

Federal Agencies: Setting an Example with

Energy Savings

FOR THE 21ST CENTURY

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY
AND RENEWABLE ENERGY



Ask Richard B. Bronowski, Assistant Buildings Manager at the Denver Federal Center, what the Federal Energy Management Program (FEMP) has done for him and his agency. FEMP chose a 14-story building at the Federal Center to demonstrate technology that reduces water usage by as much as 50%. In addition, the related energy savings from decreased hot water use, waste treatment, and pumping are significant. According to Bronowski, "FEMP was the driving force that got this project started."

The Denver Federal Center's success represents just a small fraction of the savings that the world's largest energy consumer—the U.S. federal government—can achieve through smart energy management. The federal government spends nearly \$8 billion annually to run its 500,000 buildings, vehicles, and other energy intensive activities. FEMP helps federal agencies reduce these energy costs, apply renewable energy technologies, and conserve water.

On June 3, 1999, a new executive order was issued to bolster the federal government's commitment to energy and environmental progress in the operations of its own facilities. Entitled "Greening the Government Through Efficient Energy Management," Executive Order 13123 sets new goals for government-wide energy efficiency and establishes the framework for oversight and guidance by FEMP and its governmental partners to achieve these targets. The executive order establishes a goal to reduce energy consumption per gross square foot by 35% in 2010, compared to 1985. Achieving this objective will save taxpayers more than \$750 million per year and cut greenhouse gas emissions by 2.4 million tons from current levels—the equivalent of removing 1.7 million cars from the road.

As the central point of contact for more than 100 federal agencies, FEMP

is helping agencies accomplish these reductions by creating partnerships, leveraging resources, transferring technology, and providing training and technical assistance. FEMP helps agencies find private-sector financing mechanisms; leads interagency and public/private partnerships; and conducts training, audits, and technology demonstrations to help agencies identify their best energy project investments.

Project Financing

With FEMP's help in developing partnerships between government agencies and private companies, federal energy efficiency projects are increasingly being financed through utility incentive programs and private energy service companies. These partnerships use energy saving performance contracts (ESPCs) and utility programs to pay the up-front costs of efficiency improvements. The federal return on investment is \$2 for every \$1 invested.

FEMP has a coordinated network of services and experts to assist agencies in achieving their energy and dollar savings. Agencies can now obtain FEMP expertise efficiently and effectively to implement alternatively financed projects. FEMP services range from assistance with contract planning to comprehensive technical support. Obtaining agency funds for energy projects may be an

NREL/PIX 02347, PACIFIC NORTHWEST NATIONAL LABORATORY



Energy efficient lighting retrofits and appliance upgrades at the Headquarters of 1 Corps in Ft. Lewis, Washington, are just a few of the changes made to the 4200 buildings at this military installation through FEMP.

How FEMP is working for you

- Reduces building energy costs
- Saves taxpayers' money
- Leverages \$2 in net savings for every \$1 invested
- Expands the marketplace for new renewable energy and energy efficiency technologies
- Reduces pollution—by 2010, the equivalent of 2.5 million metric tons of carbon emissions will be avoided annually
- Ensures hazardous materials are used sparingly and disposed of properly
- Promotes environmentally sound building design and operations

NREL/PIX 05426, KENT BULLARD, NATIONAL PARK SERVICE



FEMP's technical assistance helps the National Park Service use renewable energy such as this hybrid wind/photovoltaic energy system that powers the ranger station on San Miguel Island, California, to safeguard pristine areas.

FEDERAL ENERGY MANAGEMENT PROGRAM



NREL/PIX 01082, LAWRENCE BERKELEY NATIONAL LABORATORY

The skylighted entryway at the Thoreau Center for Sustainability at Presidio National Park, San Francisco, California, uses photovoltaic cells that are laminated to the skylight glass to produce electricity as well as to shade and daylight.



NREL/PIX 04210, LARRY GORDON

The Carl Hayden Visitor's Center at Glen Canyon Dam in Arizona is a FEMP Energy Saver Showcase facility that uses a variety of energy efficient, renewable energy, and water conservation technologies.

energy manager's biggest hurdle, so FEMP answers questions and helps arrange project financing that requires no up-front capital investment. FEMP technical services are available for alternatively financed projects on a cost-reimbursable basis to any agency.

Technical Guidance and Assistance

Through training programs, on-site audits, design assistance, and technology applications, FEMP helps agencies identify the best, most cost-effective energy efficiency, water-saving, and renewable energy projects. To create a well-trained federal workforce, FEMP conducts Internet and classroom-based workshops. FEMP also performs technology demonstrations and holds an annual conference and trade show for federal energy and facility managers, engineers, contract administrators, and decision makers.

FEMP helps to promote cutting-edge renewable energy technologies by training facility managers and showcasing cost-effective applications. FEMP also identifies federal market opportunities and works with procurement organizations to aggregate purchases, reduce costs, and expand markets for energy efficient and renewable energy products. To assist agencies in best-product procurement practices, FEMP has compiled energy efficiency recommendations for new construction, sustainable design, and various home and office products.

Planning, Reporting, and Evaluation

Collecting and distributing information on how different federal facilities are using energy and water wisely is another way FEMP helps agencies to make the best decisions about saving energy. One of FEMP's primary responsibilities is coordinating and reporting to Congress on agencies' efforts to achieve federal energy management goals. FEMP coordinates the federal Interagency Energy Policy Committee and the Interagency Energy Management Task Force to encourage cooperation and strategic energy management.

In addition to submitting an annual report to Congress, FEMP disseminates case studies and other materials that highlight agencies' progress through publications and electronic media. FEMP also manages the *You Have the Power* campaign to raise awareness among federal employees about saving energy, money, and future resources. Through the campaign's Web site, print materials, private-sector partnerships, and recognition of Energy Champions—federal employees who are doing great things to save energy—*You Have the Power* is helping to propel the federal sector into an energy efficient era.

Contacts

FEMP Web site

www.eren.doe.gov/femp

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