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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

June 17, 1981

ENERGY AND MINERALS  
DIVISION

B-203092

Chairmen, Selected Committees and  
Subcommittees

SUBJECT: Views on Energy Conservation and the  
Federal Government's Role (EMD-81-82)

The administration's fiscal year 1982 budget proposals signal a major shift in the Federal Government's role with respect to achieving energy conservation. The proposals would significantly reduce funding for the energy conservation programs carried out by the Department of Energy (DOE)-- from \$938 million in fiscal year 1981 to \$195 million in fiscal year 1982. According to the administration, the basis for its position is that rising energy costs are encouraging major efforts in energy conservation, thereby permitting a substantial curtailment in Federal conservation programs.

During the past 3 years, the General Accounting Office (GAO) has issued a number of reports, to both the Congress and DOE, addressing the Federal Government's efforts to achieve greater energy conservation in the Nation. This report summarizes the key aspects of our past work and contains our views on the proposed 1982 budget for energy conservation. The report is intended to assist the Congress in its continuing deliberations over Federal initiatives in the energy conservation area and in its decisions on the administration's fiscal year 1982 budget proposals.

Based on our past work, the administration's actions to substantially curtail conservation programs raise two areas of concern. First, major decisions on the Federal Government's role in fostering energy conservation continue to be made without a clear understanding of energy conservation's contribution in resolving national energy problems in a timely manner. Second, the abrupt changes in certain Federal programs, as reflected in the fiscal year 1982 proposed budget, may preclude the timely realization of selected energy conservation opportunities since it is not clear to what extent State, local, and private efforts will fill the void left by a substantially reduced Federal effort.

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The recent decontrol of energy prices should result in a greater incentive for consumers to identify and implement energy conservation measures. Price increases experienced in the past few years have undoubtedly been the primary contributing factor to decreases in energy demand. However, institutional and other barriers are likely to continue to inhibit consumers' efforts to conserve.

AN OVERALL PLAN STILL NEEDED

A fundamental problem we have found in the overall Federal approach to achieving energy conservation has been the lack of overall long-term energy conservation goals and a comprehensive plan designed to meet such goals. We believe the failure to develop such a plan continues to perpetuate confusion over how much energy conservation is needed, how well the Nation is doing in conserving energy, and what more needs to be done.

Solutions to the Nation's energy problems require actions both to increase the availability of domestic energy supplies and to improve the efficiency of energy use. The actions taken over the last few years highlight the complexities in resolving the Nation's energy problems. For example, efforts to expand domestic supplies have been constrained by environmental and safety issues. Efforts to improve the efficiency of energy use, while meeting with some success, have been confronted with institutional and financial barriers and have not resulted in achieving all available energy conservation opportunities.

With respect to energy conservation, we concluded in past reports that long-term energy conservation goals and a comprehensive plan to meet these goals were needed to effectively direct private sector and Federal initiatives. We believe the failure to take such steps has undermined the Federal Government's efforts to systematically develop a cohesive, effective Federal response in fostering the timely achievement of energy conservation. Thus, neither past administrations nor the current administration, in our view, have had an appropriate framework to guide their decisions in selecting Federal initiatives in the energy conservation area.

We continue to believe that establishing long-term energy conservation goals and a plan to meet those goals would provide a framework to view energy conservation's role in resolving the Nation's energy problems and serve as a basis for determining the type of Federal involvement and the extent of Federal initiatives needed to assure that energy conservation effectively contributes to resolving the Nation's energy problems.

VIEWS ON THE PROPOSED  
FISCAL YEAR 1982 BUDGET

The administration's fiscal year 1982 budget proposals reflect a fundamentally different view from past administrations regarding the Federal Government's role in achieving energy conservation. The administration's view is based on the premise that market forces will assure that energy conservation will be achieved. Thus the administration has proposed to eliminate certain Federal energy conservation programs and to substantially reduce funding for others.

In our past work evaluating Federal energy conservation policies and programs, we have identified problems and have made suggestions for corrective action. Based on this work we agree with certain of the administration's proposed actions, but are concerned about others. Many of our views were included as comments on the administration's budget proposals which were made available to various congressional committees. 1/ We are including, as Enclosure I in this letter, an overview of the results of our past work evaluating selected DOE energy conservation programs.

Overall, we agree with the administration's decisions to continue a low-income weatherization effort, energy conservation assistance to schools and hospitals, and energy conservation tax credits. (Enclosure I provides more specific comments on these initiatives.) Such initiatives can contribute to achieving energy conservation by overcoming financial barriers which inhibit consumers' efforts to implement energy conservation measures. We also agree with the administration's proposal to eliminate programs providing general energy conservation information to consumers. Our work has shown that DOE's general information programs directed at

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1/"U.S. General Accounting Office: Comments on the President's February 18, 1981, Budget Proposals And Additional Cost Saving Measures", OPP-81-2, March 3, 1981.

residential consumers appeared to contribute little to meeting their information needs.

On the other hand, we are concerned about the administration's decisions to eliminate Federal support for the Residential Conservation Service (RCS) and the Energy Extension Service (EES), and reduce funding for the Federal Energy Management Program (FEMP).

Our work has shown that the Federal Government has a role to play in assuring that residential consumers have the knowledge that will enable them to implement appropriate energy conservation measures. The knowledge these consumers need--comprehensive, site-specific information--can be effectively provided through the RCS and EES programs. If consumers have appropriate information, the increased motivation to conserve brought about by higher energy prices can result in consumers implementing the most effective energy conservation measures.

With respect to FEMP, the Federal Government, as the largest energy user in the Nation, has a unique opportunity to save significant amounts of energy in its facilities and operations and set an example for the Nation. We have concluded in past reports that a high-ranking FEMP office should be established in DOE with broad responsibility and adequate personnel and funding. This office should be directed to pursue energy conservation aggressively within the Federal Government as intended under energy legislation and Executive orders.

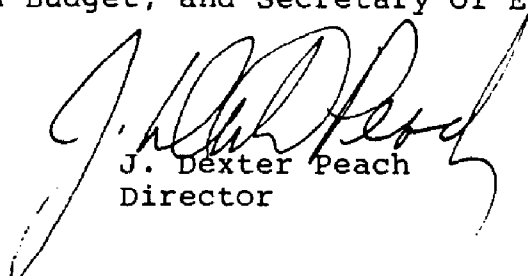
### CONCLUSIONS

Finding solutions to the Nation's energy problems has been and will continue to be difficult. A shift from past trends will be required on both the supply and demand sides of the energy equation. The actions taken by the 97th Congress concerning energy conservation will affect the Nation's energy situation well beyond the current session. Action on the administration's fiscal year 1982 energy budget proposals will require a balancing of actions to reduce Federal expenditures with actions to resolve the Nation's energy problems. Our past work has identified areas where conservation opportunities exist as well as specific ways to improve Federal energy conservation initiatives through more efficient use of limited Federal resources and by more effectively managing these efforts.

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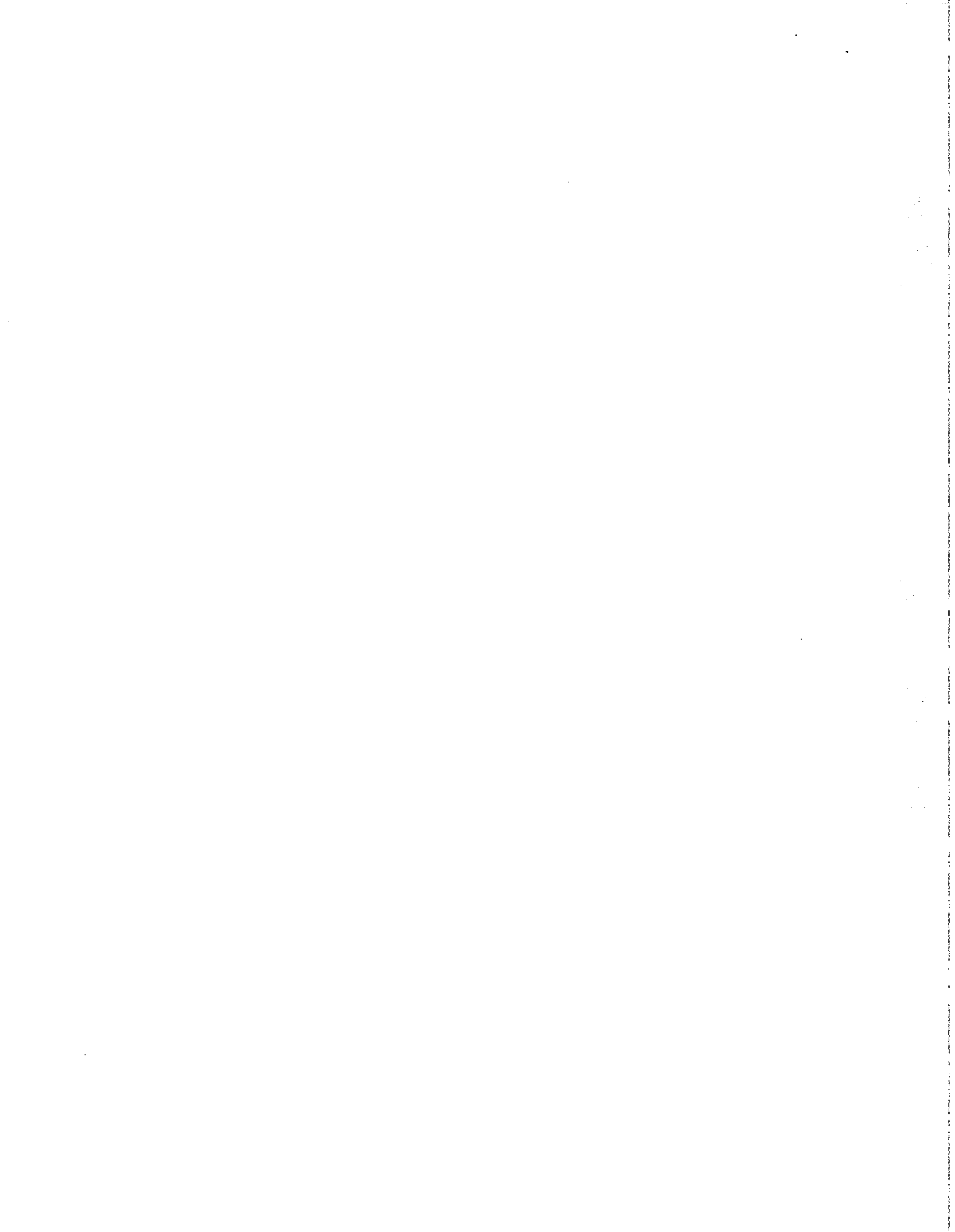
In our view, there continues to be a need for the Federal Government to facilitate and supplement market forces by focusing efforts in areas where barriers inhibit the realization of available energy conservation opportunities. We recognize that decontrolling energy prices will enhance private sector efforts to identify and take advantage of these opportunities. However, we believe there is a need for the Federal Government to (1) take corrective actions to assure that certain ongoing programs are effectively and efficiently implemented and (2) establish overall energy conservation goals and develop a comprehensive plan in support of those goals to facilitate decisions on the type and extent of Federal initiatives needed to realize established goals.

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Copies of this report are being sent to the Director, Office of Management and Budget, and Secretary of Energy.



J. Dexter Peach  
Director

Enclosure



VIEWS ON SELECTED DOE  
ENERGY CONSERVATION PROGRAMS

<u>Program</u>	<u>Results of Past Work</u>	<u>Overall Views</u>
Residential Conservation Service (RCS), Energy Extension Service (EES) <u>1/</u>	Comprehensive on-site energy audits provide the most effective form of residential energy conservation outreach. We found that DOE was not giving sufficient attention to on-site audits, a central feature of RCS. Further, we found that EES, a program created to solve problems of poor coordination and inadequate funding of governmental outreach programs, was provided limited organizational status in DOE and had not realized congressional intent. We recommended that DOE emphasize on-site audits in its outreach by giving priority to RCS as the centerpiece of an integrated energy conservation outreach strategy and assuring that EES is carried out as envisioned by the Congress.	Consumers need to be aware of their energy conservation opportunities before they can act. Comprehensive on-site audits effectively provide consumers the information they need. The administration proposes to cut the RCS and EES on the basis that utilities will respond to consumer needs when conservation represents an economic alternative.  This proposal fails to recognize the timely and important contribution energy conservation can make in the Nation's energy situation and the potential role RCS and EES can make in achieving voluntary energy conservation. Because individual utilities face different supply, demand and cost situations, it is likely that the administration's strategy would result in a fragmented assortment of residential conservation programs. Ultimately, this strategy could lead to years of delay in achieving conservation opportunities.
Building Energy Performance Standards (BEPS) <u>2/</u>	These standards set limits on the total amount of energy buildings may be designed to use but do not prescribe the details of how this is to be achieved. The standards were intended to correct market imperfections and lack of information. We questioned whether recent estimates of energy savings from BEPS justified a sanction for non-compliance. We recommended that DOE continue to work on the soundness of the standards and consider a voluntary BEPS.	While a mandatory program may not be justified at this time, a voluntary BEPS standard could serve as a benchmark for the building community by reflecting that level of building energy efficiency which can be cost-effectively achieved.
Federal Energy Management Program (FEMP) <u>3/</u>	We found that the Federal Government has a unique opportunity to save significant amounts of energy. DOE did not have an approved 10-year plan for improving the energy efficiency of Federal buildings as required by law and had not assisted Federal agencies in developing energy conservation plans for their operations. We stated that DOE should be responsible for developing a comprehensive Federal energy conservation plan and that a FEMP office with adequate funding and personnel resources should be established.	In view of the significant future energy and cost savings that a viable and effective FEMP could bring to the Federal Government, we believe an aggressive program should be continued. In our view, DOE should have the leadership role in directing this effort and maintain centralized control over funding for conservation measures in Federal facilities and operations.

VIEWS ON SELECTED DOE  
ENERGY CONSERVATION PROGRAMS

<u>Program</u>	<u>Results of Past Work</u>	<u>Overall Views</u>
Low Income Weatherization Program <u>4/</u>	We reported that DOE could not determine the expected impact of the program in terms of energy savings, and had not developed a method to prioritize dwelling units to receive Federal assistance. In a subsequent report, we found that DOE still had not estimated actual energy savings nor developed procedures for selecting homes offering the greatest potential for energy savings and benefiting low-income persons.	A successful low-income weatherization program could go a long way toward reducing the energy bills of low-income households--now estimated at about 12 million. Also, a successful program could have an effect on Federal programs providing fuel assistance to low-income persons--about \$2 billion in the fiscal year 1981 budget. Although the administration would continue a low-income weatherization program effort under the Department of Housing and Urban Development's block grant program, it is unclear what level of funding will ultimately be directed to weatherize the homes of low-income persons.
Schools and Hospitals Program <u>5/</u>	We found that this program was not an effective use of Federal funds when compared to other DOE conservation programs. We recommended that the program be adjusted to provide more energy audits to institutions which want and could benefit from them.	Continuing the program with a focus on providing energy audits for institutions which want and could benefit from them can increase overall energy savings without increasing program funding.
Voluntary Truck and Bus Fuel Economy Program <u>6/</u>	We reported that although much had been accomplished by the industry voluntarily, significant potential energy savings were still possible by improving the fuel efficiency of heavy trucks. We concluded that the program could be more effective if DOE placed a higher priority on the program.	While it is unclear what impact the administration's budget will have on improving the efficiency of heavy trucks, significant potential energy savings are still possible. An effective Federal program could foster the achievement of these savings in a timely manner.
Cogeneration Activities <u>7/</u>	We found that in the paper and pulp, chemical and petroleum refining industries, there are potential energy savings by using cogeneration. We recommended that DOE develop a coherent Federal policy consistent with State and regional interests to encourage coal and other alternative fuel use for cogeneration with a controlled shift away from oil and natural gas.	While it is unclear what impact the administration's budget will have on cogeneration activities, we believe that a coherent Federal policy would encourage greater cogeneration development.



VIEWS ON SELECTED DOE  
ENERGY CONSERVATION PROGRAMS

<u>Program</u>	<u>Results of Past Work</u>	<u>Overall Views</u>
State Energy Conservation Program (SECP) 8/	We reported that the administration and operation of SECP could be improved in the areas of assessing program impact, accounting of funds, maintaining program compliance and providing technical assistance. In a second report, we found that the energy savings reported for 1978 by the States were overstated and unsupported.	SECP has been effective in terms of developing--for the first time--a capability to manage energy programs in many States. The loss of Federal funds may cause some States, because of budget constraints, to eliminate State energy offices, resulting in a loss of this management and coordination activity at the State level. This immediate loss would affect not only the conservation area, but would also affect the States' growing responsibilities in emergency planning activities, such as gasoline supply distribution.
Appliance Efficiency Standards	We have not issued any reports evaluating the appliance efficiency standards program.	In commenting on past administration's energy proposals, we supported the establishment of appliance efficiency standards. An important consideration when deciding to establish appliance standards is that without a Federal standard, States are likely to establish their own standards. Manufacturers could be forced to comply with a number of different standards. In our view, Federal standards would assure a level of uniformity as well as assure that energy efficient appliances are produced.
Energy Conservation Tax Credits	We have not performed any work specifically evaluating the energy conservation tax credits.	We have, in the past, supported tax credits as an incentive for consumers to achieve energy conservation opportunities. We believe that the impact of the existing tax credits should be closely monitored to assure that they are effectively contributing to the achievement of available energy conservation opportunities.
Energy Conservation Information Programs-- Residential 9/	In our residential energy conservation outreach work, we found that many DOE information programs were not meeting consumer's information needs and did not add to the information being provided by non-DOE sources.	We support the administration's general position that many of DOE's information programs are contributing little to meet the needs of consumers. However, we believe that an information program focused around comprehensive, on-site energy audits can effectively contribute to the achievement of residential energy conservation opportunities.

NOTES

- 1/"Residential Energy Conservation Outreach Activities--A New Federal Approach Needed," EMD-81-8, Feb. 11, 1981.
- 2/"Improved Data And Procedures Needed For Development And Implementation of Building Energy Performance Standards," EMD-81-2, Dec. 23, 1980.
- 3/"Evaluation Of The Plan To Conserve Energy In Federal Buildings Through Retrofit Programs," EMD-78-2, Dec. 22, 1977.  
  
Letter report to the Secretary of Energy on DOE's development of a 10-year plan for Federal buildings, EMD-78-89, July 20, 1978.  
  
"Transportation Energy Conservation In The Federal Government," EMD-79-3, Jan. 25, 1979.  
  
"Energy-Saving Strategies For Federal Procurement," EMD-79-68, June 19, 1979.  
  
"The Federal Government Needs A Comprehensive Program To Curb Its Energy Use," EMD-80-11, Dec. 12, 1979.
- 4/"Evaluation Of Four Energy Conservation Programs--Fiscal Year 1977," EMD-78-81, Nov. 21, 1978.  
  
"Delays And Uncertain Energy Savings In Programs To Promote State Energy Conservation," EMD-80-97, Sept. 2, 1980.
- 5/"The Energy Conservation Program For Schools And Hospitals Can Be More Effective," EMD-81-47, March 23, 1981.
- 6/"The Federal Government Should More Actively Promote Energy Conservation By Heavy Trucks," EMD-80-40, Mar. 13, 1980.
- 7/"Industrial Cogeneration--What It Is, How It Works, Its Potential," EMD-80-7, Apr. 29, 1980.
- 8/Ibid. "Evaluation of Four Energy Conservation Programs--Fiscal Year 1977."

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"Slow Progress and Uncertain Energy Savings In Program To Weatherize Low Income Homes," EMD-80-59, May 15, 1980.

9/Ibid. "Residential Energy Conservation Outreach Activities--A New Federal Approach Needed."

OTHER GAO REPORTS ON ENERGY CONSERVATION

"Federal Agencies Can Do More To Promote Energy Conservation By Government Contractors," EMD-77-62, Sept. 30, 1977.

"Improvements Needed In Department of Defense Energy Conservation Investment Program", EMD-78-15, Jan. 18, 1978.

Letter report to the Secretary of Energy on DOE's actions to develop contingency plans, EMD-78-59, Apr. 27, 1978.

"The Federal Government Should Establish And Meet Energy Conservation Goals," EMD-78-38, June 30, 1978.

"More Use Should Be Made Of Energy-Saving Products In Federal Buildings," EMD-79-11, Jan. 23, 1979.

Letter report to the Chairmen of energy-related committees and subcommittees on opportunities to minimize impact of Iranian oil situation through energy conservation, EMD-79-34, Feb. 13, 1979.

Letter report to the Secretary of Energy on lighting and thermal efficiency standards for Federal buildings, EMD-79-32, Mar. 8, 1979.

Letter report to the Secretary of Energy on the organization, management and activities of the Office of Conservation and Solar Applications, EMD-79-64, May 18, 1979.

"A Framework For Developing A National Energy Conservation Program," EMD-79-76, July 31, 1979.

"The Solar In Federal Buildings Demonstration Program," EMD-79-84, Aug. 10, 1979.

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Letter report to the Chairman, Senate Energy and Natural Resources Committee on shortages caused by Iranian cutoff, EMD-79-88, Aug. 27, 1979.

"Federal Efforts To Ensure The Effectiveness And Safety Of Thermal Insulation Can Be Improved," EMD-80-4, Nov. 26, 1979.

"Uncertainties About The Effectiveness of Federal Programs To Make New Buildings More Energy Efficient," EMD-80-32, Jan. 28, 1980.

"The Government Should Buy More Fuel-Efficient Trucks And Truck Tractors," EMD-80-27, Feb. 21, 1980.

"How the Petroleum Refining Industry Approaches Energy Conservation--A Case Study," EMD-80-55, June 13, 1980.

"Energy Conservation: An Expanding Program Needing More Direction," EMD-80-82, July 24, 1980.

"Actions Needed To Increase Bicycle/Moped Use In The Federal Community," EMD-81-41, Jan. 19, 1981.

"The Department of Energy Should Provide Leadership To Assure Near-Term Gasoline Conservation Opportunities Are Realized," EMD-81-52, Apr. 13, 1981.

LIST OF ADDRESSEES FOR GAO REPORT  
ON ENERGY CONSERVATION (EMD-81-82)

The Honorable Mark O. Hatfield  
Chairman, Committee on Appropriations  
United States Senate

The Honorable Pete V. Domenici  
Chairman, Committee on the Budget  
United States Senate

The Honorable James A. McClure  
Chairman, Subcommittee on Interior  
Committee on Appropriations  
United States Senate

The Honorable James A. McClure  
Chairman, Committee on Energy and  
Natural Resources  
United States Senate

The Honorable Lowell P. Weicker, Jr.  
Chairman, Subcommittee on Energy  
Conservation and Supply  
Committee on Energy and Natural  
Resources  
United States Senate

The Honorable Jamie L. Whitten  
Chairman, Committee on Appropriations  
House of Representatives

The Honorable James R. Jones  
Chairman, Committee on the Budget  
House of Representatives

The Honorable Sidney R. Yates  
Chairman, Subcommittee on Interior  
Committee on Appropriations  
House of Representatives

The Honorable Tom Bevill  
Chairman, Subcommittee on  
Energy and Water Development  
Committee on Appropriations  
House of Representatives

The Honorable John D. Dingell  
Chairman, Committee on Energy  
and Commerce  
House of Representatives

The Honorable Richard L. Ottinger  
Chairman, Subcommittee on Energy  
Conservation and Power  
Committee on Energy and Commerce  
House of Representatives

The Honorable Don Fuqua  
Chairman, Committee on Science  
and Technology  
House of Representatives

