment strategies have enabled the new Industrial Facilities Program to move quickly in delivering services to federal industrial facilities. Moreover, the program brings the prodigious experience and capability of OIT's industrial experts to the table. The IAC teams now affiliated with FEMP's industrial program have performed over 9,000 assessments of private-sector manufacturing facilities since 1976. Consultants within the Best Practices program have provided assessments for OIT's Industries of the Future across the United States.

### For More Information

The FEMP Industrial Team facilitates communication among the network of technical experts who serve the program and ensures that the team delivers the assistance that FEMP's industry customers need. Interested agencies should contact their DOE Regional Office for further information or to request assistance.

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Produced for the U.S. Department of Energy by the Oak Ridge National Laboratory, a DOE national laboratory

ORNL 01-02628/jcp  
March 2001