

LOW-INCOME ENERGY ASSISTANCE:  
ISSUES AND OPTIONS

The Congress of the United States  
Congressional Budget Office

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NOTES

Unless otherwise indicated, all years referred to in this report are fiscal years.

Details in the text and tables of this report may not add to totals because of rounding.

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PREFACE

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The rapid increases in energy prices that took place during the last decade greatly increased household expenditures on energy and led the Congress to establish a series of programs to help low-income households cope with high energy costs. This report, prepared at the request of the Senate Budget Committee, examines the current burden of high energy costs on low-income households and analyzes issues and options relating to the design of future energy assistance programs. In keeping with the Congressional Budget Office's mandate to provide objective and impartial analysis, this study offers no recommendations.

Lynn A. Paquette, of the Human Resources and Community Development Division of CBO, prepared the paper, under the supervision of Martin D. Levine and Nancy M. Gordon. The author wishes to acknowledge the invaluable contributions of many persons, including Ken Cahill, Alan Cohen, Everett Ehrlich, Steve Sheingold, and Reuben Snipper. Numerous people at the Community Services Administration, the U.S. Department of Energy, and the U.S. Department of Health and Human Services gave useful technical assistance. Francis Pierce edited the manuscript. Mary Braxton, Jill Bury, and Andy McDonald-Houck typed the many drafts. Mary Braxton, with Toni Wright, prepared the final paper for publication.

Alice M. Rivlin  
Director

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## SUMMARY

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Since 1977, the federal government has provided assistance to low-income households to help them deal with high energy prices. Funding for low-income energy assistance has risen from \$200 million in that year to \$1.85 billion in 1981. A number of proposals now before the Congress would authorize such aid for future years as well. These proposals, like the current program, would provide block grants to states to be used to offset low-income households' high costs for energy to heat (or cool) their homes, and some of them would also help households facing other types of emergency situations. While the proposals differ in several significant respects, all would continue earlier federal commitments to help protect low-income persons from the burden of high energy prices.

### RISING ENERGY PRICES AND THEIR DISTRIBUTIVE EFFECTS

During the 1970s, energy prices increased significantly more rapidly than did prices in general. Prices for energy used in homes--principally fuel oil, natural gas, electricity, and bottled gas--rose twice as fast, on average, as the general inflation rate between 1972 and 1980, and gasoline prices rose 2.5 times as fast. Home energy and gasoline prices are generally expected to continue to rise at a faster rate than inflation during the 1980s, with natural gas prices increasing most rapidly due to their scheduled decontrol.

Since low-income households spend a larger proportion of their incomes on energy-related expenditures than do other households, they lose a larger proportion of their real incomes when energy prices rise. In fiscal year 1981, households with incomes below \$7,400 are estimated to spend over 15 percent of their incomes on home energy and over 8 percent on gasoline, compared to less than 4 percent spent on home energy and less than 5 percent spent on gasoline by other households (see Summary Table 1). Some of this variation among income classes reflects the fact that low-income households often have total consumer expenditures that exceed income, while most middle- and upper-income households save a portion of their income. Low-income households also appear

to spend a greater proportion of their income indirectly on energy--through the purchase of goods and services using energy as an input--than do middle- and upper-income households, although in this respect the differences among income classes appear to be much smaller.

SUMMARY TABLE 1. ESTIMATED AVERAGE HOUSEHOLD EXPENDITURES ON HOME ENERGY AND GASOLINE, BY INCOME CLASS AND REGION, FISCAL YEAR 1981

	Estimated Average Expenditures on Home Energy		Estimated Average Expenditures on Gasoline	
	In Dollars	As per- cent of Income	In Dollars	As per- cent of Income
Estimated Household Income				
Less than \$7,400	740	15.2	400	8.2
\$7,400 to \$14,799	880	7.9	670	6.0
\$14,800 to \$22,099	910	4.9	1,100	6.0
\$22,100 to \$36,899	1,090	3.8	1,490	5.2
\$36,900 or more	1,290	2.5	1,940	3.7
Region				
Northeast	1,290	5.2	1,030	4.1
North Central	1,080	4.4	1,220	4.9
South	900	4.0	1,210	5.4
West	700	2.9	1,160	4.8
Average, All Households	1,000	4.2	1,160	4.8

SOURCE: Congressional Budget Office estimates, based on the Department of Energy's National Interim Energy Consumption Survey, the Household Transportation Panel of the DOE's Residential Energy Consumption Survey, and the Census Bureau's March 1978 and March 1980 Current Population Surveys.

The burden of rising energy prices also varies among households in the same income class, in accordance with such factors as climate, the type of heating fuel used, and automobile driving patterns. Average home energy expenditures in fiscal year 1981 are estimated to range from \$700 in the West to \$1,290 in the Northeast. Household gasoline expenditures, on the other hand, average 14 percent lower in the Northeast than in the other regions.

Rising energy prices affect income as well as expenditures. Some types of income--most notably benefits paid by the federal government--are indexed for inflation and, therefore, rise along with increases in energy prices. Because low-income persons are more likely than others to receive such indexed benefits as Social Security, Supplemental Security Income, or food stamps, federal income support programs at least partially compensate some poor persons for rising energy costs.

Rising energy prices also lead to significant structural changes in the U.S. economy and thereby alter employment opportunities, wages, and corporate profits. The distributional impact of these changes is extremely complex, however, and is difficult to assess.

#### GOALS OF ENERGY ASSISTANCE PROGRAMS

Low-income energy assistance programs may address any number of specific goals, among them:

- o Ensuring adequate levels of home energy consumption by low-income households;
- o Offsetting the effects of rising energy prices on the real incomes of low-income households; and
- o Promoting energy conservation.

Deciding which of these goals is to receive priority may have significant program-design implications.

Some programs may attempt to ensure that low-income households are able to consume adequate amounts of home energy by allocating benefits in relation to a household's actual home energy expenses. While such programs may closely target benefits on those households bearing the greatest burdens from rising costs, they may also lessen the incentives for conservation. An energy assistance program that is intended to offset the redistributive effects of rising energy prices by increasing the incomes of low-income households may tie benefits less closely to home heating needs, and may create less of a disincentive for conservation. By the same token, it may provide inadequate levels of aid to households with unusually high home energy expenses in relation to income.

A program promoting energy conservation, by contrast, would address one of the underlying causes of many low-income households' energy burdens--energy-inefficient housing--and would help reduce the nation's total energy consumption. In addition, such a program would help to ensure adequate home energy consumption levels by low-income households, and to raise their real incomes. However, some households--for instance, renters, and those for whom weatherization or other conservation-related home improvements would not be cost-effective--might not benefit from this approach. Also, some households with unusually high home energy expenditures might be unable to meet their home energy costs even after conservation-related home improvements were made.

#### POLICY ISSUES AND OPTIONS

Most energy assistance proposals for 1982--described in Summary Table 2--would continue to provide block grants to states for energy assistance. Other options for the future to offset the energy costs of low-income households include larger federal cash assistance benefits and increased funding for weatherizing homes.

#### Block Grants

If the Congress chooses to continue to provide low-income energy assistance through block grants to states, then it must determine what guidelines to establish for states' use of funds. Specific program-design issues include:

SUMMARY TABLE 2. PROVISIONS OF THE 1981 LOW-INCOME ENERGY ASSISTANCE PROGRAM AND OF SELECTED 1982 ENERGY AND EMERGENCY ASSISTANCE PROPOSALS

Proposal	Funding Level <sup>a</sup> (In billions of dollars)	Income Eligibility Guidelines	Allowable Use of Funds	Benefit Structure	Types of Benefits Provided
1981 Program	1.85	Lower Living Standard, or 125 percent of poverty line for a one-person household, or federal public assistance reciprocity	Home heating or medically necessary cooling expenses	Highest benefits to those with lowest incomes, and with highest home energy expenses in relation to income	Cash, vendor payments, and vouchers; limit of 3 percent of funds for emergency assistance <sup>b</sup>
House Ways and Means Committee Proposal	1.40	150 percent of poverty line, or 60 percent of state median income, or federal public assistance reciprocity	Home energy assistance	Similar to current program, but federal restrictions less strict	No federal restrictions
Senate Labor and Human Resources Committee Proposal	1.88	No federal restrictions but priority given to those with incomes below the Lower Living Standard or 125 percent of poverty line if a one-person household	Home energy assistance	Similar to current program, but federal restrictions less strict	Cash, vendor payments, and vouchers; limit of 10 percent of funds for weatherization; "reasonable" amount for emergency assistance <sup>b</sup>
H.R. 3469	1.40	No federal restrictions	Energy or other emergency assistance	No federal restrictions	No federal restrictions

SOURCE: Congressional Budget Office.

- a. Actual funding level for 1981 program and proposed funding levels for 1982.
- b. Emergency assistance may include goods such as blankets or space heaters, minor home repairs, or cash or vendor payments. In 1981, such assistance may also be provided through the Community Services Administration's crisis intervention program.

- o Who should be eligible for benefits;
- o How benefits should be allocated and what types of benefits and services should be provided; and
- o What amounts of funds should be provided.

Eligibility Guidelines. Placing restrictions on who is to be eligible for energy assistance involves making decisions as to what income groups should receive aid, and whether or not any particular types of households should be afforded special treatment. Since very poor households tend to spend much higher proportions of their incomes on energy than do other households, setting relatively high income limits may reduce aid for the poorest households while providing aid to those less in need. Allowing states to impose categorical restrictions on eligibility--by, for example, serving only households with young children or elderly members--would allow states to target aid on those types of families assumed to be most in need but would prohibit some of the poorest households from receiving any aid.

Eligibility under the current program is restricted to households with incomes below the Bureau of Labor Statistics' Lower Living Standard or 125 percent of the Office of Management and Budget's poverty guideline if a one-person household, or receiving Aid to Families with Dependent Children, Supplemental Security Income, food stamp, or certain veterans' benefits. States are not allowed to place categorical restrictions on eligibility. The Ways and Means Committee's 1982 proposal<sup>1</sup> would provide benefits for households with incomes below 150 percent of the OMB poverty guideline or 60 percent of a state's median family income and,

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1. The House Ways and Means Committee and the Senate Labor and Human Resources Committee proposals referred to here are the recommendations made by those bodies in satisfying budget reconciliation instructions embodied in the First Concurrent Resolution on the Budget for 1982. The Administration's proposal referred to here is its initial proposal, as introduced on May 6, 1981, in H.R. 3469.

like the current program, would grant automatic eligibility to federal public assistance recipients. This proposal would also require states to serve those households with the lowest incomes to the extent consistent with the efficient and timely payment of benefits. The Labor and Human Resources Committee's proposal would not set income eligibility guidelines, but would require states to give priority to households meeting the current program's income eligibility guidelines. The Administration's original 1982 proposal--H.R. 3469--would not set any federal restrictions on eligibility.

Benefit Determinations. In providing block grants to states, the federal government may determine how benefits are allocated among eligible households and what types of benefits and services are to be provided.

Requiring states to provide benefits closely tied to households' actual home energy expenses and incomes ensures that the largest payments go to those households bearing the greatest burdens from high home energy expenses. However, tying benefits closely to actual energy expenditures may lessen incentives for conservation, and such benefits may be relatively costly to administer. Making assistance payments less directly related to actual home energy expenses, by contrast, would lead to smaller conservation disincentives and would be less costly to administer, but would also be less targeted on households with the most burdensome home energy costs.

Energy assistance benefits may consist of cash, vendor payments or vouchers, weatherization assistance, or in-kind goods such as blankets or space heaters. Cash payments are simplest to administer, but, unlike vendor payments or vouchers, do not ensure that benefits are used for home energy consumption. For many households, weatherization assistance may provide larger benefits in the long run than cash or vendor payments costing the same amount. But a program that uses a large portion of its funds for weatherization may serve fewer households in its first years, since the average cost of weatherizing a housing unit is relatively high compared to the average annual cash or vendor payments made under the current energy assistance program.

Under the current program, states are required to provide the highest levels of benefits to those households with the lowest

incomes and with the highest home energy expenses in relation to income. The Ways and Means Committee's 1982 proposal would continue to require that states allocate benefits in this manner, but only to the extent consistent with the efficient and timely payment of benefits. The Labor and Human Resources Committee's proposal also includes a requirement similar to that of the current program, but would allow states complete flexibility in deciding how to satisfy this requirement. H.R. 3469 would not set specific requirements as to how states should allocate benefits.

The current program requires states to provide nearly all benefits in such forms as cash, vendor payments, or vouchers. The Ways and Means Committee's proposal and H.R. 3469 would allow states to provide any amount of benefits in the form of weatherization or consumer goods as well. The Labor and Human Resources Committee's proposal would limit weatherization assistance to no more than 10 percent of total funds.

Funding Levels. The 1981 low-income energy assistance program is funded at a level of \$1.85 billion. The Ways and Means Committee's proposal would provide \$1.4 billion in 1982, and \$1.6 billion in 1983. It would also distribute funds as matching grants in 1983, with the federal government providing 80 percent of the total funds. The Labor and Human Resources Committee would provide funding of roughly \$1.88 billion annually for 1982 through 1986, while H.R. 3469 calls for annual funding of \$1.4 billion in 1982 through 1985.

#### Other Policy Alternatives

The federal government could also reduce the energy burdens of low-income households by devoting more resources to the current low-income weatherization assistance program or to general cash assistance programs. These options would more directly address the underlying causes of high energy burdens--energy-inefficient housing and low incomes--but might leave many of the poorest households unserved.

Weatherization assistance allows low-income households to reduce their home energy consumption, thereby increasing their real incomes, reducing their need for other forms of energy assistance, and promoting one of the government's broad policy goals--

energy conservation. Weatherizing a large portion of the housing units of low-income households would increase federal expenditures in the near term but would reduce the need for such expenditures in the more distant future, by reducing the burden of high home energy prices on low-income households. Such an approach might, however, be less effective in helping renters and those whose homes are in need of major repairs.

Incorporating energy assistance into the Aid to Families with Dependent Children and the Supplemental Security Income programs would allow recipients complete flexibility in allocating their resources, while avoiding the possible conservation disincentives and administrative expenses of a separate energy assistance program. On the other hand, persons ineligible for federal cash assistance benefits would not receive any energy aid under this proposal, and those who would receive aid could use it for purposes other than home energy consumption. Moreover, benefits would probably not reflect the extent of variation in energy use among recipients of cash assistance.



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## CHAPTER I. INTRODUCTION

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This paper is intended to assist the Congress in addressing issues concerning the design and funding of future low-income energy assistance programs. Rapidly rising energy prices during the 1970s greatly increased household expenditures on energy, and led to the establishment of programs to assist low-income households in meeting high home energy costs. These programs--funded since 1977--have varied in their goals, and in their methods of reaching these goals. In general, the programs in effect prior to 1980 served as temporary measures to aid families facing emergencies. By contrast, the current program is intended to reduce the average energy-cost burden of low-income households, whether or not they are facing emergency hardships. All such programs have, however, been concerned with protecting low-income persons from the effects of rapid energy price increases.

### CHANGING ENERGY PRICES

During the past decade, energy prices--particularly fuel oil prices--have risen at far greater rates than have prices in general. Between 1972 and 1980, the Consumer Price Index (CPI) for energy increased more than twice as fast as did the CPI for nonenergy goods, while the CPI for fuel oil, coal, and bottled gas rose four times as fast as did prices for nonenergy goods. Increases in fuel oil and gasoline prices were especially steep during the 1973 oil embargo and in the aftermath of the 1979 Iranian revolution. The decontrol of domestic oil prices, which took place between June 1979 and January 1981, also contributed to these price increases.

Energy prices are generally expected to continue to rise at a faster rate than inflation during the 1980s. Real prices for oil are generally projected to rise during this decade.<sup>1</sup> Natural gas

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1. See, for example, Petroleum Industry Research Foundation, Oil in the U.S. Energy Perspective--A Forecast to 1990 (1980); Chase Manhattan Bank, "The Petroleum Situation," vol. 5, (Continued)

prices--which are currently subject to federal controls--are expected to rise still more rapidly since controls on most gas are scheduled to be completely phased out by January 1, 1985.

#### LEGISLATIVE BACKGROUND AND ISSUES FOR THE FUTURE

Congressional concern with protecting low-income persons from the hardships of rapidly rising energy costs began shortly after the oil embargo of 1973 and has been reflected in numerous legislative actions since then. In 1974, the Congress amended the Economic Opportunity Act of 1964 to authorize an Emergency Energy Conservation Services program. Annual appropriations of \$200 million for energy assistance to low-income households were provided under the authority of this act in 1977, 1978, and 1979 (see Table 1).

The Congress increased funding for energy assistance to low-income households substantially in 1980 and 1981. Funding of \$1.6 billion was provided in 1980 in response to the large increase in oil prices that occurred during 1979 and the Administration's decision to decontrol domestic oil prices. The Crude Oil Windfall Profit Tax Act of 1980 (P.L. 96-223) authorized an expanded low-income energy assistance program for 1981 at a funding level of up to \$3.1 billion. Actual funding for 1981, however, was held to \$1.85 billion--60 percent of the authorized ceiling. The Windfall Profit Tax Act also stated that, for accounting purposes, 25 percent of net revenues generated by the tax from 1982 through 1990 are to be allocated to a low-income energy assistance subaccount in the Treasury. The proposals currently being considered by the Congress for 1982 call for funding levels well below the approximately \$5 billion that might be available if all the revenues in this subaccount were devoted to energy assistance.

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1. (continued)  
nos. 1-2 (January/February 1981); Energy Information Administration of the Department of Energy, Annual Report to Congress, 1980; Data Resources, Inc., Energy Review (Spring 1981); CBO, The World Oil Market in the 1980s: Implications for the United States (May 1980).

TABLE 1. SUMMARY OF LOW-INCOME ENERGY ASSISTANCE PROGRAMS, FISCAL YEARS 1977-1981

Year	Program	Funds Appropriated (billions of dollars)	Households Served (millions)	Average Benefit Per Household (dollars)
1977	Special Crisis Intervention Program	0.20	1.2	140 <sup>a</sup>
1978	Emergency Energy Assistance Program	0.20	0.9	165
1979	Crisis Intervention Program	0.20	b	b
1980	Energy Crisis Assistance Program	0.40	1.6 <sup>c</sup>	188 <sup>d</sup>
	Energy Allowance Program	0.80	4.4 <sup>c</sup>	150 <sup>d</sup>
	SSI-Energy Allowance Program	0.40	4.0 <sup>c</sup>	97 <sup>d</sup>
1981	Low-Income Energy Assistance Program	1.76	10.0 <sup>e</sup>	161 <sup>f</sup>
	Crisis Intervention Program	0.09	b	b

SOURCE: Congressional Budget Office estimates, based on published and unpublished documents.

a. CBO estimate, assuming the percent of funds spent on administration was the same as in 1978.

b. Data not available.

c. These figures represent preliminary estimates of the number of payments made to households rather than the number of households served. Some households received more than one benefit.

d. Since some households received more than one benefit, the average benefit per household is actually somewhat higher than the average listed here. Estimates are preliminary.

e. State estimates, as of January 1981.

f. CBO estimate, assuming all available funds are spent, and states spend the maximum of 7.5 percent of funds on administration.

As the Congress considers alternative energy assistance proposals for 1982 and the years ahead, numerous issues must be resolved. If the current structure of providing block grants to states is maintained, the Congress must determine whether to establish guidelines for states' use of federal funds and, if so, what type of guidelines to establish. Specific issues that either the federal or state governments must resolve include:

- o Who should be eligible for benefits;
- o What type of energy expenses (heating, cooling, other home energy, gasoline) should be considered in determining energy burden;
- o How closely benefits should reflect a household's actual energy burden;
- o What types of benefits or services should be offered;
- o What amounts of federal and state funds should be provided; and
- o How federal funds should be allocated among states.

Alternatively, the Congress could choose to alleviate the energy-cost burdens of low-income persons by relying on specific conservation tools such as weatherization assistance or by expanding existing income supplement programs.

#### PLAN OF THE PAPER

Chapter II describes how rising energy prices affect different types of households. Chapter III discusses the various goals that may be given priority in a program to help low-income households deal with high energy costs. Issues and options involved in planning future programs are examined in Chapter IV. A description of past and current federal energy assistance programs is presented in the appendix.

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## CHAPTER II. DISTRIBUTIONAL EFFECTS OF ENERGY PRICE INCREASES

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Between 1972 and 1980, the price of fuel oil rose roughly four times as rapidly as the price of nonenergy consumer goods, and price increases for natural gas, electricity, and gasoline also outstripped inflation. As a result, direct household expenditures on energy rose from 4 percent of the nation's gross national product (GNP) in 1972 to 6 percent in 1980. The consumption of oil, natural gas, electricity, and coal by all sectors of the economy, valued at their cost to the first user, rose from roughly 5 percent of GNP in 1973 to 11 percent in 1980.<sup>1</sup> This chapter describes current energy expenditure patterns of different income groups and regions and examines the effects of energy price increases on different groups of households.

### DISTRIBUTION OF ENERGY EXPENDITURES

Increases in energy prices affect household expenditures directly through increases in the costs of home fuel and gasoline, and indirectly through increases in the costs of products and services that use energy as an input. The impacts of these increases have been greatest, in relative terms, on the poorest households, since they spend larger portions of their incomes on energy than do other households.

#### Direct Energy Expenditures

Direct household energy expenditures include spending for both home energy and gasoline. Each comprises roughly half of total direct household energy expenditures in the United States,

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1. Congressional Budget Office estimates, based on data from the Department of Energy's Monthly Energy Review (April 1981), and Data Resources, Inc.'s Energy Review (Winter 1980-81).

with home energy expenditures representing a greater share of total energy costs for households in the lowest income classes.<sup>2</sup>

It is estimated that households with incomes of less than \$7,400 will spend an average of \$1,140, or more than one-fifth of their incomes, directly on home energy and gasoline in fiscal year 1981, compared to \$2,340 or less than 9 percent of income for all other households (see Table 2). Those with incomes exceeding \$36,900 will spend \$3,230, or roughly 6 percent of their incomes, directly on energy. Direct household energy expenses as a percent of income in 1981 are estimated to be fairly constant across the Northeast, North Central, and South regions--at roughly 9.3 percent--and substantially lower in the West at 7.7 percent.

Home Energy Expenditures. Expenditures on energy used in the home--i.e., excluding gasoline--consume a much greater proportion of income for low-income households than for middle- and upper-income households (see Table 3). During 1981, households with incomes below 125 percent of the federal poverty standards<sup>3</sup> will spend an estimated average of \$790, or nearly 14 percent of their incomes, on home energy compared to \$1,020, or less than 4 percent of income, for other households. Among those with incomes

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2. Estimates of household home energy expenditures presented in this chapter are based on the Department of Energy's National Interim Energy Consumption Survey (NIECS). This survey collected income, demographic, and housing data from approximately 4,000 households throughout the continental United States between September 1977 and January 1978. Data on the energy expenditures of these households during the year beginning April 1978 were obtained directly from fuel dealers and utility companies. The data were adjusted by CBO to represent expected expenditures in fiscal year 1981.
  3. Unless otherwise specified, the poverty standards referred to throughout this paper are the federal poverty standards as published by the Bureau of the Census, or as estimated by CBO. In cases where reference is made to the Office of Management and Budget (OMB) poverty guidelines--the poverty guidelines generally used when administering federal programs--this reference is made explicitly.

TABLE 2. ESTIMATED AVERAGE ANNUAL HOUSEHOLD EXPENDITURES ON HOME ENERGY AND GASOLINE, BY INCOME CLASS AND REGION, FISCAL YEAR 1981

	Estimated Average Home Energy and Gasoline Expenditures in Dollars <sup>a</sup>	As Percent of Income <sup>b</sup>	Percent of all Households <sup>c</sup>
<b>Estimated Household Income</b>			
Less than \$7,400	1,140	23.4	15
\$7,400 to \$14,799	1,550	13.9	21
\$14,800 to \$22,099	2,010	10.9	19
\$22,100 to \$36,899	2,580	9.0	28
\$36,900 or More	3,230	6.2	18
<b>Region<sup>d</sup></b>			
Northeast	2,320	9.3	23
North Central	2,300	9.3	27
South	2,110	9.4	32
West	1,860	7.7	19
Average, All Households	2,160	9.0	100

SOURCE: Congressional Budget Office estimates, based on the Department of Energy's National Interim Energy Consumption Survey, the Household Transportation Panel of the DOE's Residential Energy Consumption Survey, and the Census Bureau's March 1978 and March 1980 Current Population Surveys.

- a. Energy expenditures are adjusted from the survey years to 1981 based on estimated energy price changes. The quantity of energy purchased is assumed to decrease by 0.15 percent for each one percent increase in the price of energy.

(Continued)

TABLE 2. (Continued)

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- b. Average incomes are derived from the March 1978 Current Population Survey and adjusted to 1981 on the basis of CBO economic assumptions.
  - c. Estimate based on the March 1978 Current Population Survey, adjusted to represent 1981, and corrected for the under-reporting and nonreporting of income.
  - d. Northeast: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, Pennsylvania, New Jersey. North Central: Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, North Dakota. South: Maryland, Delaware, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, Texas. West: Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, Washington, Oregon, Nevada, California. Table excludes residents of Alaska and Hawaii.

exceeding \$36,900, home energy expenditures are estimated to represent less than 3 percent of their incomes.

One reason that home energy expenditures account for such a high proportion of income for low-income households is that, in any one year, such households often have total consumer expenditures that exceed income. Since most middle- and upper-income households save a portion of their incomes, the ratio of home energy expenditures to total consumer expenditures varies considerably less across income classes than does the ratio of home energy expenditures to gross income.