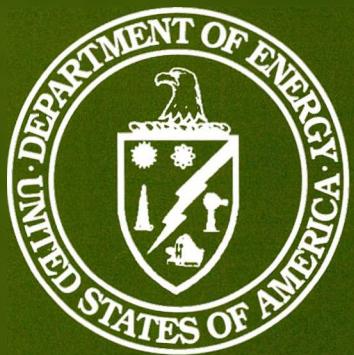


# Comprehensive Program and Plan for Federal Energy Education, Extension, and Information Activities: Annual Revisions

The Fourteenth Report To Congress



November 1990

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# Comprehensive Program and Plan for Federal Energy Education, Extension, and Information Activities: Annual Revisions

## The Fourteenth Report To Congress

November 1990



U.S. Department of Energy  
Assistant Secretary, Conservation and Renewable Energy  
Office of National Programs  
Washington, DC 20585

MASTER

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## **ACKNOWLEDGEMENTS**

The United States Department of Energy is grateful for the continuing advice, information, and careful consideration provided by the numerous people and organizations that in the aggregate make this document possible each year.

Various Federal departments, agencies, and semi-autonomous administrations are represented in this document. Thirteen of these actively participated in energy education, extension, and information activities during FY 1990. Their program summaries are included in Appendix A. They are as follows:

### **ACTION**

Bonneville Power Administration  
Defense Nuclear Agency  
Department of Agriculture  
Department of Commerce  
Department of Defense  
Department of Energy  
Department of Health and Human Services  
Department of Housing and Urban Development  
Environmental Protection Agency  
National Aeronautics and Space Administration  
Naval Facilities Engineering Command  
Tennessee Valley Authority

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## EXECUTIVE SUMMARY

This document is the fourteenth annual revision to the *Comprehensive Program and Plan for Federal Energy Education, Extension, and Information Activities*, pursuant to Section 508(c) of the National Energy Extension Service Act, Public Law 95-39, 42 U.S.C. 7007(c). This document also fulfills the requirement under Section 404(2) of the Energy Security Act, Public Law 96-294, 42 U.S.C. 7373.

Like its predecessors, this revision catalogues coordination among agencies in the areas of Federal energy education, extension, outreach and information activities by providing a summary of their intentions, a list of major accomplishments, and a point of contact for additional information. These programs cover a wide array of energy applications, specifically targeted audiences, and such delivery mechanisms as volunteer efforts, education and information research and development initiatives, and efforts tailored to specific consumers.

## I. INTRODUCTION AND OVERVIEW

The *Comprehensive Program and Plan (CPP) for Federal Energy Education, Extension, and Information Activities*, is a summary of the efforts of over two dozen Federal agencies during the previous fiscal year. The program activities encompass a wide range of audiences, including energy producers, users, inventors, and students. These programs perform vital services including:

- transfer energy production and consumption information;
- conduct energy conservation workshops;
- perform home weatherization for the elderly and economically disadvantaged;
- provide energy audits;
- educate the public on ways to conserve energy and thus reduce pollution emissions;
- provide pre-venture capital for energy inventors;
- stimulate interest in math, science, and engineering among precollege and college students;
- dispense Federal solar research into the private sector; and
- work with home builders to increase energy efficiency of homes.

This document serves as a resource to individuals and organizations by highlighting the activities and audiences of Federal energy education, information, and extension programs and activities and listing key contact personnel for further information.

Many programs listed in this fourteenth CPP have matured over the years, fine-tuning their activities and target audiences to provide effective services. Other programs are recent and reflect either new efforts to provide energy services or are consolidations of previous programs to provide service more efficiently.

In a speech before the Oak Ridge, Tennessee Chapter of the NAACP, the Secretary of Energy, Admiral James D. Watkins, U.S. Navy (Retired), emphasized the importance of the nation's energy strategy. "We know that energy solutions equate to greater opportunity for everyone to produce more and to invest and find solutions and to improve their lives. This is why we are defining a workable National Energy Strategy. As we develop and find more abundant and cleaner forms of energy, we are helping to ensure for the nation a time of peace and prosperity whose practical effect will be the empowerment of a huge cross-section of our society."<sup>1</sup> This fourteenth Annual CPP can contribute to the sharing of information among those concerned with energy strategy and policy, and thus, assist all components of the national energy community.

In response to the policy emphasis of the Secretary and the President, the Department of Energy's (DOE) Support Offices are increasing their education, extension, outreach, and information activities. Although it should be recognized that this is not a requirement for this report, listed below are examples which highlight some of the hands-on work being done in conjunction with many States and local communities. Such activities include:

- The Chicago Support Office administers the Illinois Energy Internship Program, whose sponsors include Argonne and Fermi National Laboratories, a solar energy technology company, public utilities, a local weatherization agency and environmental centers. The program awards summer internships to high school juniors and seniors who then act as ambassadors to other students, thereby providing education and encouraging consideration of energy-related careers.

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<sup>1</sup>Remarks by The Honorable James D. Watkins, Admiral, U.S. Navy (Retired), Secretary of Energy to The Oak Ridge, Tennessee Chapter of the NAACP on November 4, 1989, Oak Ridge, Tennessee, 7:30 p.m., pp. 6-7.

- The Kansas City Support Office coordinates a four-state energy education project,

now in the advanced planning stages, which expands K-12 curriculum and develops background materials on energy, environment and economics.

- The Atlanta Support Office administers almost a dozen energy information and

education activities through State Energy offices and Weatherization Assistance Program grantees. These activities, supported by grant funds, are aimed at elementary, middle school, consumer, adult/community and low-income housing audiences. It also supports several energy information services and conservation projects intended to educate clients and encourage awareness of energy conservation and efficiency.

- The Boston Support Office is expanding its coordination of the Community Energy

Education Work Group, an all-volunteer New England Energy Task Force (NEETF), which is a 16-year old regional energy technology transfer/public education network.

- The Philadelphia Support Office supported a six day forum sponsored by the

Pennsylvania Energy Office to provide teachers with background information and curriculum on energy and environmental education for grades K-8.

- The Denver Support Office adopts local schools and provides speakers and teachers

for energy education in middle schools and high schools.

- The Boston Support Office has developed and published a Guide to New England Energy Education Resources to assist K-adult teachers in assessing, acquiring and integrating energy information into their curricula.

- The Philadelphia Support Office supported a Futures Career Center run by the non-profit Philadelphia Futures and Franklin Institute, a mentoring program aimed to provide motivation through information to 7-12th graders visiting the Institute. A related program, using experts from Princeton Plasma Physics Laboratory and aimed at inner-city students, is proposed for FY 1991.

These programs indicate the extent to which the Department of Energy is working to respond to increased policy priorities on energy education, extension, information, and outreach. Substantial new programs are planned for FY 1991.

The Department of Energy welcomes your comments and suggestions to improve the merit of this report. Please write or call Mr. Earl Stancell.

Earl Stancell  
Office of National Programs  
CE-52  
U.S. Department of Energy  
Washington, D.C. 20585  
(202) 586-9108

**EXHIBIT I-1**  
**FEDERAL AGENCIES WITH ENERGY EDUCATION,  
EXTENSION, AND INFORMATION ACTIVITIES IN FY 1990**

**ACTION**

Retired Senior Volunteer Program (RSVP)

**DEFENSE NUCLEAR AGENCY**

Energy Resource Management Plan

**U.S. DEPARTMENT OF AGRICULTURE (USDA)**

Conservation Tillage Program, Conservation Reserve Program,  
and Irrigation Water Management

Energy Education and Management Program

Energy, Research, Development and Application

**U.S. DEPARTMENT OF COMMERCE**

National Sea Grant College Program

**U.S. DEPARTMENT OF DEFENSE (DoD)**

Defense Energy Awareness Week

**U.S. DEPARTMENT OF ENERGY (DOE)**

Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS)

Energy Analysis and Diagnostic Center (EADC) Program

Energy Extension Service (EES)

Energy-Related Inventions Program (ERIP)

Federal Energy Management Program (FEMP)

Gas Mileage Guide

Institutional Conservation Programs (ICP)

National Appropriate Technology Assistance Service (NATAS)

National Energy Information Center (NEIC)

Office of Public Affairs

Office of Scientific and Technical Information (OSTI)

Pre-Freshman Enrichment Program (PREP)

Solar Technical Information Program (STIP)

State Energy Conservation Program (SECP)

Technical Information and Communication Program

Weatherization Assistance Program (WAP)

U.S. DEPARTMENT OF ENERGY -- BONNEVILLE POWER ADMINISTRATION

Super Good Cents (SG¢) -- Energy Efficient New Homes and Apartments  
Irrigated Agriculture Hardware Program  
Irrigation Scheduling Program

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS)

Low Income Home Energy Assistance Program (LIHEAP)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

Administration of Energy Activities and Support Function  
District Heating and Cooling (DHC)

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

Motor Vehicle Fuel Economy Label Program

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

Energy Management Program

U.S. NAVY FACILITIES ENGINEERING COMMAND (NAVFAC)

Navy Family Housing Division

TENNESSEE VALLEY AUTHORITY (TVA)

Cycle and Save Program  
The Environmental Education Section  
Heat Pump Program (HPP)  
Industrial Energy Services Program (IES)  
Residential New Construction Program

*Programs no Longer Participating and Deleted from the FY 1990 Report*

Tennessee Valley Authority: Community Energy Partnership; Home Weatherization Program;  
Energy Saver Home Program (ESH)  
U.S. Dept. of Energy: Residential and Commercial Conservation Program  
U.S. Dept. of Housing and Urban Development (HUD): Solar Energy and Energy  
Conservation Bank.

## **EXHIBIT 1-2**

## CATEGORIES OF AUDIENCES AND SERVICES IN FY 1990

## EXHIBIT 1-2

### CATEGORIES OF AUDIENCES AND SERVICES IN FY 1990 *CONTINUED*

CATEGORIES OF AUDIENCES SERVED									AGENCY AND ACTIVITY			CATEGORIES OF SERVICES PROVIDED					
General Public	Residential	Teachers and/or Students	Business and Industrial	Trade and Professional Groups	Local Government	State Government	Health, Education & Research Institutes	Community & Other Non-Profit Groups	Agriculture	Transportation							
•	•	•	•	•	•	•	•	•	•	•	Federal Energy Management Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Gas Mileage Guide	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Institutional Conservation Programs (Schools and Hospitals)	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	National Appropriate Technology Assistance Service	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	National Energy Information Center	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Office of Scientific and Technical Information	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Pre-Freshmen Enrichment Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Solar Technical Information Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	State Energy Conservation Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Technical Information and Communication Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Weatherization Assistance Program	•	•	•	•	•	•
U.S. DEPT. OF ENERGY- BONNEVILLE POWER ADMINISTRATION:																	
•	•	•	•	•	•	•	•	•	•	•	Irrigated Agriculture Harware Programs	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Irrigation Scheduling Program	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	Super Good Cents	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	U.S. ENVIRONMENTAL PROTECTION AGENCY:						
•	•	•	•	•	•	•	•	•	•	•	Motor Vehicle Fuel Economy Labeling Program	•	•	•	•	•	•

**EXHIBIT 1-2**

## **CATEGORIES OF AUDIENCES AND SERVICES IN FY 1990 CONTINUED**

## **II. APPENDICES**

### **A. PROJECT SUMMARIES**

**AGENCY:** ACTION

**ACTIVITY:** Retired Senior Volunteer Program (RSVP)

**RESPONSIBLE OFFICE:** ACTION  
1100 Vermont Avenue, N.W.  
Washington, DC 20525  
202-606-4849

**CONTACT:** Ruth Archie

**PURPOSE:** To provide a variety of volunteer opportunities for retired persons age 60 or over to serve on a regular basis in their communities.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- The 410,000 volunteers who served in 1990 contributed over 80 million volunteer hours to their communities in all states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. About one percent of the hours contributed by volunteers were in the area of energy conservation. Some of the activities with which volunteers were involved were:
  - Conducting workshops on energy conservation;
  - Performing simple home weatherization;
  - Developing recycling programs; and
  - Providing volunteer support to various park and forest services (forest ranger services, park guide programs, etc.).
- RSVP actively contributed volunteer services through approximately 760 projects.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

On a yearly basis, each project reports the level of activity in the various areas of service including the area of energy conservation. In addition, on a yearly basis, the Advisory Council of each project completes an evaluation on the total aspect of the programs.

**FY 1990 FUNDING:**

Not a separate budget item.

**AGENCY:** Defense Nuclear Agency

**ACTIVITY:** Energy Resource Management Plan

**RESPONSIBLE OFFICE:** Defense Nuclear Agency  
Logistics and Engineering  
6801 Telegraph Road  
Alexandria, VA 22310-3398  
703-325-1164

**CONTACT:** Len Renkenberger

**PURPOSE:** To increase energy conservation through awareness and voluntary efforts.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Strict compliance with Federal Energy Conservation Policy was actively administered through a continuous program of monitoring and education.
- Conducted energy week program at Headquarters.
- An Energy Management Monetary Awards Program was implemented, with individual cash awards being offered. Energy savings realized are retained by the facility for beautification purposes.
- Continuing evaluation of voluntary efforts and funding of quick payback projects.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Where DoD requirements exist, effectiveness is evaluated against DoD goals. Evaluation of all subordinate commands is an objective of the action officer and commanding officer.

**FY 1990 FUNDING:**

A total of \$20,000 is budgeted for all energy efforts; the Awards Program is limited to \$100,000 per year. All information and displays utilized during energy week were obtained at no cost or very nominal cost from DoD and other sources such as the Department of Energy and public utilities.

**AGENCY:** U.S. Department of Agriculture

**ACTIVITY:** Conservation Tillage Program  
Conservation Reserve Program  
Irrigation Water Management

**RESPONSIBLE OFFICE:** U.S. Department of Agriculture (USDA)  
Soil Conservation Service (SCS)  
Public Information Division  
Room 6110, USDA South Building  
Washington, DC 20250  
(202) 447-4543

**CONTACT:** Henry C. Wyman

**PURPOSE:** SCS's 3,000 field offices promote conservation tillage, educate farmers on conservation legislation (including conservation compliance provisions, which call for removing highly erodible lands from production), and certify land as being erodible, in compliance, etc.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Conservation tillage reduced fuel use by requiring fewer trips across a field and therefore less fuel. It also reduced soil erosion significantly, thus reducing fuels used in counteracting off-site effects of erosion (dredging sediment, purifying water, etc.).
- Conservation reserve program continued to remove land from production, thereby eliminating fuel use on that land altogether, except for occasional mowing or other land maintenance. At the end of FY 1990, some 34 million acres of highly erodible and environmentally sensitive cropland had been removed from production.
- Some 50 million acres of America's cropland is irrigated. SCS engineers and conservationists worked with landowners to improve their irrigation systems (water management). As landowners replace or modify irrigation equipment, and as they convert from high-volume to low-volume irrigation systems, energy efficiency is improved.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

National Association of Conservation District's (NACD) Conservation Tillage Information Center makes an annual survey of farmers to gauge the extent to which conservation tillage is used.

**FY 1990 FUNDING:**

Budgetary breakdown is unavailable.

**AGENCY:** U.S. Department of Agriculture

**ACTIVITY:** Energy Education and Management Program

**RESPONSIBLE OFFICE:** U.S. Department of Agriculture (USDA)  
Cooperative Extension System  
Extension Service  
Room 3443-S  
Washington, DC 20250-0900  
(202) 447-2908

**CONTACT:** Bonnie O. Tanner

**PURPOSE:** Energy education is integrated into related ongoing programs for the residential sector, agricultural sector, small communities, and local governments. Cooperative Extension Service (CES) provides energy information monthly to more than 650 key leaders throughout the country. The USDA situation and outlook information is provided to Extension clientele on a regular basis. Applicable research information is disseminated through the CES.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- The Extension Service through the CES has provided clientele with energy information since the oil embargo of 1973. The CES in a number of states has administered the DOE, Energy Extension program each year through a State grant arrangement. Florida, Mississippi, and Oregon have the total Energy Extension Service (EES) State program.
- Petroleum Violation Escrow (PVE) oil overcharge funds are used to develop and implement energy programs. The PVE funds have been distributed to State Energy offices as cases have been settled and are to be used in implementing or marketing energy conservation activities. This fiscal year, more than \$18 million was obtained by CES to deliver innovative energy education programs.
- USDA has cooperated annually with other Government agencies and private sector organizations in sponsoring an American Energy Awareness promotion during the month of October. The theme this year was "Energy Builds a Better America". Data from 50 counties in 20 States, Guam and Micronesia reported that CES programs reached over 2,350,000 people via media, meetings, tours, and special exhibits.

- Through 4-H energy and environment educational projects, more than 97,000 youth participated in educational activities. Energy and environment residential sector programs impact data from 19 States indicated 600,000 citizens applied knowledge and skills that extended family resources by more than \$426 million as a result of improved decision making and the application of skills learned. More than 1,157,000 individuals increased their knowledge base and learned new skills.
- The 1989 Annual Report of the National Extension Homemakers Council, Inc., an organization of over 400,000 volunteers trained by CES, indicated that the membership contributed 638,489 volunteer teaching hours reaching 1,054,318 individuals and over 41,983,433 media contacts for a total dollar return of \$5,219,715.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

An evaluation procedure is built into most programs at the time they are designed. Impact studies may be carried out within a county, state, or on a nation-wide basis. Progress reports are submitted annually.

#### **FY 1990 FUNDING:**

Budgetary breakdown is unavailable.

**AGENCY:** U.S. Department of Commerce - National Oceanic and Atmospheric Administration

**ACTIVITY:** National Sea Grant College Program

**RESPONSIBLE OFFICE:**  
U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
1335 East-West Highway  
ORP-1  
Silver Spring, Maryland 20910  
(301) 427-2431

**CONTACT:** Bud Griswold

**PURPOSE:** To help commercial fishermen and marine vessel operators increase energy efficiency of their boat operations.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- The ongoing experiments on new trawl gear are proving successful, resulting in the use of larger mesh gear with reduced friction and drag. Extension activities are continuing with the fishing industry. Some fishermen reported up to 40 percent reduction in energy costs when fishing.
- There are also new computer models developed to maximize propeller design to boat specification and general use patterns (tow time vs. cruise time) and use of real time remotely sensed sea-surface temperature data to locate potential fish aggregation and minimize scouting time.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Benefits from gear redesign are measured on a cost-per-unit basis against program expenditures.

#### **FY 1990 FUNDING:**

Approximately \$200,000 for education, extension, and information activities.

**AGENCY:** U.S. Department of Defense

**ACTIVITY:** Defense Energy Awareness Week

**RESPONSIBLE OFFICE:** Energy Policy Directorate (OASD(P&L))  
The Pentagon, Room 1D760  
Washington, D.C. 20301-8000  
(703) 697-1988

**CONTACT:** Edward J. Dyckman

**PURPOSE:** To focus the attention of military and civilian DoD employees on making the correct energy choices for the 1990s. To be flexible in evaluating the impacts of changing security commitments on DoD's energy needs. To conserve resources to enable DoD to achieve this flexibility. To identify resources to clean up land, air, and water environment's affected by DoD's transportation, storage, and use of energy.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

More than 500 military bases world-wide participated in 1990 Energy Awareness Activities during the month of October. In connection with this effort, the DoD won two-thirds of the Federal Energy Efficiency Awards in 1990, which were announced by the Department of Energy.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Effectiveness is measured by the results of Federal agencies in meeting their energy management and conservation goals for buildings and general operations.

#### **FY 1990 FUNDING:**

Not a separate budget item.

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS)

**RESPONSIBLE OFFICE:** Office of Technical Assistance  
Conservation and Renewable Energy  
CE-54  
U.S. Department of Energy  
Washington, DC 20585  
(202) 586-1265

**CONTACT:** Anita DeVine

**PURPOSE:** To respond to public inquiries and transfer research and development results to energy decision makers in the public and private sectors for improved energy development and use.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- In response to approximately 48,000 inquiries by telephone and mail, distributed more than 160,000 publications. These include 140,000 sheets, 7,000 bibliographies, 7,000 books and brochures, and 10,000 fliers and source sheets. A large volume of inquiries (up to 1,500 a week) were answered within 72 hours of receipt, whether by phone or mail.
- Prepared and distributed more than 23,000 individual letter responses composed of computer-generated standard responses to questions.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Evaluation procedures are unavailable.

**FY 1990 FUNDING:**

\$940,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Energy Analysis and Diagnostic Center (EADC) Program

**RESPONSIBLE OFFICE:** Implementation and Deployment Division, CE-223  
Office of Waste Reduction Technologies  
Conservation and Renewable Energy  
U.S. Department of Energy  
Washington, DC 20585

**CONTACT:** Charles J. Glaser

**PURPOSE:** The EADC program trains university engineering students to conduct energy efficiency audits for small and medium-sized manufacturing firms within a 150 mile radius of their school campus. The program provides "hands-on" experience in industrial energy management for young engineering professionals.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Approximately 360 manufacturing plants were audited during FY 1990.
- At the close of the 1990 period, the program had conducted 3,169 plant audits.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

All audit reports submitted to EADC client firms are reviewed by field manager's for accuracy. Two-thirds of the client firms serviced by each EADC are independently interviewed annually. EADC staff conduct a follow-up interview with all client firms to confirm the use of the audit report recommendations.

#### **FY 1990 FUNDING:**

\$1,700,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Energy Extension Service (EES)

**RESPONSIBLE OFFICE:**

State Energy Programs Division  
Office of National Programs  
Conservation and Renewable Energy  
Washington, DC 20585  
(202) 586-2300

**CONTACT:** Jim Demetrops

**PURPOSE:** To provide tailored information, specialized training, and technical assistance to small-scale energy users such as small businesses, local governments, and homeowners. Serves an integrating and coordinating function by bringing together existing resources and delivery mechanisms, providing small-scale energy users with new and updated information and sound technical advice. Finally, to encourage States and Territories to increasingly seek non-Federal funding to provide these services, and to make this program self sustaining.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Continued efforts to develop alternative funding approaches as Federal funding declined.
- A major network conference for State program managers of the State Energy Conservation Program (SECP), Energy Extension Service (EES) and Institutional Conservation Program (ICP) was convened in the State of California under the theme "Energy, Environment, Economy: Partnership for the Future" to develop management skills to build energy partnerships.
- Technical assistance as required was provided to the States.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

States are encouraged to maintain evaluation plans for individual program activities. Also, DOE support offices conduct periodic monitoring visits to EES project sites.

#### **FY 1990 FUNDING:**

\$3,983,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Energy-Related Inventions Program (ERIP) and Innovative Concepts Program (InnCon)

**RESPONSIBLE OFFICE:** Inventions and Innovation Division, CE-521  
U.S. Department of Energy  
1000 Independence Avenue, S.W., Room 5E-052  
Washington, DC 20585  
(202) 586-1478

**CONTACT:** Terry Levinson

**PURPOSE:** To provide pre-venture funding for non-nuclear, energy-related inventions being developed by individuals and small businesses and to stimulate innovation in the United States.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Held six National Innovation Workshops to stimulate innovation and improve the quality of submissions made by inventors under the Energy-Related Inventions Program.
- Additionally, the program provided inventors and entrepreneurs with information on patenting, licensing, marketing, business planning, relevant DOE programs, and other topics related to the innovation process.
- Conducted Innovative Concepts Fair at which innovators supported by several DOE programs made presentations to prospective sponsors of follow-on work.
- Reviewed and evaluated 1,200 inventions and provided grant support to 37 inventors.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

This program is evaluated by Oak Ridge National Laboratory for effectiveness and innovative creativeness.

#### **FY 1990 FUNDING:**

\$4,950,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Federal Energy Management Program (FEMP)

**RESPONSIBLE OFFICE:** Office of Federal Energy Management Programs  
Deputy Assistant Secretary for Building Technologies  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
(202) 586-5772

**CONTACT:** Richard Brancato

**PURPOSE:** The Federal Energy Management Program (FEMP) provides leadership with the Federal Government to promote or enhance energy efficiency. Ongoing FEMP activities include providing guidance, technical assistance, information dissemination and reporting on agency progress in implementing legislative mandates.

FEMP helps Federal agencies reduce energy consumption in Federal buildings and operations through development of appropriate planning guidelines, provision of technical assistance, monitoring of performance goals, and development of innovative practices and financing mechanisms.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Established the Federal relighting initiative to expedite adoption of efficient lighting in Federal buildings and demonstrate opportunities to participate in utility rebate programs.
- Provided outreach and technical assistance to Federal agencies. Initiated Federal energy conservation shared savings contracts authorized by P.L. 99-272. Provided technical and analytical tools, including the ASEAM-2 computer model, to assist Federal agencies in conducting analyses of Federal building energy requirements and options.
- Developed and submitted annual reports to the President and the Congress on Federal Energy Management.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Effectiveness is measured by the results of Federal agencies in meeting their energy reduction goals for buildings and operations.

**FY 1990 FUNDING:**

\$1,200,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Gas Mileage Guide

**RESPONSIBLE OFFICE:** Office of Transportation Technologies  
CE-30  
U.S. Department of Energy  
1000 Independence Avenue, S.W., Room 6B-070  
Washington, DC 20585  
(202) 586-8014

**CONTACT:** Joyce Barr

**PURPOSE:** DOE receives the fuel economy figures for all new cars and light duty trucks from the Environmental Protection Agency. These figures are printed in a handy guide which purchasers can use to compare fuel economy of all vehicles they are considering purchasing. In this way, car buyers can identify which is the most fuel efficient vehicle to buy.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Printed and distributed 3.2 million copies of the Gas Mileage Guide to new car dealers.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Through monitoring the number of requests for the guide and compliance of dealers in displaying guides in new automotive show rooms.

**FY 1990 FUNDING:**

\$700,000

**AGENCY:** U.S. Department of Energy  
**ACTIVITY:** Institutional Conservation Programs (Schools and Hospitals)

**RESPONSIBLE OFFICE:**  
Institutional Conservation Programs (ICP)  
Office of Grants Management  
Office of Technical and Financial Assistance  
Conservation and Renewable Energy  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
(202) 586-8034

**CONTACT:** Robert K. Volk, Jr.

**PURPOSE:** To provide training and technical assistance to State and institutional officials in a broad range of issues, from improving compliance with grant program rules to facilitating energy management actions at the institutional level.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Conducted post-grant workshops for grantees after receipt of grants to familiarize them with grant requirements.
- Developed networks with trade, professional, and utility associations at the national and regional/State levels.
- Continued dissemination of results of national evaluation of ICP to interested parties.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

The program is evaluated through a variety of measures including a) program monitoring by headquarters, field offices, and State energy offices; b) headquarters program reviews; c) headquarters and field office coordinated on-site grantee reviews; and d) the national evaluation project mentioned above, which addresses program impact, effectiveness, and penetration.

#### **FY 1990 FUNDING:**

\$25,250,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** National Appropriate Technology Assistance Service (NATAS)

**RESPONSIBLE OFFICE:**

Office of Technical Assistance  
Conservation and Renewable Energy  
CE-54  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
(202) 586-1265

**CONTACT:** Anita DeVine

**PURPOSE:** To provide engineering, scientific, and technical information regarding the implementation of energy conservation techniques and renewable energy technologies in response to inquiries from individuals, businesses, and State and local governments.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Responded to more than 8,100 requests for technical information and assistance, and more than 900 requests for business assistance.
- Published numerous technical articles in popular literature, reaching more than two million people.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

An evaluation form is sent with all responses to technical and commercialization assistance requests. The users of NATAS rate the timeliness, quality, and usefulness of the service they receive.

**FY 1990 FUNDING:**

\$1,400,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** National Energy Information Center (NEIC)

**RESPONSIBLE OFFICE:**

National Energy Information Center  
Information and Administrative Services Division  
Office of Planning, Management, and Information Services  
Energy Information Administration (EIA)  
1000 Independence Avenue, S.W., Room 1F-048  
U.S. Department of Energy  
Washington, DC 20585  
(202) 586-8800

**CONTACT:** Nancy Nicoletti

**PURPOSE:** To disseminate data about energy, particularly the data that EIA collects. The NEIC serves the EIA by distributing EIA publications, maintaining a reading room, answering questions received from visitors, letter writers, and telephone callers, and transferring EIA data to machine-readable tapes that the National Technical Information Service (NTIS) sells.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Responded to over 39,000 inquiries for energy information.
- Sold approximately 92,000 copies of EIA publications through the Government Printing Office (GPO), generating approximately \$434,000 in revenue, including \$101,000 generated by the GPO sales agent in the NEIC inquiry center.
- Sold 534 machine-readable tapes of EIA historical data and software models through the NTIS, generating more than \$117,000 in revenue.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

For the evaluation of its effectiveness, the NEIC relies heavily upon the feedback it receives from its users. In addition, it carefully monitors inquiries, circulation, and revenue statistics from year to year.

#### **FY 1990 FUNDING:**

\$786,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Office of Public Affairs

**RESPONSIBLE OFFICE:** Public Information Office  
PA-5, MS1E200  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
(202) 586-6827

**CONTACT:** F. Chester Gray

**PURPOSE:** To respond to public inquiries concerning energy-related topics.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Responded to approximately 10 requests for conservation printing negatives.
- Published a monthly Departmental newspaper, DOE This Month, reporting on DOE research projects and major policy and personnel developments. About 26,500 copies of each issue are distributed at no charge to DOE employees, contractor management, the Congress, the media, and on request to other Federal, State and local agencies, public libraries, and academia. DOE This Month is available to the private sector by paid subscription through the U.S. Government Printing Office.
- Responded to approximately 5,000 inquiries on conservation and renewable energy (85 percent by phone and 15 percent by mail), which included sending out approximately 1,000 publications upon request.
- Provided general information to approximately 2,500 visitors to the public inquiries center.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Through the review of readers comments.

**FY 1990 FUNDING:**

Budgetary breakdown is unavailable.

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Office of Scientific and Technical Information (OSTI)

**RESPONSIBLE OFFICE:** U.S. Department of Energy  
Office of Scientific and Technical Information  
P.O. Box 62  
Oak Ridge, TN 37831  
(615) 576-1222

**CONTACT:** Thurman Whitson

**PURPOSE:** OSTI's mission is to provide direction for DOE's Scientific and Technical Information Program and to maintain a centralized base of support to assist Departmental elements in planning, developing, and implementing scientific and technical information activities. In carrying out its mission, OSTI has four major objectives.

- To provide direction for the development, communication, and coordination of policy, procedures, and standards for the handling of Scientific and Technical Information (STI) in the Department.
- To acquire, manage, and provide access to civilian energy and national defense STI.
- To provide consultation and assistance to Departmental elements in planning, developing, and implementing STI program activities.
- To represent the Department and participate in interagency, international, and domestic STI activities.
- In FY 1990, emphasis was placed on collecting and managing both DOE and worldwide STI. The information was shared with U.S. industry, as appropriate, through more effective means of access; and improving services to DOE and its contractors.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Continued emphasis on the use of DOE energy data bases and arrangements to make major data bases available to the public through commercial online systems.
- Continued announcements in appropriate publications of worldwide information collected and provided to National Technical Information Service (NTIS) for sale to the public.

- Continued the maintenance and distribution of DOE-funded energy publications prepared for the public and in response to public requests for information on energy.
- Continued providing microfiche copies of DOE research and development reports to all U.S. depository libraries for public access.
- Continuation of OSTI as the operating agent for the International Energy Agency (IEA) Energy Technology Data Exchange (ETDE), through which each of the fourteen signatory countries contribute information to a common data base that is shared by all participants.
- Continued the fulfillment of U.S. STI commitments to the International Atomic Energy Agency (IAEA) and the IEA.
- Operation of the Superconductivity Information System (SIS) to respond to the need for a rapid real-time communication capability among U.S. researchers and access to the latest worldwide information available.
- Initiation of a STI needs assessment of DOE and DOE contractors to better understand the full range of needs, what mechanisms for meeting these needs are most effective, and to serve as a benchmark for strategic and long-range planning of DOE's Scientific and Technical Information Program (STIP).

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Studies are conducted periodically to assess the value of OSTI products, services, and activities and their impact on DOE research productivity and management accountability.

#### **FY 1990 FUNDING:**

\$14,790,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Pre-Freshman Enrichment Program (PREP)

**RESPONSIBLE OFFICE:**

Division of University and Industry Programs  
Office of Energy Research  
U.S. Department of Energy  
Room 3F-061  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 586-1634

**CONTACT:** John Ortman

**PURPOSE:** To award grants to institutions nationwide to run summer seminars in math- and science-based subjects.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

Over 1,500 minority and female secondary school students were reached. Twenty-five grants were awarded to engineering institutions.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Site visits and follow-up surveys are conducted by institutions.

**FY 1990 FUNDING:**

\$350,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Solar Technical Information Program

**RESPONSIBLE OFFICE:** Solar Energy Research Institute  
1617 Cole Boulevard  
Golden, CO 80401  
(303) 231-1317

**CONTACT:** Paul Notari

**PURPOSE:** The Solar Technical Information Program (STIP) is a part of the DOE technology transfer process in which the Federal solar research program responds to the information needs of industry and other elements of the private sector. The purpose of the program is to provide technical information related to solar research sponsored by the DOE to targeted scientific and industrial audiences. Its key distinction is its emphasis on tailoring the information to the audience for whom it is intended and in packaging it in a concise, understandable manner.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Three technical communication publications were produced and furnished in reproducible copy form to trade associations or professional societies for their publication and distribution.
- Eight technical communication publications were published and disseminated through regular Federal channels (U.S. Superintendent of Documents, NTIS, etc.).
- Seventeen program summary reports were produced and delivered to DOE headquarters for distribution.
- Twenty-two original manuscripts were produced, peer reviewed, and submitted to appropriate DOE renewable energy technical divisions for final approval.
- The DOE Renewable Energy exhibit was displayed at three major professional conferences; i.e., the National Solar Energy Conference, the Earth Day Exhibit on the Washington Mall, and the Responsible Energy Technologies Symposium and International Exposition (RETSIE).

- A total of 3,010 technical inquiries from scientists, engineers, and other professionals were answered by solar technical inquiry specialists or SERI researchers. Another 575 nontechnical inquiries were referred to the Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS) or other appropriate services.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Two user studies were conducted during FY 1990. The first identified the information needs and desires of specific audiences. Planning for FY 1991 will rely on these identified needs. The second study measured the success of past STIP documents in meeting the needs of targeted solar user groups. Overall, STIP publications were given high marks in usefulness and effectiveness.

In addition, comments of peer reviewers of all documents are recorded; a program review is conducted bi-annually; and sales of documents through U.S. Superintendent of Documents are tabulated.

#### **FY 1990 FUNDING:**

**\$1,259,000**

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** State Energy Conservation Program (SECP)

**RESPONSIBLE OFFICE:** State Energy Programs Division  
Office of National Programs  
Conservation and Renewable Energy  
U.S. Department of Energy  
Washington, DC 20585  
(202) 586-2300

**CONTACT:** Jim Demetros

**PURPOSE:** To provide funding to the States, the District of Columbia and U.S. Territories for energy conservation activities, and to build a capacity within and among the States and Territories to plan, develop, and carry out their own energy conservation and outreach activities.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- All States, Territories, and the District of Columbia were awarded grants to operate SECP. DOE continued activities to promote the development of skills required to build energy efficiency partnerships and lessen State dependence on Federal financial assistance.
- DOE also continued to provide technical assistance to States in the areas of evaluation, technology transfer, and program development.
- A major network conference for State program managers of the SECP and Energy Extension Service (EES) and Institutional Conservation Program (ICP) was convened in the State of California under the theme "Energy, Environment, Economy: Partnership for the Future" to develop management skills to build energy efficiency partnerships.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Each State conducts evaluations to determine the effectiveness of the program measures contained in the State's energy conservation plan. Also, DOE support offices conduct periodic monitoring visits to SECP project sites.

#### **FY 1990 FUNDING:**

\$9,555,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Technical Information and Communication Program

**RESPONSIBLE OFFICE:** Office of Industrial Technologies, CE-22  
Conservation and Renewable Energy  
U.S. Department of Energy  
1000 Independence Avenue, S.W., Room 6B-113  
Washington, DC 20585  
(202) 586-9104

**CONTACT:** Marsha Quinn

**PURPOSE:** To publish and transfer technical information derived from research and development projects supported by the Office of Industrial Technologies, Industrial end-users, and other appropriate audiences.  
  
To conduct technical workshops and technical symposia on work supported by the Office of Industrial Technologies.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Published three field test-case studies on projects nearing commercialization stage. Supported publication of a foundry energy conservation manual and conducted workshops for the foundry industry.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Successfully developed technologies are tracked to determine the locations of installed units and the amount of energy saved.

**FY 1990 FUNDING:**

\$800,000

**AGENCY:** U.S. Department of Energy

**ACTIVITY:** Weatherization Assistance Program (WAP)

**RESPONSIBLE OFFICE:** Weatherization Assistance Program  
U.S. Department of Energy  
1000 Independence Avenue, S.W., Room 5G-023  
Washington, DC 20585  
(202) 586-2204

**CONTACT:** Mary Fowler

**PURPOSE:** To weatherize dwellings of low-income persons, particularly the elderly and handicapped in order to conserve energy and to aid those persons least able to afford higher utility costs. WAP is a housing retrofit program. Beyond the conduct of limited training and technical assistance for program operators and some client education for program recipients, the program does not engage in typical energy education, extension, and information activities.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Weatherized approximately 130,000 homes in FY 1990 and more than two million homes to date.
- Continued to encourage States to emphasize client education.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Conduct periodic program evaluations.

**FY 1990 FUNDING:**

\$161,964,000

**AGENCY:** U.S. Department of Energy - Bonneville Power Administration

**ACTIVITY:** Super Good Cents (SG¢)

**RESPONSIBLE OFFICE:** Bonneville Power Administration  
U.S. Department of Energy  
P.O. Box 3621  
Portland, OR 97208  
(503) 230-5486

**CONTACT:** Garry Thompson

**PURPOSE:** This is a region-wide advertising and builder training program which focuses on utilities and utility-operated certification programs to encourage the construction and purchase of energy-efficient electrically-heated homes. The ultimate goal is to prepare the market for the adoption of energy-efficient building codes and increased energy efficiency.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Over 8,000 SG¢ homes (3,300 single family homes and 4,700 multi-family dwellings) have been built, inspected and certified by participating Northwest utilities in FY 1990.
- Over 2,300 builders are currently participating in the SG¢ program.
- The adoption of SG¢ standards occurred in approximately nine local constituencies and one State, the State of Washington.
- A region-wide advertising campaign generated greater home recognition of SG¢ homes; 75 percent of people polled recognized what constitutes SG¢ home construction techniques.
- Seven new training videos were produced for owner-builders, local jurisdictions and utilities.
- The SG¢ specification and Technical Reference Manual has been updated and revised for the 1990 building season. Over 2,000 have been ordered.
- A Bill to adopt SG¢ standards state-wide was introduced in 1990, in the State of Oregon.

## **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Consumer awareness surveys and quarterly reports are used to evaluate the accomplishments of participating utilities which indicate SG&E penetration of the electric space heat market.

## **FY 1990 FUNDING:**

Approximately \$4.5 million.

**AGENCY:** U.S. Department of Energy - Bonneville Power Administration

**ACTIVITY:** Irrigated Agriculture Hardware Programs

**RESPONSIBLE OFFICE:** Bonneville Power Administration (BPA)  
Snake River Area Office  
101 West Poplar Street  
Walla Walla, WA 99365  
(509) 522-6221

**CONTACT:** Jennifer Eskil

**PURPOSE:** To educate irrigators about opportunities for reducing electrical energy costs for pumping and improving crop quality and yield. The Hardware Program is operated by BPA through customer utilities.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Inspected 280 irrigation systems and 65 retrofits.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

In 1986, process and impact evaluations were performed. BPA performed a process evaluation in 1989. The evaluation showed that energy savings were being bought at low leveled costs.

**FY 1990 FUNDING:**

\$1,300,000

**AGENCY:** U.S. Department of Energy - Bonneville Power Administration

**ACTIVITY:** Irrigation Scheduling Program

**RESPONSIBLE  
OFFICE:** Bonneville Power Administration  
Snake River Area Office  
101 West Poplar Street  
Walla Walla, WA 99365  
(509) 522-6221

**CONTACT:** Jennifer Eskil

**PURPOSE:** The Irrigation Scheduling Program, operated by the Bureau of Reclamation through BPA's customer utilities, is to inform irrigators about opportunities to reduce energy costs for pumping. It also improves crop quality and yield per unit of water. Over the long term, this activity should be self-sustaining as a commercially viable venture. In FY 1990 a pilot computerized scheduling effort was begun.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- 51,000 acres were scheduled and 241 irrigators educated.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Process and input evaluations are performed; one such evaluation was performed during FY 1990. An evaluation of the pilot computerized scheduling effort will be performed in FY 1991.

**FY 1990 FUNDING:**

\$600,000

**AGENCY:** U.S. Department of Health & Human Services

**ACTIVITY:** Low Income Home Energy Assistance Program (LIHEAP)

**RESPONSIBLE OFFICE:**

Family Support Administration  
Office of Community Services  
Office of Energy Assistance  
Aerospace Building  
370 L'Enfant Promenade, S.W.  
Fifth Floor, West  
Washington, DC 20447  
(202) 252-5300

**CONTACT:** Janet Fox

**PURPOSE:** The LIHEAP is one of six block grant programs authorized by the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35, as amended) and administered within the Department of Health and Human Services (HHS).

In HHS, LIHEAP is administered by the Office of Community Services within the Family Support Administration. LIHEAP provides grants to States, the District of Columbia, the Territories, and Indian tribes to assist eligible low income households meet the costs of home energy. Congress established the formula for distributing funds to grantees based on each State's share of home energy expenditures by low income households nationwide. The funds are to be used to assist households with income not exceeding the greater of 150 percent of the poverty level or 60 percent of a State's median income, or households with recipients of Aid to Families with Dependent Children, Supplemental Security Income, Food Stamps, or certain income-tested veterans' benefits.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

LIHEAP provided grants to all fifty States, the District of Columbia, six Territories, and 114 Indian tribes and tribal organizations. States estimate that approximately six million households will receive assistance with heating costs, 300,000 households will receive cooling assistance, 900,000 households will receive crisis assistance, and 200,000 households will receive weatherization assistance.

## **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Grantees are required by statute to monitor the assistance provided under LIHEAP and to prepare an independent audit of the program. The Office of Energy Assistance reviews each grantee's application for compliance with the law and conducts several in-house and onsite compliance reviews each year.

## **FY 1990 FUNDING:**

\$365,000,000

**AGENCY:** U.S. Department of Housing and Urban Development

**ACTIVITY:** Administration of Energy Activities and Support Function

**RESPONSIBLE OFFICE:**

Energy Division  
Office of Environment and Energy  
Community Planning and Development  
U.S. Department of Housing and Urban Development (HUD)  
451 7th Street, S.W., Room 7244  
Washington, DC 20410  
(202) 708-2504

**CONTACT:** Robert Groberg

**PURPOSE:** To serve as the principal coordinator for energy activities and to provide advice and staff support on energy matters affecting state and local governments and the general public. Administer and participate in demonstrations, feasibility studies, and cooperative efforts with other agencies in support of the energy objectives of programs administered by HUD.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Continued to distribute a strategic planning guide showing local officials how to use energy efficiency to promote economic development under Community Development Block Grant programs.
- Published a 40-page guide to performing energy retrofits during rehabilitation of housing occupied by low and moderate income persons.
- Advanced community energy systems district heating/cooling technical assistance projects to the construction stage.
- Conducted the 7th National Conference on district heating/cooling community energy systems and their role in economic development and improvement of the environment in cooperation with the Department of Energy.
- Commenced an initiative with the Department of Energy to promote affordable housing through energy efficiency.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Not available

**FY 1990 FUNDING:**

Not available

**AGENCY:** U.S. Department of Housing and Urban Development

**ACTIVITY:** District Heating and Cooling (DHC)

**RESPONSIBLE OFFICE:**

Energy Division  
Office of Environment and Energy  
Community Planning and Development  
U.S. Department of Housing and Urban Development  
451 7th Street, S.W., Room 7244  
Washington, DC 20410  
(202) 708-2504

**CONTACT:** Robert Groberg

**PURPOSE:** To help communities obtain stable or reduced costs for heating and cooling and, in doing so, realize the associated economic and community development benefits of more jobs retained and higher values for district heating and cooling properties.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Assisted projects have advanced through design to construction and operation.
- Held national conference in cooperation with Department of Energy and distributed proceedings.
- In addition to assisting specific cities, the Division program continued to provide technical advice to aid States in setting up their own programs to help localities develop district heating systems.
- Through cooperation with public interest groups and the assisted communities themselves, the program has promoted the transfer of technical information and experience among communities nationwide.
- New appropriation for feasibility and design assessments will be implemented in FY 1991.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Responses are received from the cities served by the program as to its effectiveness.

#### **FY 1990 FUNDING:**

\$750,000

**AGENCY:** U.S. Environmental Protection Agency (EPA)

**ACTIVITY:** Motor Vehicle Fuel Economy Label Program

**RESPONSIBLE OFFICE:**

Certification Division  
Office of Mobile Sources  
Environmental Protection Agency (EPA)  
Motor Vehicle Emission Laboratory  
Ann Arbor, MI 48105  
(313) 668-4280

**CONTACT:** Tom Ball

**PURPOSE:** To provide comparative fuel economy on all new vehicles in order to assist consumers in their new vehicle purchase decisions. Every new light-duty vehicle is required to display a fuel economy label prior to being offered for sale. This fuel economy is submitted to the Department of Energy for publication in the Gas Mileage Guide.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- The annual listing was provided to DOE on September 7, 1990 for publication in the Gas Mileage Guide. This listing contained approximately 1,000 entries.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

EPA performs testing on about 30 percent of all test vehicles. A higher level of testing is done if manufacturers do not have good correlation with the EPA laboratory. EPA occasionally reviews available consumer reported fuel economy data to determine if program adjustments are necessary to preserve the accuracy of the EPA numbers in predicting typical in-use fuel economy.

#### **FY 1990 FUNDING:**

Budgetary breakdown is not available.

**AGENCY:** National Aeronautics and Space Administration (NASA)

**ACTIVITY:** Energy Management Program

**RESPONSIBLE OFFICE:** Maintenance Management Branch  
Code NXG-NASA Headquarters  
Washington, DC 20546  
(202) 453-1955

**CONTACT:** Robert Wilson or Charles Pitterer, Jr.

**PURPOSE:** To establish a high quality energy management program, and to manage the use of energy within NASA.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Established a new energy conservation management instruction guide containing energy conservation policies and guidelines for use NASA-wide.
- Distributed information to all NASA operation centers to publicize the Shared Energy Savings program.
- Distributed information to all NASA operation centers concerning the proposed Executive Order for Energy Conservation.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

This program annually monitors the energy savings of all utilities (i.e., natural gas, electricity, petroleum based fuels, etc.) to depict energy savings.

#### **FY 1990 FUNDING:**

Activities are funded as part of the general operating budget.

**AGENCY:** U.S. Navy Facilities Engineering Command

**ACTIVITY:** Navy Family Housing Division

**RESPONSIBLE OFFICE:** Naval Facilities Engineering Command  
Hoffman Building II  
Attn: Code 083B1  
Alexandria, VA 22332-2300  
(202) 325-0511

**CONTACT:** Brian Collins

**PURPOSE:** To promote energy and resource conservation practices within U.S. naval family housing worldwide.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Initiated efforts to promote voluntary conservation by family housing occupants by returning savings to their community.
- Funded a study on energy efficient windows and window coverings. Final product is a user friendly manual for installation housing managers.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

This program uses an energy audit report for every naval installation and measures the energy performance of family housing compared with the baseline as adjusted by weather conditions (degree days). The baseline year was FY 1986; the goal is a 12 percent reduction in total energy use by FY 1995. The program establishes test procedures and parameters for individual locations worldwide.

#### **FY 1990 FUNDING:**

Not available

**AGENCY:** Tennessee Valley Authority

**ACTIVITY:** Cycle and Save Program

**RESPONSIBLE OFFICE:** Residential and Commercial Section  
Marketing Services Branch  
Distributor Marketing and Services Division  
Tennessee Valley Authority (TVA)  
SP 3N 46B  
Chattanooga, TN 37402-2801  
(615) 751-5261

**CONTACT:** Barbara O. Nieri

**PURPOSE:** To reduce peak-power demand and thus facilitate more effective use of existing generating facilities through the direct control of residential water heaters and central air conditioners or heat pumps.

The Cycle and Save Program is a load management program offered to residential consumers through participating power distributors. Consumer water heaters and central air conditioners are controlled for short periods of time by the use of radio-controlled receivers. Consumers may receive an incentive for participating in the program.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Load managed 47,000 water heaters.
- Load managed 47,000 central air conditioners.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Effectiveness is based primarily on total installations and total load controlled.

#### **FY 1990 FUNDING:**

Approximately \$200,000 (from TVA power funds).

**AGENCY:** Tennessee Valley Authority

**ACTIVITY:** The Environmental Education Section

**RESPONSIBLE OFFICE:**  
Resources Development Group  
Forestry Building  
Rideway Road  
Norris, TN 37828  
(615) 632-1640

**CONTACT:** Lynn M. Hodges

**PURPOSE:** To help social groups and individuals gain a variety of experience in and acquire a basic understanding of the environment and its associated problems, and to be actively involved at all levels in working toward resolution of environmental problems. The program operation deals with formal and informal education populations and with special project activities.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- Provided support to a network of 16 centers for environmental and energy education at regional colleges and universities. The section was awarded an international service award for its activities.
- Educational packages were developed with energy education as one of the components. Topics included water quality, groundwater, surface water, natural resources, and other energy education-related issues.
- Specific energy education materials were developed to emphasize scientific and mathematic concepts for grades 3-5.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Quarterly reports from universities, and responses from the general public on workshops, serve as on-going evaluations of program activities.

**FY 1990 FUNDING:**

\$500,000

**AGENCY:** Tennessee Valley Authority

**ACTIVITY:** Heat Pump Program (HPP)

**RESPONSIBLE OFFICE:** Residential and Commercial Section  
Marketing Services Branch  
Distributor Marketing and Services Division  
Tennessee Valley Authority (TVA)  
SP 3N 46B  
Chattanooga, TN 37402-2801  
(615) 751-5261

**CONTACT:** Barbara O. Nieri

**PURPOSE:** Through participating power distributors, the HPP is designed to promote the installation of heat pumps for residential consumers by offering low-interest financing.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

10,000 heat pump units have been installed.

**PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

The number of heat pumps installed.

**FY 1990 FUNDING:**

Approximately \$3,500,000 (from TVA power funds).

**AGENCY:** Tennessee Valley Authority

**ACTIVITY:** Industrial Energy Services Program (IES)

**RESPONSIBLE OFFICE:** Transmission and Customer Services  
Missionary Ridge Place 4S 145X  
Chattanooga, TN 37402-2801  
(615) 751-5103

**CONTACT:** James N. West

**PURPOSE:** TVA's Industrial Energy Services (IES) Program promotes overall productivity, customer satisfaction, and distributor relations while providing electricity at the lowest feasible cost and encouraging economic development with the power service region.

**MAJOR ACCOMPLISHMENTS IN FY 1990:**

- TVA serves over 2,500 industrial firms which use in excess of 100,000 kwh per month. Special efforts have been implemented to work more closely and provide greater customer service with consultants providing tailored services and new electro-technology knowledge. These industrial energy services are designed to encourage economic development by promoting improvements in energy efficiency and overall productivity. As of June 1990, energy services had been provided for over 630 industries in conjunction with TVA's Manufacturing Development Program with feasibility studies done for possible electro-technology applications. The IES Program contributed to the creation of more than 15,050 job opportunities this fiscal year. Some of the information materials presented to industrial consumers are the "Energy Digest" newsletter, Center for Materials Fabrication Information, technical briefs, industrial energy management guidelines, and consumer awareness workshops and seminars. To date, over 530 engineers and utility technicians have been educated on up-to-date electro-technologies and TVA industrial energy services.
- Disseminated electro-technology materials to selected Tennessee Valley industries with applications potential.
- Conducted 14 training sessions in electrotechnologies for field service and distributor personnel.

## **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

The main performance parameters will be the overall cost reductions, increased productivity and employment, and capacity and energy efficiency achieved by the program.

**FY 1990 FUNDING: \$1,685,000**

**AGENCY:** Tennessee Valley Authority

**ACTIVITY:** Residential New Construction

**RESPONSIBLE OFFICE:**

Residential and Commercial Section  
Marketing Services Branch  
Distributor Marketing and Services Division  
Tennessee Valley Authority  
SP 3N 46B  
Chattanooga, TN 37402-2801  
(615) 751-5261

**CONTACT:** Barbara O. Nieri

**PURPOSE:** The purpose of this program is to encourage the installation of heat pumps and electric water heating systems in energy-efficient, new single-family, and multifamily homes. This program includes an onsite inspection to ensure the home meets minimum prescribed construction standards and heat pump installation standards. TVA staff assist participating local power distributors to carry out a residential new construction program and work with local home builders and realtors in defining the benefits of all-electric homes.

Under the program, participating distributors may offer incentives such as cash or payments, free or reduced cost underground or overhead electric service to the home, electric bill credits, and/or low-interest loans. The maximum loan amount is \$7,500, and it may be used for a heat pump and related items. There is no down payment and the loan may be repaid over a period of up to 10 years.

#### **MAJOR ACCOMPLISHMENTS IN FY 1990:**

- 117 local power distributors are participating in the program.
- Approximately 3,000 homes were inspected during the 1990 fiscal year.

#### **PROCEDURES FOR EVALUATING PROGRAM EFFECTIVENESS:**

Number of new homes inspected under the program.

#### **FY 1990 FUNDING:**

Approximately \$1,800,000 (from TVA power funds).



## APPENDIX B

### LEGISLATIVE REPORTING PROVISIONS REGARDING FEDERAL ENERGY EDUCATION, EXTENSION AND INFORMATION PROGRAMS

Section 508 of the  
National Energy Extension Act (42 U.S.C. 7007)

#### COMPREHENSIVE PROGRAM AND PLAN

Section 508 requires the preparation of a comprehensive program and plan for Federal Energy Education, Extension, and Information activities. This comprehensive program and plan was initially prepared in 1978. Section 508(c) requires annual reporting by the Secretary on revisions to the program and plan.

Section 404 of the  
Energy Security Act (42 U.S.C. 7373)

#### DISSEMINATION OF INFORMATION ON RENEWABLE ENERGY RESOURCES AND CONSERVATION

Section 404(2) provides that the Secretary report annually on the status of the Department's energy conservation and renewable resources information dissemination activities. Section 402(2) contemplates that the status of the Department's efforts to coordinate these activities with similar activities of other Federal agencies will be included in this report.



## **APPENDIX B**

# **LEGISLATIVE REPORTING PROVISIONS REGARDING ENERGY EDUCATION, EXTENSION AND INFORMATION PROGRAMS**

## **APPENDIX C**

### **U.S. DEPARTMENT OF ENERGY AND OTHER ENERGY INFORMATION SERVICES**

## APPENDIX C

### U.S. DEPARTMENT OF ENERGY AND OTHER ENERGY INFORMATION SERVICES

The U.S. Department of Energy offers six information services providing of energy information targeted to specific audiences. Phone numbers and address of those services are listed below:

1. **CAREIRS:** The Conservation and Renewable Energy Inquiry and Referral Service (CAREIRS) provides answers to energy related inquires for the general public by toll-free telephone or mail.
2. **NATAS:** The National Appropriate Technology Assistance Service (NATAS) provides specific information and technical and commercialization assistance by toll-free telephone or mail.
3. **OSTI/TIC:** The Office of Scientific and Technical Information makes research reports, summaries of research programs, abstract periodicals, and other information products, available to the public through the National Technical Information Service; provides access to major DOE databases through commerical online systems; and, in cooperation with DOE program offices, distributes handbooks, brochures, flyers, posters, and similar materials, in response to public requests for energy-related materials.
4. **SERI/TIS:** The Solar Energy Research Institute, Technical Inquiry Service (SERI/TIS) provides solar technical information requested by scientific and industrial professionals by telephone or mail.
5. **NEIC/EIA:** The National Energy Information Center, Energy Information Administration (NEIC/EIA) provides data and projections on energy production, consumption, prices and supplies, by mail or telephone.
6. **PUBLIC INQUIRIES:** DOE's Office of Public Affairs handles walk-in public inquiries at DOE Headquarters, including distribution of press releases, Secretarial speeches, and other current public information documents.

#### Mailing Address and Telephone Numbers

##### Renewable Energy Information

P.O. Box 8900

Silver Spring, MD 20907

1-800-523-2929

1-800-464-4983 (Pennsylvania)

1-800-233-3071 (Alaska & Hawaii)

**NATAS**  
U.S. Department of Energy  
P.O. Box 2525  
Butte, MT 59702-2525  
1-800-428-2525  
1-800-428-1718 (Montana)

Technical Information Service  
Solar Energy Research Institute  
1617 Cole Boulevard  
Golden, CO 80401  
(303) 231-7303

Office of Scientific and Technical Information  
U.S. Department of Energy  
P.O. Box 62  
Oak Ridge, TN 37831  
(615) 576-1222

National Energy Information Center  
U.S. Department of Energy  
Room 1F-048  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 586-8800

U.S. Department of Energy  
Room 1E-206  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 586-5655 (General Information)

In addition to these Department of Energy information services, there exist two other information sources which provide a broad range of energy-related information. The first of these, the National Technical Information Service (NTIS) distributes a wide variety of Government reports at cost. The phone number and address for NTIS are below.

NTIS  
U.S. Department of Commerce  
5285 Port Royal Road  
Springfield, VA 22161  
(703) 487-4600 (General Information)

Secondly, the Department of Housing and Urban Development, the United States Department of Agriculture, and other Federal agencies use the Local Government Information Network (LOGIN) electronic data base to disseminate energy information to local and State governments.

For further information about LOGIN contact:

**Ms. Lois Dean,  
Energy Management Specialist  
U.S. Department of Housing and Urban Development  
Energy Division  
Washington DC 20410  
(202) 755-5504**

**OR**

**LOGIN Product Development  
Central Data  
LOGIN Services/MEVO4A  
511 11th Avenue South  
Minneapolis, MN 55415-1679  
1-800-328-1921**



## **APPENDIX D**

### **U.S. DEPARTMENT OF ENERGY PRINCIPLES ON COORDINATION OF INFORMATION DISSEMINATION WITH PRIVATE ORGANIZATIONS**

## APPENDIX D

### **U.S. DEPARTMENT OF ENERGY PRINCIPLES ON COORDINATION OF INFORMATION DISSEMINATION WITH PRIVATE ORGANIZATIONS**

- (1) Federal agencies will explore ways to make energy outreach programs more visible and will seek the assistance of private organizations in disseminating outreach materials and information.
- (2) Outreach program managers will help the private sector recognize the energy and cost savings to be realized by participants in Federally-sponsored activities.
- (3) In order to lessen private sector concerns about unfair competition by the Federal government in energy outreach, program managers will publicize clearly what Federal agencies will do, the services they offer, and what they will not do.
- (4) If conflicts with the private sector occur, program managers will try to reduce them through open discussion and a mutually acceptable effort to resolve them.
- (5) In order for their services to be credible to the private sector, outreach program managers will ensure that competent professionals carry out those services.