



CREATING AN ENERGY AWARENESS PROGRAM

A HANDBOOK FOR
FEDERAL ENERGY
MANAGERS



Office of Energy Efficiency
and Renewable Energy
U.S. Department of Energy



FEDERAL ENERGY MANAGEMENT PROGRAM

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The Federal government is the single largest domestic user of energy, spending more than \$9 billion to power its vehicles, operations, and approximately 500,000 facilities throughout the United States. Federal agencies impact every energy-consuming sector of our economy—commercial, industrial, residential, agricultural, and transportation.

Efficient energy management at Federal facilities and operations:

- Saves taxpayers money;
- Reduces greenhouse gas emissions;
- Protects the environment and natural resources; and
- Contributes to the preservation of our national security.

FEMP helps agencies meet legislative requirements, Presidential directives, and their energy management goals by creating partnerships, leveraging resources, transferring technology, and providing training and technical guidance and assistance. These activities support Executive Orders 13123, 13221, and other Executive Orders and Presidential Directives and relevant laws. (www.eren.doe.gov/femp/resources/legislation.html)

As stated in the Presidential Directive on Energy Conservation at Federal Facilities, "...the Federal government should set a good example of conservation by reducing its own energy use..."

Lead By Example is FEMP's slogan for Federal agencies to show positive action toward energy awareness, conservation, and efficiency. It is also a key to mitigating the adverse budgetary and operational impact of the current energy situation.

FEMP has developed this guidebook to support your efforts in hopes that you will use it to reduce energy shortages and lower our reliance on energy imports.

Acknowledgements

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FEMP Director Beth Shearer greets many people who enthusiastically want to find out more about saving energy in their own offices and homes.



"FEMP will continue to provide timely guidance, education, technical advice, and outreach materials as we reaffirm our commitment to Lead By Example."

*- Beth Shearer, Director
Federal Energy Management Program*

INTRODUCTION

Why Federal Energy Awareness is Important

As a Federal Energy Coordinator, you already know that energy efficiency is good for you, good for your agency, and good for the nation and the world. You understand the inter-relationship between energy, the economy, and the environment. You know from experience that energy-efficient buildings are healthier places to work and can increase the comfort and productivity of employees. Even so, efforts to adopt energy-efficient equipment and maintenance and operations practices can be challenging.

Perhaps an even more difficult challenge is to instill energy efficiency as a fundamental value in your organization. People tend to take energy for granted, and many are unaware of the opportunities they have to reduce energy use. Some may claim to favor energy efficiency, but do not follow through when it comes to changing their own behaviors. Nevertheless, meeting the challenge of developing a program aimed at changing behaviors has been shown to have productive results. Along with helping you meet your energy management goals, saving taxpayer dollars, and protecting the environment, benefits specific to your facility and employees include:

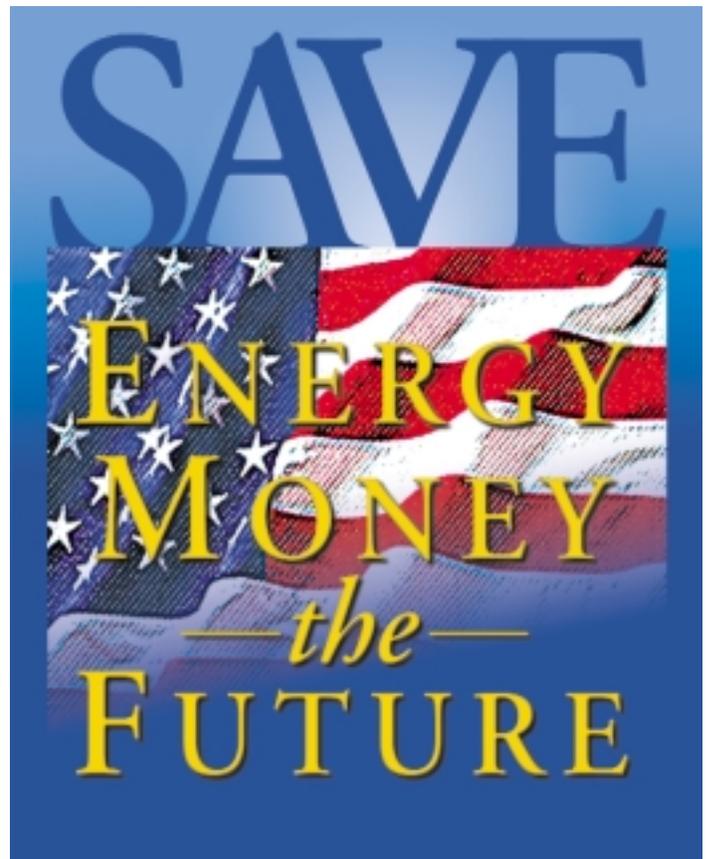
- Improving agency operations and increasing employee productivity;
- Directing resources to other mission-critical activities;
- Transferring energy and money-saving activities to home and recreation; and
- Serving as a positive model of energy savings for other Federal facilities.

Two-pilot projects conducted by FEMP demonstrate that behavior-based programs can help reduce energy use and expenditures. These programs targeted families in military housing. Military residents do not pay their own utility bills, so the reductions in energy use experienced at both sites resulted purely from behavioral changes—not from monetary gain. At Fort Lewis, Washington, the pilot project ran for one year. The total energy savings in family housing was 10% on a weather-corrected basis, exceeding the campaign goal of 3%. Cost savings were over \$130,000 for the year. At the Marine Corps Air Station (MCAS) in Yuma, Arizona, the campaign ran for only three months of the summer cooling season. However,

energy use still dipped 13% in the last month of the campaign, and the housing manager ended the year with a \$50,000 surplus.¹

Using the insights gained from these two projects and other research on energy-efficient behavior, this handbook will provide a step-by-step approach to help you design and implement a program aimed at increasing energy-efficient behavior of employees at your own facility. The following page outlines the critical steps to achieve your awareness goals and will guide you through the remaining chapters. Read from the beginning for a comprehensive approach, or flip to the sections you are interested in for greater detail.

Even if you have an outreach program in place, this guidebook contains valuable ideas and approaches that you may not have tried before!



¹ Descriptions of the campaigns and activities at Fort Lewis, WA and MCAS Yuma, AZ may be found in the *Handbook for Promoting Behavior-Based Energy Efficiency in Military Housing*. To obtain a copy, please visit www.eren.doe.gov/femp/yhttp/strategies.html or call 1-800-363-3732.

KEY STEPS FOR A SUCCESSFUL ENERGY AWARENESS PROGRAM

Step One Plan the Effort

- Define your agency's mission and goals. Establish a direct relationship between saving energy and success in meeting these goals.
- Assess the constraints and opportunities of your facility. Evaluate energy use patterns based on your types of equipment, size of staff, hours of operation, and current levels of energy use. Use this information to ensure that you develop obtainable goals and plan activities well-suited to your organization's needs.
- Determine the specific goals and objectives of your awareness program.
- Obtain upper management support. Ask a Senior Manager to serve as the facility's "Energy Champion" to lend authority and endorse the program's messages.
- Recruit enthusiastic and capable team members to serve on your planning committee.
- Assess your access to various communications channels (such as newsletters, closed circuit TV, etc.) and program capability to produce printed materials, displays, videos, and hand-outs.
- Assess your financial resources and develop a preliminary budget.
- Examine existing links with institutional groups and others that can help promote your program.
- Consider an evaluation mechanism for gathering behavioral data and reporting program results.

Step Two Design and Implement the Program

- Solicit input from employees to develop program content via surveys, focus groups, and personal interviews.
- Identify the desired behaviors/actions and consider how you will motivate employees to take these actions, such as through incentives and awards.
- Develop motivational themes, messages, and slogans.

- Determine the communications channels you will use to convey your information (e.g., posters, video, newsletter, exhibit).
- Select the activities/methods you will employ to distribute the messages/information.
- Develop a new budget specific to the products you plan to develop and the activities in which you plan to participate.
- Develop a schedule based on a specific timeframe (e.g., one fiscal year) to help you produce your products in plenty of time to carry out planned activities.
- Produce your visuals, products, and materials and conduct activities.

Step Three Evaluate and Report Results

- Obtain employee feedback on the program's effectiveness through focus groups and surveys. Consider a mid-course evaluation as well as a final evaluation.
- Document the energy and water savings. Share results based on measures implemented and employee achievements.

Step Four Sustain the Effort

- Develop ways of introducing new employees to the program, such as an informational video, personal interview, or employee awareness handbook.
- Continue to implement your incentive and awards programs and publicly recognize employee accomplishments.
- Ask employees to pledge their commitment to specific personal actions or new events to promote and encourage ongoing participation.
- Recruit new members and conduct regular meetings with your planning committee. Continue to plan your program into the next year.