

## The SAVEnergy Program

*FEMP supports energy efficiency and water conservation in the Federal sector by assisting agencies in obtaining SAVEnergy Audits and Action Plans for their facilities*

As a Federal energy or facility manager, you want to do your part to meet your agency's goals for greater energy efficiency and water conservation in government buildings. You might also want to lower your facility's overall utility costs and help reduce the air emissions associated with energy use. But if you aren't sure how to get started, one good way is to begin with a SAVEnergy Audit.

### What is a SAVEnergy Audit?

The SAVEnergy Audit is a comprehensive, thorough examination of the energy systems in your facility or building. The audit is conducted by engineers specializing in building energy systems. It evaluates such things as the condition of the building envelope—windows, walls, floors, and roof—and the performance of the building's energy-consuming equipment—lighting, furnaces, chillers, pumps, and so on. The SAVEnergy Audit reveals the operating condition of your building, assesses its energy use, identifies cost-effective energy conservation measures (ECMs) you can implement, and recommends cost-effective operation and maintenance (O&M) activities. The audit also includes screening your facility for opportunities to conserve water and to use renewable energy systems that benefit the environment.

You can request a SAVEnergy Audit, conducted at little or no cost to your agency, through the SAVEnergy Program in the U.S. Department of Energy's (DOE) Federal Energy Management

Program (FEMP). To request an audit, see FEMP's Web site ([www.eren.doe.gov/femp/techassist/savenergyprog.html](http://www.eren.doe.gov/femp/techassist/savenergyprog.html)) or contact your DOE FEMP Regional Office representative ([www.eren.doe.gov/femp/aboutfemp/doe\\_regional\\_office.html](http://www.eren.doe.gov/femp/aboutfemp/doe_regional_office.html)).

The SAVEnergy Program provides direct assistance to Federal agencies like yours to help you identify and implement energy efficiency and water conservation measures. In turn, these measures enable your agency to meet the requirements of the Energy Policy Act of 1992 (EPAAct) and Executive Order (E.O.) 13123, *Greening the Government Through Efficient Energy Management*.

EPAAct required Federal agencies to reduce their building energy use per square foot by at least 10% by FY 1995 and 20% by FY 2000, in comparison to FY 1985 energy-use levels. E.O. 13123 raises this to a 30% reduction in energy use by FY 2005 and a 35% reduction by FY 2010. And it requires Federal agencies to reduce the amount of energy they use in industrial and laboratory facilities (per square foot, unit of production, or other unit) by at least 20% by 2005 and 25% by 2010, relative to 1990 usage levels. E.O. 13123 also calls on agencies to conduct energy and water audits for approximately 10% of their facilities each year.

To help Federal agencies meet these requirements, DOE FEMP initiated the SAVEnergy Program in 1995. In August 1999, DOE awarded a new SAVEnergy contract, selecting four firms, based on qualifications, in each of DOE's six regions to conduct energy and water conservation audits. The results of these audits are included in SAVEnergy Action Plans. Individual SAVEnergy Action Teams then can select the best ECMs from among those identified in the plan for implementation.

### The SAVEnergy Action Plan

The SAVEnergy contractor reports the results of your audit in a SAVEnergy Action Plan. This plan lists the ECMs and O&M improvements identified in the audit, makes recommendations on the most



## Program Overview



The Rocky Mountain National Park Visitor Center is one of 43 national park facilities that have received and benefited from a SAVEnergy Audit.

Randy Jones, U.S. DOE/PIX04059

### Benefits of SAVEnergy Audits

SAVEnergy Audits can benefit your facility by helping you—

- Identify cost-effective, energy-saving measures in your facility
- Evaluate the performance of your facility's heating, ventilating, and cooling systems
- Screen your facility for opportunities to conserve water and use clean renewable energy systems
- Create action plans for greater energy and water efficiency
- Form an action team to implement conservation measures
- Meet the requirements of Executive Order 13123 and your agency's goals for energy efficiency

Internet: [www.eren.doe.gov/femp/](http://www.eren.doe.gov/femp/)

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Office of Energy Efficiency and Renewable Energy



cost-effective ECMs for your facility, and describes the financing options available to you. These options include direct appropriations, Energy Savings Performance Contracts (ESPCs), and Utility Energy Services Contracts (UESCs). The plan allows you to choose and prioritize the ECMs and financing options that meet your needs.

#### ***The SAVEnergy Action Team***

Your SAVEnergy Action Team implements the ECMs you selected from the SAVEnergy Action Plan. In addition to your facility's energy manager, team members can include representatives from your contracts, finance, legal, environmental, construction, and other departments. Additional team support can come from DOE, local utilities, and contractors. The team's primary activities are to—

- Review and evaluate SAVEnergy Action Plans
- Overcome barriers to completing projects
- Facilitate any project financing options, such as ESPCs and UESCs
- Leverage utility incentives funding
- Track savings and report them to your agency as well as to DOE.

#### **What else does the SAVEnergy Program offer?**

The SAVEnergy Program centers around the SAVEnergy Audit. And it offers several other options, including a separate Water Conservation Audit, a Federal Energy Decision Screening Analysis, a Whole-Building Computer Simulation, and an ESPC Site Data Package.

#### ***Water Conservation Audit***

The Water Conservation Audit is a more comprehensive study of water use at a facility. This audit covers a facility's water supply, major water-using processes and equipment, and more.

#### ***Federal Energy Decision Screening (FEDS) Analysis***

This computer analysis tool provides a comprehensive approach to fuel-neutral, technology-independent, integrated energy resource planning and acquisition.

#### ***Whole-Building Computer Simulation***

The Whole-Building Computer Simulation uses the building's energy-use profiles, operating schedules, energy-consuming systems, and other items to characterize current energy use and address the interactive effects of recommended ECMs. This study identifies all life-cycle cost-effective measures.

#### ***Energy Savings Performance Contract Site Data Package***

The ESPC Site Data Package combines information from the SAVEnergy Audit and the screening tools

into a technical description. Facility managers can then use this technical description to implement ECMs through an ESPC.

#### **How are requests for SAVEnergy Audits evaluated?**

Because of budget constraints, FEMP can fund only a certain number of requests for a SAVEnergy Audit each year. Therefore, FEMP staff must have some assurance that an agency is likely to complete the ECMs selected from the SAVEnergy Action Plan for a particular facility. In evaluating requests and making funding decisions, FEMP must generally give preference to requests that include positive responses to some of these important questions:

1. Does your facility have a project champion who can see the project through to completion?
2. Does your facility now have high energy costs?
3. Has your agency set aside any funds for energy and water efficiency projects?
4. Does your local utility have incentive programs, such as demand-side management?
5. Is your facility considering the use of any project financing alternatives, such as ESPC or UESC?
6. Is an energy service company interested in your site?
7. Does your agency have funds to share the cost of the audit?
8. Can a project at your facility be replicated at other, similar facilities?
9. Can your facility use this project as a showcase for other agencies?
10. Have site personnel attended any FEMP training courses?

Your participation and support in this program can help the Federal government meet its goals for greater energy and water efficiency and enhanced energy security. For more information and assistance, please contact your DOE Regional Office FEMP representative or one of the FEMP contacts listed below.

#### **For More Information**

FEMP Help Desk:  
(800) DOE-EREC (363-3732)

On the Web: [www.eren.doe.gov/femp/techassist/audit.html](http://www.eren.doe.gov/femp/techassist/audit.html)

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